

# IPPS

Sharing Plant Production Knowledge Globally

# the Propagator



International Plant Propagators  
Society (IPPS) Australia

International Plant Propagators' Society <http://aus.ipps.org/>  
Australian Region - Newsletter Autumn 2017 - No: 53

## Propagating for Health, Wealth & Good Times

### What are your goals?

### Have you written them down?

Time Magazine listed "The Goal" a novel by the business consultant Eliyahu M. Goldratt as one of the 25 most influential business management books. In the novel the business goal was to increase profit, return on investment & cash flow simultaneously.

The book is focused on the theory of constraints or bottlenecks and taking steps to alleviate them to improve business operations as well as our own personal life. Recognising bottlenecks enables us to plan around them, the most time intensive (the difficult time consuming daily chores) should be done first to give you more flexibility with your time. Once recognised some can virtually be eliminated or effects minimised by changing the way we go about things, potentially giving us more time to enjoy what we are doing.

A "chain is no stronger than it's weakest link". So what are your bottlenecks? Do they include:

- Timing and seasonal availability of suitable propagation material.
- Hand watering with limited staff.
- Operations layout and managing biosecurity risks and weather.
- Picking, labelling, preparing and packing within staff constraints.
- Scheduling tasks to ensure materials are available when needed e.g. labels.
- Recording successful methods and standardising them to improve staff performance and training.

So again what is your own goal, is it to be "healthy, wealthy and wise"?

Join us at the conference at the Hilton in Perth in May when we explore ways we can do things better, or explore how others tackle similar issues differently. As always conferences give us a bit of "time out" to catch up with friends we have not seen for a while, and do some touring. Of course IPPS

conferences are valued for spreading horticultural knowledge. It is a great time to not only hear from some great speakers about pertinent topics but meet up with others and share our successes and failures.

I hope the IPPS meeting in Perth is part of your goal. I look forward to seeing you there, so be prepared to "Seek and Share".

Bruce Higgs



Entrance to the Parmelia Hilton at 14 Mill St Perth  
*Photo courtesy of the Parmelia Hilton*

### THIS EDITION

'Propagating for Health, Wealth & Good Times'

2017 Southern African Exchange  
The Season Six Pack

Thank you Yates  
Perth Conference  
Pre Conference Tour  
Weed Risk Assessment  
Reports

◆ President's Comment  
◆ Executive Officer's Comment  
◆ International Directors Report  
Profile David Hancock  
Newsletter Editors Comment

## President's Comment



John Messina

One of the staff at work said to me the other day "it's either 40 degrees or 40 millimetres - take your pick". It sums up concisely the recent pattern of weather around here. A period of scorching heat followed by a downpour of rain in biblical proportions. After our second hottest December ever recorded, we went one better and logged our hottest ever January. February wasn't far behind, making it a tough summer to be a Viburnum plant in a nursery.

As I write this, we are experiencing a week of almost constant rain. I suppose it does give some relief to the heat. For those that have endured similar conditions, I hope you have made it through without too much heartache.

It has been a busy time for planning the upcoming Perth conference. In amongst the task of keeping a business going (through some pretty extreme heat in Perth as well), and a trip to the South African regions conference, David Hancock has somehow found time to organise what looks to be a cracking conference.

Following the traditional conference format, It starts on the evening of 11th May, and finishes on the 14th. Staying up to date with the latest technologies and industry directions is how we are going to stay in

business, and this conference - titled "Propagating for Health, Wealth, and Good Times", looks to be another valuable opportunity for networking and learning. The venue is the Parmelia Hilton hotel in Perth. ***If you haven't already done so, now is the time to start booking accommodation, flights and registration.*** Remember, early bird registration closes on the 31st March and offers a significant saving on the registration cost. Though you can register anytime right up until the start of the conference.

In some exciting news, this years conference will see the first sponsorship of the 6-Pack initiative by the Seasol Company. Developing new talent is vital for the future of our industry. Encouraging those new to the industry to be involved in networking and sharing of information, is an important part of maintaining horticulture as a long term career option. Without these kind of programs, we risk diminishing our long term industry options and collective resources.

