Eyes on potatoes

AUSTRALIAN POTATO INDUSTRY COUNCIL NEWSLETTER

Volume 24 - March 2005

ISSN 1328-6897

Tonnage up at Sisters Creek, Tasmania

Andrew and Carolyn Nichols have taken their 50 t/ha *Russet Burbank* crop to 70 t/ha, and are endeavoring to make it to stay that way at their Sisters Creek property in north west Tasmania.

With their son Michael, the Nichols run a 380 ha property, Redbanks. Redbanks is a mixed enterprise - 150 ha of pasture for raising beef and 125 ha of cropping ground including potatoes. The rest of the property is devoted to natural bush, wetlands and revegetation areas.

The family has adopted a sustainable farming approach that has not only netted them higher yields but also national Landcare awards. In 2003, they won the Rural Press Landcare Primary Producer Award and in 2004, a National Landcare Award for successfully combining conservation and productive farming practices. They do this by keeping wild areas and hollow trees on their farm to encourage native wildlife that coexists with the range of farm animals and crops. Carolyn runs a small shop on the property, called Naturally Nichols, selling gourmet food and hampers.

Michael is responsible for the cropping side of the operation. The six to seven year cropping rotation consists of 16 ha of potatoes in Year one, followed by poppies then peas and broccoli over a year, then onions, wheat and finally permanent pasture for one to two years. The potatoes are contract planted and harvested.

Michael says that since he started to intensely manage the potato crop two years ago, their tonnage has grown from 50 t/ha to 70 t/ha. The Nichols now plan rather than hope for the higher tonnage. Michael is convinced their tonnage has increased because of the different way they prepare their ground.

Ground preparation

"Instead of doing four passes in the paddock, we only go over it twice," Michael said. "This is because we use a combination implement – a hoe with a set of rippers on front with the rotary hoe on back.

"We can rip up the ground, spread chicken manure fertilizer and plough it in at the same time, and the job is done in two rather than four passes.

"That way we don't disturb the soil structure as much and we save valuable time."

Michael says the chicken manure fertilizer from their poultry enterprise also helps the crop.

"It has a high concentration of nutrients, particularly phosphorus and in my view, adds more microbes to soil than many conventional fertilizers," he said. 'The microbes help by making the soil more organic, invigorating it.

"By the time we apply the manure to the ground ready for potatoes, it's already decomposed, much like a rich garden mulch. The ground then lies fallow for a month before the potatoes are planted."

Grower discussion group

Michael's involvement with the Boat Harbour potato grower discussion group to improve yields and soil quality has also helped him get higher yields.

Serv Ag started the group and Michael joined about two years ago. Growers meet once a month during spring and summer until the crop is harvested.

"We continue to present our crop figures, soil test and sap test results. We see what all growers are doing – we compare tonnages at the end of each season and discuss problems and possible solutions.

"Everyone involved in the productivity group has increased their yields. Our average tonnage for the Sisters Creek area is now 70 t/ha; it used to be 60."

Andrew Nichols
Redbanks, Sisters Creek
Tasmania
☎ *(03) 6445 1438*
✉ *naturallynichols@tassie.net.au*

[contents]

[inserts]

Chips #24 Newsletter
Potato 2005 Conference Flyer

Today and Beyond
Potato 2005
Potato 2005 - National Potato Conference
Phillip Island, Victoria
19 - 21 September 2005
More information at
www.spv.org.au

LIFT OUT - In this issue

Keep the bad guys out!

Biosecurity Plan

Plant Health Australia has been working with AUSVEG, Potato Processors Association of Australia and the Commonwealth and State governments to develop a biosecurity plan for the potato industry.

The first major step has been to identify key pests and diseases that could seriously damage the industry. The next step is to develop measures to minimise the chance of these pests and diseases arriving and spreading in the industry and to have emergency plans in place in case they do arrive.

For more information on this story see page 9

Eyes on potatoes

Eyes on Potatoes is produced by SageWords on behalf of the Australian Potato Industry Council.

© Horticulture Australia Limited 2005

HAL

Know-how for Horticulture™

The Australian Government proudly supports research and development by matching the industry levy and Voluntary Contributions.

Editor
Cathy Sage
SageWords
PO Box 1246
Kensington VIC 3031
Ph: (03) 9328 5310
Fax: (03) 9328 5302
cathy@sagewords.com.au

Co-Editors
Jo Curkpatrick
Span Communication
Ph: (03) 9328 5301
Fax: (03) 9328 5302
jo@spancom.com.au

Diana Wolfe
Wolfe Words
Ph/Fax: (03) 9372 5305
diana@wolfewords.com

Assistant Editor
Leigh Walters
South Australian Farmers Federation
PO Box 6014
Halifax Street
Adelaide SA 5000
Ph: (08) 8232 5555
Fax: (08) 8232 1311
lwalters@saff.com.au

Advertising Manager
Mathew Bowen, AT&M Advertising
Ph: (03) 6334 3577
Fax: (03) 6331 5006
info@atm-sprinta.com

AT&M
ADVERTISING • MARKETING • DESIGN • PRINT

Advisory Group
The advisory group provides editorial support in identifying issues, organising content and ensuring the newsletter meets grower needs.

Stephen Wade (NSW)
Department of Primary Industries
Ph: (02) 6330 1216
Fax: (02) 6332 1458
stephen.wade@agric.nsw.gov.au

Michael Hughes (QLD)
Department of Primary Industries & Fisheries
Ph: (07) 4095 8229
Fax: (07) 4095 8258
michael.hughes@dpi.qld.gov.au

Bob Peake (SA)
Primary Industries and Resources SA
Ph: (08) 8389 8800
Fax: (08) 8389 8899
peake.bob@saugov.sa.gov.au

Iain Kirkwood (TAS)
Department of Primary Industries, Water and Environment
Ph: (03) 6421 7601
Fax: (03) 6424 5142
lain.Kirkwood@dpiwe.tas.gov.au

Bruce Fry (VIC)
Department of Primary Industries
Ph: (03) 5233 5510
Fax: (03) 5231 3823
Bruce.Fry@nre.vic.gov.au

Rachel Lancaster (WA)
Department of Agriculture
Ph: (08) 9780 6210
Fax: (08) 9780 6163
rlancaster@agric.wa.gov.au

Distribution
The following people are responsible for sending out the newsletter in their state. Please send any corrections to mailing lists to the Assistant Editor.

Stephen Wade (NSW)
Department of Primary Industries
Ph: (02) 6330 1216
Fax: (02) 6332 1458
stephen.wade@agric.nsw.gov.au

Jann Uhr (QLD)
Growcom
Ph: (07) 3620 3844
Fax: (07) 3620 3800
juhr@growcom.com.au

Patricia Dempsey (SA)
South Australian Farmers Federation
Ph: (08) 8232 5555
Fax: (08) 8232 1311
pdempsey@saff.com.au

Kaye Preece (TAS)
Tasmanian Farmers & Graziers Association
Ph: (03) 6331 6377
Fax: (03) 6331 4344
tfgakaye@bigpond.com

Tony Pitt (VIC)
AG-Challenge
Ph: (03) 5623 4788
Fax: (03) 5623 4596
tony.agchall@dcsi.net.au

Jim Turley (WA)
Potato Growers Association of WA
Ph: (08) 9481 0834
Fax: (08) 9481 0024
potatoga@iinet.net.au

Consumers attitudes & behaviour when buying potatoes

The following is the first part of an edited extract from market research commissioned on behalf of the industry.

The study

To help develop a marketing strategy for the fresh potato industry, market research was carried out by Market Equity in January 2005. It involved six discussion group sessions involving consumers, purchasers and people at different life stages – young couples and singles; young families; older families; and older couples, singles and empty nesters.

The market research aimed to provide insights into consumer attitudes and behaviour. This involved gaining an understanding of the motivations and barriers to buying and eating fresh potatoes.

Eating Trends and Influences

Our meal components have changed

In Australia, the components that make up a meal have changed over time.

- In the past, consumers commonly ate a meal of meat and three veg, that is a protein (meat), vegetables, and a starch or carbohydrate (usually potato).
- Today, most consumers believe it unnecessary to have a protein, carbohydrate and vegetables all in same meal.

