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Welcome to our new Platinum Sponsor

As we move towards the second half of 2026, I am incredibly pleased to share that Protected Cropping Australia has entered into a new partnership agreement with Achmea Farm Insurance, who will come on board as Platinum Sponsor of PCA2027 and a major supporter of PCA more broadly over the coming years.

This partnership represents much more than sponsorship. Achmea Farm Insurance's commitment to our sector aligns strongly with PCA's ongoing focus on supporting growers to build resilient, sustainable and future-focused businesses. Through this collaboration, members can expect to see a greater emphasis on education and practical resources relating to risk management – an area that is becoming increasingly important for businesses operating in a rapidly changing environment.

Growers today are managing a complex mix of pressures. Climate variability and biosecurity threats sit alongside rising input costs, inflationary impacts, labour constraints and the need to make long-term infrastructure and expansion decisions. For many operators, investment in protected cropping systems, technology and scale brings significant opportunity, but also new risk and insurance considerations that need to be understood and planned for. Having trusted partners who understand agriculture, and who are willing to invest in education and long-term capability building, is critical.

Conference plans underway

PCA is excited to work with Achmea Farm Insurance to deliver meaningful opportunities



Luke Foster (General Manager Client Growth, Achmea), Julie Krieger (Executive Officer, PCA), Matthew Plunkett (Industry Development Officer, PCA), and Math Creemers (CFO, Achmea) at the announcement of Achmea Farm Insurance's major support for PCA and the 2027 conference.

for our members to strengthen knowledge, preparedness and confidence in this space.

At the same time, preparations for PCA2027 are already well underway, and excitement is beginning to build. The conference website is now live at www.pca2027.com.au, giving members, exhibitors and industry stakeholders an early look at what is shaping up to be another outstanding industry event.

PCA2027 will take place on the Gold Coast from July 26–28, 2027 and with the theme 'Growing What's Next'. The theme reflects the incredible pace of innovation occurring across protected cropping and the opportunities that lie ahead for our industry. From advances in technology and automation, to sustainability initiatives,

energy solutions, biosecurity preparedness and next-generation growing systems, the conference will focus on the ideas, people and partnerships helping shape the future of Australian protected cropping.

The Gold Coast Convention and Exhibition Centre provides an outstanding venue for the event, bringing together growers, researchers, suppliers, educators and policymakers from across Australia and beyond. While 2027 may still feel some time away, planning for an event of this scale begins early and we are already seeing strong interest from sponsors, exhibitors and speakers.

Our sponsorship and exhibition prospectus will be released soon, and we encourage businesses interested in being part of PCA2027 to keep an eye out for its release. Based on the enthusiasm we are already seeing, we expect significant demand for opportunities to be involved.

As always, thank you to our members, partners and supporters for your ongoing contribution to PCA and to the advancement of our industry. The future of protected cropping in Australia is bright, and we look forward to continuing to grow what's next – together.



The Gold Coast Convention and Exhibition Centre will host PCA2027, the PCA's conference that will be held in late July 2027. Photo Adobe Stock Photos.

Julie Krieger
Executive Officer, PCA
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Protected cropping innovation program moves forward

A major Hort Innovation-funded program is quietly reshaping what's possible in Australian protected cropping with automation, digital tools, and smarter growing systems moving from pilot stage into commercial reality across tomatoes, berries, avocados, and orchard crops.

The Growing Horticulture through Protected Cropping Innovation program, delivered by Applied Horticultural Research (AHR) in partnership with Hort Innovation's Hort Frontiers fund, is one of Australia's most ambitious and wide-ranging efforts to future-proof the protected cropping sector.

Covering multiple commodities, the program unites growers, researchers, and tech providers to tackle key challenges: labour, sustainability, energy, and smarter agronomy.

Now in its second year, updates from key partners show early wins for protected cropping growers.