The support from Seasol will go a long way to ensuring we have talented people working in propagation and horticulture. I would like to thank our own David Hancock for all his work in keeping the 6-pack concept running with this conference. And I especially thank Alick Osborne and his team at Seasol for coming on board. I'm looking forward to hearing more about the benefits to propagation that the company offers in Perth, and some potential alternatives to the traditional fertiliser technologies we have largely relied on.

**The "Seasol 6-Pack" certainly has a ring to it!**

I hope to see you all in Perth.

Cheers,

John



## Executive Officer's Report

### IPPS Office

I have been kept quite busy with 'day-to-day' running of the IPPS Office as well as membership subscription renewals and assisting the Conference Organisers.



### Membership Subscription Renewal 2017

All Members should've received notification emails from the International Board advising that your IPPS Membership is now due for 2017. All IPPS Regions are now managed by the International Board.

Last year there were a few 'teething' problems. The International website committee have been working hard to rectify these so all should be smoother this year. If Members are still experiencing issues whilst trying to renew their membership via the new International website, please let me know.

For those Members who prefer to pay via credit card or EFT facility please contact me. 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

**Volume 65 – IPPS Proceedings**

Books and CD's were posted out in December 2016. If you have not received your Book or CD to date, please contact me so I can follow up.

**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](mailto: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 Conference****– 'Propagating for Health, Wealth & Good Times'**

- 11<sup>th</sup> to 14<sup>th</sup> May 2017 –

**Parmelia Hilton Hotel, Perth**

Conference Registration Forms along with information can be accessed and downloaded from the Australian website: [www.ipps.org.au](http://www.ipps.org.au) as well as the International website: [www.ipps.org](http://www.ipps.org)

DON'T DELAY.....  
BOOK TODAY....



I look forward to meeting up with Members who will be attending the conference in PERTH.

Pam Berryman

**Seasol**<sup>®</sup>  
INTERNATIONAL PTY LTD

**The SEASOL 6-PACK**

The IPPS Australian region is excited to have Seasol on board as sponsor of the 6-Pack initiative. We thank Seasol for their support in encouraging and developing young talent in the industry.

Seasol International manufactures and markets high quality kelp, fish, humic and trace element products for the horticultural and agricultural market. The Seasol range of products have been used by farmers, orchardists and commercial growers for over 40 years to improve the quality and performance of their yields. These products cover a wide range of applications, from establishing new plantings to increasing frost or dry resistance and general soil and plant health, and are manufactured to the highest quality and the highest possible concentrations.

Seasol believe that the greatest measure of their success is the success of growers. They offer both traditional and certified growers a choice of excellent alternative products for their fertiliser programme and invest heavily in research and development so growers receive the full benefit of findings. Many of the products are 'soft' inputs that can be used in sustainable agriculture and have a profound effect on both soil and plant health.

With decades of experience and a local person on the ground, we provide a wealth of technical support and expertise to assist growers to get the best out of their crops.

Seasol have a network of agents and technical people around Australia. You can get in contact with them utilising the details below:

1027 Mountain Hwy, Bayswater Victoria 3153 Australia

Phone 03 9729 6511

Email: [Ask@seasol.com.au](mailto:Ask@seasol.com.au)

**2017 Southern African Exchange**

I would like to thank the IPPS for the opportunity that I have been given to go to South Africa on this 2 week exchange. I have only been involved in the nursery industry for 18 months and I am very keen to see and experience other nurseries and meet the nursery staff. I am looking forward to seeing how different businesses operate and deal with the everyday challenges that commercial propagation brings. I am hoping to learn a few different techniques with respect to pricking out seedlings, propagating from cuttings, pest management,

watering and tracking orders which hopefully I will be able to instigate when I get back home.

As I am also responsible for the management side of our business, I am also keen to see how other businesses operate from a management point of view regarding generation of sales, minimising overproduction and plant losses and ensuring staff meet their daily targets.

