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# NSW Flower News

**issue 9 Summer 2008**

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## **Welcome**

This issue of NSW Flower News highlights a variety of research projects underway at NSW DPI, while 'What's On' lists many different events where people in the flower industry can meet each other and learn more about related industries. It's also worth considering the PROfarm short courses, which allow you to expand your knowledge in a range of on-farm topics.

## **Pest and disease alerts**

### **Elm leaf beetle detected in southern NSW for the first time**

The presence of Elm leaf beetle (*Pyrrhalta luteola*) has just been officially confirmed in NSW. This beetle was first discovered in Australia in 1989 on the Mornington Peninsula, although it may have been introduced some years before. The beetle is now established in Melbourne, particularly in the Southern and Eastern urban areas, and extending well into Gippsland. More



(Photos of the elm leaf beetle and damaged foliage are reproduced with acknowledgement to [www.global-garden.com.au](http://www.global-garden.com.au)).

recently the beetle has been discovered in regional parts of Victoria including Geelong, Benalla, Mansfield and Bendigo. Elm leaf beetle has also had a detection reported from Launceston, Tasmania.

The elm leaf beetle has the potential to cause severe defoliation of susceptible elms, which can weaken mature trees and reduce their amenity value. Elms subjected to repeated elm leaf beetle attack are also more susceptible to other pests and diseases.

Most of the elms planted in Australian streets, parks and gardens are European

species and are susceptible to elm leaf beetle attack. They include the English elm *Ulmus procera*, Dutch elm *U. x hollandica*, golden elm *U. glabra* "Lutescens", variegated elm *U. minor* "Variegata", and the weeping elm *U. glabra* "Camperdowni". Asian species such as the Chinese elm *U. parvifolia* and the closely related *Zelkova serrata* are relatively resistant to elm leaf beetle.

This first confirmed NSW detection of elm leaf beetle comes from southern NSW. Although the adult beetle can fly between trees, they are natural hitchhikers and can spread quickly to new areas in cars, caravans and other vehicles. Pathways for this beetle's introduction into NSW from Victoria have existed for a number of years. It is likely that this pest will spread to others parts of NSW where elm is grown.

For more information on this pest, including symptoms and management, see <http://www.elmsavers.com.au> and [www.global-garden.com.au](http://www.global-garden.com.au)

### **Detection of an exotic virus on *Brugmansia* sp.**

The exotic virus Colombian Datura Virus (CDV) was detected for the first time in Australia during spring 2007. This virus infects plants of the genus *Brugmansia*, commonly known as Angel's Trumpets, and closely related *Datura* species. It can also infect certain other genera in the Solanaceae family, including *Nicotiana* (tobacco), tomato, *Physalis peruviana* (Cape gooseberry), *Solanum nigrum* (black nightshade) and *S. muricatum* (pepino) and *Petunia x hybrida*.

Colombian Datura Virus has now been positively identified in *Brugmansia* plants sampled at several locations in NSW and Victoria. For the first time, DNA sequence analysis was used to positively identify this virus, which belongs to the potyvirus group.

Symptoms of the virus are yellow mottling of the leaves, especially visible on the newest fully expanded leaves. The mottle is transient and appears to be best expressed during cooler weather in autumn or when the plant is under stress. Shoots in the more shaded centre of infected plants tend to

show more symptoms in the spring. However, infected plants may be entirely free of virus symptoms. The virus can be spread by aphids and through vegetative propagation.

### **Research updates**

#### **Grafting trials**



Grafted *Corymbia* is one of the success stories in research trials being conducted by NSW DPI researcher Jonathan Lidbetter who is evaluating the performance of grafted plants of a range of species for cut flowers and foliage.

#### **Introducing David Nehl**

Dr David Nehl is a Senior Research Scientist with the NSW Department of Primary Industries, based at the Elizabeth Macarthur Agricultural Institute, Menangle near Camden.

David majored in plant sciences at the University of New England in the 1980s, and following a brief period of work in commercial nurseries near Brisbane, he set up and ran his own wholesale native plant nursery near Coffs Harbour. In 1990 he returned to study, working on biological control of Noogoora burr for his Honours year, followed by a PhD investigating mycorrhizas and a soilborne disease of cotton.

