

IPPS

Sharing Plant Production Knowledge Globally

the Propagator

International Plant Propagators' Society Australian Region - Newsletter Autumn 2009 - No: 21

Fruitful at 42° South

"I love a Sunburnt Country" is how the well known second verse of My Country by Dorothea Mackellar starts, for that's the verse so often quoted. It also tells of droughts and floods, and the land's beauty and terror.

That's what it seems we have been through with droughts, and especially those very hot periods in January and February across South Eastern Australia, and the devastating bush fires in Victoria. Not to mention the cyclones and floods in north Queensland. I am sure all members have sympathy for those affected.

With May fast approaching the joint Australian / New Zealand IPPS conference is less than two months away. Tasmania has also experienced drier times.

A couple of years ahead the organisers of these conferences have to choose a theme and this year it was more complicated as it is a joint regional conference. The theme this year is '**Fruitful at 42° South**'.

No doubt we will experience many of the things that make Tasmania a food bowl for Australia. This is a gardening state with a wide diversity of native and introduced flora. Those on the tours will also catch some of the great scenery that make this island a favourite tourist attraction for many Australians.

I am looking forward to catching up in Hobart with people I have not seen in a year or so and making new contacts. As always the IPPS conference is one of the key events in my annual calendar, and not one to miss. For more details see:

<http://sites.google.com/site/ippstas/>

Bruce Higgs



Conference Venue - media photo courtesy of Wrest Point Hotel

Fruitful at 42° South Conference Breakfast

Something different on Saturday morning, come and have a sumptuous breakfast with others at the conference venue. This is included with your registration.

Young Members Breakfast

A special area will be set aside for young members to meet and have breakfast together. Some great ideas and initiatives have come from these in the past - so don't miss the opportunity.

THIS EDITION

Fruitful at 42° S

Looking forward to the conference.

**Tasmanian May Conference
Profile - Rose Vander Staay**

Reports

- **President's Comment**
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Soil-less Potting Mixes Challenge

**Coming Events, News, letters
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President's Comment

I am writing this report at a time when the nation is still in mourning regarding the loss of life and property in Victoria's horrific bushfires. There is ferocious debate in regard to better management of forests and National parks so that this type of event and the frequency thereof is mitigated to a manageable limit.



Not only were residential properties lost or affected by the fires but a number of small businesses, vineyards and commercial forestry operations were also badly damaged or completely destroyed. The Nursery Industry did not come out unscathed either with one nursery that has lost everything and some larger ones losing stock and also having stock plants seriously affected by the intensity of the fires.

I am sure you all join with me in sending all the people who have lost friends, relatives and property in the fires our condolences. For those in our own industry who have lost so much, I am sure that wherever possible other nursery people including IPPS members will do all they can to help those in need and assist in reestablishing their operations.

It doesn't seem all that long ago that I wrote my last report probably due to the short time that has elapsed since our November meeting and a time that has included Christmas, New Year and the general holiday period. I trust all our members have enjoyed the break, at least those that were able to take one.

As we watch what is happening around the world as a result of the global financial crisis, the information that I receive regarding the nursery industry both internationally and on the domestic scene, suggests that we may be able to ride this period out quite nicely. The history of our industry in tight economic times demonstrates we tend to be able to survive quite well as people stay at home and spend more time in their gardens. The only downside I can see is the continuing drought in SE Australia and water restrictions which seem to constantly escalate.

It will still be hard work for us to maintain sales and keep up profitability, particularly with fewer players dominating the retail sector of the industry. We must continue to be innovative in both production and plant breeding as well as try and retain as many of our trained staff as possible.

Our Joint conference with New Zealand in Hobart is not too far away and I urge as many of you as possible to register as soon as you can. I think it will be a great opportunity to mix with some really interesting propagators from both Australia and New Zealand; there will be a lot to learn. Rose and Tony Van der Staay are

organising what looks to be a really interesting pre conference tour as well. These tours are an excellent opportunity to look at a wide range of nurseries and flora as well as meet propagators from around the world. I hope to see as many of you as possible in Tasmania.

As we move towards our conference and our annual general meeting, it will be time for some of the committee to move on and for some new faces to become directors. If you feel that you can contribute to the ongoing well being of IPPS Australian Region, please contact a current board member or myself and we can let you know what is entailed in being a director and the steps you need to go through to nominate for a position.

