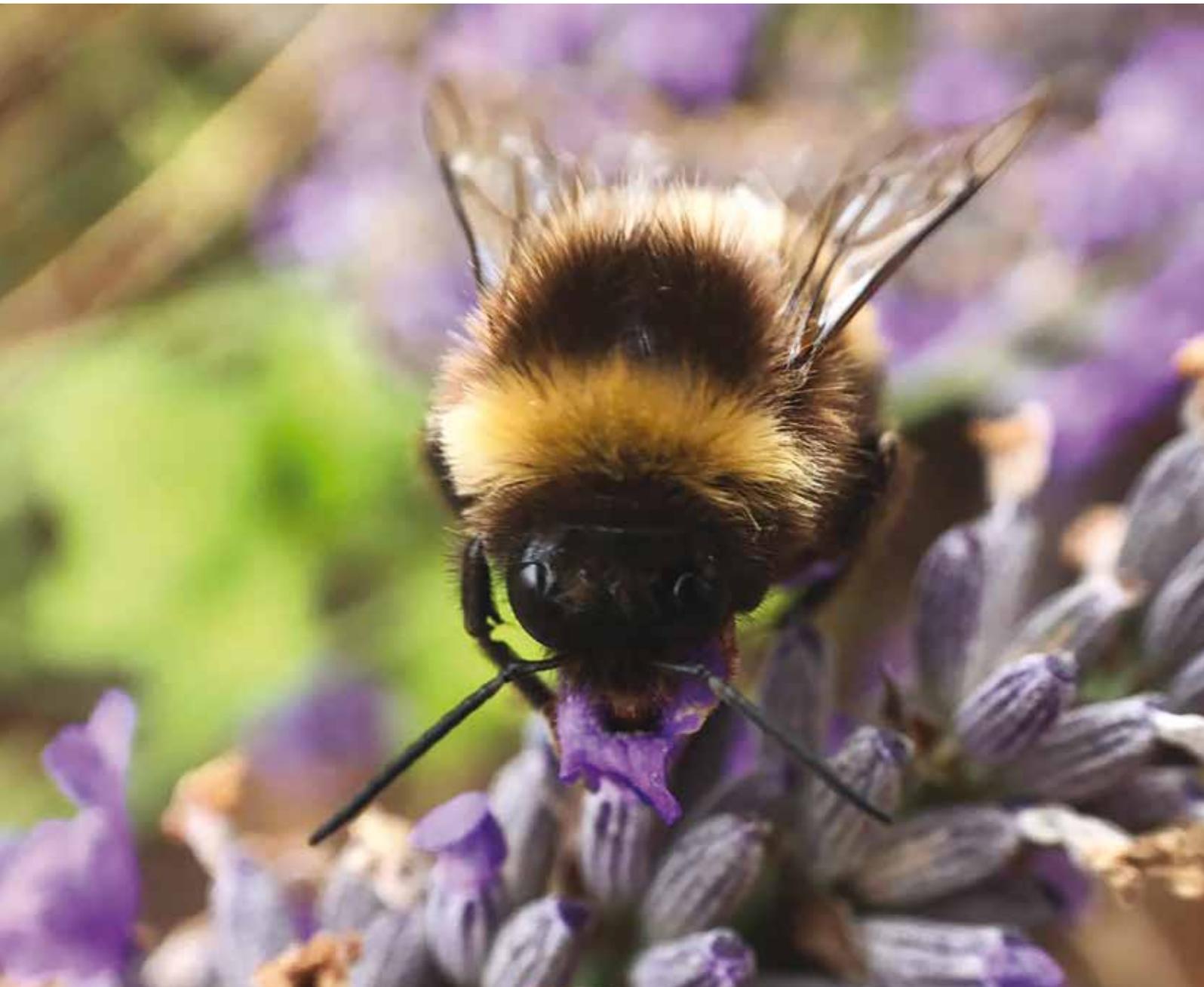


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FRONT COVER

Bombus terrestris (Bt) bumblebees have been freely pollinating flowers in the Royal Tasmanian Botanical Gardens for 20 years.