David joined the Department in 1995 as a plant pathologist working on disease surveys, integrated disease management and soil biology in field crops at Narrabri. He moved to the Elizabeth Macarthur Agricultural Institute (EMAI), Menangle (near Camden) in July 2007 as officer in charge of the Plant Health Diagnostic Service and is currently enjoying the

challenges of diagnosing diseases in everything from sprouts to trees.

#### **Len Tesoriero assumes new role**

Len Tesoriero has taken on a new role as Industry Leader (Greenhouse and Ornamentals) fostering industry development. He maintains an active interest in plant health diagnostics and integrated disease management research. Len currently manages three research projects in the field of protected cropping. Len will be known to many in the flower industry for his work in NSW DPI's Plant Health Diagnostic Service and his highly informative talks on managing plant diseases.

#### **Specifications project aims to lift wildflower quality**

'Quality specifications for the Australian wildflower industry' is a project supported by the Rural Industries Research & Development Corporation (RIRDC), the NSW DPI and industry. It aims to develop commercially relevant 'minimum acceptable' product specifications, including photographic standards, for 30 wildflower products. The project is being conducted by Bettina Gollnow, Dr Jenny Ekman and Dr Ross Worrall and scientific photographer Mr Lowan Turton.

#### **Why do we need specifications?**

Industry reviews have repeatedly highlighted the need to lift the quality and consistency of flowers, especially those sent to overseas markets. While there are various published standards for several flowers and foliage, they have not been adopted broadly across the industry. Relevant standards or specifications are lacking for most of our major crops, as well as new and emerging products.

Standards are a tool to give a consistent and better quality end product but have to be widely used to be effective.

#### **What will the project do?**

- Identify 30 widely grown products which would benefit from specifications
- Write easy to use, grower friendly specifications for each product, supported by clear photographic

images. The specifications will include a product description (covering such attributes as flowers, leaves, stem and stage of opening for domestic and export markets). The photos will make it easy to see what the 'minimum acceptable' product should look like. There will be more photos to document common defects, as well as under- and over-mature blooms.

- Growers and marketers will be involved in drafting the specifications and testing them to see how they work in 'the real world'.
- Product handled and graded according to the draft specification will be assessed and feedback given to the growers and marketers concerned.
- Completed specifications and photos will be published on the internet (address to be advised) and printed copies will also be available to buy.
- General guidelines will be produced to outline recommended pre harvest management such as pest and disease management, and plant hydration.
- Labelling protocols will be prepared to standardise information across the industry.

#### **Why we need specifications: the Christmas bush example**



The untidy cut ends detract from this bunch

A wide range of 'Christmas bush' bunches are offered to buyers on the domestic market. Bunches sampled at the Sydney Flower Market in the lead up to Christmas 2007 ranged in weight from 305 grams and 9 stems to a whopping 1081g bunch of 10 stems picked from the bush. Some bunches were too small but most were 'just right' for the domestic market. Some sprays had darkened sepals, most likely due to insufficient cooling before they were shipped, and these rapidly turned black and spoiled the product soon after the bunch left the markets. Other bunches suffered from 'grow through' or uneven red colouration.



These bunches were both marketed as 'domestic bunches', but they are clearly very different in size, giving the customer very different 'value'.

### The 30 products

- 1 *Actinotis* (Flannel flower)
- 2 *Anigozanthos* e.g. 'Big Red'
- 3 *Macropidia* (black kangaroo paw)
- 4 *Banksia baxteri*
- 5 *Banksia coccinea*
- 6 *Banksia plagiocarpa*
- 7 *Berzelia lanuginosa*
- 8 *Boronia* 'Lipstick'
- 9 *Ceratopetalum gummiferum* (Christmas bush)
- 'Alberys Red'
- 1 *Chamelaucium* ('Purple Pride' or 'Mullering Brook')
- 0 *Chamelaucium* ('pearl' type)
- 1
- 1 *Eriostemon australasius*
- 2
- 1 *Eucalyptus* flowers (*E. ficifolia* hybrids)
- 3
- 1 *Geleznovia verrucosa*
- 4
- 1 *Grevillea* 'Moonlight'
- 5
- 1 *Leptospermum* 'Lavender Queen'