Consumers believe the key to choosing meal components is balance. Balance means the consumption of different proteins, carbohydrates and vegetables over a week but not necessarily in one meal.

A balanced diet means:

- A variety of foods consumed over the week.
    - For example, sometimes a meal will consist of a protein (eg fish) and salad, steak and vegetables, pasta and tomato sauce, beef curry and rice.
    - Carbohydrates will be consumed over the week but at not necessarily at every meal.

Not all people are sure what foods are carbohydrates (besides potatoes, rice and pasta). For example, one focus group participant asked if beans were a carbohydrate.

Many factors have contributed to this change in eating patterns.

Potatoes play a smaller role in evening meals

Potatoes play a less regular part of a balanced diet because consumers attempt to include a wide range of foods across all potential meal opportunities.

It seems accepted that potatoes are versatile and can be cooked in many ways. However they are not perceived as versatile when matching potatoes with different types of foods and ethnic meals.

"They are versatile within themselves – but not versatile in matches."

Consumers perceive that potatoes match certain foods or meal occasions. These meals tend to be traditional or comfort food occasions, for example Sunday roasts.

Potatoes were not perceived as matching well with modern culturally or ethnic foods, for example Italian or Asian.

In summary, potatoes are being consumed on fewer occasions because:

- consumers have a broader food repertoire and a balanced diet means eating a wide range of foods from this repertoire
- inclusion of a wide range of foods means individual foods are eaten at less regular intervals, hence there are fewer meal occasions when potatoes can be consumed
- potatoes are only matched with a limited range of foods. This further limits potential meal occasions when potatoes are consumed.

Nutrition – it's a confusing topic!

General nutritional knowledge

- Consumers have clear perceptions about what is nutritious and what is not. However:
    - they are not sure if their perceptions are true in reality
    - although they can rate one food as more nutritious than another, they generally do not know why it is more nutritious.

Continued page 5

Phosyn Analytical

PHOSYN ANALYTICAL

Phosyn Analytical have a full range of services, including soil, leaf and petiole analysis available to monitor your **crop nutrient status**, with all results available within **5** days.

Phosyn Analytical 1/60 Junction Road, Andrews, Queensland
PO Box 2594, Burleigh MDC, Queensland 4220,
Ph: (07) 5568 8700 Email:phosynanalytical@phosyn.com
www.phosyn.com

INTERNATIONAL SPECIALISTS IN CROP NUTRITION

RIZOLEX® AND SUMISCLEX®

And now introducing RIZOLEX® in Liquid formulation

SUMITOMO CHEMICAL

Toll Free: 1800 060 671

® RIZOLEX and SUMISCLEX are registered trademarks of Sumitomo Chemical Co. Limited Japan.

- Regarding nutrition, often consumers are confused about what is right, what is good for them and what is not. There is a general frustration about media reports on nutrition.
  "One day they are saying a food is good and then bad – what is right?"
- There are different perceptions as to what is healthy, for example which foods make you fat and cause disease. For example one participant said "we fry everything and we're not fat", while another said "Potatoes are fattening. I eat lots of potatoes so they must be making me fat".
- People obtain nutritional information from a variety of sources. Information from these sources often conflict. Sources include:
  - information learnt from family and school growing up
  - friends and family
  - doctors
  - internet
  - magazines
  - newspapers
  - television programs.
- People tend to be polarised when it comes to concern for health and nutrition. Older people tend to be more concerned about their health especially those who have had health scares (or members of their family or friends have). These people are more likely to seek out nutritional information. They are more likely to have been asked to watch their diet by their doctor. Some doctors also provide dietary advice or meal plans.

Impact of the low/no carbohydrate diet

- A large number of people are aware of this diet and many have seen other people lose weight on it.
- There appears to be more knowledge of the diet amongst older people and women, while men were less likely to be aware. There was also lower awareness amongst families, where at this life stage, health and weight are less of a concern.
- A few participants were on some form of the diet to lose weight.
- Participants perceived this diet requires that carbohydrates are cut out or reduced. This includes pasta, rice and potatoes, bread and ice cream.
- Many believe this diet is a fad rather than a long term trend.

Nutritional perceptions of food

Overall, nutritional perceptions mentioned included:

- greens are better than other vegetables because they provide antioxidants
- white vegetables are bad
- Mum said eat your greens
- coloured vegetables are more nutritious and you should try to get a range of colours on your plate.
- Parents try to get children to eat foods which are as nutritional as possible – but they will not eat everything. Children tend to have less sophisticated tastes. Some children may only eat one vegetable or one fruit and refuse to eat others.
- There were mixed perceptions about whether fresh or frozen vegetables were better for you. Many said that they believe frozen is just as good as fresh (nutritional value) as vegetables are snap frozen soon after picking and fresh produce bought at a store could be a couple of weeks old. Even though this may be true, participants still felt fresh was better.

Nutritional perception of potatoes

Generally, there is lack of knowledge about the nutritional value of potatoes.

Aside from the perception that potatoes are a high carbohydrate food, some believe potatoes are fattening in themselves. Others believe potatoes are only fattening depending on the way they prepared and cooked, for example frying in fat or oil, roasting in butter or mashing potatoes with milk and butter. Steamed and boiled potatoes were perceived as boring.

Recipe cards

Most people are aware of recipe cards available in supermarkets although there is a perception there are not many around currently. Recipe cards located in supermarkets are often viewed suspiciously. Many believe the cards include sponsored products and the manufacturer is just getting you to buy their product.

Perceptions of Potatoes

Consumption habits vary

Many consumers reported a change in their consumption of potatoes over time. Overall, slightly more consumers claimed to be eating fewer potatoes than they were five years ago. Those claiming to eat the same amount or more potatoes tended to be from family households.

Continued page 6

walabi®
GET THE JUMP ON TARGET SPOT
Walabi® is a Registered Trademark of Bayer.
Bayer Cropscience Pty Ltd, ABN 87 000 226 022
391-393 Tooronga Road East Hawthorn, Vic 3123
Ph (03) 9248 6888 www.bayercropscience.com.au
BHT2134/The Hopkins Part.
Bayer CropScience

Consumers eating fewer potatoes than they were five years ago gave the following reasons. They:

- wanted to cut down on carbohydrates;
- perceive potatoes are not a vegetable that should be eaten daily unless coupled with a lot of exercise
- are eating less bad foods overall including oil. This means they have cut out, for example, fried chips and roast potatoes.

Comparison on versatility and value for money

Versatility

Essentially potatoes are seen as being very versatile in themselves so were rated as more versatile than rice and pasta. For example, potatoes could be boiled, steamed, baked in their skin, roasted, mashed and made into potato bake. However, they were not perceived as versatile as rice in terms of matching with other foods. Potatoes were limited by consumers to traditional matches, whereas rice could be eaten at traditional type meals but also in other meals such as stir fries and with ethnic foods. Also, consumers stated that rice and pasta could be stored for long periods of time without spoiling. Hence, they could be on hand for use at any time.

Value for money

Overall, potatoes are viewed as a commodity product so consumers tend to differentiate between carbohydrates on price rather than value. Potatoes are perceived to be on par or of slightly less value than rice, but both were perceived to have more value than pasta. Dried pasta was perceived to have more value for money than fresh pasta as it can be stored in the cupboard and used at any time.

In comparison, consumers generally thought that more processed foods such as frozen chips had less value and versatility. Although, frozen chips were mentioned as being valuable for keeping the kids quiet.

Comparison on taste and nutrition

Consumers believed that taste and nutritional value of different carbohydrates varied depending on how the foods are cooked (for example steamed versus fried) and what they are matched with (for rice and pasta). For example, a baked jacket potato is seen as tastier than a boiled potato. Many liked mashed potato.

Taste

When taken alone (without accompaniments), rice and pasta were generally seen as being less tasty than a potato. Many commented you could eat a potato by itself whereas you could not eat pasta or rice in the same way.

On a scale of tasty to bland, potatoes were perceived to rate about mid-way. Generally bread was perceived to be a lot tastier than potatoes, rice and pasta. The type of bread influenced the degree of difference.

Fresh and dried pasta were generally perceived to be on a par (it's the sauce that makes the difference), however brown rice was perceived to be tastier than white.