David Cliffe

Executive Officer's Comment

At the time of writing this report we are receiving some good falls of 'liquid sunshine', unfortunately, too much in some parts of South-east Queensland, whilst in Victoria people are having to deal with the trauma and devastation of the fires.



This time of year is a busy period for the IPPS Office, membership subscription renewals, conference registrations as well as tending to 'day to day' administration duties.

MEMBERSHIP SUBSCRIPTION RENEWAL – Yes, it is that time of the year again. *A big thank-you to members who have forwarded payments.* A friendly reminder to everyone else, could you please tend to this matter at your earliest convenience. If you are having difficulty in paying your subscription (for whatever reason), please feel free to contact me so that we can discuss alternative payment options.

The Australian Region of IPPS has 256 members compared to 239 this time last year.

New Members, who have joined since November'08 are;

Dr. Anthony Kachenko – N&GIA – Epping NSW

Ms. Kylie Stocks – Verdigris – Batemans Bay NSW

Mr. David Willyams – Marinup Nursery – Dwellingup WA

Mr. Bill Hollingworth – Bandicoot Nursery – Mt. Barker WA

Mr. Alex Cliffe – Narromine Transplants – Narromine NSW

As at 28.02.09 Bank Balance in Cheque Account was: \$55,223.40 (\$620.45 belongs to Editors Account).

Term Deposit of \$10,000 matured in November'08 and was reinvested at 4.25% pa

If you haven't already done so don't forget to register for the joint IPPS Conference (Australia & New Zealand) being held in **HOBART TASMANIA** (*Thursday 14th May to Sunday 17th May 2009*)

Conference details can be accessed via our website:
www.ipps.org.au

I look forward to meeting up with Members and guests who will be attending the conference in Hobart, Tasmania.

- Pam Berryman

International Directors Report

It is mid March and I am writing this report remembering last year in the run up to the Melbourne Conference and all the jobs that had to be done. This year is a lot easier as we are in Hobart and others are doing the hard yards. I am looking forward to catching up with our friends from across the Tasman.



It is just under a year since the International Board last met in Auckland. With the long gap between meetings (our next one is in Ireland in September) it is hard to keep up the energy. It is especially hard in a year like this one. Drought, heat, fires, smoke and a sluggish economy all make for interesting times.

Priorities haven't changed much in the last twelve months. We are still concerned on a global stage with declining membership. It is hoped with the new logos and more horticultural image we maybe be able to appeal to a new group of horticulturists. As I read the reports of some of the other regions slipping membership at financial pressures are meaning they have to look closely at what they are doing.

It is pleasing to be able to report that our membership is slightly increasing. I am not sure how the harder times will affect this but I suspect that of all the trade and industry groups in horticulture, ours is one that gives the best return for investment. However, it does take us, the current members, to let others know this. Only last week I was talking to a well know professional horticulturist who is thinking about joining – after 30+ years in the industry. So please ask your work colleagues, customers and suppliers to consider joining.

On January 1 our new international President took the reins. Terry Hatch did a great job in his term and helped direct the Society through some tight financial times at the end of 2008. We did drop some investments in the US markets but overall faired reasonably well. Peter Bingham is the new president and he comes from a specialist production nursery in the UK. Peter sees the

need for increased membership as a priority. He is also wary of ensuring we keep our finances healthy over the next few years.

I hope to see you all in Hobart in a couple of month's time. The year is nearly half gone already.

Clive Larkman

IPPS SOUTH AFRICAN EXCHANGE 2009

For the opportunity of a lifetime, it is time to apply for the fourth South African Exchange Program.

This was established by Australian IPPS and South Africa IPPS to give young propagators, at the start of their career, the opportunity to gain experience of each others industry and to build a better understanding of each country.

In July/August 2009 the young propagator chosen will spend approximately 3 weeks in South Africa, hosted by local Nurserymen, where he/she will work and visit other nurseries and places of interest in South Africa, including tourist venues, plus attend their IPPS Conference.

The program as usual is sponsored by Australia and South Africa IPPS, but will be later in the year, because South Africa's Conference is held in August. After the trip the chosen propagator will be expected to attend the Australian IPPS Conference in April/May 2010 to talk about his/her wonderful experience.