- 6
- 1 *Leucodendron* 'Jubilee Crown'
- 7 (as an example of cone type *Leucodendron*)
- 1 *Leucodendron* 'Safari Sunset'
- 8
- 1 *Leucodendron* 'multi headed' stems
- 9 'Pisa' as an example
- 2 *Leucospermum* 'Hi Gold'
- 0
- 2 *Leucospermum* 'Mardi Gras' yellow (*L. conocarpendron* hybrid)
- 1 *Ozothamnus* (riceflower) white
- 2
- 2 *Protea cynaroides* (King protea - pink)
- 3
- 2 *Protea* 'Pink Ice'
- 4
- 2 *Protea lacticolor* hybrid
- 5 (as an example of a 'cigar type' protea bloom)
- 2 *Protea repens* (e.g. 'Honey Glow')
- 6
- 2 *Serruria florida*
- 7
- 2 *Scholtzia*
- 8
- 2 *Telopea speciosissima* (waratah) - red as an example
- 9
- 3 *Thryptomene calycina*
- 0

An additional specification will be written for *Blandfordia grandiflora* (Christmas bells) using information already prepared by NSW DPI with growers.

### Modifying greenhouses helps slash pesticide use

Research trials with a Sydney cucumber grower have found that pesticide use can be significantly reduced by making modifications to standard greenhouses. The findings apply equally to greenhouse flower crops.

Many of the insects which have developed resistance to pesticides are winged, and with standard greenhouse design they simply fly in - and settle on the produce. NSW Department of Primary Industries entomologist, Dr Leigh Pilkington, says "some of the worst insect pests can move around easily because they have wings. By having greenhouses with open ends, all we are doing is inviting them to fly straight in."

Trials conducted by Dr Pilkington more than halved the numbers of thrips and

whitefly found in a Sydney cucumber grower's greenhouses.

Dr Pilkington advocates an integrated pest management strategy, an approach combining good farm hygiene with a monitoring program for pests and diseases, optimal growing conditions, use of soft chemicals and biological controls.

In recent research trials, Dr Pilkington used a high grade mesh to screen all openings in the greenhouse, improved the ventilation by maximising the size of air vents and put fans in for better air circulation.

The aim was to gain greater control over the environment inside the greenhouse. One of the biggest impacts was to drop the average temperature inside the modified greenhouses by an average 11.6 degrees C in the middle of the day, compared with the unmodified greenhouses. "Pests generally like high temperatures, whereas 'beneficial' insects used as biological control agents struggle to survive when it gets too warm", Dr Pilkington said. "By reducing the temperature, the growing environment is more conducive to using biological control options and generally far better for the plants."

The biggest impact was on containing the pest insects, western flower thrips, which are already resistant to a wide range of chemicals, and greenhouse whitefly. Greenhouse whitefly is expected to become more resistant to pesticides in the near future.

In the Sydney trial, the greenhouse modifications reduced numbers of pest insects to the point that chemical use could be restricted to reduced-risk chemicals. Yields were also up, because the cooler environment inside the greenhouses was better for the plants. Another big advantage was that the modified greenhouses were safer and more comfortable for people to work in.

One of the next phases in the project is to cost different modifications and work out viable options for growers.

### **What's on?**

February

22-24

2008 NSW Wildflower Conference, Sydney. Contact Bettina Gollnow (phone 02 4640 6437).

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Rose & Gerbera Workshop, Queensland. Presenter: Herman Eijkelboom from Greenhouse Consultancy, the Netherlands. Contact FAQI by 15 February to register ([faq@flowersqueensland.asn.au](mailto:faq@flowersqueensland.asn.au), phone 07 3824 9537).

March

26-28

Nursery and garden industry national 2008 conference and exhibition – *Seachange for an essential industry* - aims to examine who and what influence the different tiers of government and how media can shape their decisions. It will also consider the impact of these decisions on public perception, the economy and our industry. See [www.ngia.com.au](http://www.ngia.com.au).

May

20—22

Irrigation Australia 2008 – Conference and Exhibition, Melbourne. Theme: "**Share the water, share the benefits**" offers a world class conference program for all those involved in the irrigation industry. Visit the website [www.irrigationaustralia.com.au](http://www.irrigationaustralia.com.au)

July

26

What's New for Flower Growers Seminar, Dural Country Club. Featured topics include growing media, the popular 'grower's tale' and managing greenhouse pests, as well as the trade expo. Contact Bettina Gollnow (phone 02 4640 6437) or Alan Merriman (phone 02 4773 4291 or 0408 267 728).

