

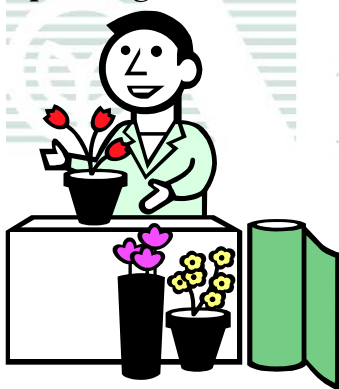


NSW Flower News

issue 1 May 2003

Welcome to the first issue of Flower News – updates on research and advisory activities from NSW Agriculture plus news items of interest. It is our intention to publish Flower News in May and November. Flower news will be sent to each industry association in NSW to be forwarded to members via the next mail out or included in your association's newsletter. We welcome your feedback to the Editor (see last page).

Upcoming events:



*** What's new in irrigation and water management? Third annual information day for cut flower growers.** Saturday July 26, 2003, Dural Country Club, 662a Old Northern Road, Dural (Sydney). 1 pm to 5 pm. The guest speakers are Dr Karen Robb, Bill Yiasoumi and Vaughan Pierce. If you have not received a flyer, please contact the Editor.

Research updates – research in progress at NSW Agriculture - Flannel flower research project up and running

A project to develop a model production system to grow flannel flowers all year round is being coordinated by Dr Ross Worrall, research horticulturist at Narara. Collaborating growers will receive plants of superior form to trial in a containerised production system under cover (rain shelters rather than true greenhouses). The first variety to be tested is a year-round flowering form of flannel flower. Normally this species has a spring flowering season with odd flowers at other times of the year, but during his extensive collecting trips, Ross have identified a form which flowers well all year.

Plants are ready to be delivered to the collaborators, some of whom already have their rainshelters ready. Planting density in the model system will be high to maximise yields per production unit. Collaborative research between Ross and Len Tesoriero (plant pathologist at Camden's Plant Health Diagnostic Laboratory) is testing the



NSW Agriculture



Flannel flower production system under trial at Narara

response (read death!) of flannel flowers to inoculation with several known pathogenic fungi. So far, despite growing in waterlogged and poorly aerated mixes, there have been no significant losses, confirming the theory that management is the key to healthy flannel flower plants and profitable yields for growers. The project is expected to run for three years.

Rose and gerbera IPM group



NSW Agriculture has hosted two meetings of growers of roses and gerberas interested in learning more about adopting integrated pest management on their farms. The aim is to develop a project in this area. The first meeting included a most interesting and detailed report on progress in IPM in California given by Professor Mike Parrella, who was on a brief visit to Australia. Californian rose growers now commonly monitor for thrips and mites in their crops, use screens to keep pests out, use predatory mites to manage two spotted mites and directed sprays of IPM-compatible chemicals to manage WFT. Most gerbera growers use 5 different biological control agents in their crops. Mike gave an update on the latest work to develop guidelines for growers to use in interpreting the information they get from their monitoring – eg how many WFT do you

have to find on sticky traps before you should spray? It's more than you might think. The group is now pooling information on current pest and disease management, to ensure that more emphasis is given to 'IPM friendly' products and practices. Research entomologists Dr Stephen Goodwin and Marilyn Steiner (Narara) and Camden based plant pathologist Len Tesoriero and floriculture extension officer Bettina Gollnow are working with industry on this project.

WFT and resistance monitoring

Dr Grant Herron's Camden team is continuing to screen WFT for resistance to various chemicals. To date this work has shown few crop specific responses in terms of WFT resistance, which is unusual. This means that even where a chemical is registered for a specific crop, resistance to that chemical has been found in other crops. This means that growers of a particular crop can't consider resistance management in isolation and we still need national coordination of WFT resistance management and monitoring across all crops (fruit, vegetables, flowers and nursery crops).

