



## VegMech 2025 Year in Review

The VegMech project team is excited to share the highlights of a productive 2025.

The year commenced communicating outcomes and learnings from the 2024 Veg Mech US study tour to the broader industry, via industry updates, podcasts, Australian Grower Magazine articles and study tour videos.

A key success for the program was facilitating the first Ecorobotix ARA high precision sprayer into Australia in April 2025, with subsequent commercial adoption of this technology by vegetable growers. A major focus in 2025 was on grower engagement through field days and case study technology demonstration sites. Demonstrations of autonomous weeding and seeding machines and high precision smart spraying systems, were held in four states, allowing growers to see these solutions in action and hear from the growers trialling them. The Gatton AgTech Showcase in October 2025 brought together industry leaders, growers, and exhibitors from across the world, highlighting new and advanced technologies and continuing to expand the horticultural agtech community.

Additionally, the project was able to send a representative to Agritechnica in Germany, the world's leading agricultural technology fair furthering engagement with manufacturers to advance new agtech into Australia. Through collaboration, knowledge sharing, and industry engagement, the VegMech project continues to progress technology adoption nationally.

### 2024 Study Tour insights and communications

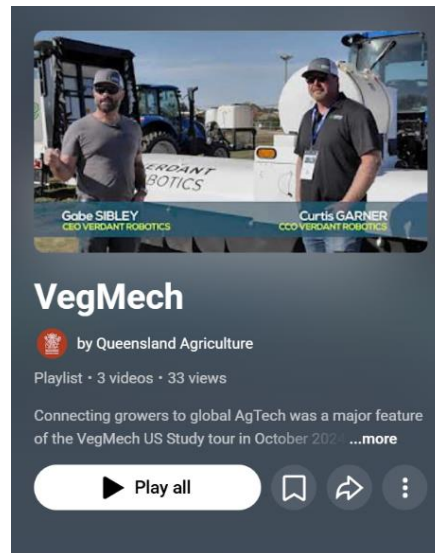
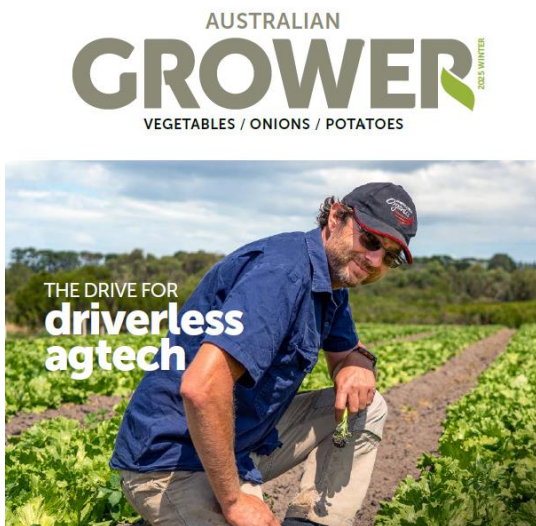
In 2024 the VegMech project facilitated a grower study tour to the USA including FIRA-USA. To share insights with the broader industry, participants contributed to a range of post tour communications industry updates, podcasts, Australian Grower Magazine articles and study tour videos.

*2024 Veg Mech study tour participant, Bryce Lamb, Wickham Farms, presenting his insights at the Lockyer Valley Growers Association update in February 2025.*





The tour increased awareness of global technologies that can contribute to efficiencies in labour and crop inputs and connected growers directly with global manufacturers. The feedback from tour participants was overwhelmingly positive. Weed management technologies were a hit with 75% of survey responses expressing interest in laser weeders, AI powered smart sprayers and precision mechanical weeders. The trip allowed these growers to see a range of field agtech and 75% stated they are likely to adopt a specific new technology identified through the tour. Additionally, 25% indicated they might consider adopting new technology in the future because of participating in the study tour. In terms of emerging or developing technologies, the cost of labour was at the forefront with autonomous harvesting technologies the priority.



Access these communication products by Ctrl +click on them.

