WILDFLOWERS AUSTRALIA

August 2011 newsletter[1]

In this issue we cover the following events, reports and news:

Flowers 2011 – a personal view by Paul Dalley
Horsham regional conference
Passion to Profit magazine
WFA website update
Myrtle rust update
Introducing Australian Wildflowers Research, Development and Education Pty Ltd
NRIA herbicide minor use permits project
Flowers from Australia booklet
Flower term of the month
Events and diary dates
Changing your contact details?
How to contact WFA

[1] *This newsletter is an activity funded by the RIRDC project* Capacity Building and Communications Enhancement of the Wildflower industry. *It has been compiled by Bettina Gollnow, the Communications & Extension Manager, also funded by this project.*

Australian Government
Rural Industries Research and Development Corporation

Flowers 2011, a personal view – Paul Dalley[2]

The conference covered a variety of topics, from big picture industry trends, to specific tips for growers. The recurring themes for me were the need to improve flower vase life and consumer value, to connect more with customers and consumers, and do these things while improving the sustainability of the whole industry (staying green and profitable) from farm to the customer's home. From global to local, what I heard was, be concerned and connected.

Looking at **macro trends**, **Will Healy**, Ball Horticulture Company, reminded us:
* Australia is multi ethnic but the Northern Hemisphere is Eurocentric in flower and plant use, industry needs to learn the culture of flowers for its varied customers,
* the growing importance of **internet** advertising, especially on smart phones.
* consumer view of plants and flowers as quality of life, a decorative necessity, a creative expression, need to be fast, fun, friendly.
* shrinkage, what we don't get paid for, from seed/cutting, young plant, finished plant, distribution, retail, consumer: total about 30%.
* genetics is the basis of vase life; new cut flower varieties pass 14 day test.
* consumers ready to pay more for sustainability like biodegradable packaging.
* opportunity of 'locavore', sourcing food and flowers within 150km.

Two grower types are emerging …. Who are you? Both can be successful.
* the **lifestyle grower** has control, is autonomous, independent, has extensive experience, is experiential and experimental; these growers do experiments, get out & fail, e.g. producing "unshippable" snapdragons.
* The **supply chain grower** has a narrow control field, is interdependent, reliant, with specialised experience, offering repeatability; less control, more efficiency, sustainable, CO_2 down, lean flow automation.
* passion v efficiency, varieties v units.

Looking at past and present **trends in US floral industry**, **George Staby**, Perishables Research Organisation, surveyed consumers in 1979 and found flowers don't last long enough. In 2010, unknown vase life is still a major concern. Consumers want care info, info on expected vase life at purchase and guaranteed vase life in days. Mass marketers are offering this.
* 85% of US cut flowers are imported, mostly from Columbia, Ecuador & Mexico. US growers still do specialty, woody and hard to ship crops.
* market shares: florists have 40% of $, 30% of stems; mass marketers 52% of $, 65% stems; phone and online overnight 8% of $, 5% stems. Overnight delivery has no cold chain. Overnight and florists have higher prices.
* radio frequency ID tags track temperature in a box, can predict vase life after transport.
www.chainoflifenetwork.org

Scott Salter, Lynch Group, who have done 2500 vase life tests in 2 years, stressed the need to maximise consumer value in tough retail times, reminding us that more than 40% of flower purchases are 'to show care'. Growers should 'walk the crop' often, do small experiments, test & create new procedures, like changing the number of stems/bunch and correct sleeve sizing to eliminate transit damage.

[2] Paul is the WFA member who received the conference scholarship and travel grant from the RIRDC, to attend this conference.

Andrea Caldecott has worked on promotion with grower groups in UK, reportedly achieving a return of $130 for $1 invested by growers. She is enthusiastic about growers using social media (number 1 reason in Australia to go online) to let people know what you do, show them what you have, teach them something; 11% of all business referrals in Australia are from Facebook. Andrea suggests being personal, not pushy, accepting feedback and criticism; "be nice, quoted, shareable, opinionated, eloquent, interesting, interested, personal, pithy and regular".

