



the Propagator

International Plant Propagators' Society <http://aus.ipps.org/>
Australian Region - Newsletter Winter 2021 - No: 68

IPPS is Platinum

"Any Fool can Know, the point is to Understand"
- Albert Einstein

During 1951, yes 70 years ago, a group of about 70 plant growers / propagators and Horticultural scientists met at the Hotel Statler in Cleveland, Ohio. In 1961 members of the group formed the IPPS with the aim to share their knowledge. They were passionate plants people with remarkable knowledge and skills who were keen to pass this on to future generations for the improvement of horticulture. They came up with the logo shown opposite, as well as forming a annual database of knowledge for each conference meeting in "Proceedings" or the little black book. "*quaerere et impertire*" in the old logo is translated from the Latin as our motto "seek and share" (or impart).

The Society has since grown into an international forum for individual members based on geographic regions, for sharing plant production knowledge and much more. IPPS has had to adapt with Covid 19, and have been embracing electronic means of meeting and sharing knowledge also.

Back in 1951 people relied on books, and hand written notes. Now mostly we each have access to smartphones and electronic devices if we want to "Google" to get information on how to do something. But the issue is that when I have had a problem with a particular aspect of propagating or growing particular plants, the answer was often not there.

Back to the quote from Albert Einstein, and that is about



knowledge versus wisdom. Knowledge you can get from books and the internet. Wisdom and skills come from experience and living, and learning when and how to apply learnt knowledge. That is the real strength of IPPS meetings, interacting with people who have experience and are willing to share their wisdom. It is being involved with a global network of plants-people who are able to share advice when you seek it.

"Information is not knowledge. The only source of knowledge is experience. You need experience to gain wisdom." - Albert Einstein

Time for a party to celebrate our Platinum Anniversary as a Society, well not quite yet, but hoping for one next year at Leura NSW for us Aussies at least. We will also be celebrating our 50th meeting there.

Bruce Higgs

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President's Report

Hello fellow members,

I wish I could write to say that the past year has been full of great achievements. Well not totally disastrous, we have maintained our membership and we have been able to attend some virtual sites ranging from Botanical gardens to some large production operations in the North America regions.



For those of us still working in the industry autumn was incredible, the lack of stock has been felt across all sections of the industry. I know in our case we have been selling some of our spring crops during March, though the stock was only half grown, retailers were happy to have the stock on the ground so that at least they had it.

In our case we also grow house plants, and again we were struggling to keep up, though we found our supply chain struggling to get on top of supplying.

We then had the issue of trying to grow plants with lower natural light and cooler nights, so we add lights and bottom heat to try and get quicker growth before the really short winter days hit in.

Well that's what happening in my backyard, what's happening in yours? In April Angus Stewart and I were putting together some short videos highlighting different aspects and production systems at Westland's plus another one of our members at Habitat Plants. These were premiered at our AGM on Zoom again this year at the end of May.

Mean-while our society keeps going, though we desperately need to get together, it is unfortunate that we had little choice in cancelling our May conference, but we are looking forward to next year's meeting in Katoomba area which Bruce Higgs is organising.

Cheers

Tony Vander Staay



Executive Officer's Report

IPPS Office

Well once again this year, Members participated in a ZOOM meeting rather than being able to meet up in person at our Annual Conference. I have still been kept busy with 'day-to-day' running of the IPPS Office as well as following up on membership subscription renewals.



Membership Subscription Renewal 2021

Membership Renewals for 2021 are now OVERDUE.



The Australian region is required to report to the International Board the number of membership subscriptions for 2021 by JUNE each year and send payments to cover the costs of International administration.

If you have not received your Membership Renewal Notice, please contact me...pam@ipps.org.au

If you are having difficulty in paying your subscription please contact me so that we can look at the various options available for split payments.

BANK DETAILS: Bendigo Bank BSB: 633-000 Account No: 140185737

If paying by EFT PLEASE PUT INVOICE NO. OR NAME IN THE PAYMENT BOX SO I CAN IDENTIFY WHO PAYMENT IS FROM. THANK YOU

In light of COVID19, the SOP was updated to include provisions for meetings to be held by means other than in person. The amendment was tabled and approved.

Last year, in conjunction with NZ, we sought a printer to produce the BLACK BOOK. This was posted out to Members who indicated they would still like to receive it. If you had any issues with the 'BLACK BOOK' (eg: pages falling out etc), please let me know so that we can forward comments onto the printer.

Contact Detail Changes

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 pam@ipps.org.au

It is important that the Australian & International database records are kept **'up to date'**, otherwise you could be missing out on receiving information.