*“The highlight for the project team was getting the group of growers in the same room as eight technology manufacturers through the exclusive breakfast event. Growers could hear directly from these companies on their latest technologies, both commercially available but also still in development.” – Julie O’Halloran*

### New technology into Australia

2025 saw the first of the Ecorobotix ARA high precision sprayers arrive in Australia through a field trial arrangement with DPI. This agreement was months in the making and a key outcome of the 2024 Veg Mech study tour to FIRA-USA which allowed for more detailed face to face negotiations with Ecorobotix. This first ARA sprayer was used for initial validation work at Gatton Smart Farm and demonstration at a range of industry field days in mid 2025.

This is a key role for the Veg Mech program, to identify and engage with technology manufacturers with solutions that can offset labour and crop input costs for vegetable systems. The ARA sprayer has the potential to reduce chemical inputs by up to 95%.



*First ARA high precision sprayer to arrive in Australia at DPI’s Gatton Smart Farm.*



Trialling the Ecorobotix ARA high precision sprayer in onions at the Gatton Smart Farm saw visible differences in early season crop growth. The plant by plant precision targeting of herbicides directly on weeds limited herbicide impacts early in the onion crop.



*Ecorobotix ARA 2 x selective herbicide applications targeting each weed*



*Ecorobotix ARA sprayer left: Conventional sprayer right*



*Conventional sprayer 2 x selective herbicide applications broadcast*

## Communications

### International Webinar

International engagement through the project continued with the 2<sup>nd</sup> Veg Mech webinar on 27th March 2025 focused on Advanced harvesting technologies for field vegetables. Facilitated by the DPI project team, attendees heard from James Rome - Head of Agriculture, East Scotland Growers, Ron van de Pavert - CEO/owner BrimaPack, Karl Thomas - General Manager, CYTHE and Adam Ballan - General Manager-Farms, Fresh Select. The discussion focused on the status and development of mechanised harvesting technologies, the potential for these technologies in vegetable systems and key considerations for transitioning to mechanised harvesting. The webinar had over 230 registrations from across 40 countries.

### Q&A

 Adam Ballan General Manager - Farms Fresh Select Australia	 James Rome Head of Agriculture East Scotland Growers Scotland	 Ron van de Pavert CEO/Owner BrimaPack Netherlands	 Karl Thomas General Manager AHS - Automated Harvesting Solutions, LLC USA
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*Webinar panel members during the Q&A session – Ctrl+Click to access the recording*



### Australian Grower Magazine Articles

The VegMech project has featured project progress in the AUSVEG Australian Grower Magazine in multiple issues throughout 2025.

- The Autumn issue article 'Connecting Australian growers to the latest global agtech trends and advances' discussed the 2024 US study tour that focused on automation to maximise labour and cost efficiency through technologies not yet available in Australia. [Autumn 2025 AUSVEG Magazine.](#)
- In Winter an article 'TAPG Ag Innovation Expo' focused on the Hagley field day in Tasmania where the project highlighted the FarmDroid technology and how the agtech is becoming a large part of the horticulture discussion in modern grower events. [Winter 2025 AUSVEG Magazine.](#)
- The Summer issue highlighted a small DPI led program that is closely aligned with the Veg Mech program on advanced harvesting mechanisation. This includes key insights from an incursion into Australia by two leading mechanised harvester manufacturers to understand Australian vegetable systems and workshop key considerations for automated and mechanised harvesting. [Summer 2025/2026 AUSVEG Magazine.](#)

### AusVeg Podcasts

In the AUSVEG Vegalogue podcast episode #27 Dan Hodges, Peninsula Fresh Organics discusses his agtech lessons from the 2024 Veg Mech study tour to the USA.

[R&D Edition: Agtech lessons from the US for Peninsula Fresh Organics](#)

In the AUSVEG Vegalogue podcast episode #33 DPI's Ian Layden, discusses integrating new agtech into grower businesses following the April 2025 Hagley field day and how agtech can be part of the solution for key issues facing industries such as input reduction, more produce uniformity, farming system changes and understanding of how new technologies should be considered when justifying capital expenditure.

