## **Protected Cropping Australia Conference**



28-30 JULY 2025 ADELAIDE CONVENTION CENTRE

Growing profitably and sustainably

## **PROGRAM** Growing Profitably and Sustainably



\*\* Program subject to change at the discretion of the PCA Conference 2025 Program Committee \*\*

Monday, 28 July 2025				
9.00am – 2.00pm	Hall H			
From 2.00pm	Registration and Exhibition Open	Hall H		
2.00pm -3.30pm	2.00pm -3.30pm Tomato Brown Rugose Fruit Virus Workshop Chair – Andrew Tout			
3.30pm - 3.45pm	Break			
3.45pm – 5.30pm     Ag Tech & Startup Alley     Hall H       Chair – Chris Wilkins     Chair – Chris Wilkins     Chair – Chris Wilkins				
5.30pm – 7.30pm	Welcome Reception	Hall H		

		esday, 29 July 2025		
	Registration Open (arrival tea and coffee)			
07.00am – 8.00am	Sponsored Breakfast – Warren Davies – The	e Unbreakable Farmer		
From 8.00am	Exhibition Open		Hall H	
8.30am – 8.45am	Welcome & Acknowledgement of Country	Des Dowling MC)	Hall C	
	Andrew Mcillwain (PCA Deputy Chair)			
8.45am – 8.55am	Opening Address:		Hall C	
	Zak Iqbal (PCA Conference Chair)			
8.55am – 9.00am	Naming Rights Sponsor Address TBC		Hall C	
9.00am – 10.30am	Keynote Panel Presentations & Panel:		Hall C	
	<ul> <li>Levi Nupponen – Agrology Pty Ltd (P</li> </ul>			
		ven & Glasshouse Consultancy (Presentation & Pa	nel)	
	Anna Drake – Rabobank (Panel)			
	Steve Marafiote – Sundrop Farms (P	anel)		
	Chair – Andrew McIlwain			
10.30am – 11.10am	Morning Tea and Exhibition		Hall H	
11.10am – 12.45pm	Concurrent Sessions	Hall A		
	Hall C	Hall B		
	Ag Tech Innovation (Robotics, AI,	Climate, Energy & Renewables	Grower Workshop	
	Automation)	Climate control (incl. lighting)	Growing for Profit	
			<ul><li>Chair – Graeme Smith</li><li>Paul Omodei</li></ul>	
		Session Sponsored by <b>DENSO</b>		
11.10am – 11.30am	25. Artificial Intelligence and Agricultural-	16. Engineering Sunlight for the	Levi Nupponen	
	Technologies in Protected Horticulture:	Horticulture Industry		
	Trends, Challenges, and Opportunities	Amity Bliss, LLEAF Pty Ltd		
	Md Shahiduzzaman, University of New			
11.30am – 11.50am	<i>England (UNE)</i> 43. Bioscout - Helping farmers see the	62. The underestimated importance of		
11.30diii - 11.30diii	unseen	controlled air movement through the canopy		
	Charles Simons, Bioscout Australia	for more active, more healthy and more		
		sustainable crops		
		Ton Habraken, Ludvig Svensson BV		
11.50am – 12.10pm	1. How is a Greenhouse AI built	21. Boosting crop yield in protected cropping		
· · · · · ·	Paul Voutier, Ambit Robotics	systems with carbon		
		, Amrutha Vijayakumar, University of New		
		England, Armidale		

