



ISSN 1448-4285

NSW Flower News

issue 5 August 2005

In this issue:

- * NSW DPI Researchers honoured
- * Breaking news – WFT resistance
- * Dates for your diary
- * Upcoming events
- * National wildflower industry body endorsed
- * Pesticide news – training
- * New books from DPI
- * Industry News – Wildflowers NSW
- * Water & irrigation
- * Reports – 2005 NSW Wildflower industry meeting, 7th Australian Native Flower Conference, Waratah farm walk, Urban agriculture, What's New 2005
- * Interesting websites
- * Industry contacts

Welcome to the 5th issue of Flower News – updates on research and advisory activities from the NSW Department of Primary Industries. There is important information about WFT, training for pesticide users and about efforts to support the wildflower industry. Catch up on the highlights of several recent industry meetings and conferences. You will also find details of new information sources.

NSW DPI staff honoured at national greenhouse conference

The Svensson 2005 Award for Researcher of the Year for the Australian Hydroponic & Greenhouse Industry was awarded to **Marilyn Steiner** for her outstanding contribution to the greenhouse and hydroponic industry through research. Nominations were judged by the AHGA executive committee.

Marilyn arrived in Australia 11 years ago and is employed as a Senior Entomologist with the NSW DPI.

Prior to coming to Australia, Marilyn was responsible for the development of biocontrol in the greenhouse industry in Alberta, Canada.

In Australia, Marilyn is responsible for the recent increase in the number of commercially-produced biocontrol agents for the greenhouse industry. These include the highly impressive *Montdorensis* thrips predator, and more recently the additional thrips predator *Cucumeris*. Together these two will provide biocontrol for thrips over a more extensive temperature range. Marilyn has also initiated the identification, development and introduction to commercial production of *Hypoaspis* fungus gnat predator, *Dalotia* shore fly predator and *Aphidius* aphid parasitoid and her research in this field continues.

Currently Marilyn has a major research program into trialling a range of reduced-risk chemicals to identify promising new IPM tools to integrate with biocontrol, plus an investigation into chemical risks associated with the use of a range of existing chemicals



NSW DEPARTMENT OF
PRIMARY INDUSTRIES

applied to crop foliage, various potting media and structural materials such as plastic and metal against key biocontrol agents.

The Svensson 2005 Award for Industry Training in the Australian Hydroponic & Greenhouse Industry recognises an individual or organisation that has made a significant contribution to industry training or research extension.

The Industry Training Award went to the **NSW DPI Protected Cropping IPM Team** which includes Stephen Goodwin and Marilyn Steiner (Entomology), Len Tesoriero (Pathology), Virginia Brunton (Training) and Jeremy Badgery-Parker (Extension).

Together they have delivered technical workshops, training and support to greenhouse growers across Australia.

They produced an IPM technical manual and field guide for greenhouse vegetables and ornamentals and an accredited IPM training course for industry. Associated with this they have also developed a benchmarking survey to measure the rate of IPM adoption and to assist growers improve their pest management practices. IPM-accredited growers will qualify to use an IPM marketing logo due to be launched later this year.

Contrasted with organic accreditation, IPM accreditation will be a mark of low pesticide use and safe produce, the key concerns for most consumers.

The IPM team have also facilitated a number of overseas visits by IPM specialists to provide technical support, participate in workshops and industry conferences and to provide advice to growers around the country.

Breaking news – new WFT resistance

Laboratory bioassays by DPI insecticide resistance researcher Dr Grant Herron have documented complete resistance to the chemical spinosad (e.g. Success®) and a high level of resistance to fipronil (e.g. Regent®) in a sample of WFT collected from a flower farm in NSW. This is the first time (in the world) that a strain of WFT with 100% spinosad resistant individuals has been documented. This chemical is important in WFT management because it is the only registered chemical that is also compatible with IPM.

The WFT sample comes from a greenhouse flower crop and researchers think it is likely that the resistance to these chemicals will remain for a long time in the thrips population, which is effectively isolated from other WFT by being trapped within a greenhouse. The finding demonstrates how critical correct resistance management is in the fight to manage WFT.

5 tips for managing western flower thrips (and tomato spotted wilt virus)

Stacey Azzopardi, Vegetable IPM Project Officer



WFT – wanted dead, not alive!

1. Hygiene – and more hygiene.
2. Monitor your crops – use sticky traps, check your plants, and keep records to help identify WFT problems accurately and early.

3. Look after your crops – keep plants healthy and select tolerant varieties if available.
4. Use the right chemicals strategically – 3 consecutive sprays of the same chemical. Spray only when you have to and don't overuse chemicals or you will get resistant thrips.
5. Use biological controls and let the bugs do the job – a number are now commercially available.