Specifically the research has found a trend of increasing resistance to chlorpyrifos (eg Lorsban®), which would undermine control of WFT and is likely giving cross resistance (where pesticides are members of the same chemical group, resistance can transfer to all chemicals in that group, even if they have never been used before on that farm) to dichlorvos (a useful chemical for disinfecting greenhouse structures of WFT between crops). For this reason, the useful life of chlorpyrifos is likely to be short. The lab has also found a sample of WFT which are resistant to fipronil, another important chemical used in managing WFT. Other chemicals used to manage WFT seem to be standing up reasonably well to date.

More on WFT and TSWV...

National website on Western flower thrips

www.nre.vic.gov.au/farming/horticulture/wft/. This site includes a lot of information about managing WFT and the associated virus tomato spotted wilt virus. The latest ornamental crop management fact sheets are available, along with newsletters to bring you up to date with research projects and impacts of WFT around Australia.

Using petunias as virus indicators

An interesting paper is available on using petunia plants as indicator plants to monitor for tospoviruses (this includes tomato spotted wilt virus) in ornamental plant crops. Petunia indicator plants show distinctive local lesions (spots) on the leaves when thrips infected with TSWV feed on them.

Including petunia plants amongst your crop will let you identify early if thrips capable of transmitting TSWV and related viruses are in your crop. See commserv.ucdavis.edu/CESanDiego/petunia.pdf

NSW Agriculture bookshop

For details of publications available to download or buy, see NSW Agriculture's website – go to the 'News and media' icon, then choose 'Bookshop'. You will find a publications catalogue, a list of agfacts and agnotes, information on farming and business management, plant industry and horticulture information, soil and water publications and a video catalogue. For those wanting to diversify, there is even a book on snail farming (for the gourmet food industry).

A new agfact worth looking at is the 3rd edition of **Root knot disease and its control**, by Dr L Rahman. The symptoms and cause are described, as is the nematode life cycle. There is a lot of information on management and control options available to growers.

The Plant Health Diagnostic Service



Please remember this service is available to you to help your business grow, healthily. It consists of a statewide network of laboratories staffed by specialist plant pathologists and entomologists expert in a wide range of horticultural pests and diseases. Much like your GP might send you to a pathology lab to get samples taken and sent to a lab, so your illness can be better managed, so it is with your crop. Save yourself the cost of unnecessary or incorrect chemicals, and indeed on going crop losses, by getting answers about what is causing the symptoms or crop losses you can see in your flowers. The earlier you can do this, the more you will improve your profitability. As well as diagnosing crop diseases and disorders, insect and mite problems can be identified, chemical resistance testing can be arranged and active surveillance for emerging and exotic diseases is conducted. Water analysis for plant pathogens can also be done for you. Chemical testing is also done – including water analysis (chemical) of irrigation water and hydroponic solutions, nutrient analysis of plants and soil, and analysis of chemical residues in plants, soil and water

Testing is undertaken on a full cost-recovery basis, but charges are highly competitive. See www.agric.nsw.gov.au/reader/6506 for current services, sample submission forms and charges. You will also find

useful information here on how to prepare your sample and send it. Note that freight is included in the test charges. For more information, contact

one of our laboratories - see the table for details. Samples can be left at any site and will be sent to the nearest appropriate laboratory.

