

IPPS

Sharing Plant Production Knowledge Globally

the Propagator

International Plant Propagators' Society
Australian Region - Newsletter Summer 2009 - No: 24

Season's Greetings

Using a fir tree at Christmas originated in Germany with a tree lit by candles. Then came decorations and tinsel. Early last century about 98% of Christmas trees came from forests or local plantings, then artificial trees became common. Today, many Christmas trees are grown on tree farms and harvested for people to use at Christmas.

Something that has become more common is for us to buy a tree with roots in a pot and eventually plant it. That is probably better for the environment. Have you thought what happens in other parts of the world, especially in northern Canada where nurseries shut down over winter?

I am sure that many of us propagate plants especially for the season here in Australia, I have heard that John Teulon propagates Holly which sounds a bit rough on the hands, but I hear he has a secret. Holly and Mistletoe are popular in Europe and Poinsettia also in North America.

We have our native local Christmas plants: *Ceratopetalum gummiferum* and *Blandfordia grandiflora* for NSW, *Prostanthera lasianthos* for Victoria, *Bursaria spinosa* in South Australia and Tasmania, *Nuytsia floribunda* in Western Australia and *Calanthe triplicata* (Christmas orchid) in Queensland. Tree ferns were also popular Christmas decorative plants in the 1800's. Probably more significant now are plants sold as gift lines at this time of year.

We are members of a global society, and at this time of year it is easy to be reminded of that, as you read on you will see how this experience can broaden your

horizons. Language is not as much a barrier these days with the internet and translation programs.

Merry Christmas and a prosperous New Year to you all in 2010.

- Bruce Higgs



Christmas tree with regions of IPPS and the logo

THIS EDITION

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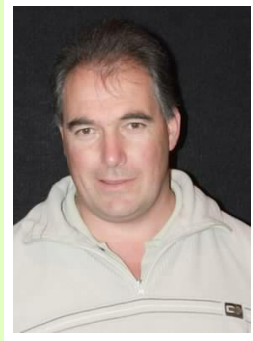
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President's Comment

It is pleasing to see comparatively new members share their enthusiasm and experiences as this is a strength to our society. An example of this is Steve Vallance who as part of helping out with next year's conference committee went to the international IPPS conference in Ireland. His and other reports on the international conference in this edition will highlight some of the benefits from the global "seek and share" network.



Whilst talking about conferences I am pleased to note that Hobart made a small surplus which has been split with our NZ colleagues and that Margy Clema and her WA team seem to be progressing well towards are next conference in Fremantle. Similarly, planning is underway for the International conference in Sydney 2011

Society is constantly changing, our industry is constantly changing and we have to constantly evaluate and change accordingly to keep our society current and relevant. We have as a society done a reasonable job of this over the years as our regions strong membership numbers indicate. Other IPPS regions are not so strong and the International board are looking at ways to make them more relevant to meet more current demands. A start of this process was the international logo change and the emphasis on the technical aspects of production rather than just propagation.

Following on from an international directive the board are currently reviewing our website and highlighting any areas for improvement. We are not looking at any major changes or any significant cost and it is anticipated that some of these changes will be implemented fairly quickly. The aim is to make our website more functional and interactive so to be of more use to members and attractive to potential members. In doing this we will refer to the independent recommendations from the International review of all IPPS websites – the Australian website feedback was positive but we certainly for example have less pictures than others. Look out for subtle changes next year at www.ipps.org.au

Whilst on interactive media and keeping up with the times it is pleasing that some of the young propagators have got a Facebook site up and running. To David Parlby and all the other members utilising it I hope it helps you keep in touch and provides a useful resource. Communication is very much a key part of the seek and share experience of IPPS and we as a society have to be aware of keeping current via all the various means available – email, newsletter, conference, website, proceeding CD's, training DVD's, facebook – so that members can derive the best benefit.

Yet another more recent innovation we are looking at a board level is internet teleconferencing – potentially we can make our board meetings more productive visually and verbally whilst on the current rates at an actually slightly reduced cost.