Bettina Gollnow, Communications & Extension Manager, Wildflowers Australia, spoke of the role of the wildflower **Quality Specifications & Postharvest Manual** in improving vase life and consumer value, and the link with grower profitability. My impression overall was the quality specs, showcased on the Wildflowers Australia/RIRDC display, were seen as an indication of a proactive industry sector, and the wildflower product on display attracted plenty of attention from florists, many of whom had not seen some of the products before. Quality was excellent, thanks to the support of WFA members Big Spring Mount, Golden Gecko, Mountain Nursery, Premium Greens, The Banksia Company & WAFEX.

Jerry Crockford, marketing consultant, alerted us to the **Rule of 7**: you may need at least 7 contacts with your target market over 18 months. Who does your website target? How will they find it? What will they do there? 80% sales are made only after 5th to 12th contact, persistence pays. **Your real business** is solving problems/fulfilling dreams, making people feel good. Tell customers how to choose flowers, what to look for, ways to spot poor quality, how to look after flowers. Lead with benefits (what you get), follow with features (what I have) and **specify the feeling/reward from the product**.

Nicky Mann, A Dozen Roses, is a very dynamic marketer who runs a direct retail rose farm. Her energy and enthusiasm for her flowers and business was a delight. She has **7 ways to market floral on a shoestring.**
1. social media – FaceBook, LinkedIn, Twitter, forums, blogs, YouTube, SMS, Google+
2. e-marketing & e-commerce: newsletter, emails, website/online store, info & advice on product, how grown and processed, catalogue of products – tour, wedding, funeral.
3. networking – field days, communicate with customers – phone, visit, mail, Xmas card, have the conversation, be genuine and present.
4. sponsorship – giveaways for involvement in event. Co-promote, volunteer.
5. editorial - send info to local paper, local mags, radio, industry magazines, public speaking at events.
6. be competitive.
7. have fun & keep learning.

Nicky offers **a 7 day vase life guarantee and printed care instructions** with each bunch.
www.roses2go.com.au

George Staby was emphatic, and entertaining, in explaining the most important factors in determining and **improving postharvest performance.**
#1 is variety. Varieties vary, some roses are 3 times more sensitive to ethylene damage than others.
#2 temperature management is the most important factor for any variety. Cut flowers live on carbohydrates stored before harvest. Respiration burns these carbs. Respiration runs faster at higher temps, burning more carbs. Rate of respiration at 25°C is around 20 times higher than at 6°C. Important to forced air cool (precool) after temperatures rise during packing process. "Putting flowers into water does not compensate for poor temperature management"
#3 ethylene control preventative treatment. Industry loss is around 30%, causes premature aging and various symptoms, all with poor vase life.