Aside from the nursery visits, I am looking forward to hearing the conference speakers and interacting with a wide variety of propagators to learn how diverse this industry is. I am interested to see what the



## International Directors Report

### Clive Larkman

We have only recently had another meeting of the International Board. Most of what happens could be described as mundane administration issues that help drive the international body. Four years ago a new strategic plan was undertaken. In summary the primary tasks were to increase membership value by updating and modernising communications and membership functionality. These are the key aspects of work undertaken over the last year:

- IPPS proceedings were completed and shipped out mid December 2016. Issues of Black Book publication and general membership issues have been a major conversation for many years.

- The International Board have finalized the Committee responsibilities for 2017. I am chairing the new Region Committee as Peter Lewis has stepped down. New areas of the world have shown interest in joining IPPS and include China, India, Malaysia/Singapore and Central America. It takes time for people to understand the IPPS culture, and the potential region finding a group of like-minded people and nominated leader or two to drive the organisation in that country. The old 'at large' membership category has been changed to International Membership and the Board are discussing how these members can be more effectively represented at an International Board level.

- The International Conference is up and running for 2017 during June to July from the UK through Belgium to Amsterdam and Post Conference tour in Germany. This will be the first European tour. Quite a few Members from the Australian Region will be attending this conference.

revegetation industry is like within South Africa and how similar or different it is to what we are involved in. If time allows in the second week, I am also hoping to get some time to sneak away and spot some lions or elephants!

I originally graduated in Perth as a veterinarian and worked as a small animal vet in Perth, Canada and the UK for 10 years. After moving back to Australia I decided on a career change and started with Natural Area in 2015 in the field unit. This involved working in weed control, planting native tubestock, erosion control matting on the beach and riverbanks and bushland reserve maintenance. After 5 months I transferred across to the native plant nursery as the production manager, overseeing the production of our native tubestock for revegetation programs through seed, cuttings, division and salvage. It was a steep learning curve as we produce over 350 species but thoroughly enjoyable. In August 2016, our Nursery Manager left and I was promoted to fill her position. Since then, I have been learning the business side of the Nursery becoming involved with quotes, sales, tracking orders and working with the other business units to supply plants for their projects. Having not seen or worked in any other nursery, I am looking forward to the experiences the South African exchange will provide me!

Regards, Bree Howard

- Hans Sittig & Donna Fare have been working on the website to resolve problems experienced last year, so they should now all be resolved. Thanks must go out to Hans from Southern Africa Region and our secretaries who have worked together to get it to this point.

- Another focus of the organisation has been attracting and retaining younger membership. The exchange programme now in use by most regions has been very successful. We are now looking at work exchanges but there are a few, not insurmountable hurdles such as work permits in some countries. If you are looking for work experience overseas, there is a huge international IPPS network out there.

- Administration of the International Office has been reviewed and a

## 2017

### Youth Auction

*Supporting youth in horticulture, the future of our industry*

#### **BRING SOMETHING TO THE CONFERENCE TO AUCTION OFF TO SUPPORT OUR YOUTH**

If you have some quality plants (being aware of quarantine regulations in WA), a painting or work of art or craft, a book, some useful tools or implements, fertiliser or chemicals, football souvenirs or some nice wine / beer etc. that you could contribute, please bring them along.

If you would like to have something special to display to your customers for a year then we have our annual mounted display Silver Felco secateurs as well (these are much sought after and usually go for over \$1000).

**Don't forget to bring some cash to support a good cause.**

decision made to employ an Executive Officer to run the affairs. The role is still being defined as a lot will depend on what happens with the IPPS proceedings.

- After many years of planning we have finally setup a corporate sponsorship package. If you are interested please let me know.

Looking forward to another great conference in Perth and International conference in Europe this year. Happy growing and don't forget to invite others as we seek and share.

## Thank you Yates

The 6-pack concept began in the lead up to the Coffs Harbour conference in 2003. Greg McPhee and Steve Hart devised a way to get young people involved in the IPPS, by assisting in conference activities. By being hands-on in the running of the conference, they would meet more members and be exposed to more of the Society's great benefits.

To enable it to happen, they needed a sponsor. This is where Rob Reynolds stepped in. His company Hortex was the first 6-pack sponsor, and carried on support in subsequent conferences. When Rob moved to Yates, he continued th support. As a market leader in the industry, Yates saw the benefits of developing young talent for the future of Horticulture, and since then every IPPS Australian region conference has benefited from the Yates 6-Pack initiative.