Now that you are thinking about this experience or you know someone who may be suitable, check the following to make sure of eligibility:-

- You must be over the age of 18 years and just starting your career of propagating and growing plants.
- You must be able to travel to South Africa in July/Aug 2009 and attend our 2010 Conference.
- Your employer must support this application and your time off work.
- You must be prepared to make notes and take photographs of your great experience and report back to Australian IPPS Conference in 2010.

If all of the above suits you and you would like to be hosted to gain great knowledge, experience the lifestyle and great sights of South Africa. Then tell us about your background in Horticulture, including training and work experience and send the application form available on the IPPS website www.ipps.org.au by April 2009.

David Ponman



IPPS Conference May 09

Destination 42 degrees South for a Fruitful time of seeking and sharing. The IPPS Australia and New Zealand combined conference will be held at Wrest Point Hotel on 14th – 17th May 2009.

There are to date 66 Kiwis' coming and 6 South Africans so come on Aussies get your act together.

Tasmania in all its breathe-taking autumn glory. Hobart trees in rich autumn colours of gold's reds and browns reflected in the glassy water ways. Set between the towering peak of Mt Wellington and the Derwent River Hobart is arguably Australia's most beautiful capital city.

The weather in Hobart in May is generally still, cool to light frosts in the morning with clear sunny days, temperatures rising to a heady 15 °C, so bring a warm jacket.

Tasmania is a destination offering opportunities to experience the heritage, natural beauty and wilderness which is unique to this state. Taste in abundance the magnificent food, wine and beer for which Tasmania is renown for.

The Conference will kick off with a Governors Reception to be held at the stately Government house. This magnificent sand stone building was built in the 1850's and is still in daily use.

When you register for the conference you will receive a personal invitation from the Governor to attend this function, it is important that you RSVP as requested and **bring the Invitation** otherwise they won't let you in. **Don't forget that this is strictly a lounge suit occasion.** Upon arrival we will be introduced individually to the Governor and Mrs Underwood. It's a great night to look forward to.

On the Thursday evening after government house we will drop people off (if they wish) at the restaurants in Salamanca, because the reception is only nibbles. The buses will continue onto the hotel which also has eateries and restaurants (Salamanca would be cheaper and have a bigger range of outlets).

Friday we get down to transferring the information, our speakers are drawn from a very wide range of knowledge. We start with a gentlemen known around the

world as the Mad Hatcher, (some give him credit for being able to strike roots on a Pencil), Terry Hatch is the immediate past international President of the Society and he will give a talk on New Zealand natives suitable for hedging. Then Natalie Tapsen from the Royal Tasmanian Botanical Gardens will talk on the propagation of *Lomatia tasmanica*- a very endangered plant from the Tasmanian south west. From here we go to Mark Stevenson (N.Z) discussing 'formulating quality potting mixes for propagation and growing of container crops'.

Jeff Elliot (N.Z) will talk about "dirty water". Following Jeff we will have another tassie local Nic Cracknell who will give us the low down on modern Tomato production. Then James Wood from the Royal Botanical Gardens will give us a run down on the work he is currently doing for the Millennium seed bank at the gardens.

Now for a different tack, Robert Chin will give a paper on 'Invasive Plants and the Nursery – Australian, Canadian and American experiences'.

Juliette and Eliza from Taupo Native Plants jointly give a talk on the use of Manuka honey as rooting hormone for New Zealand natives. It looks like a couple of youthful propagators may have noticed one of Michael's earlier challenges from our newsletter.

Back into fruit production, but this time 'Greenhouse berry production', by Mark Salter a 3rd generation apple orchardist and entrepreneur. Graham Saltiel will present a paper on 'Selecting the right potting mix', then Nicola Rochester from Scotts (N.Z) will give us some food for thought with a paper entitled "fertilizer and Nutrition of cuttings in prop.- is it a con??"

Now a special treat, we have organised 6 very quick boats to take those who wish for a spin around the river from Tasman Bridge to the mouth of the river and a few bays in between. However, there is only room for 240 participants **so it's first in, best dress.** Followed by something uniquely Tasmanian with the 'Taste Of Tasmania' food feast.

Nursery Tours: After the AGM's Saturday will be full of seeing how the Holiday Island works, some of you will get a chance to visit the famous Salamanca Market on the Saturday morning, while others will get to see a

Calling for Auction Items for the Hobart Conference

An auction of donated new items is held each conference to support the activities of the IPPS.