Plants produce ethylene as a signal of attack and defence against botrytis. Before ethylene attaches to receptors, STS or MCP (EthylBloc) attach and block ethylene. Proper temperature management controls ethylene on waxflower.
"Note: fortunately many wildflower species are not ethylene sensitive. However, as the quality specifications project has documented, there is a lot still to learn about the optimum postharvest treatments of many wildflowers and for many the ethylene sensitivity tests have yet to done". Bettina Gollnow, WFA newsletter July 2011.
Dry handling at grower, wholesale and retail levels has potential to improve performance by reduction in fungal and mechanical damage and double handling, but temperature control is critical. Note: Dry handling wildflowers needs specific trials, crops may vary greatly in response to dry handling; field hydration before harvest will be important as well as time from harvest to cooler.
Nutritional status - good levels of calcium and silicon increase resistance to disease and insects. Measure soil or mix levels, silicon is not present in peat or cocopeat. A few ppm of silicon is ok. Ammonium nitrogen reduces postharvest life, with softer growth, compared to nitrate nitrogen. Note: protea may do better with ammonium nitrogen.
Bucket cleaning – use chlorine, check free chlorine level with test strips, 2-4 ppm is ok but has no residual action, alternate monthly with quaternary ammonium compounds, which have residual effect.
"If you wouldn't drink the water from your buckets, don't put your flowers in them either"
Flower food also helps reduce bacterial load in buckets. Use correct strength solutions, too weak may feed bacteria with sugar without having enough bactericide to control it. Best way to test flower food solution is at correct strength is to measure pH. There are questions on effectiveness of flower food at grower and wholesale levels. High sugar pulse on protea, leucadendron, grevillea, kangaroo paw has a proven good effect. Sugar is for a purpose, to promote further opening of buds and help stop leaf blackening (exhaustion of carbohydrates). Flower food/preservative solutions have not been tested for many wildflower crops.
Water uptake: failures caused by physical blockage of xylem, like straws, blocked by air, dirt, microbes. RECUT, 2-3cm, recut under water if possible, acidify warm or cold water. 20cm deep water pressurises, pushing water up stem. Band on bunch at 10cm from base to facilitate recutting, with stems ends even, straight or angle cut, same reason.
New postharvest products:
Quick test kits for Botrytis, often misdiagnosed, from Nursery & Garden Industry Queensland.
To counter botrytis in shipments, TransportCARE paper around sleeved flower heads releasing chlorine dioxide, stops spread of botrytis.
Calcium hypochlorite, 200 ppm chlorine, is an effective quick dip for botrytis.
Anti-dehydration treatment, ProTone, abscisic acid ABA, for water stress in red grapes, closes stomates, can be phytotoxic.
Wetter/adjuvant Synbiont Crop Enhancer especially for postharvest dip for botrytis control.

On the same theme of **vase life and postharvest solutions**, **Jaap van Stavaaren**, spoke of European perceptions. The consumer usually expects **at least 7 days** and full opening, but expectation varies for different products, 14 days for Chrysanths, but peonies about 5 days. Growers and florists need to inform consumers on bud opening.
For growers, botrytis problems are eased by reduced handling, damage, condensation and use of field chemicals.
Disinfect buckets once a week, for best vase life. First in, first out. Soap is inadequate, use strong chlorine at 500 ppm for 15 minutes.
Use flower food. All have ingredients to kill bacteria and assist water uptake. There are different formulations for many crops. Florissant and Chrysal are two well-known quality brands. 75% of water uptake happens in the first 30 minutes, so long

hydration times may not be necessary.
www.ufosuppliesw.nl

Richard Go and **Shauna Larson** showed florists how to make different types of arrangements using the same basic materials, and shared tips on cost control. They emphasised having product knowledge and professionalism, did the maths of profit margin and generally told the florists not to sell too cheaply. They advised to do competitive analysis, avoid a low price strategy, don't give discounts, give extra in product or service. The **product's value factor is a combination of material quality, finished performance, packaging, on time delivery, after sales service.** They're selling a solution to a perceived problem. I asked Shauna how she views price increases from growers, she said increases are ok if quality is there, service is good and she can claim a credit if she has a problem with the product.

Frank Scholten, Chrysal, gave a fascinating glimpse of global flower biz logistics. Australia is a very small player. Production moves to more land, water, cheap labour. There are big fluctuations in **supply and demand**; the Dutch auction price can vary by 200% in 7 days for a commodity like a 42cm intermediate rose, 3.5cm head, about 11 eurocents (AUD 15c) delivered to Amsterdam. Currency fluctuation is a major problem to 12 month supply contracts, as is airfreight availability and price. **Sea freight** is very efficient for medium-long distance, has low CO_2 emissions. Problems are large lots of product needed to fill, quality issues, port reliability and delays, quality perception. Chrysanths & protea are successfully shipped from South Africa to Europe; Colombia ships to USA and Holland. Retailers want lower **carbon footprint** and labelling to say so.
Relative carbon emission units per kg per km: container ship - 11, diesel train - 17, electric train - 44, truck - 50, Boeing 747 – 552.