After 13 years, and sponsoring 72 young horticulturists, Yates have decided to hand over the sponsorship reins for the 6-pack concept.

I would like to formally thank the company for their years of support. Especially Rob Reynolds, David Jakobs, Kevin Young, and all the technical and sales staff that have been involved in supporting the concept over the years. By

encouraging young propagators to actively participate in the IPPS conferences, Yates were certainly upholding the society motto of "Seek and Share".

From this year, we are excited to have the Seasol Company involved as 6-Pack sponsors. We look forward to the "Seasol 6-Pack" being involved in our future conferences.

John Messina

IPPS Australian Region President

## Perth Conference

*Perth – much more than endless sunshine, add the best IPPS has to offer, and you will have the ultimate propagation conference experience*

Perth effortlessly blends urban cool with raw natural beauty and makes the perfect base for your unique Western Australian experience. Bustling with new bars, restaurants, shopping and cultural spaces, Perth is also home to Kings Park, one of the world's largest inner city parks, the world famous Perth Mint, the new city river foreshore area Elizabeth Quay, car free Rottneest Island and its 63 beaches, beautiful wineries, and stunning beach sunsets. The 45th annual IPPS conference in Perth will tick all the boxes.

The programme will satisfy all comers as the conference themes of "propagating for health & wealth" are addressed as the good times roll on. There will be technical presentations and supplier updates but the main presentations will focus on what growers have worked on

recently and what is planned and how best for propagators to work collaboratively with green life industry stakeholders. The seeking and sharing of information is the IPPS purpose and all will come away having learnt something new and beneficial. The benefits and importance of our international connections will be highlighted.

On the Saturday evening we will have the traditional formal IPPS Conference dinner at the Hilton. It will be time for fine food & beverages and dancing to a swinging live band with lots of laughs with the fundraising auction and moments to celebrate as awards are presented.

### Conference venues & events.

**Parmelia Hilton** - A great room rate was negotiated for this classy central city venue. The Parmelia is 20 minutes from the airport, 3 minutes from Elizabeth Quay Train Station and an easy walk to casual and formal dining spots. Other suggested nearby accommodation options will be posted to the IPPS website.

### Conference

**Thursday 11<sup>th</sup> May** – Early registration / Morning Board meeting & afternoon all member golf event. Otherwise this is a free day.

Afternoon options An exclusive guided tour of Kings Park plant & seed science, plant development and nursery departments. EOI by text (0429095850) or email [david@naturalarea.com.au](mailto:david@naturalarea.com.au). Perth spots of interest to be provided for those interested.





*Golf afternoon for growers* - Join the stars & hackers in the traditional IPPS golf event over 9 holes on a nearby beautiful Perth course.

*Welcome function* - Later that evening we will convene on the outdoor Piazza at the Parmelia for a relaxing meet and greet, with renowned Indigenous welcome to Country experience.

**Friday 12<sup>th</sup> May** – Main registration & short conference introduction / welcome and announcements with a tribute to the Late Steve Vallance our immediate past President.

The rest of the day we will all be on coach tours to a mix of top shelf venues plus nursery visits. Caversham Wildlife Park, Margaret River Chocolate Factory; Landsdale Plants (retail) a wildflower nursery with new plant varieties from all over WA on show; Natural Area Nursery (Restoration plant propagation & palletised logistics); Ellenby Tree Farm growing trees in the Rootmaker system; and ending the day with a traditional BBQ in a nursery setting. An additional large scale/mechanised nursery visit is being negotiated. Further details will

be available shortly, enquiries to [david@naturalarea.com.au](mailto:david@naturalarea.com.au)

**Saturday May 13<sup>th</sup>** - High profile big picture presentations: **Greg Priest** "Growing the Urban Forest Movement", Josh Byrne & Associates; **"The Green Cities Project"** *Which plant, where, when database*; Macquarie University & HIA.

There is a "Highly interactive healthy plants/healthy people" session; and a latest business finance update session along with Solar Power issues analysis.