Nutritional value

General lack of nutritional knowledge resulted in conflicting nutritional perceptions. Consumers rated one carbohydrate nutritionally higher than another but could not express why.

Generally brown (for example brown rice) and colours (eg sweet potatoes) were perceived to have higher nutritional value. The majority perceived potatoes had a higher nutritional value that white rice (although a few believed they were on par). Pasta was perceived to have less nutritional value than both rice and pasta.

When mentioned by consumers, brown rice was perceived to have more nutritional value than fresh potatoes.

Comparison with sweet potatoes or kumera

Many consumers mentioned sweet potatoes when talking about taste and nutrition.

Sweet potatoes were perceived to be of greater nutritional value than potatoes due to the colour of their flesh. They were also perceived to be tastier (although tastes varied).

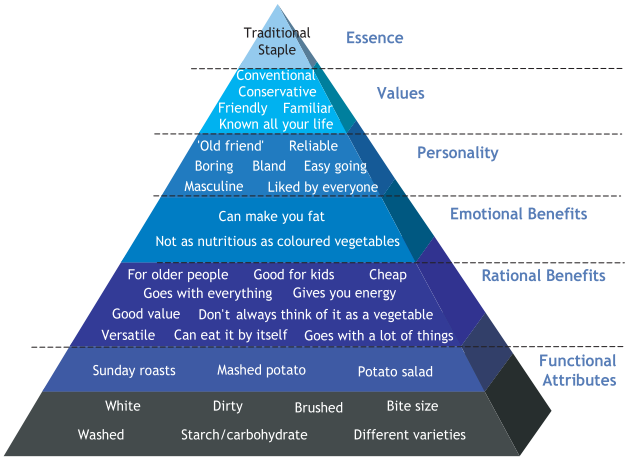
Potatoes as a convenience food

Due to an increasingly busy lifestyle, time pressures have resulted in a demand for convenient foods. Leaving aside pre-prepared meals, potatoes are still regarded by many as quick and easy to prepare. Some consumers think potatoes can be boiled in the same time it takes to cook rice (there is a perception by some that store washed potatoes do not require further preparation prior to cooking). Many consumers mentioned that potatoes can also be microwaved in their skin.

Potatoes of the future

Consumers made the following suggestions for development of potatoes in the future. These factors can reveal unmet needs. Suggestions included:

- new varieties
- varieties that can be stored for longer periods of time
- more vitamins/higher nutritional value/other benefits
- different colours
- new packaging
- environmentally friendly packaging
- taste improvement.



Implications for Potatoes

- There is an opportunity to make potatoes more relevant to consumers in the 21st century - to make fresh potatoes more exciting and adaptable for different uses.
- There is a need to counteract negative associations with potatoes, for example that they make people fat.
- There is an opportunity to build on positive associations. Potatoes are generally seen as always playing a part (however small) in a consumerís food repertoire. They are seen as 'old friends' and have the 'comfort factor'.

Research boost for *plant biosecurity*

Exotic pests and diseases pose a threat to the Australian plant industries. Early detection is crucial in mounting appropriate and effective responses to these pests and will minimise their economic and environmental impact.

An application by Plant Health Australia (PHA) for a Cooperative Research Centre for National Plant Biosecurity (CRC NPB) has been approved by the Department of Education, Science and Training, with funding totalling $20,500,000 over seven years.

The CRC NPB will improve scientific efforts to allow early detection of pests in the Australian plant industries and therefore reduce the threat of unwanted pests and diseases. Research and education will help achieve this in all aspects of biosecurity including prevention, diagnosis, surveillance and management.

An important benefit of having the CRC NPB will be an increase in the number of skilled scientists involved in plant industries across Australia.

The new CRC NPB will bring together PHA (the national coordinating body for plant health in Australia), three rural Research and Development Corporations (including HAL); the Department of Agriculture, Fisheries and Forestry; Departments of Agriculture from all states and the Northern Territory; and other key research organisations including the CSIRO, the Southern Cross University, Murdoch University, Charles Darwin University and the University of Adelaide.

For more information contact: Georgina Bryant, Communications Officer, Plant Health Australia ☎ (02) 6260 4322

Work begins on horticulture business code

Horticulture Australia Council

Australia's major farm lobby groups have begun working with the federal government on the development of a mandatory horticulture business code.

The Horticulture Australia Council (HAC) and National Farmers' Federation (NFF) have welcomed the opportunity to speak with government about the processes behind the development and implementation of the code.

In a joint statement, the two organisations said they had formed an industry committee to negotiate the development and implementation of the horticulture business code, promised by the coalition in the federal election to address market failure in the fruit and vegetable industry.

The Department of Agriculture, Fisheries & Forestry will have responsibility for developing the code for industry. The first step of the process began in mid-January when Agriculture Minister Warren Truss notified industry of the government's intention to proceed with the code.

NFF Vice President Charles Burke said good consultation with industry would be essential to the successful development of the code.

"This will give growers the opportunity to express their needs and ensure the code will work and we are pleased that government officials are aware of the importance of this phase," he said.

HAC and NFF have informed government of the need for the code not to create onerous paperwork or compliance costs for growers and their trading partners but to deliver clarity and transparency in business transactions.

HAC spokesman Mark Panitz said the most suitable dispute resolution and anti-intimidation mechanisms need to be explored to ensure these can be suitably enforced under the code.

"Once developed, the proposed code will be 'road tested' with a range of growers of different size, crop and location to ensure it adequately meets their business needs," he said.

The code is being established under the provisions of the Trade Practices Act and will deliver significant improvements in market performance by building on the commercial relationships at Australia's wholesale markets. There are seven steps in its implementation:

- early notification to key stakeholders
- comprehensive consultation
- making regulations
- review
- draft regulation impact statement
- final regulation impact statement
- notification of when code comes into effect.

A fact sheet on the code and its implementation is available at www.horticulturebusinesscode.com

For further comment: Mark Panitz (HAC spokesman)

☎ 07 3620 3870 or 0418 151 908

Mairi Barton (General Manager, Public Relations, NFF)

☎ 02 6273 3855 or 0408 448 250

Free Trade Agreements - US and Thailand

Free Trade Agreements with the US and Thailand have resulted in changes to trade regulations for potatoes. The full impact of the changes may not be immediately evident and some changes are being phased in over time.

United States

The Australia-United States Free Trade Agreement provides for increased market access for most Australian agricultural products and the elimination of tariffs over time on almost all US agricultural tariff lines.

All Australian agricultural tariffs were eliminated immediately the Agreement entered into force on 1 January, 2005.

The US and Australia have agreed not to use export subsidies on agricultural goods traded into each other's market. Australia does not use export subsidies, while the US currently only employs export subsidies on a small range of dairy products into markets other than Australia.

The Agreement establishes a new forum for scientific cooperation between US and Australian authorities to resolve specific bilateral animal and plant health matters based on science and with a view to facilitating trade.

Potato specific changes

(i) The following are examples of US tariff changes as a result of the agreement. **The tariffs are imposed on Australian goods entering the US.**

Potato fresh or chilled	
Old tariff: 0.5 cents/kg	Action: Immediate tariff elimination
Potato starch	
Old tariff: 0.56 cents/kg	Action: Immediate tariff elimination
Other vegetables; mixtures of vegetables – Potatoes whether or not cut or sliced but not further prepared	
Old tariff: 2.3 cents/kg	Action: Immediate tariff elimination
Other vegetables prepared or preserved by vinegar or acetic acid, frozen	
Old tariff: 6.4 – 8.0 %	Action: Elimination of tariffs in equal annual instalments over 4 years
Vegetables (uncooked or cooked by steaming or boiling in water), frozen – potatoes	
Old tariff: 14%	Action: Elimination of tariffs in equal annual instalments over 10 years

(ii) The following are examples of Australian tariff changes as a result of the agreement. **The tariffs are imposed on US goods entering Australia.**

Potato fresh or chilled – seed, other	
Old tariff: none	Action: No change
Potato starch	
Old tariff: 5%	Action: Immediate tariff elimination
Other vegetables; mixtures of vegetables – Potatoes whether or not cut or sliced but not further prepared	
Old tariff: 5%	Action: Immediate tariff elimination
Other vegetables prepared or preserved otherwise than by vinegar or acetic acid, frozen - potatoes	
Old tariff: 5%	Action: Immediate tariff elimination
Vegetables (Uncooked or cooked by steaming or boiling in water), frozen - potatoes	
Old tariff: 5%	Action: Immediate tariff elimination

More information

www.dfat.gov.au/trade/negotiations/us.html

www.ustr.gov/Trade_Agreements/Bilateral/Australia_FTA/Section_Index.html

Thailand

The Thailand-Australia Free Trade Agreement results in Thai tariffs on potatoes from Australia being gradually phased out from 1 January 2005.