Customer service centre	Address	Telephone/fax
<i>Elizabeth Macarthur Agricultural Institute</i>	Woodbridge Rd Menangle NSW 2568 (PMB 8 Camden NSW 2570)	Ph: 02 4640 6428 Fax: 02 4640 6415
<i>Orange Agricultural Institute</i>	Forest Rd Orange NSW 2800	Ph: 02 6391 3980 1800 675 821 Fax: 02 6391 3899
<i>Tamworth Centre for Crop Improvement</i>	RMB 944 Calala Lane Tamworth NSW 2340	Ph: 02 6763 1187 Fax: 02 6763 1222
<i>Wagga Wagga Agricultural Institute</i>	Pine Gully Rd Wagga Wagga NSW 2650 (PMB Wagga Wagga NSW 2650)	Ph: 02 6938 1957 Fax: 02 6938 1822
<i>Yanco Agricultural Institute</i>	80 Trunk Rd Yanco NSW 2703 (PMB Yanco NSW 2703)	Ph: 02 6951 2611 Fax: 02 6951 2719
<i>Alstonville Tropical Fruit Research Station</i>	Bruxner Highway Alstonville NSW 2477 (PO Box 72 Alstonville NSW 2477)	Ph: 02 6626 2445 Fax: 02 6628 5209
<i>Wollongbar Agricultural Institute</i>	PMB Bruxner Highway Wollongbar NSW 2477	Ph: 02 6626 1103/ 6626 1261 Fax: 02 6626 1133/ 6626 1276
<i>National Centre for Greenhouse Horticulture</i>	Research Rd, Narara NSW 2250 (Locked Bag 26, Gosford NSW 2250)	Ph: 02 4348 1900 Fax: 02 4348 1910

Port Macquarie wildflower industry meeting a success

Over 100 people attended this meeting which was held on the NSW mid North Coast over the weekend of February 22-24. Feedback about the meeting has been extremely positive, with activities forming the ‘core’ of the program, like the farm tour, review of the past season and the ‘crystal ball gazing’ by marketers, remaining popular.



The farm tour, organised by Greig Ireland (pictured in foreground), District Horticulturist based at Coffs Harbour, prompted much discussion.

The overseas guest speakers also presented a wealth of information. We used the conference evaluations to collect information about frost and drought impacts on growers' production. 39% had experienced frosts 0 to -3°C , or -3 to -6°C , while the remaining 22% had endured frosts of greater than -7°C . 33% of growers had lost marketable product due to frost damage. The drought had caused 27% of growers to lose product and over 42% had lost plants. Most growers (70%) relied on a single water source (mostly a dam) to irrigate their flowers and 27% had access to 2 different sources. Of all growers who replied, 45% used dams, 25% used bore water, 18% used town water and the remainder relied on creek or river water.

A full report on the conference will be published on the NSW Agriculture website – see www.agric.nsw.gov.au, then 'horticulture', then 'flowers and ornamentals'.

Website publications on cut flower industry.

A series of publications is now published on the Departmental website, designed to meet the needs of established growers, as well as potential and new entrants to the commercial cut flower industry. Go to www.agric.nsw.gov.au, then 'horticulture', then 'flowers and ornamentals'. The entries include:

- a list of print publications available through the Department's Bookshop with links to allow you to purchase a range of titles.
- 'Commercial flower growing in NSW – an industry snapshot'
- 'Exporting cut flowers' - information on the world flower trade, the Australian export industry, market profiles, limiting factors and links to industry organisations.
- Information on the Waratah Industry Network.

- General information on fresh flower care, suitable for consumers and florists is available in 'Keeping fresh flowers at their best'. there is also more detailed information on postharvest care of flowers.
- Chrysanthemum white rust agnote
- a series of agnotes on different aspects of greenhouse horticulture
- the book 'Environmental management guidelines for growing cut flowers' and the companion agnote 'Environmental issues for commercial flower growers'
- 'Growing proteas commercially' – Agfact
- A comprehensive publication on Australian native species as cut flowers complete with key crop profiles and references will be added later this year.

Website worth looking at:

Chain of life network where you will find a wealth of information on postharvest care of flowers – see www.chainoflife.com

Plant breeders rights

These are a system to allow someone who has developed a new plant variety to profit from their hard work through royalty payments and protection of their intellectual property. New flower varieties are very important to the fashion conscious flower industry. For example, between 1990 and 2000, the number of new rose varieties introduced increased by 1000%. Overseas, there are proactive efforts to protect PBR and catch those who break the rules – using the latest genetic fingerprinting techniques – and take legal action.

