



# the Propagator

International Plant Propagators' Society  
Australian Region - Newsletter Summer 2007 - No: 16

## MOTHER-STOCK

Motherstock ..... it is all about caring and nurturing plants for productive propagation. At the 2005 Mildura IPPS conference someone asked why cutting stock plants are called motherstock. One thought was that the name had crept in from the tissue culture industry, and distinguishes sexual from asexual production.

In order to have a good source of cutting material the stock plants need to be:

- True to type and name
- Free of disease and pests including weed seed.
- In the proper condition so that cuttings taken are more likely to strike. To achieve juvenility you can cut from young plants, or more often it means pruning plants.

Sources of cutting material are:

- From park and domestic landscape plantings, or in the wild. These pose problems controlling disease, and potentially errors in identification, as well as lack of control of growing conditions and pruning.
- Prunings from nursery plants when shaping. It may be hard in the nursery to ensure that trimmings are taken at the right time for propagating cuttings.
- Specially maintained stock plants in containers or in the ground are probably the best source of cuttings. The growing history and identity of the plants is readily available, and they can be pruned and fed to ensure vigour.
- For the more expensive lines, tissue cultured stock may be used to establish disease free stock.

With drought affecting so much of the country many growers are reviewing and changing their practices, especially in the southern regions. It seems that many ornamental plant production nurseries have converted spray irrigated stock plants in pots to more efficient and more forgiving drip irrigated in field planting. Of course you lose the ability to sell your 2 to 4 year old mature plants when you do this.

There are many other things to consider including the value of the crop, affect of herbicides on propagation success, mulching, and pruning and feeding regimes.

In areas where we hear of fruit trees being cut down or removed due to lack of available water, some growers are conserving and growing their valuable stock plants in large structures and/ or large pots with drip fertigation under cover. There may be some further benefits in this by avoiding weeds and extra maintenance. We saw such a sophisticated operation this year at Narromine Transplants, and Boulevard Nurseries at Mildura a few years ago. It is hard to justify this cost for ornamentals.

Some Nurseries also rely on their display of plants through the Open Garden scheme or garden clubs and also have beautiful maintained gardens.

In the end how you manage mother stock is what works for you. Some grower reports on stock plant care and management are in this newsletter.

- Bruce Higgs

Scotts Tubes Mangrove NSW at the time of a IPPS 2007 meeting. Gardens showing landscaping and mulching of stock plants



## President's Comment

With a number of the executive and members having just returned from overseas to attend the international meeting and pre conference tour, I am sure that there will be some interesting conversation at our next executive meeting about what they have all seen and done as well as from the group of young propagators that also attended. I think it is marvellous that we are able to use IPPS to give a wide range of propagators and administrators the opportunity to travel worldwide and see how the industry operates in different environments and markets.

While I wasn't involved with IPPS, I too have just returned from a visit to Europe the highlight of which was attendance at Hortifair in Amsterdam. This is without doubt the leading trade show for the nursery industry worldwide and was an exhibition of new nursery and flower growing technology extraordinaire. I thoroughly recommend it to those of you looking for new ideas in nursery structures, robotics, irrigation and plant handling technology. Perhaps it might be possible for an IPPS Australian Region organised tour to the Netherlands and Scandinavia, with Hortifair as one of the main visiting points. It took us two days to get around Hortifair properly.

The Society is keen to encourage as many area meetings as possible and already this year there has been a number of successful meetings held. If you have an idea for one in your area please contact John Messina our area meeting coordinator and talk to him about the organisation of one of these events. These meetings have a number of benefits for members and non members alike and they also act as a platform for us to get the word out there regarding the Society and the value of becoming a member.

Work continues regarding the organisation of next years conference in Melbourne and I would encourage anyone that feels that they would like to present a paper at the conference to contact Andrew Mathews, I am sure that he will welcome your inquiry.

Looking further ahead, the executive is now keen to fix a site for the 2011 conference, which is to be held in NSW. The reason for such a long term planning is that this conference will also host the International Board, so it is really important that we get the venue and the organisation for all of this on track as soon as we can. We will let you know the details via the newsletter once the decision has been made.