For more on managing WFT, see our website: www.dpi.nsw.gov.au then 'agriculture', 'horticulture' and then 'pests, diseases and disorders' – under 'thrips' you will find the 'What thrips is that?' series and the 'WFT insecticide resistance management plan'.

Dates for your diary

February 25 & 26, 2006

Annual meeting of NSW wildflower growers, Port Macquarie. Contact Bettina Gollnow 4640 6437, email:

bettina.gollnow@dpi.nsw.gov.au.

An optional grower workshop on '**Improving the profitability of your flower business**' with Gerry Parlevliet from Agriculture WA is planned.

March 16 & 17, 2006

Waxflower Conference 2006, Western Australia. Call 08 9892 8415 or email

npoulis@agric.wa.gov.au

March 30 – April 4, 2006

12th International Protea Conference and 7th International Protea Working Group Symposium. San Diego, California, USA. See

www.IPA2006conference.org

Upcoming events ...

**Hawkesbury Waratah Festival
September 24 – October 9, 2005.**

The event organisers again welcome support from growers who can supply blooms, either for the Blooms Competition or as a donation to be used in the floral displays in the Mount Tomah Botanic Gardens Visitors Centre during the Festival. Around 8,000 people are expected to visit this year's Festival.

Details of the event program and blooms competition can be found on the website www.hwf.wildflowersaust.net

Mid north coast wildflower industry flower promotion

November 5 & 6, 2005

NSW Department of State and Regional Development (DSRD) and NSW DPI are working with wildflower growers on the mid north coast to promote the use of locally grown product to local florists.

Leading floral designer Richard Go will show local florists how to use local flowers and foliage in various ways that will capture the imagination of local consumers. A floral design competition will be held to let the region's florists and floristry students show off their talents to the general public who will be able to view the work in progress and learn more about how to care for their flowers once they get them home.

Growers are invited to attend and can become more involved in the event by supplying product for Richard Go or for the floristry competition. Please get in touch with Bettina Gollnow to register your interest and to find out more details.

National wildflower industry body endorsed

The wildflower industry has received support from the Commonwealth Government funded Industry Partnerships Program - for background, see www.daff.gov.au/industrypartnerships

As a first step, consultants Ridge Partners were hired to produce a 'taking stock' report on the industry and set future directions. Despite a very tight time frame, the consultants talked to people throughout the industry chain and produced a comprehensive and very useful strategic industry review, the first review of the industry since 1994. A national workshop held in June captured

the views of representative growers, wholesalers, supermarkets, exporters and research and extension providers. NSW grower/exporter Paul Dalley and Bettina Gollnow from NSW DPI were among the invited participants and later joined the working party to develop the next phase.

The workshop identified the following key strategic areas and industry goals for the next 5 years.

1. Establish a national/state industry structure for wildflowers
2. Increase overseas marketing and promotion aiming to double exports to a value of \$100M by 2010
3. Research new varieties with the industry aiming to establish a funded research program to drive development of new products
4. Increase domestic market development and promotion aiming to double domestic consumption in the next 5 years
5. Improve farm productivity and profit by working towards the farm profit being greater than or equal to 20% of its turnover and/or 50% of farms with over 10 ha in production.

The industry is now applying for on going funding through the Industry Partnerships scheme. This funding is critical to begin the job of unifying the Australian Wildflower Industry through the formation of a national body, which would be recognised as the peak industry body, committed to industry growth and new directions to ensure the industry of tomorrow is more profitable and sustainable.

This would require the development of a business plan, collection of reliable industry statistics, tightening links between existing groups and networks and improving across industry communication, and running pilot projects to find the best way of assisting growers to be more profitable and to attract new investment. This phase would see everyone in the industry

having a say on how this national structure would look and be funded.

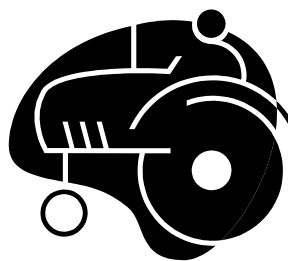
There are many opportunities that a more united wildflower industry could exploit, ranging from a greater share of the domestic market to a more targeted development of our unique flora for both local and export markets.

Pesticide news

Do you have the right training pesticides?

Pesticides can be dangerous if incorrectly applied or managed, especially to those people who work with pesticides or are regularly exposed to them. Training in their correct use will minimise mistakes being made when using pesticides.