Members and Businesses who would like to donate items (not plants) should contact the executive officer:

Pam Berryman

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unique Bonsai nursery specialising in Tasmanian natives, we also will get a chance to see the latest technology being used in growing tomatoes. We will also visit the unique growing conditions created in the Antarctic House at the Royal Botanical gardens.

Then we all meet at Westland Nurseries (photo above) site at Seven Mile Beach for lunch. Established in 1956, we have approx. 12 hectares of nursery production (wholesale and retail from this site) covering such diverse crops as: house plants, native Australian plants, herbaceous plants, exotics, growers of the Colour Wave range of plants, Ramm botanical grower, Poinsettias for Christmas, potted flowering lines, including forcing spring flowering bulbs, semi-advanced trees and shrubs, also advanced trees in containers ranging from 45 litre through to 300 litre.

The nursery runs on recycled water from the local treatment plant, complete with pressure sand filters, the range of structures are all home grown, ranging from conventional glasshouse to plastic igloo to 2,500m² moving roof structure. Westland's do their own composting and mixing of growing medias, everything from propagation to advanced tree mixes. We have just installed the latest potting machine from Belgium. The propagating area (approx. 1,000m²) has fogging facilities, and generally supplies up to 60% of our own requirements. When we run out of things to do we grow a few cut flowers just to make life interesting.

During the afternoon we will have workshops involving: Ian Tolley, on sharpening tools; grafting demonstrations by Ian Williams; potting machine demos by Transplant systems; and knife propagation methods.

Sunday sessions: start with Terry Hatch and *Dracophyllum* and related species propagation. Greg Neighbour will then talk about recent work on 'Cutting pre-treatments - investigating some claims'. For the last 5 years Peter Ollerenshaw has been breeding *Correas* and is just about ready to release some new varieties, he has been looking for ones that have more, or new colours, or bigger flowers. Michael Danelon will then give us an update on 'How better to model your irrigation system'. Hugh Goulay will finish off the talks with 'The Biological Control of Weeds' - sounds pretty

interesting also. We will of course have our popular Question and Answer session where we look forward to your participation.

Rose & Tony Vander Staay

PROFILE -

Rose Vander Staay



Last year I decided at the conference I would try to get a profile of the organiser of the conference so you know a bit more about them. This time it was my privilege to ask the questions to our first vice president Rose Vanderstaay.

What are the things that you feel have created or made your standing in the industry?

I have always being a plant person. After completing my diploma of horticulture at Burnley Horticultural College in 1971, I started working with Tony and his father Henry, at Westlands' Nursery as a propagator. Mr. Van then took me to the first IPPS meeting in Leura in 1973. I joined the Society in 1987 at the joint meeting of Aus/N.Z. at Tauranga (east of Auckland). Our nursery produces from seed and cuttings a very wide range of plant material ranging from perennials, natives and exotics.

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

My experience is very broad having worked in three different propagation facilities from static high humidity, to a misting house and currently using fogging. So I am able to talk to new members about all these experiences in a cool temperate environment.

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

The first thing is the meeting of people of similar interest, who are passionate about plants and are enthusiastic about sharing their experiences. We all tend to work in our own little area, and attending IPPS meetings takes you outside your own square. Which in turn broadens your experience and helps you to think differently about problems.

An added bonus is the opportunity to visit other countries and take part in the conferences of other regions of the society, where again you are able to share with other propagators experiences.

Bruce Higgs and Rose Vander Staay

Soil-less Potting Mixes

This story came about from a conversation about potting mixes and how they were about to increase in price due to energy companies competing for pine bark for green credits. There is however another twist to the story, as I realised when preparing this. That is what a tremendous resource each IPPS member has to seek information from people right across the industry.

Perhaps the starting point when considering potting mixes and alternatives is "Growing Media for Ornamental Plants and Turf". In the section on potting mixes, components and what they are used for and various alternatives are discussed. There is a section on composting of barks and sawdust as well. Then there are various papers in IPPS Proceedings especially those by Kevin Handreck, David Nicols and Ian Gordon. Then there is the internet, where you can search all sorts of things but still wonder if you are in a position to really make an informed assessment of the situation.