On this note I will close my communications by wishing all members a Merry Christmas and a prosperous New Year.

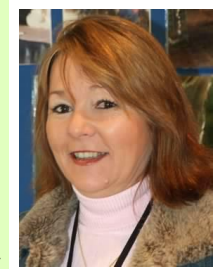
- Lionel Sach

Executive Officer's Comment

IPPS OFFICE

Even though the IPPS Office slows down at this time of the year, I have still been kept fairly busy tending to general office and in-house duties.

The IPPS Mobile Display Stand has now arrived in Brisbane and will be sent in to Skyline Displays for repairs. Once the repairs have been completed it will then be shipped over to Perth ready for next years conference in May.



PERTH CONFERENCE 2011

'Cradle of Creation'
13th to 16th May 2011



Next years conference is being held in Perth WA from **Thursday 13th May to Sunday 16th May 2010.....**so pencil this date onto your calendar. This event is shaping up to be ***'One not to be missed'***.

WEBSITE

Thank-you to Members & Executive Committee who keep a regular check on the website for me and advise of changes required. These are then passed onto IPPS's webmaster for uploading.

SUBSCRIPTIONS

The Australian Region of IPPS has 260 Members.

A warm welcome to the following New Members;

Ms Zoe Dale - Nambour QLD
Mr. Phillip Dowling - Native Plant Wholesalers SA
Mr. Graham Blair - Swanview Plant Farm WA

Early in the New Year membership subscription renewals will be forwarded 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.

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 your internet service or telephone provider recently *please, please* remember to forward your new email address on to me at pjberry@iprimus.com.au

- Pam Berryman

International President's Report

You don't have to be an optimist to work with plants, but it helps. Whether you grow plants, breed plants, hunt wild ones or teach others about them, it often relies on several things that are beyond your control, but which you hope will turn out right when the time comes.

At the recent IPPS Conference in Kilkenny, the region of Great Britain and Ireland played host to the International Board and other assorted delegates from far and near. Inevitably there was much discussion about the global economic downturn and how this has impacted on the nursery industry. Whilst there were few people who were not adversely affected, I was very impressed by the resilience and positive attitude of the delegates.

Older members, myself included, offer the scant consolation that we have seen it all before, and things will work out in the end. Others, again including myself, reckon that good weather at the key sales times will have more impact than media gloom and doom. The smarter, more realistic delegates realised that we are in for a period of tightened belts and increased focus on the economics of plant production.

The general feeling was that to balance the supply and demand equations it was better to reduce production numbers than to cut wholesale prices. Will they be brave enough when they get home? Watch this space!

The conference was very well attended. The International Board and other overseas delegates brought a lot of extra knowledge to the event and their active participation was very much appreciated by the GB&I members. It brought home to me how valuable our society is. Years before "networking", "benchmarking" and "best practice" became buzzwords IPPS was doing it. Seeking and sharing is so obviously effective that I can't understand why more people didn't start doing it sooner. The most surprising thing is that some people still need convincing as to what a good idea it is.

The overall membership numbers of IPPS world-wide have been declining in recent years. Some regions have suffered more than others have but we all need new recruits to maintain our knowledge base and generate fresh enthusiasm. If every existing member were to bring along a friend, a colleague or a neighbour to their

next local event it might be the start of a lifelong involvement. That's how I got hooked.

Over the years I have visited countless horticultural operations around the world. My colleagues dread my return from yet another trip, with yet another daft idea, but invariably, with a little modification, we have found an improvement. Very occasionally my colleagues will even admit that it was an improvement. I firmly believe that the neat ideas and generous advice that I have gleaned from my IPPS involvement have been key factors in making our nursery what it is today. My annual subscriptions have been repaid several times over.

The International Board is working on ideas to develop more membership benefits. With easier communications now available I hope the international links can be developed further to make our unique society even more valuable to its members. There is a lot of scope for more members to make use of the international contacts available through IPPS. Whatever your current challenge, there is a good chance someone on this planet has a solution to offer.