The reduction of Thailand's high tariff barriers means exports may now become viable for a range of products. Opportunities are also opening in Thailand for Australian service providers, investors, and manufacturers and processors.

Potato specific changes

Thailand provided immediate additional quota for fresh potatoes, expanding yearly until 2020, when all tariffs and quotas will be eliminated. The current 30% tariff for processed potatoes will be phased to zero in 2015.

More information

www.dfat.gov.au/trade/negotiations/aust-thai/

Other trade negotiations

On 30 November 2004, Prime Minister John Howard, together with his ASEAN and New Zealand counterparts, announced that negotiations would commence on a free trade agreement (FTA) between Australia, ASEAN and New Zealand in early 2005.

Information for the above item has been summarised from the Australian Department of Foreign Affairs and Trade, and the Office of the United States Trade Representative internet sites.

New International Publications

Potato Processing International (formerly Potato Business World), Potato Storage International and Potato Agronomy International are three new publications for growers and the industry.

The publications are being produced by the Crier Media Group in the UK who specialise in international publications for food and drink industries.

The first edition of the bimonthly Potato Agronomy International is expected in February 2005.

The first edition of the quarterly Potato Storage International was produced in December 2004.

The bimonthly Potato Processing International is due to begin publication in March 2005.

Information on the publications can be obtained from - **www.potato-international.com.**

US fresh growers form super cooperative

In the November/December edition of Spudman, it was reported that the first super cooperative for US fresh potatoes has been formed and will initially represent 60% of all fresh potatoes grown in Idaho and 20% of all fresh potatoes in the country. More information at – **www.spudman.com**.

Keep the bad guys out!

There are a number of serious pests and diseases we want to keep out of Australia but despite having an excellent quarantine system, the growth in trade and tourism and our vast coastline mean that some serious pests and diseases will inevitably enter Australia.

Growers and service providers working with crops and produce need to be alert and contact their local Department of Agriculture or the Exotic Plant Pest Hotline on 1800 084 881 if they see anything unusual.

It's important to act quickly

When a new exotic pest or disease enters a region, it starts off in a small area so if it is detected early it can often be contained and eradicated at relatively low cost. Impact on the industry in the early stages is low, although individuals may be affected.

Once an exotic disease spreads into neighbouring areas, the cost of eradication increases to a point where eradication may no longer be feasible. This decision may be made due to the difficulty of carrying out the task or the extremely high costs associated with eradication.

Once a pest or disease becomes established, it becomes the responsibility of growers to manage it. This is likely to result in additional control costs and possibly even ongoing quarantine restrictions if there are trade implications for having the pest or disease.

If eradication is to be a viable option, it needs to happen before the exotic pest or disease establishes itself.

Why it is important to report a problem

Some growers consider reporting exotic pests and diseases to be a conflict of interest. Yes, reporting it would be good for the industry but my business may be negatively affected.

Few would argue about the logic of eradicating a new exotic pest or disease before it becomes established. The main concern is the economic and social impact on businesses and families in the affected area.

However, there is still a very compelling argument for reporting an exotic pest or disease. The pest and diseases mentioned in this leaflet are all highly damaging to potato crops and if they became established, it would add a considerable ongoing cost burden for all affected. An incursion often results in trade restrictions and could also create social divisions within and between communities due to the impact on businesses.

What about reimbursement for affected growers?

To minimise the impact on individual growers some industries are working with Plant Health Australia to enable reimbursement to growers who lose crops as a result of an eradication campaign. Government and Plant Industry members of Plant Health Australia are negotiating a deed of agreement to share costs and management of emergency plant pest incursions, and the agreement includes reimbursement of affected growers. At present the potato and vegetable industries, through PHA member AUSVEG, are considering their involvement in this agreement.

Any reimbursement scheme would involve a new levy that would be activated as a result of an incursion. This would allow industry to contribute to the joint industry/government funding of the eradication campaign.

What if I spot anything new that may be exotic?

If you find something that looks like one of the pests or diseases below or anything else new to the area, it should be investigated. Call your local department of agriculture or the Exotic Plant Pest Hotline on 1800 084 881.

Suspect material should not be moved or collected without first talking to your department of agriculture, as incorrect handling of samples could spread the pest or make samples useless for diagnosis.

Remember, early detection is essential!

Keep the bad guys out!

Late blight – A2 mating type

New strains of the fungus that causes late blight *(Phytophthora infestans)*, including the A2 mating type, are very virulent and damaging. The A2 type strains have the potential to mate with the Australian A1 type strains resulting in new aggressive and adaptive strains. New aggressive strains have been spreading through Indonesia and Papua New Guinea and could cause a significant impact if they were to enter Australia.

What to look for

The exotic strains of late blight are more aggressive and damaging than the strain (mating type A1) already present in Australia. Many of the exotic strains are resistant to metalaxyl, whereas the Australian strain can still be controlled with this fungicide. The Australian strain tends to attack leaflets and petioles, eventually spreading down the stems. The aggressive exotic strains, however, can attack stems directly, as well as petioles, leaflets and tubers. Late blight caused by these strains may develop earlier in the crop and spread more quickly than disease caused by the Australian strain. With these new strains, a problem that was only sporadic and very seasonal may become more common.

S. Krishna Mohan, University of Idaho

Late blight lesions on petiole and stem

S. Krishna Mohan, University of Idaho

Late blight lesion on potato stem

Ring rot

Ring rot is a bacterial disease that can result in total yield loss in the most serious cases, decay of potatoes in storage and loss of markets due to trade restrictions. It also increases the cost of seed production as certified seed schemes are the principle means of control.

What to look for

Symptoms are quite variable, with wilting (worse in hot weather) leaf rolling and leaves turning dull light-green, then grey-green with occasional mottling, then yellow and finally brown with leaves dying leaving dead tissue.

Affected tubers become cream yellow to light brown inside (around the vascular tissue) and the discoloured region becomes soft and will ooze out when the tuber is broken open. The outside of the tuber may have reddish-brown blotches around the eyes and there may be irregular or star-shaped cracks in the skin.

Jack Kelly Clark, University of California - Agriculture and Natural Resources

Bacterial ring rot symptoms in tubers

Colorado potato beetle

Colorado potato beetle is one of the most destructive pests of potato, devouring the above ground part of the plant, often completely defoliating plants and causing up to 50% yield loss. The beetle can increase in numbers rapidly, causing a lot of damage in a short period of time. Control relies on insecticide sprays. In the US genetically modified varieties are used to control the beetle.

What to look for

Colorado potato beetle is very distinctive. Any beetles that look like the pictures should be reported immediately.

C.W. Hoy - APS

Adult, larva and egg mass

Keep the bad guys out!

Unknown - APS

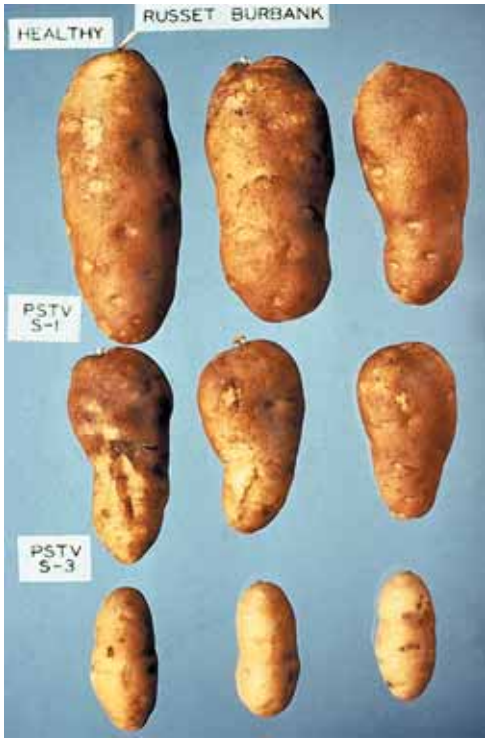
Adult feeding on an emerging potato plant

Potato spindle tuber viroid

Potato spindle tuber viroid is a highly infectious virus-like organism that has mild and severe strains. Severe strains can cause up to 40% yield loss through the reduction in size and number of tubers and loss of marketable yield. In North America this disease is estimated to cause an overall loss of 1% to the entire industry. Losses are generally more severe under dry conditions.