PCA is petitioning the Senate to make it legal to use Bt bees for pollination in commercial greenhouse crops, on par with greenhouse production around the globe.

Full story page 8

Photo © Kate Andrews - keandrews@gmail.com



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Any correspondence concerning the newsletter should be sent direct to the editor:
admin@protectedcroppingaustralia.com



Registration Open

Apex-Brinkman PCA Conference

Imagine visiting a pop-up shopping and learning centre devoted to commercial hydroponics and greenhouses, filled with like-minded growers interested in the future of intensive food production.

A perfect place to meet with industry peers, make new connections and reinforce relationships face-to-face.

Well you can!

In July you will have the opportunity to engage and network face-to-face with other growers, suppliers, consultants, researchers and guest presenters from both Australia and overseas.

Together we tour the latest hi-tech glasshouse operations, witnessing and comparing growing systems, prices and packages.

Grow your knowledge and get inspired by cutting edge technology, products and solutions.

All you have to do is register!

www.aomevents.com/pca2017/registration

PCA's Apex - Brinkman Conference 2017 will be our 14th biennial event bringing together 450+ industry people in Adelaide from the 9-12th July 2017.

Benefits

- Networking is fostered in many ways. This year we launch a new feature with a central hub space in the middle of the large trade display which will be transformed into a busy Happy Hour Bar each afternoon.
- Sunday afternoon is open to the general public to maximise contact and access.
- Monday and Tuesday comprises of technical how-to speaker presentations followed by farm tours on the Wednesday.

The conference also provides industry education and excellent opportunities for networking and business between growers, their allied trade and interested parties.

We look forward to welcoming you to Adelaide in July 2017.

REGISTER NOW

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Speaker Highlights

Apex-Brinkman PCA Conference

You're invited!
Join Other Growers
 Who learn from the best



The conference will be officially opened by
Senator the Hon. Anne Ruston, Assistant Minister for Agriculture and Water Resources.

Senator Ruston is also the dedicated Minister for Horticulture, a position to which she brings a depth of knowledge and understanding that is so well suited to this complex area of responsibility across a diverse range of crops and technologies across all states and territories.



International Guest Speaker
Marcel Bugter, AkzoNobel Micronutrients NL
How chelates can further boost your yield

Most professional growers know that chelated iron (Fe-DTPA) is used in hydroponic nutrient solutions to protect the Fe from precipitation.

Discussion will take place on whether Mn, Zn and Cu should also be chelated, following an extensive, scientific rockwool greenhouse tomato study in Belgium in 2016.

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International Guest Speaker
Mr Wim van Esch, Achmea Australia
Fresh produce product recall in the glasshouse industry

When something goes wrong with your product, the impact on your business can be far-reaching.

Learn practical measures you can take to identify, mitigate and manage your risks through sound product liability insurance.

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International Guest Speaker
Dr Katherina Adamitza Valoya, Finland
LED and light quality in plant growth

Breakthroughs in LED technology allow for a commercially available and affordable method for examining specific wavelengths that was not available with older HPS, fluorescent or metal halide light sources.

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Guest Speaker **Dr Wilson Lennard, Aquaponic Solutions**

Aquaponics is often differentiated from traditional hydroponics and substrate culture. However, ionic plant nutrient requirements are known industry standards for optimised plant yields in hydroponics and therefore, set the standards for plant nutrient provision in aquatic-based growing systems.

Learn about a method Wilson has developed that enables hydroponic nutrient mixtures and strengths to be customised for any fish or plant species in an aquaponic growing system context.



Guest Speaker **Sohum Gandhi, Enriva**
Gas, Biomass, CO₂: An Informed Choice

Heating can be one of the largest expenditures for a protected cropping business. Fuel and equipment selection has a life long impact on production, CO₂ availability, running costs and thereby the profitability and sustainability of any operation. An informed analysis before you dive in can improve the outlook of your business for years to come.