One speaker at the GB&I conference forecast that there will be a return to traditional values after this current economic crisis. Greed and envy will be replaced by honesty and integrity. Let's hope this comes true. Seeking and sharing will become fashionable. People may look at the longer term and recognise the importance of plants and plant people. It may encourage young people to consider horticulture when making career choices. Us optimists have lots more fun you know.

I am nearing the end of my Presidential year. It has been an honour and a privilege to serve in this position. I would like to thank all of the International Board for their support and wish Jim Johnson well for his term of office.

- Pete Bingham

International Director's Report

From the meeting in Ireland we were told that GB&I membership has significantly dropped, while Australia and New Zealand are the only two Regions increasing in membership. Eastern Region sadly had 12 or more people pass away throughout the year.

Year end budget experienced a small loss of US\$2,000. The 2010 budget was approved with a projected small surplus. An increase in membership fees for 2010 will help achieve this forecast.

The new logo will be appear on the front of the combined proceedings from this next edition onwards. The words 'Seeking and Sharing Since 1951' will also appear on the front cover as the new logo doesn't have this information on it and the Board felt a need to make people aware that IPPS is getting close to being a 60

year old Society. Grafting hand symbols will be displayed on the inside title page.

Discussions took place on how many members do not realize they are part of an International Society. It was suggested that twice a year a report from International President be published into a newsletter. This would then be posted onto the International website and each region could mail it out to their Members to keep them up-to-date with what is happening on the International front. Reports from International Directors from each Region will be put onto the website also.

This is my last report as International Director. In the last four years I have been privileged to sit around the table with some great members of our Society. People with a passion for plants, knowledge and sharing. I feel we have made some major shifts in attitude towards attracting and retaining members and I hope that I was able to play some part in these changes. I leave with David Cliffe as our International Director and Lionel Sach as our alternate. Two very capable members with a desire to build our Society. We are also the nominating region for the 2011 President (Greg MacPhee) which means that we have had a third voice from 2008 to 2011.

Have a great Christmas and I hope to see you all in Fremantle in May 2010.

- Clive Larkman



G'day to the Australian IPPS.

It's good to be home and after a few weeks of catching up at the Urrbrae campus/nursery and resuming teaching classes, I've finally had some time to reflect on my amazing journey in South Africa. To be honest, I had no idea what to expect and any ideas were totally exceeded. From arriving to a mass of neon green flashing lights in Durban, after 30 hours without sleep, I knew the trip was to be like nothing I'd ever experienced.

The members of the South African I.P.P.S are a top bunch and my hosts and guides were great. Iain Thompson (South Africa's exchange) organised a

fantastic week in the Kwazulu Natal province, that included tours of a tissue culture lab, a medicinal botanic garden, a nursery trade show, forestry sites, nurseries, game parks and much more. A big thanks and congratulations too, to Iain and his partner Lauren who are planning their wedding early next year.

From the Kwazulu Natal leg of the trip I flew to Capetown where I had a schedule too packed to cover in full but which included; touring Kirstenbosch Botanic Gardens and Millennium seed bank branch, Capetown's wild flowers and Fynbos, The Technicon hydroponics facility, Rooftop Gardens and many more nurseries specialising from succulents and tissue culture to advanced trees.



Somewhere along the way I arrived at the South African I.P.P.S Conference, which included highlights of its own, from nursery tours and speakers to hyrax and whale watching on the Hermanus coast. Not to mention being witness to Tony and Rose VanderStaay tearing it up the dance floor! Though the

conference was down in numbers, I got to chew the fat with past exchange's Kuphumla and Quinton and many other I.P.P.S members, who have journeyed to Australia for previous conferences.