August

24 – 28 The VI International Symposium on In Vitro Culture and Horticultural Breeding. Brisbane. The theme of the conference is '2020 Vision for in vitro horticultural breeding'. Website <http://www.une.edu.au/campus/confco/ivchb2008/>



**Hygiene tip**

Wheelie bins can be very useful on your flower farm – they can be used to collect dead plant material, prunings and used potting mix. The lid keeps any pests or diseases on this material contained so it doesn't reinfect your crop until you can dispose of the contents properly.



## **Wildflower industry – future focus**

### **\* WildFlowers Australia Ltd**

Last year saw significant progress in the wildflower industry in terms of industry organisation and unity. This was initiated at a national meeting of industry members which aimed to overcome the long standing challenge of developing the capacity required to build the industry and secure its future.

A new organisation, WildFlowers Australia Ltd (WFA), was formed and one of its main objectives is to enhance the profitability and viability of the Australian grown Wildflower Industry. Its membership is primarily drawn from growers and grower organisations across Australia. These growers produce floriculture crops based on Australian native flowers and foliages as well as selections from South African Proteaceae.

WildFlowers Australia has been formed to provide a Peak Industry Body endorsed by and able to claim true representation of Wildflower growers across the nation.

An interim executive committee has been established with representation from all states and is chaired by NSW grower Tim Bailey. Tim Bailey, will highlight the achievements of this organisation during the 2008 NSW Wildflower conference.

The challenging role of Executive Officer of WildFlowers Australia Ltd has been taken up by Queensland grower Lodi Pameijer. Together with his wife Yucca, Lodi operates 'Top of the Range Flowers', a 8 acre flower production business, located in the Sunshine Coast hinterland. The farm produces NSW Christmas Bush, Kangaroo Paws and Backhousia. Lodi 'wears many hats'. He is also the Treasurer of the Flower Association of Queensland Inc and works as the advertising salesperson for the *Australian Flower Industry* magazine. He is involved with the Corroboree Native Flower Growers Association (CNFGA), a grower group whose members are located in South East Queensland, and is a member of the

wildflower industry advisory committee for the RIRDC.

To find out more about this association and its activities, visit the WFA website:

[www.wildflowersaustralia.com.au](http://www.wildflowersaustralia.com.au)

### **\* R&D plans**

As reported in the last issue of NSW Flower News (Summer 2006-07), a new RIRDC R&D plan has been drafted for the wildflowers and native plants industry. Bettina Gollnow worked with growers, marketers, and researchers around Australia to review the RIRDCs 2000-2005 wildflowers and native plants R&D plan and develop the new industry 5 year R&D plan. Several short (2 year) and longer term (5 year) goals were identified:

- short term:
  - i. improved production systems for growers (including strategies to solve on farm problems)
  - ii. review past R&D projects to identify 'loose ends' and 'unfinished business' and fix those issues considered to be critical by an industry majority
  - iii. industry development and education, covering growers, buyers (e.g. florists) and consumers
  - iv. improved profitability, including more useful market analysis and quality standards adopted across the industry
  - v. availability of new products
- long term:
  - i. improved profitability of industry members
  - ii. availability of new products via a continual process
  - iii. market analysis and product promotion
  - iv. improved on farm and post harvest practices

### **PROfarm Short courses**

A broad range of courses are offered by NSW DPI as part of this program. Courses scheduled for the Sydney region, Southern Highlands, South Coast and Illawarra regions include:

- \* Property management planning
- \* Trim and cross cut felled trees

- \* Fencing
- \* SMARTtrain chemical accreditation and reaccreditation
- \* Weeds and their controls
- \* Safe tractor operation
- \* Soils and fertilisers
- \* Introduction to organics
- \* Introduction to irrigation management

For more information on course content, dates and locations, please contact Maryke Archbold-Hession or Lex Myhill (phone: 02 4640 6333, 0408 492 039) or check the PROfarm website: [www.profarm.com.au](http://www.profarm.com.au)

### Postharvest care

Is chlorine effective in controlling microbes in bucket and vase flower solutions? What are some risks of making your own flower food and/or hydration solutions? These are just two of the topics discussed in detail in the Chain of Life Network website. There's a lot more to the subject than just adding bleach to your buckets. There are some interactions you should know about that determine how long chlorine remains effective. There are a range of 'magic potions' that people make up and use for storing their flowers. Do they work? Should you use them? To learn more, go to [www.chainoflife.com](http://www.chainoflife.com).