Guest Speaker **Marcus van Heijst**
Priva de-leafing robot

The tomato industry is a very labour intensive industry, and in Australia we have one of the highest comparable labour costs in the world. Priva has a solution to ease the burden of one of the most menial tasks a grower faces – de-leafing of tomato plants. Priva are developing the Kompano fully autonomous picking robot.

Marcus will present the research that has led to the development of this robot.



Guest Speaker **Ian Gesch**
Emerging opportunities and challenges for CO₂ enrichment

Australia's changing energy and environment landscape and our continued reliance on fossil fuels present both challenges and opportunities for horticulturists that use CO₂ enrichment practices. This changing landscape will be discussed and information provided to help growers meet challenges and embrace opportunities.



International Guest Speaker **Dr Mike Nichols, NZ**
1) Medical marijuana (MMJ)

An introduction to the various types of cannabis and examining some of their different medical properties..

Learn how best to grow it for medical purposes and consider possible methods by which the cannabinoids are ingested.

2) Fruit growing in the future



Guest Speaker, **Wade Mann, Nuffield Scholar 2015**
IPM for greenhouse berry crops

With soaring demand for berry fruit, Wade Mann explored and assessed IPM strategies globally to identify emerging and innovative technologies available for commercial application in the greenhouse hydroponic berry industry in Australia.

Come and hear what Wade recommends for growers like you.

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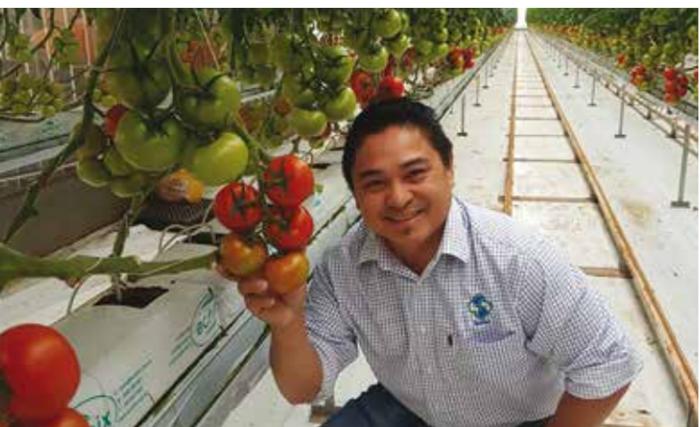


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Speaker Highlights



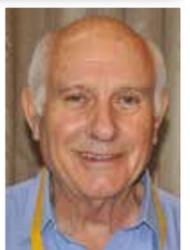
Guest Speaker
Domenic Cavallaro, Stoller Australia
How nutrients influence the growth of a plant



Guest Speaker
Dr Sophie Parks, NSW DPI
1) Thinning flowers to influence berry size and flavour.
2) Consumer preferences for blueberries



Guest Speaker
Dion Potter, Syngenta
Understanding disease resistance and crop protection, making them work for you



Guest Speaker
Rick Donnan, Growool
1) Fundamentals of hydroponic management.
2) Start up solutions lead to easier nutrient management.



Guest Speaker
Nicky Mann, Nuffield Scholar 2014
1) Intensive berry production using greenhouses, hydroponics & substrates.
2) Surviving and thriving in the Australian Flower industry.



Guest Speaker
Jonathan Lidbetter, NSW DPI
Cucumbers: Grafting and silicon, what you don't know CAN hurt you.