The Department of Environment and Conservation (NSW) advises growers that if you use pesticides in your job, new laws mean you must be trained in their use by 1 September 2005.



What does the new law say?

People who use pesticides **in their business or as part of their job** must be trained in how to use those pesticides.

You must not employ or engage a person to use pesticides unless that person is trained.

A person who is 'trained' has a qualification that shows that they have achieved a specific level of competency in pesticide use.

Someone who has already done Farmcare, ChemCert or SMARTtrain training is already qualified. This qualification remains valid for five years from the date it was completed.

People who do not have the required qualification have two years (from September 2003 to September 2005) to get trained or have their current skills recognised.

People who are qualified have to be re-assessed every five years.

Pesticide users who have not completed compulsory training in pesticide use will risk a \$400 fine. Penalties also apply for engaging a person to use pesticides if the person does not have the training required by the new Pesticides Amendment (User Training) Regulation 2003. For more information see www.environment.nsw.gov.au/pesticides

Occasional users of pesticides in the agricultural and forestry industries may be exempt from this requirement. There are more details on the website above. If you need help in accessing training, please contact Bettina Gollnow.



**New books from NSW DPI
'Being safe in the greenhouse' –
occupational health and safety
guidelines for the NSW greenhouse
industry**

Occupational health and safety is important in any workplace and greenhouses are no exception. Every grower must ensure their greenhouse and farm area is a safe working environment for themselves, their families, workers and visitors. The authors Jeremy Badgery-Parker and Joshua Jarvis cover the many issues

associated with working safely in greenhouse horticultural production. Everything from heat related illness, to working at height, noise and using chemicals. General farm safety and risk management is also covered and sources of help and information are listed.

Copies of the book are available free of charge from Bettina Gollnow.

**'Guidelines for the development of
controlled environment horticulture'
– planning greenhouse and
hydroponic horticulture in NSW**

Many flower growers are part of the greenhouse horticulture industry, the fastest growing horticulture industry in NSW, which is growing at about 8% each year. The industry is currently worth an estimated value of \$500 million per annum and includes greenhouse vegetable, cut flower and nursery production.

The main area of industry expansion is in the Sydney region and the central and mid north coast areas. By the nature of these regions, greenhouse enterprises are being developed close to urban areas. This interface with residential areas raises many issues for growers, planners and residents.

These guidelines have been compiled by Jeremy Badgery-Parker and aim to minimise potential conflicts by providing a consistent framework to allow the greenhouse industry to meet maximum production efficiency and sustainability targets. The guidelines also focus on minimising off site impacts and meeting community needs.

Information included covers:

- * siting, design and construction of farms
- * performance objectives and best practice advice for managing environmental impacts of greenhouse and hydroponic farm developments and their operation

* the development application and approval processes, requirements and legislation.

If you are planning to expand your production area, for example by adding a new greenhouse, or aiming to relocate your farm, you will find these guidelines very helpful.

Copies of the book are available free of charge from Bettina Gollnow.

Weeds field guide

NSW DPI weeds agronomist Jim Dellow has produced a field guide called 'Broadleaf weed seedlings of temperate crops and pastures'. Being able to identify weeds at an early seedling stage, means control measures can start when the weeds are easiest to control, have not set seed and have not significantly competed with your crops. Purchase the book from the Bookshop, NSW Department of Primary Industries, Orange phone 1800 028 374. It costs \$30.00 plus pack and post charges.

Industry news



Wildflowers NSW February 2005 meeting

The meeting worked through a full agenda and vigorously discussed many issues facing this industry sector. In summary the topics covered were:

- * current information on industrial relations issues and general services to members available from the NSW Farmers Association
- * ways for industry to work together more closely to make the most of promotional opportunities that may arise, especially overseas.
- * the results of the pesticide use survey
- * industry research and development needs. A short list was compiled. The

cause(s) of grow through in Christmas bush was nominated as the top problem to be researched. A grower survey will be the first step.

- * interim results of the 3 yearly industry survey
- * the propagation and sale of Australian cultivars overseas
- * opportunities to promote wildflower products through growers and associations working with the local TAFE floristry section
- * a 'getting started in wildflower growing' conference.

More details are available from your association representative. The next meeting is planned for late August.

Water & Irrigation Sydney Water

The Flower Growers Group of NSW is discussing potential impacts of further restrictions on the use of city water for cut flower growing with Sydney Water. Bettina Gollnow conducted a mini survey of growers in the Sydney Flower Market to evaluate current trends. Of the 23 growers surveyed, 39% rely totally on Sydney Water and all use drip irrigation to maximise their water use efficiency. Another 13% of growers rely on a combination of Sydney Water and their own dams to irrigate their flowers.