Clive Larkman continues to try and bring to a conclusion the update of the Standard Operating Procedures, and to work through the formation of a Foundation Trust. We hope a trust will be able to be used for the funding of special projects, in particular the funding of



scholarships for propagators to gain overseas experience. This will be an exciting development for the Society and will take some effort to set up to ensure it's tax status and viability, for a number of years to come.

- David Cliffe

## Executive Officer's Comment

I have just returned from a fantastic overseas trip, where Bruce and I were married in Santorini (see the picture). Hence, my name change from Berryman to Langley.



## INTERNATIONAL CONFERENCE

It was a wonderful experience and privilege to be invited to join with IPPS Members and delegates on the short tour from Hickory down to Chattanooga. I have so many memories that will remain with me for a lifetime. The tour planning committee did a marvellous job in ensuring that we experienced a taste of the various towns and southern hospitality within the Southeastern region of United States. I couldn't quite come to terms with the copious amounts of cold sweet and unsweetened tea that everyone consumes throughout the day.

Nurseries / Research and Garden Centres visited along the way were very interesting and informative. Highlights of the tour for me were the Biltmore Estate/ Grand Ole Opry/ Arboretum/ Smokey Mountain tours. The tour of the Opryland Garden within the Opryland Hotel was unbelievable, the tropical gardens set within a closed dome area were also spectacular.

This was the first time that all Secretariats & Treasurers from all regions had been given the opportunity to get together and discuss issues/matters from within their own regions - (the Japanese delegate was the only person unable to attend). All agreed that getting together proved to be very rewarding and beneficial. Just to be able to meet with other Secretariats & Treasurers in person was a truly rewarding experience. All agreed that this was a momentous occasion and a bondship had now been formed amongst Secretariats & Treasurers from all regions. Secretariats & Treasurers

were also invited to attend the International Planning Session and were guests at the International Board Meeting.

Secretariats & Treasurers also met with Terri Breon (International Database Co-ordinator) for a very informative workshop tutorial on the features of the International database.

#### MEMBERSHIP

At present the Australian Region of IPPS has 246 members.

#### MEMBERSHIP SUBSCRIPTIONS 2008

It is that time of the year again and shortly membership subscription renewals will be forward to out to all Members. Your speedy remittance in this regard would be very much appreciated.

All Members should have received their combined proceedings for the year. If you haven't received your copy please contact me.

#### FINANCIAL

As at the 31.10.07 the Society had a bank balance of \$60,698.

#### CONTACT DETAILS

To ensure Office records are kept 'up to date' I would appreciate it if Members could please notify me of any changed contact details. In particular, if you have changed telephone provider recently, please advise me of your new email address at [pjberry@iprimus.com.au](mailto:pjberry@iprimus.com.au)

- Pam Langley

### International Directors Report

This year the International Board meeting was held over two days, starting on Wednesday 24<sup>th</sup> October and finishing on 27<sup>th</sup> October. In attendance was Clive Larkman as alternate and myself as delegate. All regions were represented.

#### Financials.

The society remains in a strong financial position with sufficient funds to cover short term requirements. However, for the last few years the operating budget has been recorded as a loss for the society, due in the main to the costs associated with a change in management. The underlying cause is the continuing decline in membership. Only the Australian region is expanding membership.

If this trend continues then the fixed costs of running the society will need to be divided by fewer people, resulting in fee increases. This is an option not considered desirable amongst the regions some of whom struggle to convince their members of the benefit versus the costs. As a result some concentrated efforts to increase membership have been put into play, with some good initiatives being put forward by the membership committee.

## 2008 Conference

#### The member early bird details are:

Registration before February 29th 2008,  
\$340 per delegate (saving \$80)

This includes: Thursday evening welcome, food and drinks, Friday lunch, dinner, morning and afternoon teas, Saturday lunch, dinner and bus tour of nurseries, Sunday lunch, morning and afternoon teas.

**Accommodation is available at the venue:** York on Lilydale Resort <http://www.yorktaverner.com.au> When booking delegates MUST mention IPPS conference to get the conference rate, and should book directly with the venue. There are only 40 rooms at York on Lilydale, and after these are filled we will use motels in Lilydale. We will have to bus people from their accommodation to York on Lilydale, so these rooms will be the most desirable.