12.10 pm – 12.30 pm	71. Unpacking the findings of two recent berry trials to improve traceability, consumer engagement and streamlining the cross-border inspection process <i>Greg Calvert, Freshchain</i>	5. Optimal Climate Control in Greenhouses: The Importance of Double Screens Carmen Berkhout, Ridder		
12.30 pm – 12.50 pm	<ul> <li>Grower Panel discussion - Growing</li> <li>Profitably and Sustainably (12.30 – 1.10pm) <ul> <li>Giacomo Pippo, Fresh at Heart</li> <li>Jo Van Niekerk, Boomaroo Nurseries</li> <li>Paul Millett, Invertigro</li> <li>Angus Murray, Cann Group</li> </ul> </li> <li>Chair: Jack Mooney</li> </ul>	47. Smart Farm Management System: Enhancing Efficiency and Sustainability through an Online Dashboard Mark Cardamis, UNSW		
12.50pm – 1.45pm	Lunch and Exhibition Open			Hall H
12.50pm - 1.45pm	Young Researcher R&D Presentations (sponso Chair SP Singh	ored by Australian Society of Horticultural Scien	ice)	Hall H
1.45pm – 3.00pm	Concurrent Sessions			
	Hall C	Hall A	Hall B	
	Building Resilient Profitable Businesses Chair – Jack Mooney	<b>Food Safety</b> Chair – Michelle Mak	Grower Works Irrigation and I	hop Fertigation Basics
1.45pm – 2.05pm	10. Unlocking the key drivers of business profitability Paul Omodei, Planfarm Donna Lucas	27. Meeting the Challenge: Navigating Increasing Sustainability Requirements in Food Safety Certification Jane Siebum, Freshcare	Chair - Tony Bundock Bjorn Baker, Gakon Netafim Tony Bundock, Protected Cropping Australia	
2.05pm – 2.25pm	46. Lessons from the Field: Sales Strategies for Building Profitability in Horticulture <i>Georgia Stormont, Curious Georgia Coaching</i>	12. Food safety risk management in protected cropping systems Sukhvinder Pal Singh, NSW Department of Primary Industries and Regional Development	Alastair McLe	an, Powerplants
2.25pm – 2.45pm	53. Eating with your eyes Wil Haber, Envirotec Horticultural Structures	<b>Business Management &amp; Labour Efficiency</b> Chair- Chris Wilkins 23. Skilling the Way to Labour Efficiency, <i>Navtej Bal, Ironwood Institute</i>		
2.45pm – 3.05pm	34. Attracting multi-generational talent in a competitive world: How can protected cropping continue to encourage capable people into the industry? <i>Speaker TBC</i>	24. Protected Cropping Trends and Insurance Insights from Europe, <i>Marie Groenhof,</i> <i>Greenhouse and Horticulture, Hagelunie, the</i> <i>Netherlands (pre-record)</i>		
3.05pm – 3.35pm	• Dr Len Tesoriero, Crop Doc Consulting	ission		Hall C

	<ul> <li>Jasper Verhoeven, Royal Brinkman</li> <li>Chris Millis, Flavorite Hydroponic Toma</li> <li>James Bertram, Rijk Zwaan Australia P</li> <li>Andrew Redman, Perfection Fresh Aus</li> <li>Manus Thoen –75. <i>Enza Zaden Hypers</i></li> <li>Chair: Andrew Tout</li> </ul>	ty Ltd	RFV on Tomato	
3.35pm – 4.15pm	Afternoon Tea and Exhibition			Hall H
4.15pm – 5.30pm	Concurrent Sessions			
	Hall C	Hall A	Hall B	
	IPDM & Biosecurity Chair – Steve Coventry Session Sponsored by Syngenta	<b>Pollination</b> Chair – Zak Iqbal	Nutrition & Irr Chair – Daniel I	•
4.15pm – 4.35pm	11. Effective management of Tobamoviruses (Tomato brown rugose fruit virus & Cucumber green mottle mosaic virus) in greenhouse horticulture <i>Len Tesoriero, Crop Doc Consulting Pty Ltd</i>	26. Evaluating stingless bees and flies as pollinators for glasshouse strawberries Claire Allison, Hawkesbury Institute for the Environment, Western Sydney University	Irrigation Capa for Sustainable	or the Future: Building city in Intensive Horticulture Growth in Coastal NSW , Local Land Services
4.35pm – 4.55pm	15. Banker Plants in IPM: A Useful Tool But Not A One-Size- Fits-All, <i>Anita Marquart,</i> <i>Biological Services</i>	28. Pollination in protected strawberries - pollen requirement, alternative pollinators, and CEA environments <i>Melissa Broussard, The New Zealand</i> <i>Institute for Plant and Food Research, Ltd</i>	protected crop	nanobubble technology for ping anobubble Agritech
4.55pm – 5.15pm	38. Genetic defence mechanism for tomato varieties Highly Resistant (HR) to ToBRFV <i>Manus Thoen , Enza Zaden Australia</i>	42. Sonication unzips floral anther trichomes boosting pollination and tomato fruit size Christopher Cazzonell, Hawkesbury Institute for the Environment, Western Sydney University	and sustainabil production at c	ation: unlocking higher yields ity in greenhouse cucumber different EC and K levels , Western Sydney University
5.15pm – 5.35pm	6. Green and Clean: Mastering pest management and hygiene in horticulture Jasper Verhoeven, Royal Brinkman	30. Optimising honeybee pollination in protected apple orchards Lisa Evans, Plant and Food Research	Sustainable Egg	And Environmental Gains from gplant Fertigation <i>lam, Western Sydney</i>
5.35pm – 6.35pm	Networking/Poster Event – Light refreshment	is served		Hall H