- Plant information/ Plant Breeder's Rights – www.ipaccess.gov.au. Covers the issues associated with plant breeders rights in Australia, the PBR scheme and plant varieties protected by PBR.

- Further reading – a recent issue of FloraCulture International magazine included a feature on PBR. (November 2002 issue) – there are several articles on this subject - see www.floracultureintl.com for more information on this magazine and how you can subscribe (it's free and a great way to keep up to date with industry happenings around the world).

Environmental issues



** New wetland management guide for farmers*
'Managing wetlands on your property' is a comprehensive guide to all areas of on-farm wetland management, including wetlands, information gathering, management issues, benefits, strategies and objectives. you can download it at <http://www.dlwc.nsw.gov.au/care/wetlands/manageonproperty/inland/index.html>

** Tax incentives for voluntary conservation agreements*

From 20 February 2003, landholders interested in managing and conserving their land are entitled to tax incentives when entering into voluntary conservation agreements with government agencies. For more details see <http://www.ea.gov.au> and select 'Taxation concessions' on the home page.

** Energy grants credit scheme*

Federal legislation has been introduced to establish an Energy Grants Credit

Scheme, which will replace the existing Diesel Fuel Rebate Scheme and the Alternative Fuels Grants Scheme. The scheme is designed to provide price incentives and funding for conversion from the dirtiest to the most appropriate and cleanest fuels. See <http://www.aph.gov.au/library/pubs/bd> and select 'Energy Grants (Credits) Scheme.

Pesticide news

** Pesticides and the cut flower industry*

The Pesticides Act in NSW and the linked regulations requiring commercial pesticide users to keep records and, in the near future, to be formally trained are a timely reminder that all users of pesticides need to comply with the requirements of various State and Federal laws. For example:

- Pesticides must be registered (approved for use) by the Australian Pesticides and Veterinary Medicines Authority (APVMA, formerly known as the NRA) and can only be used on crops, for the pest or disease named on the label and at rates no higher than those specified on the label.
- In NSW the Environment Protection Authority (EPA) administers the Pesticides Act 1999 which aims to enforce the proper use of pesticides after the point of sale.

Many growers will have noticed that the range of products registered for use on flower crops keeps changing. NSW Agriculture's Farm Product Integrity Section has verified that growers in some other states do indeed have access to registrations and permits that allow the use of certain pesticides on ornamental plants or flower crops that are not available to NSW growers. Their check of their databases indicated that there are 49 permits and 17 product labels currently available to the industry elsewhere in Australia.

There are several reasons why this discrepancy has developed. These include the fact that many of the current permits were issued by Queensland under the old state-based registration



scheme and have remained in force, while others have been issued to an interstate industry organisation.

There is no reason why NSW growers should not have their own permits. It requires the relevant grower association to identify what use patterns are needed and then to lodge a permit application, along with any relevant data to the Australian Pesticides and Veterinary Medicines Authority (APVMA).

As a 'first step', NSW Agriculture is currently assisting the industry in identifying products and pests/diseases which are currently not available to it. Wildflower growers will have been sent a **pesticide use audit survey** to complete through their Association (please contact the Editor if you have missed out) – it aims to check that growers are matching the best available product to the target pest or disease and that this use is legal in NSW. By completing the survey, you can add to the pool of information that can be used to identify where permit applications are needed. Rose and gerbera growers belonging to the IPM discussion group have pooled their knowledge of products they use and would like to use. Those products compatible with IPM will be checked and those for which permits will be required identified.

A mechanism will then need to be developed to apply for permits through various industry organisations. It will be a slow process, but an organised mechanism needs to be put in place to allow NSW growers to catch up with others interstate. In the future, there may be an opportunity to join forces with other state industry groups to seek Australia-wide permits for new products currently not available to flower growers.