The best source of information however came from discussion with members and their networks, who could relate from experience what they knew and what they thought the real situation was. For instance Kevin Handreck as a consultant to the potting mix industry was able to confirm that the ornamental horticulture industry does use most of the available pine bark in Australia.

There is a growing trend however for barks to be burnt as part of power generation or to assist conversion of green waste into charcoal. Certainly this occurs in NSW and the University of NSW Recycled Organics Unit has prepared a paper on this. It has been reported that South East Fibre Exports (SEFE) hopes to build a \$20 million wood waste fired power station at it's Eden site, in what would be the company's biggest single investment project. The project was scheduled to operate by 2010 burning pine bark and hardwood waste to power the mill and 2,500 nearby homes.

A CSIRO pilot plant at Rockhampton was set up to convert waste otherwise going to landfill to charcoal and energy. The process is to be commercialised by

Enecon Pty Ltd. The best charcoal produced came from pine bark and shredded waste, and results in reduced greenhouse gas production.

The crux of it is that pine bark is a waste material that is still relatively inexpensive, and after milling to size and sufficient maturation provides a material with exceptional properties for potting mixes.

In Australia most of the mixes on the south east coast use pine bark from *Pinus radiata*, with blends of Slash pine in the northern rivers area of NSW. Mixes may include coir and some include sand and ash. Pine Barks come from private plantations and mills (Auspine, Gunns, Carter Holt Harvey). In Tasmania Sandra Hetherington was able to tell me that the mill there have to pay for someone to take the pine bark away at present.

In Queensland the main constituents used by growing media producers are barks from *Pinus elliotii var elliotii* (variety of Slash) with some Caribbean pine (*Pinus caribaea var. hondurensis*). Pine Bark comes from government controlled plantations. In Western Australia where Pine Bark transportation costs are higher the major component of mixes is Jarrah sawdust mixed with pine bark, sand and peat or coir.

You will not be surprised to find that David Cliffe was able to confirm that in Brazil Eucalyptus bark is a major component of potting media (20% with rice hulls and vermiculite being used to make up the remainder). They have an abundance of *E. Grandis* and *E. Camaldilensis* hybrids that have suitable barks which may be used for potting mixes.

It seems that what drives the choice is availability, performance and transport cost. The other points that came out from conversations were that prices are increasing overall and quality is variable for a number of reasons.

Factors affecting price:

- High fuel and transport costs over recent years.
- Competition from Energy companies wanting to use pine bark.
- Price wars between suppliers seeking market share.

Reduced availability though:

- Improved timber-getting techniques leaving bark behind on the ground before reaching the mill.
- Fewer trees are being harvested now for lumber due to the building slump.
- Competition from other users for this limited resource, especially in NSW, Qld and W.A.

Factors affecting quality:

- Harvesting of young trees with poorer quality bark.

Media ingredients: clockwise pine bark, sand, peat, coir, ash, perlite



- Media suppliers cheapening mixes by incorporating more bark fines (affecting air filled porosity).
- Seasonal supply at times of peak demand such as spring can lead to media being supplied that has not matured sufficiently. This can lead to poor growth in your plants.

There are real pressures now on the supply of pine bark based mixes. So what can be done about it?

Sawdusts are a proven next best option, but there are concerns with nitrogen draw-down, rapid breakdown and manganese toxicity dependent upon the area the tree came from.

Eucalyptus barks are not segregated in mills where often an east coast mill may be processing up to 12 different hardwood species. The difficulty pointed out by Kevin Handreck is that these barks can be quite different. Some are strippy, tessellated, chunky or stringy, and the stringy ones could pose a real problem with matting in a soil-less mix. There are very few indicator crops that have been tried with such compositions and development work needs to be done to take this further.

Interestingly and as an aside, there were several papers on the ability of composted Eucalypt barks to control Phytophthora, including their potential use as soil conditioners for agriculture.

Green waste is another option being evaluated these days. The trouble is it could be a bit like playing Russian roulette with a loaded gun. The risk of contaminating your crop and nursery is high. You would need a high level of assurance from the supplier that the process used was able to isolate or kill potential viruses and bacteria arising from diseased household plants and waste dumped at a local tip for composting.