#### Conference details:

Dates: 1st - 4th May 2008

Venue: York on Lilydale Resort

cnr York and Swansea Rds Mt. Evelyn 3796 Victoria.

Conference theme: *Opportunity through Diversity*

Organiser: Andrew Mathews phone 97519933

email [andrew@protea.com.au](mailto:andrew@protea.com.au)

We have a full program organised with an overseas speaker, tours of local horticultural establishments, and short pre and post conference tours for those interested. There will also be an accompanying persons program offered. Please note that the York on Lilydale is not close to shops or transport, so a car or taxi would be required for activities away from the venue.

The reserve funds have now been reinvested according to a new investment policy, with a much more conservative approach. It would appear that the 2007 overall return of 7.2% on these funds will improve the reserves available for funding new activities. The 2008 membership fee will increase by approx. \$2 USD to cover increases in operating costs. This should be more than offset by the increased currency exchange rate between the USD and the AUD.

#### International Office and International Editor

The Society has continued to retain the services of Heuser Group for 2008 and there have been positive comments about their performance. Regional Secretaries have met on the tour and agreement reached on some membership issues.

Volume 56 of the Societies proceedings is now in hand and will be mailed soon. The success of the previous years system will be repeated as it is less costly and there were few instances of lost books.

There were the usual comments about the difficulty in obtaining papers from conference presenters; this seems to be an ongoing challenge for all regions.

### **Next year's International meeting**

This will be held in NZ and already many people have indicated their interest. Costs and itinerary will be available from the NZ IPPS website soon. The pre-conference tour starts just after the Australian region so expect some spin off for our conference.

### **Constitutional amendment**

The constitutional amendment that sees the Secretary/treasurer and the International editor not having voting rights has now been ratified by all regions. This allays fears from some society members that non USA regions had a 'lesser' vote. It also signals clearly that the society is run by the regional delegates.

The constitution was also raised in other parts of the meeting and a review committee established, along with a review of the Standard Operating Procedures. Clive Larkman volunteered his services to both.

### **Travel reimbursement policy**

A policy has now been established for the reimbursement of delegate costs in attending the International meeting, including the second vice president. A fair result as the costs associated with international representation are prohibitive.

### **Refereed journal**

This was a passionate discussion with some delegates feeling that more discussion is needed before a final decision should be made. The benefit would be to have more academics present as they can 'publish' and receive kudos for doing so. Opposing views are that this will not be cost neutral as presented and that it is rushed. In the end it was decided to hold off from a final decision until more details were presented.

### **Proceedings on the internet.**

This is a long running issue that has been debated for many years. There was further discussion, however the decision was made to a) scan all proceedings and to b) mount the proceedings on the ISHS website.

### **'At Large' membership**

This option was raised last year and a committee formed to develop the concept. This involves membership outside of existing regions, with servicing undertaken by the International secretariat. At large members would be able to obtain members rates for regional meetings, but have no voting rights and no regional support. It is seen as a good lead in for membership, particularly with the greater availability of the IPPS proceedings on the web.

### **Propagator Exchange**

An Australian proposal was to have the International expansion and development fund financially support exchanges between regions. There would be US\$3,000 split between the two regions per exchange with a maximum of four exchanges for 2008. The extent of exchanges would be on a year by year basis.

The board noted the value placed on the Aust/Southern Africa exchange and the possibility of building younger cohort groups. This is a major leap forward for the Australian region as it already has in place an exchange with Southern Africa and has had some discussion with Southern USA about the possibility of an exchange.

### **Other business**

Two other Australian board submissions were received. One was for video productions (now seeking more detailed information) and one for an IPPS traveling road show (tabled for discussion at next years meeting)

### **Overall impression**

This was one the most productive IPPS International meetings I have attended. I have witnessed the societies leadership grow by leaps and bounds over the last four years.

The society is operating on a much more professional and enthusiastic basis. With financials under control, the board is viewing issues well and the society will benefit long term from decisions made. I am impressed with the new alternates coming in their depth of understanding of the societies needs.

Thanks to Clive for his enthusiasm and support. He and David will, I am sure keep up the pressure for change.