IPPS 50th Annual Conference 2022 – 'Looking Back, Looking Forward' - 4th to 7th May 2022 - Fairmont Resort & Spa, Blue Mountains NSW

Pre-conference tour – 2nd to 3rd May commencing in Penrith and concluding at Fairmont Resort & Spa

Pam Berryman

IPPS Australian Region Board for 2021 - 2022

Tony Vander Staay tvanders@westlandnurseries.com.au *President*

Bruce Higgs bruce.higgs@bigpond.com *1st Vice President*

Clive Larkman larkman@larkmannurseries.com.au *2nd Vice Pres.*

John Messina johnmessina30@gmail.com *International Director*

James Burnett jab342000@gmail.com *Treasurer*

Ray Doherty ray@azaleagrove.com.au *Awards Committee*

Puthiyarambil Josekutty josekutty964@gmail.com *Area Meetings*

Jason Dawe j.dawe@nativeplantwholesalers.com.au

David Hancock david@naturalarea.com.au *Membership Committee*

Dermot Molloy Dermot.molloy@rbg.vic.gov.au

Peter Waugh peterwaugh1841@gmail.com

Clive Larkman larkman@larkmannurseries.com.au *Editor /Historian*

Pam Berryman (07) 38299767 pam@ipps.org.au *CEO*

IPPS Seeking and Sharing Online

Covid 19 certainly has changed the way we do things, and IPPS plants-people have responded in many ways to share knowledge and their enthusiasm with members honouring the motto of seek and share.

The North American Summit was held as a Zoom webinar last October and reported on in your Summer 2020 edition of this newsletter. Two further micro-meetings were subsequently held in North America. They can be viewed at:

Tim Brotzman Session: <https://youtu.be/bcgsBM-YVLg>

Deckers Nursery: <https://youtu.be/Qwv7SWTAJfc>

Other videos are also available at:
<http://ena.ipps.org/video-galleries> and
<http://sna.ipps.org/video-galleries>

Two video presentations made by Tony Vander Staay and Angus Stewart with a Samsung smartphone were also shown at our May online AGM meeting – the 1st video featured Westland Nurseries whilst the 2nd video fea-

tured Habitat Plants in Tasmania. These will soon be uploaded onto the IPPS YouTube site.

IPPS Australian Region is now on Youtube. This is an opportunity to feature your businesses, processes and products, along with another channel for our important sponsors. Content comments etc. can be sent in via ipps.auregion@gmail.com or contact James Burnett (email: jab342000@gmail.com Mobile: 0437 636 841) for assistance. Watch his introduction to this: <https://www.youtube.com/watch?v=7x2zxI82SV0>

There is a plan to expand the scope of combined meetings with a **worldwide virtual summit**. Tony has already submitted some videos (as mentioned earlier) for consideration, and we will be inviting all Australian members both to submit content, and to register to attend the online meeting. So here is a bit of help to get you started.

Making a Video

The simplest form of video can be put together from a series of still photos taken on a mobile phone or camera (examples below) and arranged to tell a story. Most phones or cameras will have software available to turn this into an mp4 format video with the ability to add a sound track or even recorded spoken message. Take enough photos to show what is needed to tell the story.

Another alternative is to use PowerPoint to assemble a presentation, and save timed transitions for each slide. The file can have a soundtrack embedded also (which could be narration and / or musical backing starting at a particular slide) and the presentation can be saved as a



video file. An example is the video prepared to promote the 2022 conference in Leura uploaded to Facebook. Note that individual photos had to be reduced in size to about 1 Mbyte to keep the file size small enough for uploading on the net (about 50MB maximum).

<https://www.facebook.com/320452368002287/videos/186388000020370>

Another approach relies on recording on movie mode on your camera, camcorder or smartphone / tablet.

A few simple rules are; that you plan what and how you are going to shoot beforehand. If shooting something like a grafting demonstration with a fixed camera make sure it is attached to a sturdy tripod. Shooting in 4K resolution will end up with huge files, so Full HD resolution (1920 x 1080 pixels) is more than enough and probably HD (1280 x 720 pixels known as 720p) will suffice.

A lot of recording apps for smartphones use **30fps** (frames per second). While **50 fps** or **60fps** provide smoother motion especially for fast sports action, typically such videos are slowed down to 24fps or **30fps** in post-production.

Check that your battery is fully charged before filming, and make sure that you have a fast write SDXC card (to avoid a jerky video) with sufficient storage capacity. Something like a 64 kB SanDisk Extreme V30 card or better, and with a write speed of better than 50 mp/s (now typically greater than 90 mp/s). The SanDisk Ultra may be sufficient if you are recording in HD resolution.