### Sydney Flower Market prices

The Sydney Market Reporting Service records flower prices at the Sydney Flower Market at Flemington. In 2007 the prices were being recorded for 88 groups, which are mainly species, and for a total 171 sub-species which includes different varieties and/or sizes. Prices for 25 species of foliage are also recorded. Price information is collected on Mondays, Wednesdays and Fridays.

Historical data is also available – the Service has data from the past seven years, retrievable in daily, weekly and monthly formats.

Contact: Chris Cope  
PO Box 350  
Frenchs Forest NSW 2083.  
Phone: 02 9746 3437 Fax: 02 97461075  
Email: [chris@sydprod.com.au](mailto:chris@sydprod.com.au)

### APVMA news

The Australian Pesticide and Veterinary Medicine Authority (APVMA) runs an on-going program to review agricultural and veterinary chemicals where potential safety and performance risks have been identified. A review may be prompted when new research or information raises concerns about the use or safety of a particular chemical or product. Reviews may focus on one or more areas of priority such as environmental safety, worker safety, public health, residues, trade or efficacy. The opportunity to make comments during the review process is available to all users and affected industries, including the flower industry.

Here is an update on the status of several chemicals relevant to the flower industry.

#### Carbaryl review

- **Home garden, home veterinary, domestic and poultry uses** – the registration of some currently available products for use in the home garden as well as home veterinary dust treatments have been cancelled and are being phased out.
- **Agricultural situations** – ornamental crop uses have been retained.

#### Restriction on the uses of methomyl

Methomyl (trade names include: Electra, Lannate, Marlin and Nudrin) cannot be used in any protected cropping situation, including ornamental crops.

Methomyl is not registered for use on ornamental crops. The only permitted use in ornamental plants is according to the permit PER9832 which allows the use of methomyl on non-bearing ornamental crops against western flower thrips. This permit is effective from January 17 2007 to 30 September 2008.

#### Carbendazim

The APVMA is reviewing carbendazim because of concerns it might cause birth defects. The fungicide Carbendazim has a wide use pattern, including fruit and vegetables, post-harvest dips of fruit and veg, ornamentals, pastures, pulse crops.

While the product is under review, current registrations and labels have been suspended until 4 May 2009. Labels must now include the tetratogenicity warning, plus revised Safety Directions:

*WARNING: Contains carbendazim which causes birth defects in laboratory animals. Women of child bearing age should avoid contact with carbendazim.*



#### **SAFETY DIRECTIONS**

*Harmful if inhaled or swallowed. Will irritate the eyes and skin. Do not inhale vapour or spray mist. When opening the container, preparing spray and using the prepared spray wear cotton overalls buttoned to the neck and wrist, a washable hat, elbow-length PVC gloves and **a half face piece respirator**. After use and before eating, drinking or smoking, wash hands arms and face thoroughly with soap and water. After each day's use, wash gloves and contaminated clothing.*

Do not allow female workers of child bearing age to apply carbendazim and avoid exposure (for example, via re-entry into crops treated with carbendazim). Make sure you use the correct PPE, including a half face piece respirator.

#### **Acephate**

The review of acephate (e.g. Lancer® and Orthene®) has recently commenced. Watch out for updates on the APVMA website ([www.apvma.gov.au](http://www.apvma.gov.au))

#### **Climate change news**

##### **Climate change research website**

Primary producers can find out more about climate change from a new website developed by the NSW Department of Primary Industries. The website provides information on the causes of climate change, key issues for primary industries and the projected impacts on primary industries in NSW. An overview of climate change research projects being undertaken by NSW DPI is also outlined.