	Wedr	nesday, 30 July 2025		
From 7.00am	Registration Open (arrival tea and coffee)			
From 8.00am	Exhibition Open			Hall C
8.30am – 9.10am	Plenary:			Hall C
	Tristan Kitchener, Kitchener & Partners Pty Ltc	1		
9.10am – 9.50am	Plenary:			Hall C
	Lee Stiles, Secretary, Lea Valley Growers Assoc			
9.50am – 10.30am	Plenary Panel - Understanding Consumer & R			Hall C
	Tristan Kitchener, Kitchener Partners F	Pty Ltd		
	Lee Stiles (Virtual)			
	Claire Mcclelland, Fresh Produce Allia	nce		
	<ul> <li>Paul Millett, Invertigro</li> <li>Chair –Tristan Kitchener</li> </ul>			
10.30am – 11.10am	Morning Tea and Exhibition			Hall H
11.10am – 12.10pm	Concurrent Sessions			Пан П
11.10am – 12.10pm	Hall C	Hall A	Hall B	
	(Protected Cropping Research,	Sustainability & Waste Management	Emerging Crops and Technologies	
	Development Program)	Chair – TBC	Chair – Elio Jovicich	
	Chair - Gordon Rogers Hort Session Sponsored by			
11.10am – 11.30am	17. Introducing horticulture's new protected cropping program: Growing horticulture through protected cropping innovation <i>Gordon Rogers, Applied Horticultural</i> <i>Research</i>	76. Agricultural plastics – what is the future? Anne-Maree Boland – RMCG	64. Strengthening Northern Australia's horticulture through protected cropping pathways to adoption Elio Jovicich, Department of Primary Industries	
11.30am – 11.50am	<ul> <li>Panel Moderated by Gordon Rogers featuring: <ul> <li>Alvaro Vidiella (Costa)</li> <li>Jim Madden (Flavorite)</li> <li>Folco Faber (Apex Greenhouses)</li> <li>Ian Goodwin (Ag Vic)</li> <li>Stephanie Tabone (AHR)</li> <li>Siddarth Jadhav (Polybee)</li> </ul> </li> </ul>	29. Eliminating Single-Use Plastics in Hydroponic Production: A High-Impact Shift from Plastic Pots to Ellepot Paper Pots <i>Darran Stone, Ellepot</i>	22. Assessing the Australian native bush tomato (Solanum centrale) for greenhouse production <i>Michelle Mak, Western Sydney University</i>	
11.50am – 12.10pm	Panel as above	ТВС	63. Polyhouse for Sub-tropica	in the Lockyer shows Potentia I Summer