Mass marketers are driving a trend to sustainability, 25% must be biologically produced. They test for chemical residues and want track and trace back to producer. **QR codes** are easy to make and scan. Customer scans QR label code with smartphone in shop, gets web info on use and benefits; QR code integrates with sleeve and cartons, track and trace, supplier web link.
A vase life guarantee for consumers needs a controlled supply chain. www.chrysal.com

Irrespective of opinions, **Peter Deuter**, AgriScience Qld., showed **climate change** definitely has happened and continues. Vegetable **growers are adapting** by changing varieties, planting times, irrigation practices, using integrated pest management, "autonomous" adaptation to new climate in same location. Around 2030 will be the critical stage because of 'tipping points', irreversible feedback cycles leading to much faster temperature change, subsequent weather patterns and sea levels. **Ongoing changes** include hotter temperatures and more hot days in summer, leading to more crop sunburn, pollination failures, higher water requirements. Warmer temperatures will cause a shift in growing areas, increased insect activity, more pests and predators, e.g. silverleaf whitefly range extending from Nth. Qld. to SE Qld.
Scenarios are A1F1, worst case, fast

economic growth, intense fossil fuel use, population peak by 2050 then declining, and B1, best case, less growth, clean energy.
Temperatures rise under all scenarios, with rainfall effects uncertain, best estimate under A1F1, 2-5% increase in rainfall, with + or – 2% in summer
Mean minimum temps have risen more than mean maximums.
Under A1F1, Coffs Harbour region would have a mean rise of 1.2°C between 2011 and 2030, historic mean over last 100 years, 1.9°C.
Australia's emissions, 560 million tons, are :
50% stationary energy, mostly coal burning power stations.
14% transport 5% industrial 5% fugitive coal mining
8% land use change, clearing
16.5% agriculture, horticulture only 1% of this.
Horticulture growers' carbon footprint
44% energy use
27% transport
28% fertiliser applications, nitrous oxide from nitrogen fertilisers
2% animals
Carbon farming initiative opportunities for growers include :
* **biological carbon storage** in soil by reducing tillage, keeping cover with green & animal manures, increasing carbon by microbial activity.
* **reduce nitrous oxide emissions** by changing rate & timing of nitrogen applications; new nitrification inhibitors in fertilisers.
* **reafforestation** – carbon storage in trees.

Gerardo Mercurio, Italian expert on gerbera and rose, checking some roots at Currey Flowers, Karalee. If the mix has enough airspace, there will be white roots, the more the better.

Gerardo explained the importance of particle size distribution in coco or bark mix, too much fines, not **enough air for good roots**.

Richard Go at Currey Flowers

Green was also a trending flower colour

Gerbera, native to South Africa, bred in Holland, tissue cultured in India, transplanted at Highsun Express Plugs, Brisbane, grown on and sold in Australia.

Horsham regional conference

This was held on August 12 and 13. Feedback from delegates has been very positive, despite the relatively small number who attended. The farm visit program took us to two WFA member properties at Laharum – Julian Stoller's home plantation and Big Spring Mount operated by Colin and Lorena Flack. Here's some info about the growers who attended the conference: all were members of WFA. They grow a wide range of crops including Eucalypts for buds and nuts, Christmas bush, Kangaroo paw, Protea, *Leucadendron*, *Leucospermum* and *Boronia*. The main crops are waxflower, Thryptomene and Banksia. Most planned to expand their production. 4 growers have an impressive 2200 Ha under wildflower production. There will be a more detailed report on the conference next month.

Julian Stoller and his Thryptomene crop - we found out that this is just one of a broad range of wildflower crops grown in this region, in extensive plantations.

Viewing waxflower – flowering early this year – at Big Spring Mount.