International scene update presentations from Mr Anton Van der Schans, Assistant Director, Gardens on the Bay Singapore; & Julienne Zhu, Secretary General of the Nursery Stock Branch of the China Flower Association.

**Sunday May 14<sup>th</sup>** – All about growing, from expert propagators; **Angus Stewart** - *Renowned expert propagator, author, researcher and broadcaster with ABC Gardening Australia*, **George Lullfitz** "Selecting varieties to be market driven", **Ben Croxford** - propagation of otherwise

Photos (L to R) Greg Priest, Nigel Swarts and George Lullfitz

propagation recalcitrant plant species for revegetation projects, **Nigel Swarts** - native orchid propagation from the University of Tasmania.

We will have a suite of rapid fire "**Prop Worx**" presentations from growers with their latest and future projects, successes & failures.

*Trade presentations* – Our sponsors and trade displayers will update us on their latest goods and services.

In short, the Perth conference will have something for everyone;

- Potential and emerging plant varieties & export markets.
- Showcasing our emerging propagators
- Unique tour experiences
- Comprehensive green growth & nursery industry updates
- Hot propagation tips

David Hancock

The 2017 conference **Major Sponsors** are:



## Perth Pre Conference Tour 9th-10th May 2017

Experience the rugged beauty of the Indian Ocean Drive coastline north of Perth with a focus on relaxed fishing and tourism towns. Mini buses will pick up tour members at the Parmelia Hilton or Hillarys Marina. The tour starts with a visit to the internationally renowned AQWA underwater aquarium.

Traveling north we will experience spectacular Indian Ocean coastal sites & views. The Pinnacles desert at Nambung National Park has thousands of limestone pillar formations. The Park also features coastal dunes and flowering plants in low heathland areas.

We then travel to the Lobster Shack, a live Western Rock lobster factory on the beachfront at Cervantes.

After travelling through Jurien Bay and just before Greenhead we reach Lesueur National Park. The Park lies in the Geraldton Sandplains bioregion with patches of low woodland amongst shrubland. There are over 900 indigenous plant species. The Park is also the northern limit for Jarrah (*Eucalyptus marginata*) and *Corymbia haematoxylon* both

growing as mallee and not tall trees. Lesueur is under threat from the effects of *Phytophthora dieback*.

Then on to our quality coastal resort accommodation at Greenhead overlooking Dynamite Bay. Join us and our international visitors as we share superb WA rock lobster & seafood.

Our return to Perth will take us through unique national park estates and a tour of the Hi-Valley Farm bushland, a botanical extravaganza of the highest quality and guided by local experts. Looking for new plant varieties to propagate?? (seed and vegetative collections permitted). The tour includes unique Eucalyptus and flowering understory species.

The tour includes quality mini bus transport, entry fees, morning tea, lunch and dinner on day one, accommodation on Tuesday night and breakfast and lunch on Wednesday. The Underwater World / Indian Ocean Drive tour has 20 firm bookings and there are a few spots left. Its not too late to get on board for a short fun trip and some exciting nature & plant experiences.

## PROFILE



### David Hancock

David is not only the IPPS Australian Region Vice President and this years' conference organiser, but has established himself as a long term supporter of IPPS who is willing to seek and share. David has shown that he is willing to support others to learn and develop, so please take some time to chat with him at the conference and find out more of his story.

I ask each conference organiser for answers to a few simple questions and here are responses:

### ***What are the things that you feel have created your standing in the industry?***

To have established an innovative and viable niche nursery business within a broader environmental business structure, i.e. to have vertically integrated nursery into seed, contracting and consulting businesses. To have done so from a standing start without a background and formal training in horticulture and to have enticed my family to be a part of this. To have been involved in the development and support for many new nursery industry people is a particularly gratifying experience.

### ***What do I have to share with others (particularly new members) of the IPPS regarding the world of propagation?***

A willingness to discuss our successes as well as our failures in both growing and in running a business. My past background in



Pinnacles Desert - photo Neil Creek Below; Lobster Shack Cervantes



Lesueur National Park scene below; Greenhead Dynamite Bay sunset



banking and finance has given me a unique perspective on what it takes to survive and grow in business. To be able to encourage new members to develop their personal and business skills along side a willingness to research and experiment in plant development. I look to provide as much propagation information as can reasonably be expected from a commercial point of view. This has involved presenting what we have done and how it has worked for us. From there, everyone can evaluate and decide how that assists them going forward.