I feel honoured to have served the Australian region of the society as International delegate and leave with a great deal of optimism for the future.

- Greg McPhee

### **Highlights of the IPPS Young Propagators Group USA Tour Part 1 - The South**

6:14am local time, at Charlotte International airport. After over 40 hours in transit, 6 members of the IPPS young propagator's group touch down for the 2007 Southern Region pre-conference tour. We were met by Rick Crowder of Hawkesridge Farms nursery, who would show us the first of what would be a recurring theme for the tour – lots of hospitality and lots of food! We were treated to a breakfast of grits and biscuits, pancakes and strong coffee. Enough to power us on for the first day of the tour.





Our first nursery visit was to 'Buds and Blooms', a 70 acre container nursery specialising in Azaleas and Rhododendrons, as well as producing crepe myrtle, roses and pieris. The property is irrigated from a series of four large collection ponds, capturing 100% of nursery runoff.

Hawkesridge farm is next on the list. It's another large container nursery. Here we see our first implementation of the 'Pot-in-pot' technique. It's a method pioneered by Virginia grower Charlie Parkerson, where large containers are grown inside an equal size pot, which is buried below ground level. It provides support to top heavy plants, as well as buffers the effects of climatic extremes on the root system.

Hawkesridge is also the site of more of that southern hospitality. We dined on a traditional catfish fry-up with beer and hush-puppies. We were presented with our tour packs, including our very own 'Gee-Haw Whimpy Diddle'. It's a traditional toy of the mountain regions, made from sour wood. And it proved a big hit with the aussies on tour. To get a first hand look at these unique little souvenirs, be sure to check out the 2008 conference in Lillydale, where Pam and Clive will be happy to show off their skills.

The Mountain Horticultural Crops Research Station, in Fletcher North Carolina is next. It's a research centre conducting work into ornamental crops. A significant project is producing seedless varieties of common garden plants to address issues of weed potential. It is indicative of the strong support provided to ornamental



horticulture in the region, which has a total employment impact of 125,000 jobs in North Carolina.

Further along, we pass through Gatlinburg, a kind of 'Mini-Vegas' in the heart of the Smokey Mountains. We view the Great Smokey Mountains National Park in all its autumn glory. The foliage colours within this, the second most diverse temperate ecosystem on earth are spectacular, and provide for some brilliant photo opportunities.

Our last stop before the conference is Nashville, the country music capital of the world. Here we take a break from propagation with a night at the famous Grand Ole Opry, getting a taste of what country music culture is all about. Not to be out done, the New Zealanders in our group provide a little cultural exchange of their own later in Nashville. Their enthusiastic (and shirtless) display of the Haka proves one of the highlights of the trip.

From Nashville it's on to Chattanooga for the conference itself, and then onto the West Coast for another world of propagation. Check out the next 'Propagator' for a wrap up of the second half of our trip.

- John Messina

*This project was facilitated by HAL in partnership with the nursery industry. It was funded by voluntary contributions from industry. The Australian Government provides matched funding for all HAL's R&D activities.*

## Preparing and Maintaining Motherstock

At Mansfield's Propagation Nursery we put major focus on preparing and maintaining our Mother Stock, believing that a quality cutting starts from the day you plant your mother stock.

A small number of varieties, usually our softer quick growing lines are grown in 10 inch mother stock pots due to the fact that they produce better quality cutting this way as opposed to growing them in the ground.

We also have an 8 acre in ground mother stock facility where we grow majority of our cutting material. To create the best environment for our plants, beds are raised so that soil around the roots can be free draining. Once a year we mulch the beds with a 100 mm thick covering; spreading the mulch thickly helps conserve soil moisture and temperature, as well as minimizing the weeds which compete for the nutrient and moisture in the soil. As the mulch breaks down over time it helps add extremely valuable organic material to the soil structure.

Depending on which soil you have to work with in the first place, it is very important how you condition your existing soil to provide the plants the best opportunity to thrive and produce quality cuttings. Our soil is of a very poor quality sand loam, so to rectify this when planting we mix into the existing soil organic humate or



Brown Coal, as well as some Zeolite to lift the Cation exchange rate and make the soil more efficient in holding on to nutrient. A chunky pine bark potting media is also added to add more organic material to the structure which breaks down over time and feeds the microbes in the soil.