Automation moving into full commercial deployment

A significant headline from the past year is the automated pollination technology developed in partnership with Flavorite Tomatoes, which has crossed the threshold from trial into full commercial deployment.

Trials of the technology confirmed consistent pollination rates, improved fruit set, and meaningful labour savings. It's a development that stands to benefit not just Flavorite, but the broader greenhouse tomato industry.

Flavorite is rolling out the units across its three tomato growing sites, marking the first time Australian tomato growers have had access to a commercially available automated pollination system.

Automated spraying has also progressed significantly, moving from pilot testing into operational deployment. Results have shown spray coverage and reliability matching or exceeding manual methods, with the added benefit of reduced chemical exposure for workers, a safety improvement that will

resonate with growers facing increasing WHS obligations.

On the packing and grading front, an automated line is undergoing calibration. Developers and engineers have taken a creative approach to improving grading accuracy, redesigning the system's algorithm to teach it 'what good looks like' rather than simply flagging defects. Phase-one testing is progressing, with further refinements underway.

National training hub opens its doors

In Virginia, South Australia, Apex Greenhouses has completed construction and commissioning of a state-of-the-art research and training facility, with the site now actively running yield and varietal performance trials under advanced production conditions.

Since its official opening in July 2025, the facility has hosted a stream of industry visitors, training events, and demonstrations, and is establishing itself as a genuine

Australia is operating in the future of growing media

Australia is often viewed as a market working to catch up with global trends in growing media. In reality, it is already operating ahead of them, claim global substrate experts, Jennifer Neujahr and Ted Buis.

The pressures Australian growers face today, distance from supply, reliance on imported materials, exposure to freight volatility, and the need to maintain consistency under shifting environmental conditions, are the same forces beginning to reshape horticulture worldwide.

These are not short-term disruptions. They are structural realities, and Australia has been navigating them for years.

The scale of change coming to the global growing media market underscores why this matters. Projections from Wageningen University & Research in the Netherlands, based on the study *Growing Media for Food and Quality of Life in the Period 2020–2050* by Blok, C., Eveleens, B., and van Winkel, A. (2021), indicate demand will rise from 116 million cubic metres in 2022 to 295 million cubic metres by 2050.

While Australia represents a smaller share of that global total, its demand is expected to increase steadily, particularly in high-value crops, protected cropping systems, and nursery production. The difference is not in the underlying drivers of the increases, but in their visibility in the industry. In Australia, these pressures are already tangible and immediate.

A key reason Australia feels these shifts earlier than many regions of the world is the nature of its supply chains. They are longer, more complex, and highly sensitive to disruption. Material availability can change quickly. Freight costs have a direct and often immediate impact on profitability. Alternatives to core media inputs are not always readily accessible.

As a result, Australian growers have been forced to think beyond simple material selection. The focus has shifted from optimising a single raw material toward building systems that remain stable when availability, freight costs, and quality fluctuate. In other words, how substrates are sourced, processed, and managed over time to ensure reliable production outcomes.

This has accelerated a broader industry transition toward media diversification. For decades, many growing media strategies were built around the assumption that one dominant raw material would remain widely available, economically viable, and operationally stable. That assumption is becoming increasingly difficult to defend.

Peat continues to play a role. Coir is widely used. Wood fibre is gaining traction. However, the most significant shift is not the rise or fall of any



Coir is widely used in protect cropping systems in Australia. Photo Adobe Stock Photos.

“...APPROXIMATELY 30 MILLION CUBIC METRES OF FUTURE GLOBAL DEMAND [FOR GROWING MEDIA] WILL BE MET BY MATERIALS NOT YET WIDELY USED TODAY.”

one material, but the move toward balance. Growers and suppliers are developing blends designed not only for crop performance, but also for supply security and consistency in the face of ongoing variability. The objective is not substitution for its own sake, but resilience at the system level.

Within this context, the development of local biomass-derived substrate components, such as wood fibre, composted bark products, forestry residuals, and other processed organic materials, represents one of Australia's most important opportunities.