However, 48% of the growers interviewed are independent of the Sydney Water supply and use dams and/or creek water to irrigate their crops. Most are outside of the Sydney Water area. Almost 82% of these growers use drip irrigation.

Improving Irrigation with Wetting Front Detectors

Surveys have shown that there is a poor relationship between water applied and yields obtained for the same crops in the same district, which means there is significant room for improving irrigation efficiency. There are already tools and

services available for monitoring soil water and nutrients, but the majority of irrigators do not make use of them.

CSIRO researchers Richard Stirzaker, Richard Etherington, Ping Lu, Tony Thomson and Joyce Wilkie designed the FullStop wetting front detector and evaluated its performance on a range of farms under surface drip, buried drip, fixed sprinkler, centre pivot and mini-sprinkler irrigation on a variety of annual and perennial crops.

The FullStop is a simple, mechanical tool that shows how deep water moves into the soil after irrigation and is designed to help improve the accuracy of irrigation. NSW DPI irrigation specialist Bill Yiasoumi introduced the FullStop at the annual meeting of NSW Wildflower growers and several growers have since installed FullStops in their plantations.



The FullStop tells you how deep the water has penetrated into the soil after irrigation. It also stores a sample of water from the soil so fertilizer and salt levels can be monitored.

The FullStop can be used to:

- find out if you are irrigating too little or too much
- assist in the management of fertiliser and salt
- detect waterlogging

For a summary report go to RIRDC On-line
<http://www.rirdc.gov.au/reports/EFM/04-176sum.html>, and see the website www.fullstop.com.au

At the moment, the best option for growers is to source FullStops from a small equipment mail order company called the Gundaroo Tiller (see their website: www.allsun.com.au)

New Agfact: Efficient irrigation: key checks (Agfact P1.5.4 first edition)

This Agfact by Water Use Efficiency Adviser David Williams provides some handy checklists to let you decide if you are an efficient irrigator. When growers improve their irrigation water use efficiency they don't just save money. They also reduce adverse impacts on the production area and the environment more widely in areas such as soil salinisation, waterlogging and nutrient pollution, rising ground water tables and water quality degradation. Quite often, some simple and low cost changes to how you irrigate will greatly improve your efficiency.

The Agfact has handy checklists to help you assess your irrigation planning, implementation, monitoring and evaluation. By aiming to achieve all of the key checks, your ability to save water is increased.

Reports

2005 NSW wildflower meeting

Around 80 growers and industry members converged on Coffs Harbour in late February to attend the meeting jointly hosted by the NSW Department of Primary Industries and Wildflowers NSW.

A full report on the conference is published on our website – www.dpi.nsw.gov.au look in the '**Flowers and ornamentals**' section of **Horticulture**, and click '**Conferences**'.

Grower feedback positive

Feedback from conference participants was that all sessions very generally very to moderately useful to them. This year the program allowed more time for

informal discussion of industry issues and this was very well received. 28% of respondents indicated that they planned to change their irrigation management as



The Sunday farm tour program was well attended and took participants to three very different farms.

a result of information received at the conference, while almost 33% said that would be seeking assistance from Austrade as a result of learning more about services available.

71% of respondents were very supportive of the NSW industry peak body Wildflowers NSW and several gave positive suggestions about issues they wanted the body to address. These included marketing and promotion, water allocation, R&D, education subsidies, and improved networking.

The evaluations were also used to do a mini industry survey. Growers responding grew over 16 different crops, the most common being Christmas bush, Waratahs, kangaroo paws, flannel flowers, Protea and Leucodendron. 43% focussed on growing one or two crops, while 32% grew 5 or more different crops.

28% of growers indicated that their crops had been affected by frost during the winter of 2004. One grower lost 80% of marketable product due to frost damage.

Drought also caused growers to lose production. 19% of respondents said they had lost plants with 3 growers

losing over 50% of marketable product from affected crops. 17% of growers were experiencing water shortages at the time of the conference. Most (47%) relied on farm dams to irrigate, but also bores, creeks or rivers and spear points. Only 4% relied on town water and 17% used a combination of two water sources. Many growers (39%) said they employ workers on farm, mostly for casual work or at harvest time.

7th Australian Native Flower Conference, Brisbane, May 25-28.

This conference, held every 3 years, comprised two days of farm tours and two days of talks and workshops, designed to appeal to both researchers and growers. Around 150 people attended, including growers and researchers from around Australia as well as Chile, New Caledonia, Indonesia, China, Israel, New Zealand and Japan. NSW DPI researchers and extension specialists who contributed to the program were Dr Jenny Ekman, Bettina Gollnow, Jonathan Lidbetter, Dr Ross Worrall and Bill Yiasoumi.