To irrigate the plants dripper lines were installed under the mulch to deliver the water directly to the roots with very little evaporation. Recently we added a liquid feed injection system so that every time we irrigate we are feeding the plants at the same time with consistent low levels of nutrient at an E.C. of around 0.6 mS.

After taking care of the water, soil and nutrient requirements it is also very important to prune your plants correctly. First consideration is to prune at the right time of year to produce cuttings at the correct time for best performance when propagated. This is something that we are working on all the time, and timing varies depending on your area and the conditions your area provides. The second consideration is to prune your plants, after harvesting we prune plants quite hard to produce young fresh cuttings full of energy and vigor in the next crop.

Finally there is one more factor in maintaining your mother stock and this is replacing old tired plants that



are not producing top quality cuttings anymore. This takes a lot of foresight and planning to have new plants planted and established by the time your old row is ready to be replaced. At Mansfield's we find it important to rotate crops and never plant the same variety where another was planted originally. This is based on the theory that different plants use different elements of the soil structure and if the same variety is planted in the same place year after year the quality of the soil will be depleted.

We do believe that mother stock is the most important aspect of our business and are focusing more and more on improving our processes to benefit our mother stock and in turn our business.

*Daniel Mansfield -Mansfields Propagation Nursery VIC*

### Stock / Motherplants

Many of my stock plants are in ground, and form part of a display garden which is now part of Australia's Open Garden Scheme. As a specialist grower of less common perennials and shrubs, we tend to produce relatively small quantities (often only 50 - 100) of a very wide range of plants at any one time. In ground stock ensures that material is available at all times as harvesting from potted stock is not always an option. We do that as well of course, but in a more opportunistic way.

We have three main openings to the public each year - April, September and November. Stock/ garden plants are cut back after the November opening to maintain shape and also to generate more cuttings. Fortunately health of the in-ground plants has not been a great issue so far - they are fertilised with a complete granular mix in July /August and top-dressed with sheep manure at the same time.

The subsurface drip is then raised above the manure before being covered again with composted lupin mulch. This one major overhaul seems to keep them all happy through the summer.

*- Margy Clema Whistlepipe Gardens WA*





### Stock plant management at Proteaflora

Our stock plants are grown in containers, on steel benches and under plastic cover. The water and feed is delivered by drippers. The stock plants are kept for one or two years and then replaced.

The genera we grow in motherstock include Protea, Leucadendron, Leucospermum and Serruria. The covers are plastic, non-retractable, but with some roof ventilation. We don't use any shading.

Previously we had grown motherstock in a field situation. We found that with this method it was difficult to achieve consistent quality cuttings, due to the difficulty of managing pests and diseases on a broad scale.

When we changed to a more intensive system in a protected environment we were much more able to control the growth and quality factors. At the end of their life as motherstock plants (1 or 2 years) most are potted on as advanced stock.

This system gives us the best quality cuttings possible and a stream of plants available for the advanced plant market. It is an efficient system for all resources, including water.

*Andrew Mathews                      Proteaflora      VIC*

### REGIONAL MEETINGS

A **NSW Regional Meeting** was held at Scotts Tubes at Mangrove Mountain on the 31st of August. Gregory (one of our younger members) and Candice Scott were our hosts for the day, and David Ponman and Michael



NSW IPPS Regional meeting at Scotts Tubes, with Peter Albery addressing the group

Gleeson organised it. After introductions we toured the nursery.

There were a number of points of interest in the tour. I heard some were impressed with the marker stakes used in stock beds. Gregory told us that they have an outside garden contractor come through the nursery each month to maintain their stock plants including shaping, feeding and mulching. That frees staff to just take cuttings as required.

After a great barbecue lunch we listened to our guest speakers. Peter Albery from Grange Growing Solutions spoke about constituents of potting mixes, and ensuring that you have the correct mix for the type of plant.

Then followed grafting and budding demonstrations by Antonio Ferraro (recommend stainless steel Bonzai scissors as they always stay sharp), Michael Gleeson (approach grafting Corymbia), Brian Smith, and Klaus Eckhardt on budding roses (timing is critical).