Do we really need to rethink what we are using, especially as it seems pine bark will become more difficult to obtain? I know that I will need to think again about the mixes used and discuss this with our suppliers who are well aware of the situation. It seems that the days of using high pine bark containing mixes may just about be over, unless you are prepared to pay for it. Of course for some very high value crops, some are reportedly already using coir (coco peat) alone at a ten fold premium.

It seems in the meantime that measuring pH and AFP on deliveries and monitoring performance with plants in growing areas will become more common place.

I would like to acknowledge assistance from discussions with Ian Gordon, Kevin Handreck, Sandra Hetherington, Michael Danelon and the NIDO network throughout Australia. It is at the end of the process in preparing something like this that you realise what a great potential resource is at the hand of every IPPS member.

References

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Challenge

A challenge with a slight variation this time.

In the past I have been challenging the reader with little research projects. But this time I would like to challenge the boss readers to do a bit of training in the prop room.

How many of your propagation staff actually know how to graft a plant? Is this a skill that has not yet been taught in your prop shed?

What about you the boss, do you know how to graft a plant?

There are of course a few of us who are engaged in this technique all the time and I am thinking of our rose and fruit tree producers who use budding as a matter of course.

I guess you might ask here why should I have this skill? “Nothing I produce needs to be grafted”.

While the current fashions may not require grafting as a needed skill what happens if the fashions change?

I recently had the need to hone my skills when I was asked to look at the propagation of *Corymbia ficifolia* by using grafting instead of seed production (see IPPS Combined Proceedings Vol 57 page 718).

I believe that grafting may be a dying skill and should perhaps be reinvigorated. So how about you find the time to train some of your staff in the principles of this skill.

Don't forget that you can purchase DVD's from Pam at the IPPS office to help train your staff in budding and grafting.

You never know it might just pay off one day.

- Michael Gleeson

Coming Events and News

Joint Australian and New Zealand Conference 2009
Hobart MAY 11th - 17th, 2009.

4th International Plant Dormancy Symposium; Fargo, North Dakota USA 8 - 11 June. For details refer to <http://www.plantdormancy.com>

Letter to the editor:

I just having received the latest "Propagator" and read your comments in Letter to Editor re. the future of seed-collection in Australia...

...I've had a bit to do with FLORABANK in recent times and think very highly of the organisation and its (few) staff, in particular Director Dr Penny Atkinson. I KNOW with complete certainty that she would welcome the opportunity to talk to IPPS on what Florabank does and how it sees the future of the seed industry. Has anyone from Florabank ever addressed an IPPS conference in past, and if not, why not next year?

The address is <http://www.florabank.org.au/>

Kate Malfoy

Newsletter Editors Comment

It never ceases to challenge and amaze me that many things that we take for granted in the workplace and think their supply is stable, are not. This has been highlighted by newsletters dealing with water, seed, and now potting mixes to name a few. Predicted energy cost increases, affect of oil price on plastic and water costs will also undoubtedly have a great affect in horticulture. We need to continually looking at our options.

If you have a hot topic that needs to be addressed by the expert knowledge in IPPS please let me know or bring it to the conference for discussion.

Don't forget that this newsletter and some 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
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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.

A worthy propagator at the start of their career can gain an award that they can be proud of and mark the start of a successful career in horticulture. All you need to do is report on some propagation work you have undertaken.

Yates Youth Six Pack

Applications still have not closed for the chance to be a 6 pack member in Hobart. You could have the privilege to meet some of the industry leaders while being sponsored by Yates.

All that needs to be done for either of these is submit an application. Contact details are on the IPPS website (see www.ipps.org.au). Don't delay, or you will miss this great opportunity.

Merchandise Available!



Polo shirts

Traditional green with white trim, embroidered with the IPPS logo. (In sizes S/M/L/XL/XXL)
Members price **\$25.00**
Non-members **\$30.00**



Caps

Traditional green with white trim, embroidered with the IPPS logo. (One size fits all)
Members price **\$11.00**
non-members **\$15.00**



Embroidered Badges

Large 9 cm diameter sew-on badge. White, green, gold and black. Suitable for hats, vests, jackets etc. **\$10.00**



Ties

Traditional green tie. With embroidered gold 'IPPS Australia' logo. Last three in stock! **\$12.00**

To order contact John Messina at Sunraysia Nurseries, (03) 5024 8502 or email john@sunraysianurseries.com.au