The farm tour program gave delegates the chance to see a range of crops growing under different conditions

One of the keynote speakers for the conference was Prof Abe Halevy from Israel, a pioneer in the development of Australian species for floriculture. The other keynote address was from Queensland plant breeder David Hocking who spoke about developing the Australian plant gene pool.

The conference also included a session on RIRDC support for the industry with discussion led by Dr Peter O'Brien and Max Bourke from RIRDC and wildflower committee member/grower Geoff Sullivan.

The conference program included a new focus with futurist Mark Fowler proposing various scenarios for how the future might look for the flower industry. His message was 'the world is changing faster and faster, so you need to take an innovative stance and keep reinventing your business or product'. Sustainability will be a big issue in the future – by 2020, one third of the world's population will be under stress regarding water – and industries which impact on the environmental will be controversial. The flower industry also needs to keep up with what consumers are doing. They are changing how and where they spend their time – more and more is spent in the 'third space', not at home nor at work. What does that mean for flower purchases?

Waratah farm walk a success



WIN members enjoyed the informal discussions at the farm walk

The Waratah Industry Network held a farm walk on at Alpine in the Southern Highlands where over 40 growers saw an extensive collection of commercial waratah cultivars growing in a 5,000 square metre shade house, plus assorted field crops. In addition, NSW DPI entomologist Dr Victor Rajakulendran gave a well received presentation on his research into waratah stem borer moth,

one of the major pests encountered by growers.

Are you part of urban agriculture?

DPI officers at Richmond, David Mason and Andrew Docking, recently delivered a paper to the Planning Institute of Australia Congress on the importance of agriculture in urbanising landscapes. The Sydney region produces at least 12% (\$1 billion) of NSW's total agricultural production on less than 1% of the state's agricultural land and employs 11% of the State's agricultural work force. Urban agriculture models such as Hawkesbury Harvest in Sydney's north-west are beginning to demonstrate how sustainable agriculture has the potential to contribute to long-term triple bottom line outcomes. For the full report see www.planning.org.au, then select 'policy', followed by 'congress papers'.

What's New in Pest & Disease Management

This update seminar for flower and nursery plant growers was held on July 30 at Dural. Guest speakers were Stacey Azzopardi and Len Tesoriero from NSW DPI and Greg Neighbour from Scotts Australia. The event attracted about 60 participants, including 13 trade exhibitors. This was the 5th annual seminar which is a collaboration between Bettina Gollnow from NSW DPI and Alan Merriman from Organic Fertilisers.

Interesting websites

* Pest Genie

www.pestgenie.com.au

Pest Genie is a database specializing in information about plant protection and animal health products. You can search the database in a number of ways – by product, by the active, by the problem, by the use/situation or by types of product (e.g. herbicides). Drop down menus make it very easy to use. The site also lets you see and print the product

label and the MSDS (material safety data sheet).

* www.grower.start4all.com and www.greenhouses.start4all.com

Both have links to a diverse range of websites connected with flowers and the flower industry, and beyond - for example, you can access the websites of various overseas auction houses, wholesalers and retailers.



UK trends - the Marks & Spencer 'Pure' bouquet featuring Xanthorrhoea and eucalyptus foliage.

Industry contacts: NSW flower grower associations and networks

Australian Native Flower Growers & Promoters

PO Box 4327
East Gosford NSW 2250
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

Coffs Harbour Flower Exporters

Contact: Jeff Eggins
PO Box 22
Corindi Beach NSW 2456
Phone: (02) 6649 2698 (ah)

Flower Growers Group of NSW (Inc.)

Contact: Nicole Bouery
c/- 1322-1340 Camden Valley Way
Leppington NSW 2179
Phone: (02) 9606 6222
Fax: (02) 9606 6841

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

Contact: Harry Kibbler
Address: 23 Plover Lane
Kempsey NSW 2440
Phone/fax: (02) 6567 4266
www.australiannativeflowers.com.au

Waratah Industry Network

Contact via Australian Native Flower Growers and Promoters

Wildflowers Australia – NSW Branch

(previously the Australian Flora and Protea Growers Association – NSW Branch)

Contact: Frank Allatt
Address: 3401 Bells Line of Road
Bilpin NSW 2758
Phone: (02) 4567 9093
www.wildflowersaust.net

Distribution:

Flower news is published on our website and sent to each industry association in NSW to be forwarded to members via the next mail out.

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