I guess to summarise the I.P.P.S South African Exchange was a once in a lifetime opportunity I'll never forget. The experience and insight that came from being welcomed into people's homes, lives and nurseries provided something beyond what anyone gets seeing South Africa as an ordinary tourist. The knowledge and resource exposure was invaluable and as my 'yas' returns to 'yeahs', I'm again seeing 'utes, bbqs and blokes' rather than 'bakkies, briars and okes'. Though it's good too be home I miss the place, and can't recommend highly enough the program continuing and young propagators applying for next years exchange.

- Daniel Austin





IPPS 2009 International Tour

As the delegates to the 2009 IPPS international pre-conference tour began to gather in Dublin's Camden Court Hotel the main topic of conversation was the All Ireland hurling final most of us had just watched live on TV. 85,000 screaming fans at Croke Park and millions more on TV watched Kilkenny edge out Tipperary in a thriller. It was to be our first taste of Ireland's unique culture but by no means our last.

When Greg McPhee suggested to my wife, Natalie, and I that as organisers of next year's conference in Fremantle it would be a good experience and very educational for us if we were able to attend the upcoming international conference in Ireland, I didn't have any idea what a unique and marvelous place Ireland was. To be truthful, of all the places I wanted to visit in the world Ireland hadn't really rated. It rates now!

A country of just 4 million people the Irish have two major national sports not played anywhere else, both drawing 85,000 people to their respective finals within two weeks of each other. They have their own style of music, their own style of dance, even their own musical instruments. The pub culture is so unique there seems to be an Irish pub in every city on the planet! The post offices are green – because the British ones are red! They have a great sense of humor, being funny when they mean to be, and often being even funnier when they don't.

They also have their own style of food. Potato and whatever. A three course meal means you have potato mashed, fried and boiled all on the same plate. Whatever you ordered came on a bed of potato!



Peat cut to dry for winter fires on the Connemara

A collection of people from around the world assembled there at the Camden Court. None of whom we previously knew apart from the Aussie contingent. All of whom became good friends over the course of the next two weeks. IPPS people are great wherever they come from.

Day one saw us touring Dublin including their marvelous Botanical Gardens. We had lunch in an authentic Irish pub, the "Man o War". Thatched roof, low ceilings and serving the locals since some time in the 1600s. We saw 3 nurseries that day ranging from high tech, high capital, huge volume Tolley's to a much smaller but probably more interesting Flip Schram's set up, which seemed to specialize in doing as many varieties as possible. Along the way we also visited the National horse stud and had a tour guide who was reputed to have not merely kissed the Blarney stone but actually chewed a piece off it, so witty and entertaining was her commentary. We got an insight into one of Ireland's most important industries and also got a look at Melbourne cup winner 'Vintage Crop' which was bred at the stud and is a star attraction there in his retirement.

And so the pace was set. Day after day was full of activity and new sights and cultural experiences. We visited the Connemara with its mountains and wild places and peat bogs, learning how this amazing resource is harvested and utilised. The nurseries visited gave us a big range of methods, setups and ideas and the gardens we were taken to, both public and private, were also very interesting though as a grower of some



Left: Greg McPhee at the peace wall in Belfast.

Right: Australian tree ferns growing Tulley's nursery near Dublin



of WA's huge range of plants you had to feel sorry for them with the varieties they are limited to.

Towns like Galway, Cork, Killarney, Waterford were visited along with ancient churches and castles including the famous one at Blarney. The history is fantastic to people from a land settled so recently as Australia. One nursery we went to had the remains of a ring fort dating from 2000 years ago! The hotel we stayed in at Waterford was built when Captain Cook was two years old. Finally it was on to Kilkenny for the conference. Kilkenny has a tower that was built in 843 as a lookout for Viking raiders coming up the river. It is still sound and is well worth the climb for the views of this old walled medieval town.

Interestingly there were not as many delegates as we generally get to an Australian conference and the Society is struggling for numbers in most of the regions. Others are looking at some of the Australian innovations such as the six packers and the emphasis on young members in general.