What to look for

Affected plants are usually stunted and foliage is spindly and very upright, and is often a darker green than normal. It may also be a darker green at the top of stems as well as upward rolling of the terminal leaflets. Affected tubers are small, elongated, cylindrical, spindle or dumb-bell-shaped, with prominent eyes evenly distributed over the tuber.



S.A. Black - APS

Tubers from plants infected by a severe strain of potato spindle tuber viroid during the current season (middle), tubers after three seasons of infection (bottom) and healthy tubers (top)

Potato mop top virus

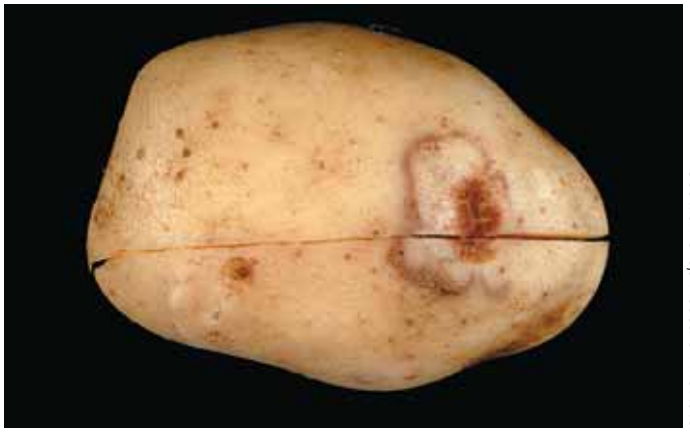
Potato mop top makes potatoes unsuitable for processing as well as reducing crop yield. The virus is spread by powdery scab which is common in Australia.

What to look for

This virus causes a wide range of symptoms, depending upon the cultivar and environmental conditions. The three most common shoot symptoms are yellow blotching or mottling, particularly of the lower leaves, chlorotic V-shaped markings in the leaflets and extreme stunting of the shoots, known as 'mop-top'. The characteristic symptom on tubers is brown arcs or rings in the tuber flesh and occasionally on the tuber surface.

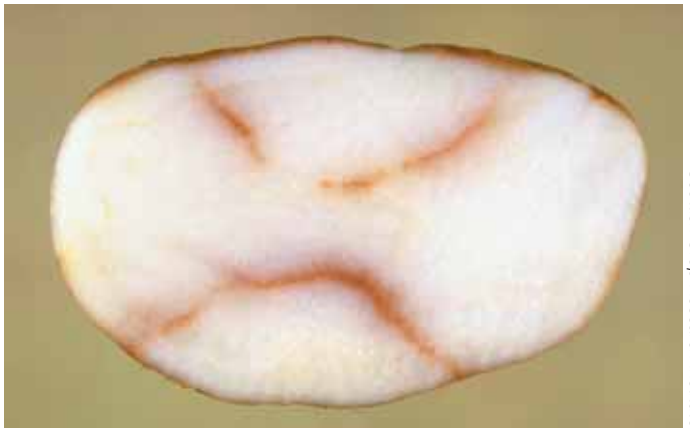
R.A.C. Jones et al -APS

Bright yellow blotches on foliage



Scottish Crop Research Institute

External tuber symptoms



Scottish Crop Research Institute

Internal tuber symptoms

Keep the bad guys out!

Potato wart disease

Potato wart is a serious disease of potato that can render entire crops unmarketable and make a paddock unsuitable for potatoes or any exported produce for many years. There are strict international quarantine conditions to prevent the spread of potato wart and there would be indirect losses through trade bans if Australia had this disease and could not eradicate it.

What to look for

This disease does not usually cause symptoms of the aerial parts of the plant, though there may be some small greenish warts on buds and reduced plant vigour. The fungal disease affects the tuber and in early infections developing tubers become so distorted they are scarcely recognisable. In older tubers, only the eyes are infected and they become the characteristic, warty, cauliflower-like growths. The growths are initially whitish or green if they are exposed to light, but gradually darken and eventually rot and disintegrate.

M. C. Hampson - APS

Wart gall causing severe disfiguration of the tuber
American Phytopathological Society

Biosecurity Plan

Plant Health Australia has been working with AUSVEG and the Commonwealth and State governments to develop a biosecurity plan for the potato industry.

The first major step has been to identify key pests and diseases that could seriously damage the industry. The next step is to develop measures to minimise the chance of these pests and diseases arriving and spreading in the industry and to have emergency plans in place in case they do arrive.

The exotic pests and diseases on this liftout have been identified in the biosecurity plan as priority threats that could severely damage Australia's potato industry.

Further information on the biosecurity plan is available from the PHA website at - www.planthealthaustralia.com.au/potato.

How to use this leaflet

Remove the leaflet from Eyes on Potatoes and pin it up in the shed, office or where it can be referred to easily.

Acknowledgements

The Biosecurity Plan has been financed through the potato levy and a grant from the Commonwealth Government via the Department of Agriculture, Fisheries and Forestry.

APS photos reprinted with permission from Diseases of root and tuber crops ©2002: The American Phytopathological Society, St Paul, Mn, USA.

Potato growers are the key to protecting Australia's crops from exotic insects and diseases that could devastate the industry.

It is important that you are aware of the risk, and if you spot anything unusual in your crop you should always check it out and call the Exotic Plant Pest Hotline on 1800 084 881.

Visit www.planthealthaustralia.com.au for further information.

Australian Government
Department of Agriculture, Fisheries and Forestry

AUSVEG

This project has received funding from the Australian Government through the Department of Agriculture, Fisheries and Forestry.

Plant Health AUSTRALIA

LOOK. BE ALERT. CALL AN EXPERT.

1800 084 881

AT&M19969

National Potato Conference 2005

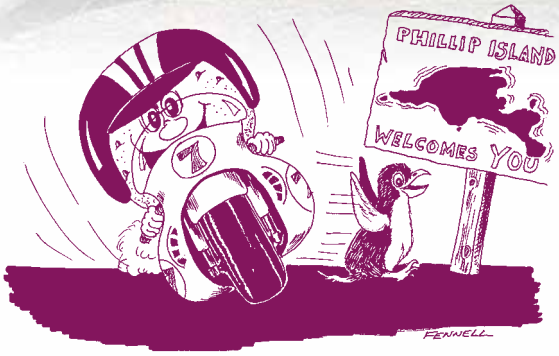
The Program is a rich mix of technical and practical with speakers from the research frontiers, the industry economists and marketers as well as a range of growers talking about how they make it work.

Potato 2005 at Cowes,Victoria in September will be your best opportunity to gain a deep understanding of the trends and direction of the Australian Potato Industry and how your business fits with it. We encourage you to be part of it!

The last time the National Potato Conference was held in Victoria was 15 years ago at Warragul. The conference is the ideal time to combine a bit of strategic thinking and planning with meeting old friends and acquaintances. The theme of the conference is "Today and Beyond" and the program provides a broad range of technical updates and reviews from local and international presenters. Several presenters will do some crystal ball gazing, looking at consumer trends, broader agricultural trends, lessons learnt from market developments and opportunities for new products.

An industry trade fair will accompany the conference. It will showcase new equipment and ideas. Company representatives will be on hand to discuss their products. Several overseas specialist equipment manufacturers will participate in this trade fair for the first time in Australia.

The three day event from Monday 19th September to Wednesday 21st September will provide a well designed and informative program, industry tour, conference dinner, an extensive trade fair and opportunity



to meet and mingle with industry representatives in an informal atmosphere. Cowes is located on Phillip Island, 140 kilometres east of Melbourne and is an international destination famous for its nightly penguin parade and seal colonies. Combine the conference with other options such as a holiday with the family, or a visit to Melbourne for the AFL grand final on the following weekend.