For a movie with action (such as a walk through a nursery or garden), try not to walk around with the camera “rolling”. A good rule is to start recording and silently count to 10, then pause and move to a different spot or zoom-in as applicable to emphasise movement or the subject for the next scene, and repeat until you have the movie you want. These segments will then need to be stitched together in editing during post processing.

Not walking around live with your camera also reduces the chance of picking up extraneous sounds and wind noise. If you have a wind muffler for an external microphone and you are outside use it. Make sure that you have sufficient lighting for your subject. Composition is very important so try and fill your frame with the subject. If filming live make sure that the microphone is close to and facing the narrator (a separate overhead boom for the microphone may be necessary).

A good example of the fixed camera movie style is shown in the video from Dermot Molloy: “Aerial layering *Ficus dammaropsis* in 2019 at RBGV”



<https://www.facebook.com/watch/?v=376014780499040>

If you are contemplating live streaming to media such as Facebook or YouTube then you need some special equipment and need to alter the settings on your camera. This is useful for streaming meetings or live talks to a remote audience. In some ways what we have been doing on Zoom is similar but less complicated.

What you will be capturing is the screen on your phone or camera / camcorder, so the settings need to be altered to eliminate all that information usually displayed. Unfortunately every device differs in how to achieve this so you will need a users manual, or check out how to do it on the net. Next you will need a HDMI cable or similar to connect to a Video Capture Device suited to your equipment. A slightly more expensive option is an Atem Mini from Black Majic, which will as well accept other inputs such as from a data-projector and external microphones. This is then fed to a computer with good graphics capability via a high speed USB C cable. Finally software such as OBS is used to edit and stream live to social media. There are numerous tutorials on how to do this on the net now.

Editing movies is relatively easy these days using software apps supplied by phone and camera suppliers. Alternatively you might have the time to learn how to use software like Lightworks Editor. If the resulting movie file size is too large for uploading to the net, you may need to shrink it using a program like HandBrake for Windows.

So the message is that you do not necessarily need expensive equipment to achieve an acceptable result these days. There are lots of guides also on the net on how to achieve the result you want. Like all things your results will improve with practice.

I hope that these tips prove useful, but if you need more help we can put you in touch with someone who may be able to help with some aspect of putting together your story. Contact Pam who will put you in touch with a local member if you need some help.

LOOKING BACK LOOKING FORWARD

FAIRMONT
RESORT & SPA
BLUE MOUNTAINS



2022 50th Meeting and Conference

Wednesday May 4 to Friday May 6

‘Looking Back, Looking Forward’ is the theme for next year’s conference. So that is why we are holding it close to where the first conference was held. The Fairmont Resort at Leura offers an excellent venue with all the facilities that we have come to expect these days, and a great place to celebrate our 50th meeting. Our intent is that participants will have an enjoyable time, while learning about leading current and future trends in growing plants. We will also experience the fantastic views and history offered by this World Heritage classified region, based on its natural horticultural diversity.

It was Edward Bunker inspired by the International President Jim Wells, that started the ball rolling in forming our IPPS region. In March 1973 the WON Group of wholesale nursery producers sponsored a meeting in conjunction with the Australian Nurserymen’s Associa-

tion annual meeting in Kings Cross, Sydney and agreed to form an IPPS region. John Teulon (who had been a member for 18 years) organised the inaugural conference and meeting later that year in October at the Leura Motel, NSW. Our First President in 1973 was Edward Bunker.

We are also planning a short pre-conference tour to give members a flavour of this scenic region on 2nd May to 3rd of May. We will explore Blue Mountains icons like the Three Sisters and Jenolan Caves as well as Mayfield Gardens and much more.

The organising committee are currently seeking sponsors and papers for the conference, and would appreciate any offers of support. Please contact Pam Berryman or myself if you can help.

Bruce Higgs



Six Pack (Advance Notice)

Applications will open soon for the chance to be a 6 pack member at our Leura conference (May 4 to 6 2022). You will have your airfare, accommodation and conference registration paid for. What we ask is that you assist the organisers with registration and general duties during the conference, and seek and share.

You must be 18 years of age, and be nominated by your employer by completion of the IPPS Nomination Form and complete the candidate information sheet on the website <http://aus.ipps.org/members/awards/six-pack-award>

Send your forms (available soon) by the closing date of Friday 18th February 2022. You could have the privilege to meet some of the industry leaders.

Rod Tallis Award

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

The award is named after one of the Society's most respected members, Rod Tallis. Rod was an avid nurseryman with a passion for plant propagating, for the IPPS and for the youth of our industry. He was a mainstay in many of the early conferences and made significant contributions to Plant propagation in Australia before his sudden death in 1981.