There was a big range of topics and speakers included the entertaining Charlie Parkerson on "Gadgets and Gizmos" or how innovation and invention has made his nursery an industry leader in the United States. A presentation on thermic films and their properties would be worth looking into for anyone looking at new ways of getting the most from their greenhouses. There was, interestingly, a presentation on "root manipulation" that showed that in root training, for one thing, the Australian industry has nothing to learn and much to teach. Other presentations were on new varieties, tissue culture, mechanization and more.

The Irish economy has been hit pretty hard by the "Global Financial Crisis" and contracted by some 8% last year and this fact could not be avoided in anything we did or anywhere we went. Nevertheless our hosts went out their way to show us their country and their industry and every one of us learned a great deal and benefited enormously from the experience.



All potting is done in 100% peat.

Next year's conference is being hosted by the Eastern region of the United States and the preconference tour starts in Pittsburg and finishes at the conference venue in Rhode Island. It is to be held in the second half of September and if there is any way you can possibly make it you should be planning to right now.

Irish IPPS Tomato Soup

In September I attended the GB&I Region and International Conference in Kilkenny Ireland.

A group of international visitors had the pleasure of visiting Nightpark Nursery in Colbinstown, in Co. Kildare where we were greeted by the owners Therese and Michael Duffey.

Nightpark Nursery is a small liner production business producing plants mainly from seed.

Our hosts went to a great deal of trouble to show their guests around the facilities and did not hesitate to answer any questions asked in the true IPPS fashion.

What we were not expecting however, was that extra bit of Irish hospitality. Therese invited her guests back to the staff room in her shed where she had prepared a huge pot of home made soup served with sour dough bread followed by a serving of homemade apple tart.

The tomato soup was fantastic and some of us went back for seconds some days later.

I asked Therese for the recipe which she did not hesitate to provide. So here it is:

Irish IPPS Tomato Soup

Therese Duffey (Serves 4-6)

Ingredients:

- 1.25 kg ripe tomatoes
- 4 sun dried tomato halved, finely chopped.
- 1 onion, finely chopped.
- 1 carrot, diced
- 2 celery sticks, finely sliced.
- 2 tbsp tomato puree. (Tomato paste)
- 500 ml vegetable stock.
- 1 good pinch sugar.
- 2 bay leaves
- vegetable oil
- salt and pepper.

Method:

1. Prepare the Tomatoes by destalking them. Cut into quarters and slice the hard core off.
2. Add the oil to a heavy base pan and heat.
3. Add the vegetables and tomatoes and cook till they are soft (about 10 minutes) but not brown.
4. Add the puree and sun dried tomatoes and stir.
5. Add the sugar and the bay leaves.
6. Cook on low for 10 minutes.
7. Add the stock and cook for about 20 minutes, stirring from time to time.
8. Remove the bay leaves.

International guests including our own Steve and Natalie Vallance enjoying home made Tomato soup at Nightpark Nursery



9. Blend until smooth. (Note: using a hand blender will give the soup a chunkier consistency which may be preferred). Add salt and pepper to taste.
10. Serve with garlic croutons or parmesan shavings or as Therese did with sour dough bread.

I suggest you put this one into your recipe book and I hope you enjoy it as much as we did.

Michael Gleeson

Tissue Culture Update

Back in 2008 at the Lilydale conference Andre Cleghorn spoke very optimistically about the future of tissue culture (TC) in Australia. One of the main areas of hope was for inexpensive robotics lines to do the cuttings. What has changed?

Tissue culture is widely used to bulk numbers up species for mass markets. The other applications involve conservation of rare species, producing disease free stock plants and for genetic manipulation developing new plants. Often the rule is that if the plant is difficult to propagate from traditional cuttings, it will be more difficult to clone with TC.

Micropropagation is labour intensive and many large laboratories have now been set up in India, China, Sri Lanka and more recently South Africa. Flasks of disease free material are not subject to normal quarantine laws affecting other plant material, so TC stock really is traded in an international market. That market has been affected by the global financial crisis.