Whatever you do, don't miss it!

For further information contact the Conference Secretariat,
PO Box 1349, Warragul, Victoria 3820
☎ (03) 5623 4188,
Fax: (03) 5622 0806
e potato2005conference@yahoo.com.au

AM for Max McKenna

Long-standing, prominent potato grower from Ulverstone, Tasmania, Max McKenna, recently received an Australia Medal (an Order of Australia award) for his services to primary industry.

Max has taken a prominent position as an agri-political leader in the potato industry over his 42-year working life.

His services to the Australian potato industry have previously been recognised by AUSVEG, Simplot Ulverstone Potato Grower's Group, Tasmanian Farmers and Graziers Association Vegetable and Potato Councils. In 2003, he received the Simplot Australia Award for services to the Tasmanian Potato Industry.

For more than twenty years Max has been actively involved in industry organisations, working on behalf of Tasmanian and Australian potato growers. He was Tasmanian delegate to the Potato Growers of Australia (PGA) and was later on AUSVEG and one of its representatives on the Australian Potato Industry Council (APIC). He served two years as PGA Chairman and Treasurer to AUSVEGand held various positions on APIC.

Max was also heavily involved in organising the compulsory grower and processor Research and Development levy, implemented in 1991.

He has been invited on Federal Government panels to assess potato industry issues, has represented the industry in many overseas forums and has helped introduce innovative overseas production practices to Australia.

On behalf of growers, he has conducted skilled negotiations on annual price and contract deliberations with processors.

The industry congratulates Max on this well deserved honour.

Barry Oldaker & Associates Pty Ltd

CONSULTANCY & SALES

Professional Advice & Sales of Equipment For All Aspects of The Potato Industry

Contracting Services

De-stoning, De-clodding and Planting (Conventional and new QUAD SYSTEM)

Distributor for

T-Systems® AUSTRALIA PTY LTD

Drip Irrigation Systems

Contact: Barry Oldaker
Mobile: 0418 503 226
Fax: 03 5334 5337

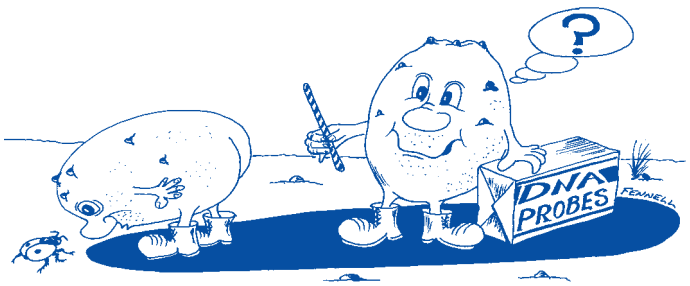
Or: Tim Oldaker
Mobile: 0408 588 785

Email: barryoldaker@bigpond.com.au
Web site: www.barryoldaker.com

AT&M20256

Processing Potato R&D Program

DNA probe tests -
predictive testing for soil borne diseases



Imagine being able to collect a soil sample and then getting it tested for a range of diseases. Predictive testing is possible and the potato industry is investing in developing this technology.

The greater the amount of disease inoculum in the soil prior to sowing the greater the risk of soil borne diseases which can cause significant yield losses. Whether a disease becomes a problem also depends on the soil environment, variety sown, management and seasonal conditions.

Understanding what disease inoculum is present provides growers with an important tool to selectively manage particular diseases. Risk for each disease can be accessed and over time a better understanding of the relationship between disease inoculum in the soil, variety, management and seasonal conditions can be gained.

DNA probe tests can be designed to detect and measure any living organism in the soil. The tests are also very sensitive, allowing small amounts of DNA to be detected.

The main advantage of DNA technology is that a single sample can be tested for many diseases making it a very valuable management tool.

These tests can be used by growers as a risk management tool and by researchers to develop better disease management strategies.

Commercial DNA probe tests for soil borne diseases have been developed and are being used by the cereal industry in Australia. The root disease testing service (RDTS) technology developed by SARDI/CSIRO is unique in the world and DNA based tests are commercially available for a broad range of soil borne diseases of cereals prior to sowing. These include take-all, cereal cyst nematode, rhizoctonia bare patch, some species of pratylenchus nematodes and crown rot. Grain growers can access the technology through PreDicta B (commercial name of the test) marketed by C-Qentec a subsidiary of Bayer CropScience.

The new Potato Processing R&D Program will extend this technology to the potato industry and will build on the considerable industry supported research already carried out at the Department of Primary Industries - Victoria and New Zealand Crop and Food Research (projects include Prediction and molecular detection of soil-borne pathogens of potato, and Enhanced detection of potato cyst nematode and bacterial wilt to improve market access for the Australia and New Zealand Potato Industries – see previous editions of Potato Australia for details).

This unique, collaborative program will develop DNA probe tests for major soil borne diseases of potato including powdery scab, common scab, rhizoctonia, as well as root lesion *(Pratylenchus)* and root knot *(Meloidogyne)* nematodes.

Kathy Ophel Keller
SARDI
☎ *(08) 8303 9368*
✉ *ophelkeller.kathy@saugov.sa.gov.au*

One soil sample can be used to test for a range of diseases

Biofumigation proves its worth in bacterial wilt control

Work by CSIRO in Perth and Canberra, Department of Primary Industries and Fisheries, Queensland and the National Crop Protection Centre in The Philippines has shown biofumigation to be effective in controlling bacterial wilt. Trials are underway in north Queensland and the Philippines to develop practical approaches to controlling bacterial wilt on the farm.

A summary of the work has been reported in the November 2004 final edition of Biofumigation Update which can be viewed on the internet at - www.ento.csiro.au/research/pestmgmt/biofumigation/newsletter_list.html

Quality System
Quality Endorsed Company
CHS
CROP HEALTH SERVICES
Plant pest & disease Diagnostic Service
Crop Hygiene Services
DPI Knoxfield: 03 9210 9356
Accurate diagnosis, rapid turn around
19982

The national processing industry has embarked on a five year R&D Program to help growers better understand and manage potato soil borne diseases. The Program will address a range of issues including how crop rotations and soil treatments affect disease incidence and severity, the breeding of disease resistant cultivars, and developing DNA tests to detect and monitor disease organisms in the soil.

Managing Advanced Soil Health (MASH)

In the Processing Potato R&D program, growers' properties are being used as a source of information to help scientists understand the complexities of soil health. Scientists have worked with farmers and processors to establish more than 116 test strips on farms across Tasmania (30 strips), Victoria (57) and South Australia (29). These strips will provide important information to help researchers and growers develop disease management strategies.

Purpose of the research

Information from the test strips will be used to better understand diseases such as common scab and powdery scab, factors contributing to disease development such as nutrition, validating DNA probe tests and better understanding the impact of rotations on disease development. We hope these sites will give valuable leads to guide other research and ultimately lead to better disease management strategies.

The test strips

The 10 metre test strips have been established in crops under a range of soil types, climatic conditions and cultural practices. This will allow researchers to study factors contributing to disease development.

The test strips consist of a 10 metre planting of *Desiree*, the variety most susceptible to common scab. If anything has an effect on disease development, it should be more obvious on *Desiree* than other cultivars.

Researchers are comparing each test strip with an adjacent 10 metre strip of commercial processing varieties.

Factors including calcium, zinc, potassium, soil pH and irrigation are often said to contribute to one or more of the diseases being studied but conclusive evidence is lacking. By monitoring a large number of crops growing under a range of conditions we hope to be able to quantify the factors that contribute to or reduce disease. We can then use this information to develop appropriate recommendations to reduce disease and improve marketable yields.

Management of the test strips

The test strips will be managed (ie. irrigated, sprayed and fertilised) the same as the main crop. However, they will be harvested separately by the research team.

Research activity

Researchers will visit the sites at different times of the year to take measurements and assess the health of the plants in the strips. These visits will take place at emergence, several weeks before harvest and at harvest.

Potatoes will be removed from the test strips for laboratory assessment. Information about the paddock such as cropping history and management will be collected from the grower.

Two way information flow

In any such study, it is important that participating growers are kept up to date with what is happening. Researchers will provide growers with updates throughout the project.