			Heidi Wiggenhauser, Department of Primary Industries
12.10pm – 12.45pm	<ul> <li>Sustainability – Challenges &amp; Opportunities i</li> <li>Ed George, Redpath &amp; Elite Tunnels</li> <li>Anne-Maree Boland, RM Consulting G</li> <li>John Baker, Perfection Fresh Australia</li> <li>Chair – Alastair McLean</li> </ul>	Group	Hall C
12.45pm – 1.45pm	Lunch and Exhibition		Hall H
1.45pm – 2.45pm	Mixed Sessions		
	Hall C	Hall A	Hall B
245	<ul> <li>Medicinal Cannabis Forum</li> <li>Chaired by Angus Murray (Cann Group</li> <li>Limited) and featuring: <ul> <li>Ricarda Jost (La Trobe University)</li> <li>Lennard Garcia-de-heer (Southern Cross University)</li> <li>Matthew Dent (Cannabiz Australia)</li> <li>Lydia Doherty (Green Farmers Aus)</li> <li>Brad Gallard (Medtec)</li> </ul> </li> </ul>	<ul> <li>Berries Forum</li> <li>Chair - Sandy Shaw</li> <li>74. How can automated insect monitoring technology enable site specific berry pollination management? <i>Alan Dorin, Monash University</i></li> <li>Other talks TBC</li> </ul>	Grower Workshop Managing pests and diseases in the greenhouse Chair - Andrew McIllwain • Stephanus Malherbe, Biological Services • Steve Coventry, Bugs For Bugs • Eugene Chau, Rovensa Next • Jasper Verhoeven, Royal Brinkman
2.45pm – 3.35pm	Concurrent Sessions		
	Hall C	Hall A	Hall B
	Pollination & Pest Management Chair - Elio Jovicich	Energy Efficiency Chair – Chris Wilkins	<b>Mixed Themes</b> Chair – Andrew Mcillwain
2.45pm – 3.05pm	32. Development of the Hoverfly (Eristalis tenax) as a Complimentary Managed Pollinator <i>Raylea Rowbottom, Seedpurity</i>	4. A transition to green energy Sohum Gandhi, Enriva Pty Ltd	Managing pests and diseases in the greenhouse 52. Multi-Action 3-in-1 Insecticide, Miticide, and Fungicide: An Ideal Solution for Integrated Pest and Disease Management Eugene Chau, Rovensa Next
3.05pm – 3.25pm	31. The use of Solitary Bees in Protected Cropping Katja Hogendoorn, the University of Adelaide	66. Climate screens: an indispensable tool for greenhouse growers to achieve more resilient, sustainable and profitable cultivation <i>Ton Habraken, Ludvig Svensson BV</i>	
3.25pm – 3.55pm	Afternoon Tea and Exhibition		Hall H
3.55pm – 5.45pm	Concurrent Sessions		
	Hall C	Hall A	Hall B

	Agronomy & Environment	Energy Efficiency	Grower Workshop
	Chair – Elio Jovicich	Chair – Chris Wilkins	Improving energy efficiency
3.55pm – 4.15pm	36. Coping with Hotter and Brighter Climates Graeme Smith, Graeme Smith Consulting	59. Resource Use and Sustainability Assessment of Australian Greenhouse Capsicum Production Jing He, Western Sydney University	<ul> <li>Chair - Matt Plunkett</li> <li>Ton Habraken, Ludvig Svensson Bv</li> <li>Jack Mooney, Provenance Propagation</li> <li>Alex Townsend, Choice Energy</li> </ul>
4.15pm – 4.35pm	37. Rock Solid Developments in the Grodan Research Department <i>Tico van Leeuwen, Grodan</i>	48. Optimizing Water, Energy and Production for Horticultural Success John van der Wilk, Stolze	
	Agronomy & Environment – continued	Market & Supply Chain, Chair – TBC	
4.35pm – 4.55pm	54. Growing Profitably and Sustainably Using Vento Tunnel Films, Increased Yields While Reducing Energy and Labour Costs with Self Ventilating Greenhouse Films <i>Robert Trenchard, Terrashield Pty Ltd</i>	60. The Food Frontier: Could the Asia Pacific Feed the World? <i>Alastair Maclean, Powerplants</i>	
4.55pm – 5.15pm	Pollination & Pest Management Chair – Elio Jovicich 20. Assessing Visual and Olfactory Cues for Enhanced Monitoring of Serpentine Leaf Miner Lok Nath Aryal, Macquarie University	56. Horticulture Goes Urban delivering knowledge to enable close to consumption production of perennial crops Samantha Baldwin, The New Zealand Institute for Plant and Food Research Limited	
5.15pm – 5.35pm	18. Varroa: the New Frontier of Honey Bee Pollination <i>Danny LeFeuvre, Australian</i> Honey Bee Industry Council		
5.35pm – 7.00pm	Free Time		
7.00pm – 11.00pm	Gala Dinner & Awards Presentation - Sponsor	red by Perfection Fresh	Hall FG