The website address is

<http://www.dpi.nsw.gov.au/research/topics/climate-change>

For the definitive overview of the global situation, the Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment Report, just released, can be downloaded at <http://www.ipcc.ch>

The Bureau of Meteorology and CSIRO have also jointly released regional climate change projections. Log onto to <http://www.climatechangeinaustralia.gov.au> to see how your region will be affected.

#### **Climate change – insect pests and weeds on the rise**



Insect pests which could become a problem include brown planthoppers, green leafhopper and additional species of stink bugs to the one in the photo, which is already a pest of brassicas in NSW.

Pest insect management already costs Australian farmers \$500 million a year – and now the rules for managing pests will need to change.

According to participants in a Grains Research and Development Corporation (GRDC) workshop held late last year in Orange, higher temperatures will increase the risk of crops being susceptible to pest insects and pathogens.

The workshop, organised by the GRDC's National Invertebrate Pest Initiative, drew together 65 scientists from State government departments, universities, farmer groups and CSIRO.

NSW DPI health sciences research leader, Dr David Hall, said some of the major consequences of temperature increases are expected to be:

- Greater survival of 'over-wintering' pests and pathogens, meaning outbreaks will develop faster in spring.

- Changes to the relationship between pest and predator, which will affect the effective functioning of integrated pest management strategies.
- More generations of pests because of the higher temperature.
- The distribution of many warm climate pests and diseases will expand southwards.

One immediate effect is likely to be more fruit flies. Andrew Jessup, the key NSW fruit fly researcher, said fruit flies could be expected to extend their range further south and the risk of tropical pests in general would increase.

Another predicted consequence of climate change is an increase in weed problems. Increasing temperatures attributable to climate change will affect the distribution of weeds and will generally shift the range of all species southward in NSW, according to NSW DPI weed ecologist Dr Stephen Johnson. 'Weeds currently restricted to lower altitudes by cool temperatures are more likely to move into higher altitude areas, for example, fireweed', according to Dr Johnson.

#### **Climate risk management project**

NSW Department of Primary Industries (NSW DPI) recently started a new **Climate Risk Management Project** under the **NSW Greenhouse Plan**, which was released by the Premier in November 2005.

The main things NSW DPI wants to achieve through its Climate Risk Management Project are to:

- raise awareness and build partnerships;
- provide an understanding of climate change and its potential impacts on agricultural production;
- give farmers across all industries the capacity to start planning their strategies for adaptation.

The project will focus on adapting agriculture to long-term climate change, rather than just managing shorter-term climate variability. The project has also developed a one day workshop for farmers. ['The Farmer's Guide to Managing Climate Risk'](#) is part of the PROfarm series of short

courses. It is available to individuals and groups, and is intended to provide farmers with the essential knowledge and tools to incorporate climate risk management into future planning for their enterprises.

For more information, or if you want to attend a NSW DPI training workshop, please contact the NSW DPI Climate Risk Management Team:

**Gary Allan** (Orange)

Phone: 02 6391 3902

[gary.allan@dpi.nsw.gov.au](mailto:gary.allan@dpi.nsw.gov.au)

**Michael Cashen** (Paterson)

Phone: 02 4939 8953

[michael.cashen@dpi.nsw.gov.au](mailto:michael.cashen@dpi.nsw.gov.au)

**Doug Richard** (Gunnedah)

Phone: 02 6741 8331

Or go to

<http://www.dpi.nsw.gov.au/agriculture/resources/climate-and-weather/general/climate-risk-management-project>

#### **Interesting websites**

##### **China – flower industry**

See [www.chinaflowernews.com](http://www.chinaflowernews.com)

##### **California Cut Flower Commission**



Check out [www.CCFC.org](http://www.CCFC.org), the redesigned official website of the California Cut Flower Commission. This organisation also develops the American Floral Trends Forecast, which offers retailers and consumers ideas for combining colours,

different flowers and accent pieces to reflect and complement the broader lifestyle trends. For 2008–09, it predicts that the key influences will be ‘handcrafted’, ‘wood’, ‘oversized’ and ‘metallic’. The images on the previous page give an idea of the Floral Trends approach that includes colour swatches, flower arrangements and room images for each ‘influence’.