Further participation

The research team are grateful for the help they have received from growers and industry officers and at this stage have enough growers participating in the work. However, as the program continues, it is hoped that more growers can become involved.

Nigel Crump
Subprogram Manager – Soil Amendments
Processing Potato R&D Program
Vic Department of Primary Industries
☎ *(03) 9210 9222*
✉ *nigel.crump@dpi.vic.gov.au*

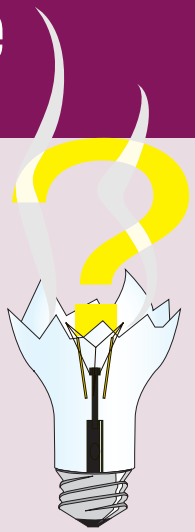
H. Polesy & Co.
(IMPORTERS) PTY. LTD. EST. 1950
www.polesy.com.au

JUTE & HESSIAN BAGS, BULKA BAGS,
POLY WOVEN BAGS, PRINTING,
SEWING MACHINES &
SEWING THREAD, ONION BAGS

AT&M19984

MICHAEL WILDE 0411 884 887

Program name competition



In December Eyes on Potatoes we announced a competition for naming the new Processing R&D program. Unfortunately we drew a blank with attracting a new name. So nobody won the prize. It has therefore been decided to retain the name we have been using – Processing Potato R&D Program or Processing R&D Program when we refer to it in the potato publications.

Leigh Walters

PS - Maybe we should have offered a weekend away on a tropical island instead of the free registration to the National Potato Conference!

Nitrophoska®

BLUE

Special

It's really living up to its name

For 75 years people have relied on Nitrophoska® Blue Special's solid reputation as the fertiliser of choice for horticulture. Now Nitrophoska® Blue Special is really living up to its name in more ways than one. From now on you'll notice that the Nitrophoska® Blue Special white granules you've always trusted will be blue in colour.

Why Blue you ask? So you'll be able to recognise superior quality even before your crops come out of the ground. Available from your local Incitec Pivot agent or dealer.

INCITEC PIVOT LIMITED ABN 42 004 080 264 70 Southbank Boulevard, Southbank Victoria 3006. Telephone 1800 333 197. **www.incitecpivot.com.au**

Incitec Pivot

Rely on the Strength

Nitrophoska® Blue Special is a registered trademark.

INC0164

Learning more about cadmium

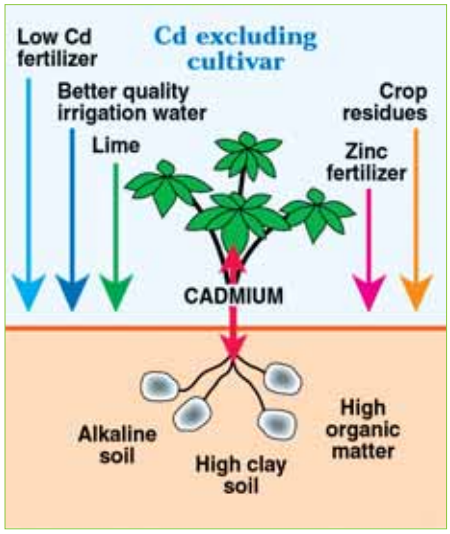
Cadmium (Cd) occurs naturally in the environment. It is often present in soils at higher than normal concentrations as the result of pollution and because it is a contaminant in applied fertilisers and soil amendments such as lime and gypsum.

Cadmium readily moves from soils to plants, so we risk absorbing Cd through the foods we eat. Prolonged consumption of food high in Cd can cause a variety of adverse health effects. Potatoes have been identified as the key source of Cd in the Australian diet, therefore it is vital to keep the Cd content of potatoes as low as possible to maintain food safety.

Management strategies to minimise Cd in tubers have been developed through levy supported projects. A better understanding of what is happening to Cd in the plant helps improve these strategies.

One levy supported project funded a PhD scholarship for Kelly Dunbar, who looked at amounts and movement of Cd in the plant and the interaction between zinc (Zn) and Cd.

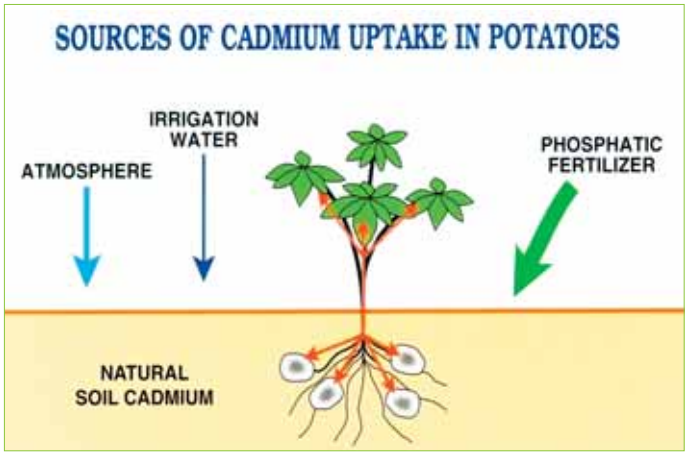
For the two cultivars examined, Kelly found that Cd uptake into *Wilwash* and *Kennebec* plants was similar, but the amount of Cd in the tubers was very different. *Wilwash* had a lot less Cd in the tubers. This indicated that some varieties had the ability to reduce the amount of Cd entering the tubers – this is important information for plant breeders attempting to develop low Cd accumulating varieties.



Growers need to minimise the amount of cadmium applied to the soil by using fertilisers and soil amendments low in cadmium.

Kelly also found that Cd taken up by the basal roots moved up to the leaves and then down to the tubers. The movement was also rapid, with applied Cd reaching the tubers in as little as eight hours.

The interactions between Zn and Cd were complex and not as simple as Zn competing with Cd for uptake into the plant. Depending on environmental conditions and the cultivar examined, we found applied Zn could either decrease or increase Cd absorption into plants. In previous field trials application of Zn always decreased tuber Cd concentrations.



Varieties that take up less cadmium are a valuable management option.

Future research will focus on identifying the precise mechanisms of Cd absorption into roots and the chemical form of Cd transported around the plant. This may lead to options for blocking Cd build up in potato tubers.

Mike McLaughlin
CSIRO Land and Water
(08) 8303 8433
mike.mclaughlin@csiro.au

Important for growers to use fertilizers and soil amendments low in cadmium

A large quantity of phosphorus fertiliser is applied to grow potatoes so it is important the fertiliser is low in cadmium. Fertiliser with less than 100 mg Cd per kilogram of phosphorus are available in the marketplace, and growers should seek to use these or ones with even lower Cd concentrations.

Some soil amendments are also a source of cadmium. As soil amendments such as limestone and gypsum are applied in large quantities, often several tonnes per hectare, it is best to choose products with low Cd concentrations - less than 5 mg Cd per kilogram of product.

Latest R&D reports

HAL
Know-how for Horticulture™

The following is a list of HAL Final Reports released in the last three months.

Biodegradable plastics: The potential for Australian potato as an input for biodegradable polymers	PT02001
Development of an industry plan for potato growers in South Australia	PT02042
Evaluation and commercialisation of common scab resistant clones of commercial potato varieties	PT01020
Potato evaluation trials – McCain Foods (Aust) Pty Ltd	PT03028
Seed potato handling and storage - implementing best practice	PT01030
Variety development for the fresh potato market in Western Australia	PT03070

The reports are available from HAL for $22.00 in Australia or $US30 outside Australia including postage. Summaries of the projects and an order form can be found on HAL's internet site at – www.horticulture.com.au. Select Project results then Potato and use the search engine to find the reports of interest.

To purchase reports use the order from the internet site or send a cheque with a note quoting the project name/s and project number/s to:
Publications
Horticulture Australia
Level 1
50 Carrington Street
Sydney NSW 2000
Ph: (02) 8295 2300
Fax: (02) 8295 2399
Email: publications@horticulture.com.au

State ROUND-UP

Western Australia

The early summer harvest from crops near Bunbury, Manjimup and Pemberton has maintained the long-run average yield of around 50 tonnes/hectare.

Supply and quality of varieties has been adequate, however some internal defects found in *Ruby Lou* have been a concern. As a result summer plantings are down on the same period last year.