I have tried to locate the person reported by Andre that was working on inexpensive robots, but he no longer works for MIT. I was unable to find out about any recent developments in robotics. ForBio in Queensland developed a robotics process called Vitron some time back. This process mimicked the manual process and involved harvesting small (6 cm) plant sections from a tray, cutting them into a number of smaller viable explants and planting these into fresh trays of nutrient medium. ForBio identified agro-forestry for pulp and

timber products as a large enough market to warrant the cost of automation. Target species included eucalypts, acacia, teak and pine. There seems to be problems applying this to less regular shaped material.

The Australian industry is mainly comprised of a few hundred small laboratories each specialising in producing a limited range of plants for niche markets. Large producers have facilities overseas or have just swung to importing the numbers they demand. The drought and Global Financial Crisis has affected some markets such as grapes and eucalypts, and some plants have been dumped on the international market. Many operators have also moved out of their business through retirement. This would seem to be even tougher than what we have experienced in horticulture generally.

Developing protocols for plants can be very time and resource expensive, and the local industry does not appear to be able to recover costs adequately for such activities. That said, many of the small businesses are still busy and there are still enquiries from overseas for large numbers of plants (in the tens of millions).

Many institutions I contacted have dropped tissue culture from undergraduate courses, as numbers enrolled in horticulture have declined over recent years. If you would like to attend a course contact a local TAFE or University as a first approach. Ron de Fossaard has recommended Jan Cousins (02 66771165) who would be prepared to run a hands-on course if an organisation could organise the necessary numbers.

There are well-paid jobs still available in the area, especially now with fewer people being trained and the demand for work in institutions related to genetic engineering. It is a bit dated now but the book "**Genes at work: biotechnology**" edited by Phil Larkin is worth borrowing from a library.

Kew gardens have a great video on TC at the site: www.youtube.com/watch?v=6j5U5eeEQtU and there have been many papers presented at past conferences. Ron de Fossaard has a series of CDs that have useful material from: <http://ronalddefossard.com/home.htm>

You could also browse the www.aanro.net site for research publications dealing with micropropagation.

The International Association for Plant Tissue Culture and Biotechnology Australian branch have just had their conference in Brisbane. There were many practical papers and Jan Cousins spoke on her recent visit to TC facilities in China. It might be worthwhile contacting them for further information or copies of papers: s.adkins@uq.edu.au. Thank you to those who have assisted me with discussions and references while writing this.

- Bruce Higgs



Profile Michael Gleeson

Above is Michael sitting in the kitchen of the 300 year old part of the house of Irish IPPS member Therese Duffey and sitting with him on the left is Paddy Gleeson. Paddy served for many years as the extension officer to the nursery trade in Ireland. Paddy has now retired back to the family district of Neneagh, in Co. Tipperary. Coincidentally Michael's heritage is also from Neneagh and he swears Paddy is a dead ringer for his great grandfather.

Michael is passionate about plants and IPPS and is a past Australian Award of Honour recipient and active member of the membership committee as well as assisting organisation of many industry related events. He currently operates a consultancy business and assists with propagation in nurseries. He operated a tubestock nursery, but is now confined to a wheelchair.

Why did you choose this career?

I was born into the business and my earliest memories go back in the mid 1950's to my father's nursery at Warrabee, on Sydney's North Shore. My father then went on to become a very well known and highly regarded landscape gardener. He established a retail nursery in Hornsby as a sideline in 1966 and this is where I really got the feel for our game. I left school in 1968 and started at Swanes Nursery in 1969 where I worked for 13 years.

What are the values that you hold to?

While working at Swanes I had the privilege of being trained by master propagator, John Teulon, who is a man with a very strong IPPS ethic that he passed on to all of his "students". I believe he has instilled in me a similar ethic and I am always very willing to do the same.

What do you feel you have to share with others (particularly new members) of the IPPS regarding "the world of propagation"?

Initially I was reluctant to join IPPS as I thought it was an organization for the elite/the managers.

I finally joined IPPS after much encouragement from John Teulon in 1986 and attended my first conference

at Manly in 1988. I now know of course that IPPS is a society for all levels of experience, and I take great joy these days to corner any new faces at conference and make them feel very welcome.