The winner will have completed a research project, written an article or series of articles or developed a new process or product. They will then write up their work in a paper to be presented at the next IPPS conference.

The paper will be assessed on issues or clarity, originality and relevance to the industry. The achievements of the applicant to date will also be reviewed.

So a worthy horticulturist 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.

The winner will be invited to the Annual Conference in Leura, N.S.W. from 4th to 6th May 2022. They will have their airfare, accommodation and conference registration paid for. They will also receive one year's membership to the IPPS and a commemorative plaque.

Submit an application by 18th Feb. 2022. Contact details are on the IPPS website (see under members at <http://aus.ipps.org/>)

Tribute to Ian Gordon



It was only earlier this year that members of our board learnt of the passing of a fellow keen plants person, Ian Gordon in 2018. Ian for many years worked as a horticulture lecturer for the University of Queensland at the Gatton campus, and in the latter years was re-

sponsible for their UQ Boyce garden at Toowoomba. He was active in our society and presented numerous papers at IPPS conferences on a number of topics. He also was a keen contributor on behalf of the society from 2009 to 2012 with regular articles on fundamental aspects of growing plants for Hort Journal.

He really had a heart for encouraging our youth in their horticultural careers. Ian taught many of the horticulturists in our industry today, with a few receiving the societies Rod Tallis award and serving on our board.

Ian's contributions to the society are indeed impressive; convening the 1985 Rockhampton conference and serving as president from 1985 to 1986. This marked the first time that the International Board met in Australia with Ian Tolley as International President. Ian Gordon also served as president from 1990 – 91 at the Perth conference organised by Irene Bowden. He received the Australian Award of Honour in 1996, and became International President from 1996 - 97.

In 1991 and 2011 he published IPPS Australian region history booklets of great reference value. As well as the societies Historian he took over from Ross Hall as our Editor from 2008 – 13. Many speakers appreciated his assistance in converting their Powerpoint presentations into a paper for publication in the IPPS Proceedings. As a member of the editorial team I had the pleasure of working with Ian for a number of years and experiencing his passion for the society, and at times outspoken opinions.

I would like to offer some thoughts and comments for one of Ian's published papers as an inspiration for each of us to get back to basics at times and question why we do things the way we do, and if there is a better way. That I believe is the challenge Ian had for each of us.

“The culture of reproduction”

Ian wrote an article entitled “The culture of reproduction” for the May 2010 edition of Hort Journal. It was a review article of the most important systems of plant tissue culture in the laboratory for research or commercial production.

Straight away I recognised that in ten years or so since it was written new methodology has come into practise including use of bioreactors such as (1) the ViVi - Temporary Immersion Bioreactor System - (see <https://www.youtube.com/watch?v=O6DfkaRPs8U&t=98s>) and <https://vivi.nu/bioreactors/>

And (2) the Nic - In System: <https://nicinsystems.com/our-video>



Or (3) breakthroughs in the tissue culture such as that for Tulip bulbs by Dummen Orange. <http://www.ipps.org.au/news-article/The-Propagator-Spring-2018-Issue-No-59/226>



But these are also developments by people asking the vital question of why, and looking for a better way to achieve the desired result. The basics still remain.

Meristem culture is still widely used commercially in the development of pathogen free material after various treatments. It is essentially miniature shoot tip culture. Hygiene is a given at all stages and is essential for success.

So the first step is initiation into culture, where the explant is selected often for juvenility, its ease of manipu-

lation and the least likely to be contaminated. These are then surface sterilised. Most commonly the medium commonly used was an agar based one with cytokinins to stimulate the initial culture, and produce multiple lateral shoots while inhibiting terminal shoot development.



Sufficient light of around 5000 lux from fluorescent tubes on a 1 hour on and 8 hour off cycle is typical. I noticed in the article that Ian did not mention that the UQ Gatton laboratory that unusually used vertical lights on the walls instead of overhead lights on each rack shelf.

The second stage is shoot multiplication. By now you will know how successful you were in selecting good material that was relatively free of microbiological contaminants. So after about 4 to 6 weeks your surviving material should have reached the stage where it can be sub-cultured and each shoot dissected to form an individual plantlet. These are returned to culture in the same formulation of medium. Cultures can then be sub-cultured about every 4 -6 weeks, and although highly labour intensive a system of batch production is possible. There have been many attempts in the past to automate this stage robotically.

Step 3 is the root development phase where your plants need to develop adventitious roots in a nutrient medium with auxins such as IBA, IAA or NAA.

The final stage 4 involves transfer to a suitable nursery growing environment. Initially plantlets need to acclimatise under shaded conditions, and humidity needs to be controlled to prevent desiccation. Multi-cell trays or tubes are often used at this stage dependent upon the customers requirements.