Another US site worth checking is [www.flowerpossibilities.com](http://www.flowerpossibilities.com)

### **Floraculture international – e newsletter**

To subscribe to Floraculture international’s passport (e newsletter) go to <http://www.ballpublishing.com/BPSubscriptions/newslettersignup.aspx>

### **Images of pests and diseases**

See [www.padil.gov.au](http://www.padil.gov.au)

### **Soil stuff**

#### **Soil critters**

To help you identify soil organisms, go to <http://soilbugs.massey.ac.nz/gallery.php>

#### **Healthy soil**

The Land and Water soil health program “Healthy soils for sustainable farms” has a newsletter with fortnightly updates emailed to you if you subscribe. See <http://www.healthysoils.gov.au/>

#### **‘Fertiliser essentials’**

This handy booklet is available from Tocal College (phone 1800 025 520). It aims to give landholders a basic knowledge of the principles of fertiliser use and how these can be used in growing crops and pastures. It examines the environmental effects of fertilisers and offers alternatives to traditional fertiliser strategies.

### **New books and publications**

#### **\* Banksia production manual**

The Department of Agriculture and Food Western Australia recently published this long awaited manual (Bulletin 4170). It covers a wide range of information, including the origin of banksia, markets, production, irrigation, economics, pests, diseases and supply chain management. While it has been written specifically for Western Australian conditions, it contains

useful information for banksia growers elsewhere. Collated by Nikki Poulish (Development Officer) and Dr Kevin Seaton (Research Officer), Innovative Plant Products Project, Department of Agriculture and Food, Western Australia,

The manual can be ordered from the Department. It costs \$88.00 (including GST) plus \$5.50 postage per copy. Please request an invoice and a copy of the manual by email or by mail: direct your email enquiries to [mtulley@agric.wa.gov.au](mailto:mtulley@agric.wa.gov.au)

or write to:

Margret Tulley  
Locked Bag 4  
Bentley Delivery Centre WA 6983  
Phone: 08 9368 3333  
Fax: 08 9474 2405

#### **\* Garden plants poisonous to people**

Primefact 359

Go to: <http://www.dpi.nsw.gov.au/> and search for ‘poisonous plants’ to find the item.



**\* New edition of field identification guide now available**

#### ***Pests, Diseases, Disorders and Beneficials in Ornamentals: Field Identification Guide***

is a picture guide to help you to identify the most common pest, disease and nutritional disorder problems affecting nursery and greenhouse ornamental plants in Australia. The third edition has just been published and includes a greatly expanded range of information.

The easy-to-use format, provides you with the information you need to identify and manage pests and diseases, whether you are a grower, student or a consultant.

The Guide is available for \$29.95 (plus postage and handling) from the NSW DPI Bookshop, phone 1800 028 374 or fax 1800 642 065.

Customer enquiries: (02) 6391 3458.  
Please quote code B276.

**\* Weeds**



The *Noxious and environmental weed control handbook* (3rd edition) is a guide to weed control in non-crop, aquatic and bushland situations. Contents include:

- Integrated weed management
- Managing your legal responsibilities in applying pesticides
- Calibration of equipment
- Reducing herbicide spray drift
- Using adjuvants, surfactants and oils with herbicides
- Cleaning and decontaminating boomsprays
- Withholding periods
- Herbicide resistance
- Control techniques using herbicides
- Weeds declared noxious in New South Wales
- Pesticide permits
- Noxious and environmental weed control
- Gas gun application
- Appendix 1: Boom spray calibration methods

**\* Total field guide to weeds and native lookalikes**

Total has published a new field guide *'Native plant or weed, pick the difference'* showing full colour side by side photos of weed and native look-alikes, with explanatory notes. It is targeted at land carers, farmers and bush regenerators in coastal and high-rainfall areas. Contact the **NSW DPI Bookshop** for your copy - orders can be placed by phoning the **Bookshop** toll free during business hours on **1800 028 374** or by emailing [bookshop@dpi.nsw.gov.au](mailto:bookshop@dpi.nsw.gov.au) . Cost: \$20 including GST plus handling and postage.

**Waratah Festival celebrates 10 years**



A little over 10 years ago a group of Waratah growers from the Hawkesbury district got together to promote the cultural and commercial significance of the Waratah in the region.