Finally what are the significant things that you have personally gained through IPPS membership?

Bruce this is a big question and will be difficult to answer. My biggest personal gain I guess has been the wonderful friendships I have made. With a number of overseas IPPS Conference visits in South Africa, Japan and more recently to Ireland my circle of friends continues to expand.

The other big joy I get from membership these days is to watch our younger members and in particular our Rod Tallis Award winners, progress through our organization and through this I hold great confidence in the future of IPPS.

Questions and Answers from Hobart

Graham Saltiel- How do you manage the manufactured mix between when it is made and when it is delivered?
Jill Reader

Our mixes are all made to an order and almost all clients have their own recipe. Once an order has been received the fertiliser is prepared and the mix made to be delivered upon completion or loaded onto one of our own trucks for delivery early the next morning. If for some reason a mix delivery is postponed it is kept on the concrete with it's ID No. This is always only a short period of time. Probably more important is the management of the mix after delivery and before use. It is best to use a mix immediately but when this is not possible then store the mix on concrete no more than 1m high in a covered bin or if you cover it make sure there is space between the mix and the cover.

What factors cause the crusting of potting media in tubes & larger pots? What can be done to overcome this? John Lawrence

Floating up of fine material with hand watering results in the surface setting solid. Fungal activity also sometimes cements the surface, but as fungal hyphae decompose it is transient. Moss can be a disaster, especially if the mix is too wet and fine with too low an AFP for the situation. You need to alter the frequency of irrigation or open up the mix. - Kevin Handreck

Lavender growers sometimes put in high rates of lime which forms a crust which is impermeable. When tested the mix has the same AFP. -Greg Neighbour

This arises from a mistaken belief that as Lavender grows in alkaline soils they need lime. They grow best at pH 5.5 to 6.3 in calcium containing soils. You can

add gypsum to supply this in stock plants. This reduces blackening of stems. - Clive Larkman

What is your opinion of the steaming process to produce potting mix from pine bark? Is composting still necessary for pathogen suppression? Glenda Pitman

Pasteurisation occurs in a mix composted at 60 to 65°C. Steam is not needed. In regard to pathogen suppression, bacteria and actinomycetes, etc. are killed off above 40 °C. The mix needs to cool down a couple of weeks after composting to build up numbers of good suppressive bacterial activity. -Kevin Handreck

We measured the temperature with a thermometer in 1 meter from the top of a heap of composting red gum sawdust. It reached 72 °C then dropped off to a manageable temperature. - Ian Tolley

Jeff Elliott What is your compost tea recipe? Rose VanderStaay

If you make your own compost tea, how would you avoid weed seed infecting the brew? Heather Higgs

If we incorporate teas/ microbes etc. Into our mix and water, then add chlorine or chloro-bromination, does this kill off bugs and the benefits? Robert Percy

For more information on this subject refer to past papers in proceedings and look up on the web: Elaine Ingram - Soil Food Web booklet that is downloadable.

How do nurseries handle their potting mix?

Many people cover their mix with tarps which is bad, as it stops oxygen exchange and cooks the mix. The mix should be covered with a roof structure. - Brad Howell

The problems with storing mix are heating, and with fresh CRF you lose the effectiveness of it, and anaerobic conditions if covered. A clean area with concrete floor/bin is good to reduce contamination. You should only order enough mix for one day or the next days use. If bark is composted well it should not heat up. If there is still activity you should let it mellow for a few weeks. - Kevin Handreck

What about a light tarp or shadecloth so it does not dry out or blow away? - Ian Tolley

We cover our mix, otherwise it dries out. If the mix is up to 0.7 NDI heating is not a problem. We don't have time to mix or turn it over, and keeping weed seed off is important. Every time we empty a bin we sterilise it with ammonia. Make sure your potting mix company uses their own trucks, Robert told of a problem leading to significant plant losses, because a supplier used trucks that also carried human waste. - Robert Percy

For trucks with 2 metre high sides, the further away you are the hotter it gets and this can be a real problem in summer.