**North Brisbane Branch (Qld)** – 33 people including IPPS members attended a Field Day held at Jackies Wholesale Nursery on Saturday 13<sup>th</sup> October 2007. The topic for the day was Horticultural Sustainability. Guest speakers included Annette McFarlane, John Daly and Des Warnock.

A number of membership packs were also taken on the day, and we look forward to seeing some new members in the future. It was a good day.

Scotts Tubes NSW, Bottom L to R: propagation house, seed sowing herbs, pump house with ozone water treatment unit



## Rod Tallis Award

It is that time of year again when our young propagators need to be nudged and encouraged to apply for this prestigious award.

It is not too late to undertake some short duration project or research that could see some worthy propagator at the start of their career gain an award that they can be proud of and mark the start of a successful career in horticulture. Past editions of "the propagator" may give some ideas for projects, and help is available if you are unsure about designing an experiment.

All that needs to be done is do the work and submit an application. Contact details for Peter Lewis are on the IPPS website. Don't delay, or you will miss this great opportunity.



Scotts Tubes hedge plantings of stock plants in mounded rows, drip irrigated, mulched. Photo also shows identification

## Challenge

It has been brought to my attention recently that Coir Peat may have affect on the strike potential of some plants. *Murraya paniculata* is a plant that may be showing that it does not work as well with Coir based media, but there might be others. I am not in a position to test this possibility so how about you fellow members out there test and report it for me!!

- Michael Gleeson

## Coming Events

**WA Regional Meeting** late January or early February near Perth, contact Mary Clema for details.

**Canberra Regional Meeting** is being planned. For details contact Paul Carmen.

**Melbourne Conference:** 1-4 May 2008 at the York on Lilydale Resort. Each year the Australian Region holds a conference that is essential for propagators to attend. Watch the website for details: [www.ipps.org.au](http://www.ipps.org.au)

**NZ Conference** (International) May 22-25 2008 West Auckland, NZ at the Langham Hotel.

**South African Conference** March 17 - 19.

## IPPS MERCHANDISE

### Orders for IPPS:

**Polo Shirts** (Members \$25 and Non-Members \$30) and **Caps** (Members \$12 and Non-Members \$15) can be placed with John Messina of Sunraysia Nurseries. Shirt sizes still available are:

Small, Medium, Large, XLarge, 2XLarge.

- Contact Details:

#### John Messina

Sunraysia Nurseries,

P.O. Box 45, Gol Gol NSW 2738

Ph: 02.5024 8502, Fax: 02.5024 8557,

Mobile 0417 389 075

Email: [john@sunraysianurseries.com.au](mailto:john@sunraysianurseries.com.au)

### Grafting Techniques – DVD's

Following DVD's are available for sale:

- *Grafting of Roses*
- *Grafting of Rainforest Plants*
- *Grafting Techniques*

\$15.00 each for Members / \$30.00 for Non-Members

Contact Pam Langley for copies.

## News

The International Secretary has past issues of Proceedings available for purchase. Please contact the secretary at [Secretary@IPPS.org](mailto:Secretary@IPPS.org) if you are interested in getting copies for yourself or a library.

Narromine Transplants won the Narromine High Flyers, Most Outstanding Business Award, for the second year in succession in November. The business also won the Primary Producers Award.

John Teulon recently received the NGINA Tubestock Growers' Perpetual Award for outstanding contribution to horticulture.

Margy Clema was recently elected president of NGIWA.

## Newsletter Editors Comment

Many thanks to all the contributors to the newsletter. Without your support the newsletter would not be what it is. If you have any news that you would like to share please let me know.

What an great experience for the young propagators to tour the USA with the IPPS International conference. There have been a number of people say how good it is that the society is getting behind schemes like this .

**The directors and officers of the Australian region would like to wish all of our members a safe and Merry Christmas and New Year.**

*Please pass one copy of the newsletter around at the workplace or leave it in a public place at work.*

Bruce Higgs - editor "the Propagator" (02) 4736 5004 [bruce.higgs@bigpond.com](mailto:bruce.higgs@bigpond.com)