Passion to Profit magazine

(August/September) published by NRIA is now available:
Click here to read and share the magazine

WFA website update – new additions

For consumers – information of interest to consumers: "What is actually meant by the term 'wildflowers'", ''Where can I buy wildflowers?', 'How to look after your wildflower bunch or arrangement', and 'How can I find out which wildflowers are in season?'. Go to: http://www.wildflowersaustralia.com.au/for-consumers

Wildflower FAQs (frequently asked questions)

This section includes 'Getting started in wildflower growing - useful background and information sources' (also added to the menu item 'For new growers') and repeats the 'For consumers' entries above.

WFA members – please check your listing

Members are reminded that they can access their listing on the website and update it. Please check that your information and contact details are up to date.

Myrtle rust update

Myrtle rust continues to spread up and down the coast of NSW with detections known from Tathra to the QLD border. It is now widely spread in South East Queensland with recent detections confirmed in nurseries in Cairns and Townsville. In NSW at least, the mild winter conditions may have helped continued spread of the rust with fresh lesions visible in many regions. This update is to remind wildflower growers to monitor their plantations carefully, especially as conditions favourable to rust infection (see below) become more prevalent.

The current natural host list now sits at 107 species across 30 genera. This is the fastest increase in recorded hosts for any biotype within this rust complex ever recorded! Since April 2010, as a result of field observations and host testing experiments led by CSIRO researchers, the list of hosts susceptible to Myrtle rust is greater than number of host species known previously for the whole guava/eucalyptus rust complex worldwide over the last 130 years. This emphasises the risk Myrtle rust poses for our Australian Myrtaceae.

Myrtle rust has also been recorded on species in the bush or used as windbreaks around plantations, and species that are severely damaged in native bushland include *Rhodamnia rubescens, Rhodomyrtus psidioides, Choricarpia leptopetala* and *Melaleuca quinquenervia.*

Recorded hosts include these wildflowers already: *Agonis flexuosa*, *Backhousia, Callistemon*, *Chamelaucium* (Qld Biosecurity rates impact of Myrtle rust as high with severe symptoms), *Eucalyptus*, *Leptospermum*, *Lophomyrtus* and *Melaleuca.*

Myrtle rust symptoms on waxflower (*Chamelaucium*) in Queensland. Photo by Geoff Pegg, Biosecurity Qld. Approval for the use of this image has been provided by the Department of Employment, Economic Development and Innovation and the copyright lies with the State of Queensland. Please note that other organisations or groups may not use this photo without first obtaining permission from the copyright holder.

What conditions favour infection?

- Presence of soft, immature foliage
- Temperatures of 15–25°C
- High humidity or wet foliage for up to 8 hours
- Low light or darkness – i.e. night temperatures of 15–25°C

Following infection, Myrtle rust needs continued temperatures as above and high humidity. The disease life cycle can be short, with pustules and spores observed within 10–12 days.

For the latest information, go to:

www.industry.nsw.gov.au/info/myrtlerust

http://www.dpi.qld.gov.au/4790_19788.htm

What (could be) next?

RIRDC has developed a program of research for the next three years and has allocated funding. So what can the wildflower industry do? It can decide on a suitable project and ask RIRDC for funds to match industry funds raised for this purpose. What sort of project might be considered? Some ideas are:

- Testing of the main wildflower hosts in Myrtaceae under controlled conditions to assess severity of infection
- Testing of key varieties and new cultivars of key crops – e.g. wax – to assess their susceptibility – is it the same or are there differences between varieties?
- Assessment of alternative chemical controls.
- Training courses

Introducing Australian Wildflowers Research, Development and Education Pty Ltd

This company has been formed by WFA to support research, development and extension projects to benefit the Australian wildflower industry. Its function is to broaden the capability of the industry, as represented by the national body WildFlowers Australia Ltd, to develop and undertake a broad range of R&D projects and educational activities. It will achieve this by applying for various government grants and managing those funds, ensuring projects are delivered in a cost effective manner and on time. A priority area will be projects focussing on issues that are directly relevant to the commercial outcomes desired by industry stakeholders.