A Saturday street parade and fair was held in Windsor at flowering time in September 1997, supported by the combined efforts of waratah growers and nursery plant suppliers, the Lion's Club of Windsor and NSW National Parks and Wildlife Service (NPWS).

Some of the highlights of this first event have become permanent features. A blooms competition gives waratah growers the opportunity to showcase their best blooms and win prizes. The general public can see extensive displays of cultivated waratahs, including new varieties. There is always a link to the local Dharug tribe with the telling of a local waratah legend. The NPWS is able to promote its conservation messages which discourage people from picking flowers in the wild. An art competition offers local school children the chance to capture the beauty of the waratah. Stunning floral arrangements feature waratahs. Local artists display their works featuring the waratah. And of course, the festival provides the opportunity for the general public to buy quality blooms and plants.

In recent years the Festival has been held at the Mount Tomah Botanic Garden, a joint activity between Mount Tomah Botanic Gardens and the Waratah Industry Network. It is a great example of growers working together with each other and with other organisations to promote their flowers and educate consumers.

### **Rural Industries Research & Development Corporation (RIRDC)**

RIRDC works closely with Australian rural industries on the organisation and funding of their R&D needs. RIRDC supports several programs related to the cut flower industry especially the Wildflowers and Native Plants Program. This Program aims to improve the profitability, productivity and sustainability of the Australian wildflower and native plant industry.

For the wildflowers and native plants program, the RIRDC website includes full and short reports on completed projects, a list of currently funded projects and industry objectives and details of publications available for purchase.

#### **RIRDC recently changed its phone and fax numbers:**

Phone: (02) 6271 4100

Fax: (02) 6271 4199

Website: [www.rirdc.gov.au](http://www.rirdc.gov.au)

#### **NSW flower grower and related industry associations and networks:**

##### **Australian Hydroponic & Greenhouse Association Inc**

Contact: Saskia Blanch

PO Box 538

Narrabeen NSW 2101

Phone/fax: 02 9939 5993

Website: [www.ahga.org.au](http://www.ahga.org.au)

##### **Australian Native Flower Growers & Promoters**

PO Box 4327

East Gosford NSW 2250

[www.anfgpa.com](http://www.anfgpa.com)

##### **Blandfordia Research & Extension Group**

Contact: Greig Ireland

NSW Department of Primary Industries

PO Box 530

Coffs Harbour NSW 2450

Phone: (02) 6650 3111

Fax: (02) 6651 2780

##### **Central West Flower Industry Association**

Contact: Neil Jones

Phone: 0419 224 461

##### **Flower Growers Group of NSW (Inc.)**

Contact: Rob Giansante

Phone: (02) 9620 1498, 0419 285 223

Fax: (02) 9620 2057

Email: [lintonfreshflowers@bigpond.com.au](mailto:lintonfreshflowers@bigpond.com.au)

[www.nswflowers.net.au](http://www.nswflowers.net.au)

##### **Native Flower Grower's Association (Mid North Coast) Inc.**

Contact: Bob Rogers

Phone/fax: (02) 6566 5560

Email: "Shannon & Bob Rogers"

<[bookworks@tsn.cc](mailto:bookworks@tsn.cc)>

[www.australiannativeflowers.com.au](http://www.australiannativeflowers.com.au)

##### **NFG Co-op**

Contact: Harry Kibbler

Phone: 02 6567 4266

Email: [info@goldengecko.com.au](mailto:info@goldengecko.com.au) or

Contact: David Mathieson

Phone: 0417 448 667

Email: [info@goldengecko.com.au](mailto:info@goldengecko.com.au)

[www.goldengecko.com.au](http://www.goldengecko.com.au)

##### **NSW Farmers Association**

Address: Level 25, 66 Goulburn Street  
Sydney 2000

Phone: (02) 8251 1700

Fax: (02) 8251 1750

[www.nswfarmers.org.au](http://www.nswfarmers.org.au)

##### **Waratah Industry Network**

Contact: Paul Nixon

Address: 13 Merino Drive

Elderslie NSW 2570

Phone: (02) 4658 1187

Email: [paulgnixon@yahoo.com.au](mailto:paulgnixon@yahoo.com.au)

##### **Wildflowers Australia Ltd**

[www.wildflowersaustralia.com.au](http://www.wildflowersaustralia.com.au)

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