Guest Speaker
Mark Massey, Polito Flower Farms
Converting a flower farm from soil to hydroponics

Conference Schedule

Sunday 9th July 2017

TIME	SESSION
1 - 5 pm	Trade exhibition open
5:15 - 6 pm	PCA AGM including elections
6 - 8 pm	Welcome reception in the trade exhibition

Monday 10th July 2017

TIME	SESSION
8 am - 7 pm	Trade exhibition open
9 am - 5 pm	Official opening, plenary lecture sessions, special guest speakers
4.30 - 7 pm	Happy hour bar amongst the trade exhibition
7.30 pm	Banquet and Awards for Excellence

Tuesday 11th July 2017

TIME	SESSION
8 am - 7 pm	Trade exhibition open
9 am - 5 pm	5 x Specific crop workshop streams Fruit & Veg Vine Crops / Leafy Greens / Aquaponics / Cut Flowers / Berries
4.30 - 7 pm	Happy Hour Bar amongst the trade exhibition

Wednesday 12th July 2017

TIME	SESSION
8 am - 5 pm	Choice of at least three bus tours visiting several hydroponic greenhouse sites including D'Vine Ripe, P'Petual, DSA Fresh, Virginia Nursery and others. (*Subject to change) Provisional return times for buses to the Adelaide Convention Centre and Adelaide Airport is 5 pm

PCA Membership Deal

Join now

to receive up to \$200 off 2017 Conference registration

Membership enquiries: Saskia **0414 333 996** or visit www.protectedcroppingaustralia.com

CONFERENCE REGISTRATION INCLUSIONS

2 1/2 day Registration - allows access to all sessions, trade exhibition, welcome reception, daily catering, satchel bag and Proceedings featuring all speaker talks and contact details for all exhibitors.

One Day Registration - allows access to all sessions, trade exhibition, satchel bag, Proceedings featuring all speaker talks and contact details for all exhibitors, as well as daily catering on the selected day.

Your co-workers can also attend the conference July 9-12th 2017 at your special members' rate

Conference Banquet & Farm Tours are additional costs for everyone. See 'Optional Extras' in the next column

Register Now

All prices include GST

REGISTRATION TYPE	EARLY BIRD BEFORE APRIL 30TH	STANDARD RATE	QTY
One Day Monday or Tuesday?			
Student	\$200	\$200	
PCA Full/Affiliates	\$250	\$250	
PCA Associates	\$300	\$300	
Non PCA members	\$350	\$350	
2 1/2 Day Conference			
Student	\$350	\$350	
PCA Full & Affiliate members	\$440	\$500	
Group (Qty 5+ delegates p.p.)	\$500	\$500	
PCA Associate member	\$540	\$600	
Non PCA member	\$640	\$700	
Optional extras for everyone			
Conference Banquet	-	\$130	
Farm Tour	-	\$120	
TOTAL COST \$			

YOUR DETAILS

Surname: _____
 First name: _____
 Preferred name on badge: _____
 Company / Position: _____
 Registration type? eg PCA Member #..... _____
 Address: _____
 Suburb: _____ State: _____ P/code: _____
 Email: _____
 Phone: _____
 Extra delegate names and email: (enter below)

2) Name	_____
Email	_____
Registration type	eg PCA Member #..... _____
3) Name	_____
Email	_____

Special requirements eg catering _____

CREDIT CARD DETAILS

Card type: _____ Expiry: ____ / ____
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Apex-Brinkman PCA Conference Partners and Trade Exhibitors July 2017

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Brinkman Australia	royalbrinkman.com.au

Platinum Partners

AIS Greenworks	aisgreenworks.com
Haygrove Tunnels	weeredbarn.co.nz
Munters Pty Ltd	munters.com.au

Welcome Cocktails Partner

South Pacific Seeds	southpacificseeds.com.au
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Central Hub & Happy Hour Partner

De Ruiter / Seminis	deruiterseeds.com
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Speaker Partners

Achmea Australia	achmea.com.au
Freshzest	freshzest.com.au

Gold Partners

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Agvita Analytical	agvita.com.au
Biological Services	biologicalservices.com.au
Brown Coir	browncoir.com
Cravo Equipment	cravo.com
Cropping Solutions	croppingsolutions.com
EE Muir and Sons P/L	eem.com.au
Greenlife Structures	greenlifestructures.com.au
Mardenkro BV	mardenkro.com
Polygro Pty Ltd	polygro.com.au
PRODOZ International	ecomix.com.au
Syngenta Australia	syngenta.com
Van der Hoeven	vanderhoeven.nl
Viscon Australia	viscon.com.au
Yara Australia	yara.com.au