Thursday, 31 July 2025 Farm Tours – timings are estimated					
Tour 1 Times	ur 1 Times Tour 1 – Vegetable Crops Tour 2 Times Tour 2 – Mixed Crops				
5.45am	Depart Adelaide Convention Centre	7.00am	Depart Adelaide Convention Centre		
6.00am	SA Produce Markets	8.00am	Australian Grain Tech		
9.00am	TRL Produce	10.00am	PNLeav Greenhouse Builder		
11.00am	VocoFresh	12.00pm	Quality Harvest		
12.30pm (lunch)	Apex Greenhouses	2.00pm	Living Colour Nursery		
2.30pm	Adelaide Airport drop off	3.30pm	Adelaide Airport drop off		
3.00pm	Return to Adelaide Convention Centre	4.00pm	Return to Adelaide Convention Centre		

## All the Posters that will be on display in the Exhibition Hall.

Presenter	Organisation	Poster Title	Theme
Alastair Delooze	DENSO	35. Technology adoption: Developing the right foundations for success.	Ag tech (including the application of AI & Robotics)
Anshul Phaugat	Centre Of Excellence - Plants For Space, La Trobe University	61. Optimizing Hydroponic Mini Cucumber Cultivation: Enhancing Nutrient Management, Labour Efficiency, and Space Exploration	Crop management
Anu Jayaweera	Macquarie University, Sydney	73. Vibratory mating disruption as a potential tool for managing serpentine leafminer (Liriomyza huidobrensis) in protected cropping systems	Integrated Pest & Disease Management
Hussein Ibrahim	Zebbraagriculture	19. Enhancement evaporative cooling for greenhouses	Climate control (incl. lighting)
Maduni Wijethilake	RMIT University	68. A light diffusion radiative cooling film for high-yield protected cropping.	Emerging technologies
Mark Cardamis	UNSW	41. Leafeon: Toward Accurate Sensing of Leaf Water Content for Protected Cropping With mmWave Radar	Ag tech (including the application of AI & Robotics)
Md Sahadat Hossain	Applied Biosciences, Macquarie University	33. Identification of host plant volatile compounds for modifying adult pest behaviour of Liriomyza huidobrensis	Integrated Pest & Disease Management
Ricarda Jost	La Trobe University	65. Understanding nutrient use in Cannabis sativa L. to optimise cultivation in protected cropping environments	Climate control (incl. lighting)
Robert Spooner-Hart	Western Sydney University	39. Managed buzz-pollination of protected crops by native, blue- banded bees	Pollination
Sanjana Akter	Macquarie University	51. Life History traits of Liriomyza huidobrensis and its parasitoid (Neochrysocharis formosa) on different temperature	Integrated Pest & Disease Management
Ton Habraken	Ludvig Svensson Bv	44. Plant Empowerment: the road-map to sustainable horticulture! A Data-Driven growing philosophy to grow more sustainable and profitable	Climate control (incl. lighting)