Often there is a gap between what can be produced from small scale research laboratory success with material from different places from stock plants, and that which is achievable on a commercial basis especially for difficult to propagate species.

News

The latest edition of the Plant Varieties Journal (Vol.33 No.4) has been published and is available at:

https://www.ipaustralia.gov.au/sites/default/files/journals/pvj_33_4_0.pdf

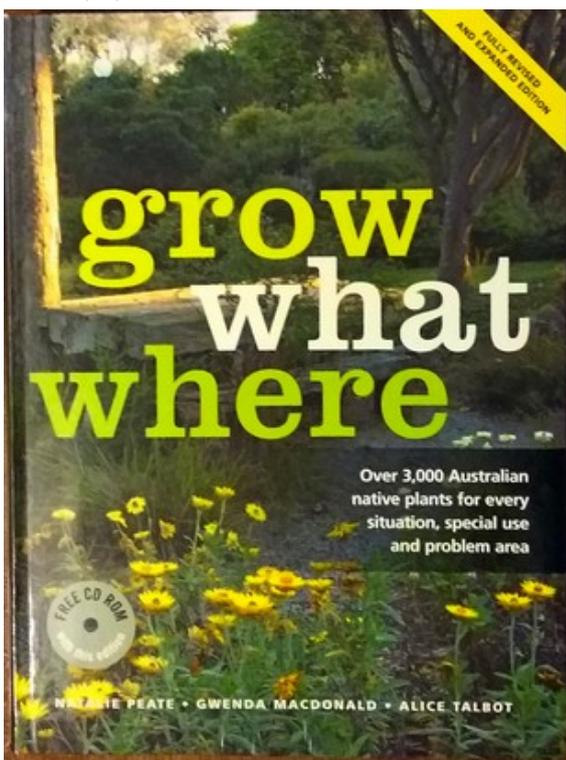
The passing of distinguished members of IPPS needs to be mentioned - Natalie Peate (13/4/21) and Ian Gordon (2018). Members sadly missed from other IPPS Regions were also noted at our AGM: Clive Mullet (VP South Africa Region) and Jim Conner (Past President Western Region).

VALE Natalie Florence PEATE 18.09.1931 - 13.04.2021

It is with deep sadness that we advise our members of the passing of Natalie Florence Peate. On behalf of the IPPS Australian Region) Board, and members, we would like to extend our sincere condolences to Natalie's husband, Roger, and her family and friends.

From starting off as a school science teacher, Natalie had a passion for collecting and propagating rare and endangered Australian plants. This developed into her spending a large part of her life in the nursery industry. In 1971, Natalie and Roger merged two business to form Plant Growers Australia (PGA), and in 1991 they sold that business.

Natalie was President of our region in 1984 – 85 after convening the Melbourne conference, and received the Award of Honour in 1994 at Noosa. She also presented a number of papers at our conferences. Natalie was also



President of the Nursery Industry Association of Victoria from 1985 – 87, and was a member of Australian Plant Breeders' Right Advisory committee.

Many of us are familiar with (and probably have a copy of) her co-authored "Grow What Where" book, among other publications. She also was the daisy study group leader for the Australian Plant Society up to 2009. Natalie was a passionate plants-person willing to share, and is sadly missed by us.

Newsletter Editors Comment

Planning is well underway for next year's conference at Leura NSW. Put the dates from 2nd May to 7th of May in your diary with a reminder to book in early in the New Year. **Is there someone you could speak to and invite them to be there as well?**

At present we are experiencing rolling lockdowns across the country due to COVID 19. The hope is that most of us will be vaccinated by early next year which will see the economic conditions improve as well as general confidence levels.

Our colleagues from the New Zealand region of IPPS had their 50th meeting this year in Hamilton with over 130 attending. That really is encouraging, so I am still optimistic for 2022 for our 50th meeting to reinvigorate the society and our region. With this in mind, I would like to see each of us inviting others to next year's conference.

Other regions especially the Eastern Region are trying various forms of online and live streamed events. Micro meetings and streamed site visits and the planned virtual world summit are examples of this. If you feel that you could assist with something like this for Australia then please contact your local board member or Pam. If you have a mobile phone or camera then you could be well on the way.

If you are not already a member join up soon. The region also has a [facebook site](#) with horticultural news items, international events and photos as well from past conference tours and activities - search for "International Plant Propagators Society (IPPS) Australia".

Pass your extra printed copy of the newsletter around at work. A copy of this newsletter and a selection of previous ones are available in colour at <http://aus.ipps.org/news>

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