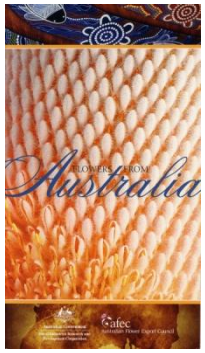
Our series on R&D updates will resume next newsletter.

NRIA herbicide minor use permits project

Representatives of NRIA and the APVMA met in late July to progress the initiative to apply for minor use herbicide permits across several new rural industries, including wildflowers. WFA is providing information on behalf of the wildflower industry. The APVMA has agreed that all of the NRIA requested herbicides are suitable to be formally submitted as an application for a Minor Use Permit. One application will be submitted for each herbicide. Herbicides being sought for wildflowers via this project are:

Glyphosate [e.g. RoundUp (R)]
Glufosinate-ammonium 200g/L [e.g. Basta (R)]
Paraquat dibromide + diquat dibromide [e.g. Sprayseed(R)]
Simazine 900g/kg
Oxyfluorfen 240g/L [e.g. Goal(R)]

Flowers from Australia booklet



This publication contains a wealth of information on Australian grown wildflowers. There's a product photo, the botanical and common names, and a summary of the natural flowering times for a very broad range of products. Readers are reminded that WFA has copies of this booklet available for sale at $14 (including GST, postage and handling). There are generous discounts for bulk purchases, e.g. if you'd like to pass on a copy to your customer list. Place your order with Sylvia at secretariat@wildflowersaustralia.com.au

Flower term of the month

What is a flower? Maybe it depends on your perspective!

Flower (commercial): For simplicity, the words 'flower' and 'stem' refer to the whole commercial cut flowering stem, including the stem, leaves, **bracts**, flowers and **flower head** (made up of individual flowers or florets). For example, the commercial flower of *Telopea speciosissima*, the waratah, includes the stem, leaves, bracts and a flower head of individual flowers. The different parts of a commercial cut flower may develop and age differently after harvest - so in one case changes in the leaves (drop, wilting or discoloration) can determine when quality is unacceptable, but in another, changes in the petals (drop, wilting or discoloration) determine it.

In the flower market, this waratah is considered to be a flower. Botanically, the centre is a mass of numerous individual flowers (sometimes called florets), surrounded by showy bracts, and the whole thing is the flowerhead.

Flower (botanical): The word 'flower' is also used to mean the individual flowers on a stem or in a flower head, e.g. the individual flowers of *Chamelaucium* and the individual flowers of *Telopea* within the **flower head**.

Flower head: The term 'flower head' is used to describe compound flowers, which consist of many individual flowers, often in a complex arrangement and often surrounded by **bracts**, such as *Acacia* (balls or rods), *Banksia*, *Grevillea*, *Helichrysum*, *Ozothamnus*, *Protea* and *Telopea*. Botanically, this flower head is called the inflorescence. The individual flowers usually open sequentially over time. For maximum vase life, the flower head is often picked when only a few individual flowers have opened or are starting to open.

Reprinted with acknowledgement from *Postharvest Handling of Australian Flowers from Australian Native Plants and Related Species. A Practical Manual* Second edition by John Faragher, Bettina Gollnow and Daryl Joyce November 2010

RIRDC Publication No. 10/027 RIRDC Project No. PRJ-000331

Events and diary dates

August 26: WFA AGM and general meeting, Brisbane.

October 13-15: IFEX 2011 Tokyo, Japan.
The latest IFEX brochure is posted on the website at www.wildflowersaustralia.com.au/what-s-new-

Changing your contact details? Please let us know.

If you are changing your email, contact phone number or moving to a new address, please let Sylvia Gleeson at the WFA Secretariat know (contact details below).

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If you wish to join WFA to receive the newsletter, weekly update emails and other member's only benefits, please go to the website - www.wildflowersaustralia.com.au - and complete a membership application.