How do you best control well established liverwort that is everywhere? Nicola Rochester

David Parlbly presented a paper on control of moss at the last Melbourne conference.

Luke Dent What is involved with Biosecure HACCP Accreditation? Andrew Mathews

This is partly explained in the NGIQ contact sites at:

www.ngiq.asn.au/documents/BioSecureHACCPBrochure0307.pdf and www.ngiq.asn.au/documents/FMSO.pdf

Apart from excluding by netting is there a way of controlling white butterfly on cabbages, cauliflowers, etc. using ecologically sound means? Alan Rate

Aside from picking off caterpillars, Dipel spray could be used, or there is reference to people using garlic extract sprayed onto plants for that purpose.

How do you control weeds on open ground Phormium? Nicola Rochester

Selective use of herbicide would be normal practice. In some places (Hawaii for instance) *Phormium tenax* is also recognised as a weed.

Rod Tallis Award

All members, 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.

2010 Six Pack

If you are a young horticulturist and would like to be a **6 pack member at next years conference** in May at Fremantle, then Peter Lewis would also like you to contact him. Contact details are on the website www.ipps.org.au.

Coming Events and News

IPPS Regional Meetings (in case you are travelling)

- **New Zealand** May 27 - 29 Blenheim
- **Eastern Region, North America - 2010 International Tour**, Sept. 20–28 Philadelphia, Pennsylvania to, Rhode Island
- **Eastern Region** Sept. 29 - Oct. 2, Rhode Island

Wedding Wishes

One of our executive team, Mim Wright, is getting married on the 12th of December. All the best for your future from IPPS to the happy couple. I hope we see a wedding photo in the future, or perhaps on facebook.

2009 Rod Tallis Award found and presented

The Rod Tallis Award was finally presented to Luke Dent at Wallum Nursery by Peter Lewis. Many thanks for Peters assistance in obtaining the award.



Challenge

The challenge is simple this time with an international flavour, try the Irish Tomato Soup recipe to be found on previous pages. So just like plant propagation be prepared to try something new.

HALF PRICE SALE!



Polo shirts

Traditional green with white trim, embroidered with the IPPS logo. (In sizes S/M/L/XL/XXL)

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Newsletter Editor's Comment

If you would like to read what is on the Japanese IPPS website then search for "Google translate" and add it to your browser bar.

For those of you who are waiting on answers, the remainder of questions from the Q&A forum at conference has been published in this edition of the newsletter. Some answers to your questions proved difficult to obtain.

Don't forget that this newsletter and most past copies are also available on the IPPS website at www.ipps.org.au, and pass your extra copy of the newsletter around at work

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

Expressions of Interest to Edit and Produce an Electronic International Newsletter

At the 2009 International Board Meeting it was agreed that 2 newsletters a year would be produced for distribution throughout all regions

The purpose of the newsletter is to promote the IPPS as an International Society and to communicate directly with our members throughout all of our Regions.

Currently the work undertaken on behalf of our Society at an International level is communicated through the respective International Directors and Alternates from each of our Regions. This is further enhanced by the role played by our International Secretariat, but it is hoped by articulating the work of the Board through regular newsletter communications we will bring the Society to life for all of our members whether they reside in South Africa or North Carolina.

We envisage that the newsletter will contain; profiles of members of the International Board, initiatives developed and the opportunities that arise out of these initiatives, and accounts of the visits made during the International tour. The newsletter would run to 4 sides of A4

The International Board has set aside an amount of money for this project and anyone who would be interested in editing and producing an electronic newsletter should contact David Hide, Chair of Membership and Marketing subcommittee.

davidhide@walberton.idps.co.uk

Please include a resume containing relevant experience, a brief summary on how you would deliver this project and the amount that you would charge the Society to produce 2 electronic newsletters each year.

David Hide International Director GB&I
Chair Membership and Marketing Subcommittee