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Additional Trade Exhibitors

A & D Australiasia	andweighing.com.au
AustSafe Super	austsafe.com.au
BBC Technologies	bbctechnologies.com
Beijing Kingpeng International	chinakingpeng.com
BOM Greenhouses BV	bomgroup.nl
Boomaroo Nurseries	boomaroo.com.au
FTEK Limited	ftek.com
Garden City Plastics	gardencityplastics.com
HM Clause Pacific	hmclause.com
Hydroponic Farmers Federation	hff.org.au
Kees Greeve BV	kgsystems.nl
Lefroy Valley	lefroyvalley.com
Ludvig Svensson	ludvigsvensson.com
Madel Australia	madec.edu.au
Metazet/FormFlex	metazet.com
NAB	nab.com.au
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Ramm Botanicals	ramm.com.au
Redpath Greenhouses	redpath.com.au
Rijk Zwaan Australia	rijkszwaan.com.au
Rivulis Irrigation	rivulis.com
Selectcoat BV	sudlac.com
Stoller Australia	stoller.com.au
Taks Handling Systems BV	taks.nl

Bumblebee Senate Inquiry Update

There is currently a Senate Inquiry into the "Risks and opportunities associated with the use of the bumblebee population in Tasmania for commercial pollination purposes". The PCA has been working on this for commercial greenhouse growers for many years.

The Senate requested submissions (either for or against), to be submitted by 3rd of March 2016 and PCA Director Marcus Brandsema detailed all the scientific research indicating that *Bombus terrestris* (Bt) bumblebees have demonstrate no threat whatsoever in the 20 years they have been in Tasmania.

All the 22 submissions can be viewed here; www.aph.gov.au/Parliamentary_Business/Committees/Senate/Environment_and_Communications/Bumblebees/Submissions

In 2017 the Senate Inquiry recommenced with a public hearing in Hobart on the 21st February, enabling some of the people who had made submissions to both speak and be asked questions.

Besides Marcus on behalf of the PCA, there were representatives from the Fruit Growers Association, Costa Group, Tasmanian Beekeepers Association (TBA), Tasmanian University and Dept. of Primary Industries. All spoke in front of three Tasmanian government Senate representatives, in support of a trial on bumblebees, except for the TBA.

Mr Lindsay Bourke (TBA), had concerns regarding the competition for pollination that the bumblebee gives to the honeybee. He also spoke about the possible dangers of introducing new Bt genetic material into Tasmania, to make the current Bt bumblebee population more viable.



Photo © Kate Andrews - keandrews@gmail.com

Apex-Brinkman PCA Conference July 9-12, 2017

Should the trial goes ahead, using the current Tasmanian bumblebee population, then it was made quite clear that it should not entertain the possibility of new genetic material, according to the scope of the application.

The concern is that if new genetic material be introduced, it could change the action of the bumblebee in the Tasmanian landscape, whereas if the Tasmanian stock is maintained, then there is no difference to the Tasmanian environment than what currently exists.

The senators reacted quite positively, with Senator Anne Urquhart giving a press release stating; **"I am confident that my Senate colleagues from across the major parties will recommend that the Federal Government amend the EPBC Act to allow for the trial"**.

The Senate Inquiry is scheduled to report on 13th June, with a further hearing to take place with the Department of the Environment in Canberra in coming months.

An excerpt of an article from the ABC Country hour regarding the public hearing can be heard here; itunes.apple.com/au/podcast/tasmanian-country-hour/id362378896?mt=2 Click on the podcast released 21/02/2017

PCA will keep you informed of developments.

PCA Director, Marcus Brandsema
marcus@pcaust.net



Photo © Kate Andrews



PCA Director Marcus Brandsema (far right) before the Senate Committee panel on February 21st 2017.



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