***What are the significant things you have personally gained through IPPS membership?***

The valuable experience of many growers that I would otherwise have not been privy to. A network of friends and professional contacts throughout Australia and extending to New Zealand, the USA, South Africa, New Caledonia, Oman, China & Europe. IPPS has driven my desire to travel, mixing propagation with good times in collaboration with like minded and passionate plant people.

## Weed Risk Assessment

We all know what is a weed and what is not ... don't we? Well as it turns out that is not the case. A simple definition of a weed is that it is a plant in the wrong place. So this is subjective as it depends on what we regard as being a wrong place. Weeds are simply plants growing when and where they can, whereas we make a decision that we do not want them there for some reason.

The problem for gardeners is that some would say a plant growing out of it's natural environment is a weed. To them our gardens including Botanic gardens and nurseries are full of weeds. You can see now how easy it is for a plant to be

regarded and potentially listed as a weed. Often it is a whole species that has been listed while ignoring infertile hybrid cultivars.

**The subject of having many ornamentals being caught up in local and State weed lists has been an issue lately.** Often it seems that this happens based on opinion rather than hard evidence, and subsequently horticulturists do not know where to turn to appeal this or to have exemptions for sterile hybrids included.

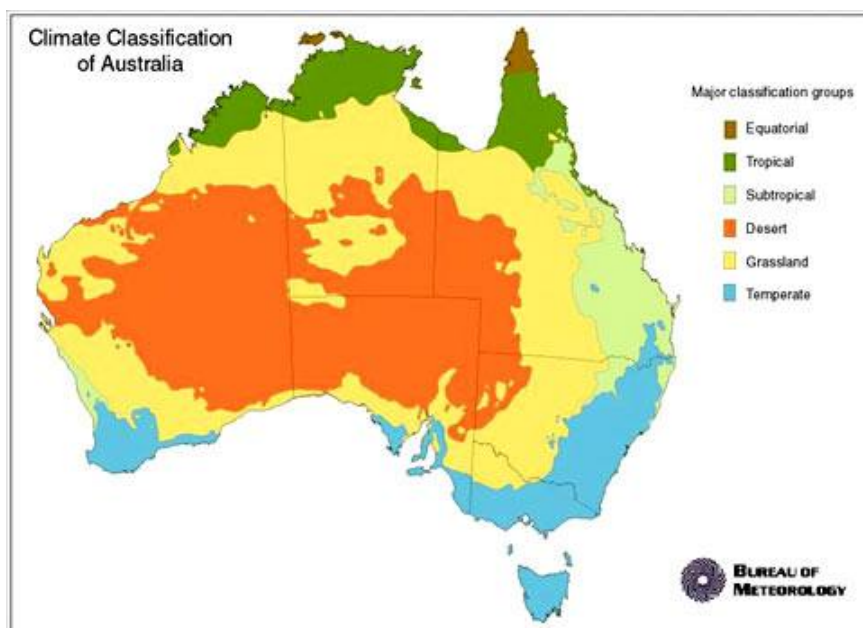
Although you might choose to disagree, it is generally believed that the majority of agricultural and environmental weeds in Australia have originated from ornamental horticulture.

What was recognised some time back as being needed was a means of assessing the weed potential for any plant. The Australian Government has a WRA (Weeds Risk Assessment) for imported plants which has 49 questions covering eight characteristics. Many of the questions appear to be expansions of optional answers to questions in the paper by Virtue et al. Climatic modelling using CliMond and Climex software is referred to, apparently to take into account potential effects of climate change. This WRA tool is known to be 90 to 100%

accurate in predicting invasive plants but accuracy for non invasive plants varies from 21 to 75% accuracy (from Conser et al).

In 1999 the Australian Nursery Industry held a first international workshop on weed risk assessment sponsored by the Horticultural Research Development Corporation (Project Report NY98045). In the report Dr Sarah Reichard informed the group of efforts in the USA to reduce the sale of weeds from nurseries. A draft weediness system for scoring nursery plants as weeds was tabled.