Production of *Royal Blue* continues to increase with strong demand for quality tubers. *Royal Blue* now forms 10% of Pool 5 production.

The supply of potatoes after New Year has been restricted. Crops have not been ready on time and immaturity continues to affect full supply.

Prospects for the autumn harvest indicate a good supply of potatoes.

Export demand for ware and seed remains strong. The main supply season is from February to April. Early *Atlantic* seed was sent to Queensland and this adds another market to the established seed trade with South Australia and overseas.

Three quarantine officials from the Thailand Department of Agriculture visited Western Australia in January to inspect seed potato production and to discuss import conditions for Australian seed. Procedures were investigated for testing potatoes in Australia for virus to ensure acceptance by Thai quarantine. These discussions involved officers from Biosecurity Australia and AQIS. Potential changes of benefit to Australian exporters will be presented to industry for approval before they are submitted to the Thai authorities for their consideration.

Peter Dawson
Advisor (Vegetables)
Department of Agriculture, WA

Brian Dickson
Operations Manager
Western Potatoes

Victoria

The Victorian crop started in wet spring conditions, causing some areas to be late and a few areas to experience some seed piece breakdown. In late November and December, planting conditions were very good. Although the start of January was cold, most of the month had ideal conditions with good rainfall.

All potato districts in Victoria received up to 125 mm in 24 hours in the first week of February. This caught up with irrigation but caused some health problems for crops specifically in low lying areas. Target spot was present in most districts.

Gippsland had a good growing season. Other than target spot, the crops remained healthy. Rain through the season resulted in good yields. Early seed crops were dug in February.

Kinglake was planted late due to the wet spring. Cool mild weather in November and December caused some unevenness in growth, but by late January crops were looking good. Seed crops will finish on time.

Ballarat crops have had good conditions and most *Russet Burbanks* have strong tops and should yield well. Cool weather at the start of January may have caused some brown centre and the big early February rain may result in some hollow heart. Overall the crops should bulk up well and finish on time.

Colac/Otway crops have had good rain and growing conditions and seed crops look very healthy, although some problems arose with heavy rain in February.

Crisping crops have had very good growing season, resulting in excellent crops. The Thorpdale crops harvested in January had very good crisp quality. Harvest started in Koo Wee Rup and Western Districts in early February with good yield and quality.

VicSPA ran a Seed Certification Workshop in the first week of December with 18 participants from five states. The program should benefit all seed growing districts in Australia and help Certification Officers achieve a uniform standard across Australia.

Bruce Fry
Horticultural Extension Officer
Department of Primary Industries

South Australia

The summer has been mild and cool which has meant that over the whole Fresh industry, crops have grown well and yields are slightly above average. Disease pressures have been low with very little tomato spotted wilt virus being reported. The biggest challenge is the low market price that reflects over production and other factors.

The mild summer weather will provide for, on current conditions, a slightly above average crop yield for the main *Russet Burbank* crop. Early season crops suffered from the hot weather and have not grown out as they normally have done. Disease pressures include some reports of minor damage from hollow heart, late blight resulting from the cool and misty weather and less reporting of tomato spotted wilt virus compared to previous seasons. If the summer continues to be relatively mild, excess production could be a challenge in the processing industry as well.

Seed crops have generally established and grown very well and should yield slightly above average. These crops have enjoyed relatively low disease pressures as well. The spraying- off of some crops has begun.

Bob Peake
Horticultural Consultant
Rural Solutions SA

Queensland

Naturally after the price slump in 2004, the question on most Queensland fresh market growers' minds is "what will happen to potato supply and prices in 2005 and how will this affect my plantings?".

It is expected that plantings in the upper Atherton Tablelands will be similar to last year. Those crops that have been planted are looking fine. The rains while late starting have been constant and lack of water is not going to be an issue with these crops. Possibly lower tableland fresh market crops will be reduced. Export market plans are likely to be at a similar level to last year's.

Bundaberg has had good rains so growers will have a plentiful supply of water for their crops, but due to price and supply issues there is uncertainty as to the level of planting which will occur.

The Lockyer Valley while having had some good storms is still short of water. The rains have not been consistent enough to fill aquifers and produce constant stream flow. Plans for processing production are similar to last year, but there is still indecision about fresh market production.

Darling Downs processing crops have produced average yields of high quality. The red soil production areas have grown some very nice crops. Water is still an issue for Darling Downs' growers. There have been rain events but patchy and variable in intensity. Water availability and price expectations will determine the level of planting in the next few months.

Michael Hughes
Extension Agronomist
Department of Primary Industries & Fisheries

New South Wales

Digging of the early crop in the Riverina started in December and will continue until April. With a dry spring and the hot weather during the growing season, most crops only produced average yields. With weak demand for fresh potatoes over Christmas, prices stayed very low at $160/tonne on-farm for dirty, bulk potatoes, a drop of $140/tonne on last season's returns. The low ware prices and the very wet summer weather considerably slowed down harvest operations.

Many Riverina growers have received over 300 mm of rain since December, nearly half their annual rainfall. Digging of the fresh crops was not completed until mid-February, with some growers keeping a large part of their crops for seed. The crisping and French fry crops had good quality and high dry matter contents. While the fresh crop areas were down on last year, the processing areas have continued to expand in the Riverina.

The early crop harvest at Dorrigo started just before Christmas and finished in early February. Despite a dry start to the season, there were good falls of rain over most of the growing season. As a result of the favourable growing conditions, crop yields were high. While there was a fair demand for fresh potatoes during the harvest, prices only averaged $18 a 50 kilogram bag ($360/tonne) on-farm, a drop of $240/tonne on last season. Digging in the Ebor and Tyringham areas started in February and will continue until Easter, with good yields also expected for these crops.

Sowing of the mid-season crop started in the Guyra, Orange and Crookwell districts in October and was finished by Christmas. The main crop areas are similar to last season. Most plantings have benefited from sowing on full soil moisture profiles and follow-up rains that fell in December and January. With the excellent growing conditions, seed crops have stayed free of major pests and diseases. Harvesting in the Orange area started in mid-February and will continue until June. Generally high yields are anticipated for this season's mid-season crop harvest.

Planting of the late crop at Dorrigo was completed in February. With good summer rains in the district, , soil moisture profiles and farm irrigation dams are full. Planting of the Riverina late crop started in mid-February and finished in early March. Late crop areas in New South Wales are similar to last year.

Stephen Wade
District Horticulturist
NSW Department of Primary Industries

Tasmania

Processing and fresh market crops are progressing well despite a considerably drier than average January. Growers were becoming concerned about whether they had enough water to finish the crops but recent rain may help alleviate the situation. Early harvested *Shepody* and *Kennebec* are performing to expectations and no significant problems have been reported. The main crop is progressing well in all areas and growers and processors are optimistic about the results.

Seed crops are looking the best they have for many years with no paddock rejections so far and excellent crop reports from all areas. The only major problem reported concerns groundkeepers, which have been inadequately controlled in neighbouring paddocks. Many crops are ahead of schedule and tuber inspections are expected to start towards the end of February. The new early harvest incentives introduced this year by Simplot will reward growers who have their crops in cold store 17-22 weeks after planting. This change is expected to ease pressure on grading / storage operators. The Simseed web based seed tracking system has been expanded to include field officer reports and the seed certification field report.

Reports from processing and fresh market crops suggest higher than normal powdery scab levels and it has been suggested this may have resulted from improved irrigation scheduling over the last few years. Conversely and on the positive side, this has also resulted in a significant fall in the level of common scab. Most processing growers still see rhizoctonia as their biggest disease problem resulting in significant losses over the harvester and a resultant increase in the groundkeeper problem. Virus levels continue to be monitored in all seed crops in the state and early results look encouraging.

Iain Kirkwood
Agriculture Officer (Potatoes)
Department of Primary Industries, Water and Environment

Used by the best potato farmers in the world.

The best potato farmers in the world use Grimme, the most successful manufacturer of specialist potato machinery in the world. Grimme provides a full range of potato harvesters, from single row diggers to sophisticated self-propelled machines as well as a full range of planters, destoners and in-store handling equipment. If you'd like to know more, contact Landpower on 03 9369 1188.

LG009

LANDPOWER
Your Farm Machinery Professionals
www.landpower.com.au

GRIMME