The Wageningen report estimates that approximately 30 million cubic metres of future global demand will be met by materials not yet widely used today. For Australia, this often points to local biomass streams that could be processed into viable substrate components.

The potential is significant, but so are the requirements. Materials must be available at scale, capable of being processed into stable, uniform products, and able to deliver consistent performance across crops and production systems. Without these characteristics, they remain confined to small-scale trials rather than commercial adoption.

Growing cacao in Tassie

Chocolate maker Anvers, based at Latrobe in North West Tasmania, set the business a challenge: to grow the cacao tree (*Theobroma cacao*) at latitude 41 degrees south, far outside its preferred equatorial range.

“We are growing chocolate not to harvest a crop but to show where chocolate comes from,” says Igor Van Gerwen, Chocolatier and Brand Ambassador for Anvers. As well as making chocolate, Anvers is a major tourist destination attracting a steady stream of visitors with its shop, chocolate-making factory, small museum and busy café.

The small hexagonal glasshouse adjacent to the café houses five potted cacao trees with another five held in the nearby nursery. The trees were grown from seed imported into Tasmania from Far North Queensland and sown just over two years ago. At now around 1.8m high they are filling the glasshouse space with lush green growth.

Surprising Igor, one of the trees, the smallest, developed buds and began to flower this autumn with more buds forming. The early flowers were carefully fertilised and Igor is waiting to see if any fruit has set but explains it can take two to five years to generate a productive harvest.

“In their natural habitat, cacao is fertilised by a small mosquito, but we used a cotton bud,” he explains.

Cacao flowers are small and cream and produced in clusters from the trunk and branches. If seeds (known as beans) form, they are held in a large pod that over time ripens from green to orange, yellow, red and brown. The beans are fermented and dried to ultimately produce the sweet treat we call chocolate.

The trees in the glasshouse at Anvers are the variety ‘Trinitario’, from Trinidad, the only variety grown in Australia. This variety is a natural hybrid of ‘Criollo’ and ‘Forastero’, originating in 18th-century and accounting for around 10 per cent of all cacao produced today.

The seeds were sourced from Darryl and Jenny Kirk at The Australian Chocolate Farm at Shannonville near Port Douglas

in Queensland, who grow and produce chocolate “from bean to bar”.

Growing conditions

At Anvers, the trees are growing in 40cm black plastic pots in a fast-draining, long-term potting mix containing perlite and added minerals. They are watered frequently by an automated watering system and feed every three months with slow-release fertiliser. As cacao trees can reach 15-20m high in the wild, these trees will need regular pruning to maintain their size within the glasshouse. Cultivated cacao trees are usually pruned to maintain their height at 4-8m and grown under a tree canopy.

The compact glasshouse is also nestled under a tree canopy, mimicking the natural habitat for the trees. The glasshouse is maintained at around 25-30C and not allowed to drop below 18C at night. The humidity within the house is 60-70 per cent. A small air conditioning unit keeps the glasshouse at the right temperature year-round.

Colourful photographic panels on the exterior of the glasshouse tell the story of the origins of chocolate. The cacao used to create Anvers chocolate is sourced from Ghana and Peru. Igor is not expecting to be producing enough local Tasmanian cacao beans any time soon, but he is delighted with this early success.



Igor Van Gerwen is hoping to grow cacao in north-west Tasmania. So far, the plants are thriving and starting to flower.



Despite their extreme southern location, Anvers' cacao plants are starting to flower.



The small greenhouse is heated to keep the cacao plants comfortable year-round.

In LED-lit greenhouses, the top of the plant is often cooler and air circulation slower, which can decrease sap flow in the upper leaves.

Preventing tip burn in a hybrid LED tomato crop

Lighting company Signify shares the results of a trial in a hybrid tomato crop in the northern hemisphere with suggestions on how to prevent tip burn.