In 2008 the results of a comparative study with Australian Botanical gardens based a ten question multiple choice was published (Virtue et al). In 2011 Dr Anthony Kachenko and Michael Gleeson (both well known Australian IPPS members at the time) developed a Weed Risk Assessment as part of an NGIA initiative, & funded by a significant grant from the Australian government Rural Industries Research and Development Corporation (RIRDC). One thousand ornamental nursery plant species were assessed using the questions for the climatic zones shown in the Koppen-Geger Australian climate zone drawing (from the Bureau of Meteorology) based on questions reported by Virtue et al..





This work was recognised by the Australian Weeds Committee.

Although potentially difficult to find now, the results of the NGIA project can be found in the 2013 “**Invasive Plant Risk Assessment Tool**” online. You can download the data as an Excel file still.

In 2013 an alternative methodology was proposed by CSIRO researchers using Weed Assemblages to predict future weeds. They found that established weed lists were unreliable and highlighted the need for a standardised classification system. They established that the main limitations to establishing a rigorous system from existing data was bias and human perceptions.

More recently (2015) research was undertaken in the USA to develop a more valid set of questions to screen nursery plants. Out of 53 common questions 19 were found by using statistical analysis to be able to reliably predict weediness. Many of the questions eliminated were irrelevant to the study, had no predictive power or could not reliably be answered. This work used 21 known USA invasive and 14 known non-invasive plants. The final 19 questions were evaluated for accuracy with a further 56 known invasive plants and 36 known non-invasive plants.

Modified questions based on this paper by Conser et al are:

1. *Has the species become naturalized where it is not native?*
2. *Is the species noted as being invasive elsewhere in the Australia or world?*
3. *Is the species noted as being invasive elsewhere in Australia or world in a similar climate?*
4. *Are other species of the same genus invasive in other areas with a similar climate?*
5. *Is the species found predominantly in a climate that matches those within the region of introduction?*

6. *Does this plant displace native plants and dominate the plant community in areas where it has invaded? Does this plant overtop and/or smother surrounding vegetation?*

7. *Is the plant noted as being highly flammable and/or promotes fire and/or change fire regimes?*

8. *Is the plant a health risk to humans or animals/fish? (Toxic Tendencies). Has the species been noted as impacting grazing systems?*

9. *Does the plant produce impenetrable thickets, blocking or slowing movement?*

10. *Does this plant reproduce vegetatively via root sprouts/suckers or stem/trunk sprouts/coppicing?*

11. *Are fragments from this plant capable of producing new plants?*

12. *Does this species produce viable seed?*

13. *Does this plant produces copious viable seeds each year (>1000)?*

14. *Does this plant produce seeds that germinate quickly (<2 months)?*

15. *Does this plant have a short juvenile period? Does it produce seed within first three years (herbaceous) or first five years (woody)?*

16. *Does this plant have a long flowering period with seeds produced for >3 months each year?*

17. *Are this plant's propagules dispersed by mammals/insects or birds or via domestic animals?*

18. *Are this plant's propagules dispersed by wind or water?*

19. *Are this plant's propagules dispersed via agriculture, contaminated seed, farm equipment, vehicles or boats, or clothing/shoes?*

Questions 2 and 5 are weighted out of two and question 3 out of three, the remainder being scored as 1 or 0 the higher score being affirmative.

**Weedy invasive plants scored over 13 in total and non-invasive 10 or less.** Between 11 and 13 plants require further evaluation. Try this with some of your plants.

It may be worthwhile re-evaluating the plants studied in the NGIA study

with these 19 questions to compare the accuracy of the earlier work.