** Soil fumigants*

With methyl bromide use as a soil fumigant due to be completely phased out by 2005, growers need to be planning alternative strategies. Many traditional flower growers have already turned to other chemical fumigants like metham sodium and dazomet (eg. Basamid ®), or are using steam or growing in media rather than soil. You need to complete specific training and receive a certificate of competency before you can legally use methyl bromide and Telone C-35 (which contains chloropicrin), to comply with Workcover regulations. To use the Telone formulation that does not contain chloropicrin, you must do a special training course to comply with the Pesticides Act. To use metham sodium, it is recommended you do a special training course to comply with the Pesticides Act. For more information, please contact the Editor.

Environment Australia will be conducting another round of applications for critical use exemptions in the first half of 2003 for industries which have no technically or economically suitable alternatives to methyl bromide. For details contact Environment Australia.

** Review of fenamiphos (Nemacur ®)*

The Australian Pesticides and Veterinary Medicines Authority (APVMA) is currently reviewing this chemical. It is

currently registered to control nematodes in bulb crops and to control soil borne nematodes and sucking insects such as aphids and thrips in ornamental crops.

It is being reviewed on the basis of its hazard to birds (especially in the granular formulation), fish (suspected kills resulting from leaching), applicator exposure (especially mixing and loading the concentrate), crop residues (specifically tomatoes, lettuce, strawberries, lettuce and animal transfer data) and public health (use in home gardens).

The review is likely to require substantial data to satisfy the nominated concerns. In the US, faced with the requirement to generate similar data, the registrant agreed to voluntarily withdraw the product from the market by 2007. The APVMA is accepting submissions until 24 June 2003. A draft report of the APVMA's review is expected for public comment in late 2004.

Protecting your ornamental plants – pest and disease identification and management publications from NSW Agriculture.

Pests, Diseases, Disorders and Beneficials in Ornamentals Field Identification Guide is a picture guide to help you identify the most common pest, disease and nutritional disorder problems for nursery and greenhouse ornamental plants in Australia.

The comprehensive *Integrated Pest Management in Ornamentals Information Guide* gives you practical advice on designing and implementing an integrated pest management program in your crops, to prevent pests and diseases from reaching damaging levels.

The publications are available as a kit for \$110, or you may purchase the *Field Identification Guide* separately for \$27.50.

Contact the NSW Agriculture bookshop for your copy –
Phone 6391 3458, 1800 028 374
Fax 1800 642 065

New books

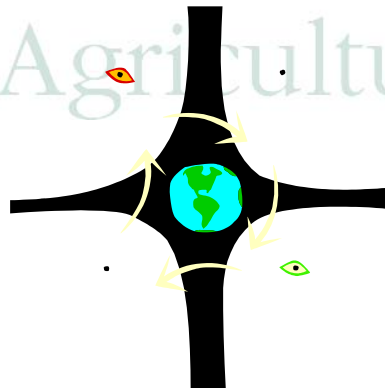
'Field guide to common pests and disease in eucalypt plantations in NSW'. Angus J. Carnegie. State Forests of NSW, 2002.

'Trees for shelter: a guide to using windbreaks on Australian farms'. H. Cleugh. Rural Industries Research & Development Corporation (RIRDC), 2003, 72 pages. Publication no. 02/059. \$34.

'Research update no. 6: trees for shelter – windbreaks for Australian farms. RIRDC, 2003. 16 pages. Publication no. 02/162; free. Or see <http://www.rirc.gov.au/reports/AFT/02-162.pdf>

To contact RIRDC – phone 02 6272 4819, fax 02 6272 5877, web www.rirc.gov.au/eshop

Contact us



We welcome your feedback and suggestions for this newsletter. Please contact the Editor, Bettina Gollnow at Elizabeth Macarthur Agricultural Institute, PMB 8 Camden NSW 2570, phone 02 4640 6437, fax 02 4640 6300, email: bettina.gollnow@agric.nsw.gov.au

If you don't have access to the web, try your local library or contact the Editor for help.