Updated WRA could be a worthwhile adjunct to a HIA project. The resultant published paper could be useful in substantiating the weediness or not with appropriate authorities in a particular area. It may also be useful for nurseries in establishing which are potentially weedy species. Bruce Higgs

## References

- NY98045 - First International Workshop - Weed Risk Assessment [www.ngina.com.au/Attachment?Action=Download&Attachment\\_id=1708](http://www.ngina.com.au/Attachment?Action=Download&Attachment_id=1708)
- J.G. Virtue, R.D. Spencer, J.E. Weiss, J.E. and S.E. Reichard  
Australia's Botanic Gardens weed risk assessment procedure, Plant Protection Quarterly Vol.23(4), 166-178, 2008  
[http://weedsnetwork.com/db/attachments/discussion/76/1/Virtue et al 2008 WRA for Botanic Gardens\\_pages 166-178](http://weedsnetwork.com/db/attachments/discussion/76/1/Virtue%20et%20al%202008%20WRA%20for%20Botanic%20Gardens_pages%20166-178)  
<http://www.virtualoceania.net/australia/maps/climate.shtml>
- 2013 “Invasive Plant Risk Assessment Tool” NGIA published online at: <http://planrisktol.com.au>
- L. Morin, D.R. Paini, R.P. Randall, Can Global Weed Assemblages Be Used to Predict Future Weeds?, PLoS ONE 8(2): e55547. doi:10.1371/journal.pone.0055547  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3564798/pdf/pone.0055547.pdf>
- C. Conser, L. Seebacher, W. Fijino J.M. DiTomaso; The Development of a Plant Risk Evaluation (PRE) Tool for Assessing the Invasive Potential of Ornamental Plants, PLoS ONE 10(3): e0121053. doi:10.1371/journal.pone.0121053.  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4372384/pdf/pone.0121053.pdf>

## News

### Congratulations Terry Hatch

In the 2017 New Years Honours list, Terry Hatch was made an Officer of the New Zealand Order of Merit for services to Horticulture. He was a founding member of the IPPS New Zealand Region, became President in 2007 and served as International President. Joy Plants, his nursery near Auckland, has been highly regarded among horticulturists for more than 30 years. Terry is a specialist in growing bulbs in New Zealand and co-authored 'Bulbs for New Zealand Gardeners and Collectors' (1994), which is still regarded as the definitive text in this field.

### 2017 IPPS NZ Conference 'Need for Speed' May 18th - 21st

Register now for an exciting, action-packed tour through the heart of the Potato/Onion country. They have a great line-up of guest speakers and nursery visits to Zealandia, Ardmore Nurseries, Icon Trees, Beaumont's Nurseries, Rainbow Park Nurseries, Twining Valley Nurseries, Joy Plants and more! RNZIH (Royal New Zealand Institute of Horticulture) will be joining the conference this year.

**PRE CONFERENCE TOUR:** Waiuku - Thursday 18<sup>th</sup> May - consists of a trip to Kariotahi Beach and at least three nurseries including Kiwi Colour, Seedling Systems and The Native Plant Nursery.

#### **POST CONF. TOUR: Far North**

Sunday 21<sup>st</sup> May to Thursday 25<sup>st</sup> to Cape Reinga. See programme on website for details.



### Newsletter Editors Comment

We always look forward to meeting up at conferences and this years at Perth should be a great event. The main focus of the next edition will be the Perth 2017 IPPS conference. I look forward to hearing about the European International Conference from some of our delegates.

If you are not already a member join up to the region's **facebook site** - search for "**International Plant Propagators Society (IPPS) Australia**" and start contributing by "liking" it and posting. We now have over a

three hundred and fifty Facebook member likes.

Sam Hall and James Burnett have become new admins for the Facebook page to bring a younger face to it and attract new members to join the society.

Don't forget that this newsletter and many past copies are available on the IPPS website at [www.ippso.org.au](http://www.ippso.org.au)

*Pass your extra printed copy of the newsletter around at work.*

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

### 2017 IPPS Calendar

11 May - 14 May 2017	Australian Region Conference, Perth
18 May - 21 May 2017	New Zealand Region Conference, Pukekohe Racetrack
2 July - 18 July 2017	International Tour & Conference - European Region - UK, Belgium, Netherlands
11 October - 14 October 2017	Eastern Region Annual Conference, Grand Rapids, Michigan
17 October - 20 October 2017	Western Region Annual Meeting, Wilsonville, Oregon
28 October - 1 November 2017	Southern Region 42nd Annual Conference, Dallas, TX