[Vegalogue #33 Podcast discussion.](#)

### Technology Case Study Sites

The project team established technology case study sites in Victoria, Tasmania and South Australia in 2025. These sites have demonstrated integration of the Robotti autonomous implement carrier, FarmDroid autonomous seeder and weeder and the Ecorobotix ARA precision sprayer into commercial vegetable systems. Case studies showcasing grower experience with these technologies, potential savings, payback period and agronomic implications are in development. A big shout out to the grower co-operators involved with these sites as this technology validation in Australian systems wouldn't be possible without their cooperation and willingness to share and be engaged in this space.

#### FarmDroid (TAS)

The FarmDroid unit has been on farm in Tasmania this year with James Terry, Cloud Ag trialling its capabilities in brassicas, lettuce and Chinese cabbage. Early results highlight the machine's ability to mechanically weed almost 24 hours a day. Early testimonial is that FarmDroid's seeding consistency could help with plant more uniform plant densities establishment and early development.



*FarmDroid site at Cloud Ag in Tasmania*



## Robotti (VIC)

The Robotti autonomous platform was another technology trialled at Bush Organics in Victoria. The Robotti was used for autonomous inter-row weeding. Having the machine on site allowed the grower to try new ways of working and organising their farm operations. The capability of the autonomous technology to work with minimal supervision meant that their operation, which relies heavily on owner labour, was able to redeploy these resources elsewhere.



*Robotti at trial site at Busch Organics in Victoria with Kane and Matt Busch and Braden Hellmuth, Farm Concepts.*

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*“Without the VegMech Project, I wouldn’t have had the resources to give autonomous platforms a trial. These are now an area of interest that we are looking closely at as new technologies emerge.” - Kane Busch*

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## Ecorobotix ARA high precision sprayer (SA)

James Smith, Bowhill Produce in South Australia is trialling the Ecorobotix ARA high precision sprayer in onions. James has set up a site comparing early season herbicide applications using the Ecorobotix ARA sprayer and his conventional boom sprayer. James is collecting data comparing the two approaches, including chemical savings and yields as well as sharing his experience in integrating the technology on farm.



*James Smith, Braden Hellmuth, Farm Concepts and field day attendee at ARA field day in South Australia*

## Industry Updates and Field days

### Potato Link industry update April 2025 (WA)

Project leader Julie O'Halloran presented at the WA Potato Link update in April 2025. This included both potato and vegetable growers and focused on key learnings and insights from the 2024 study tour and progress on technology demonstration sites. 2024 study tour participant, Bryce Lamb of Wickham Farms joined remotely to share his insights from the 2024 study tour with WA growers.



## Hort Connections

At the Hort Connections Australian Vegetable Industry Seminar, DPI’s Ian Layden facilitated a grower panel session with vegetable growers Troy Qualischefski, Qualipac (QLD) and James Terry, Cloud Ag (TAS) to discuss ‘Automated Seeding and Weeding of Brassicas: Does it Work?’. With a focus on Automated seeding and weeding of brassicas the discussion went into areas like cost and viability of seeding versus transplants and the savings of not just labour but having more consistent crop yield.

[Link to the discussion panel. AVIS25 - 3: Veg Mech \(VG23003\) Automated Seeding & Weeding of Brassicas: Does It Work? Panel](#)

Hort Innovation, R&D Program Manager Tom McCue presented on the Veg Mech program at a plenary session at Hort Connections 2025. Tom’s presentation highlighted the industry need for autonomous and mechanised agtech, the global landscape and how the Veg Mech program is engaging internationally to accelerate agtech adoption here in Australia.

## Hagley field day (TAS)

The FarmDroid autonomous seeder and weeder was showcased at the Hagley field day in Tasmania in April 2025 including a live demonstration and presentations from the grower co-operators and project team members. James Terry of Cloud Ag outlined his experience in integrating the technology on farm and key learnings so far.

[Hagley Field Day Expo video.](#)

*FarmDroid being showcased at the Hagley field day with Ian Layden, DPI and James Terry, Cloud Ag in Tasmania.*



## Hort Connections field tour (QLD)

The project facilitated the first ARA smart sprayer into Australia in April 2025 as a demonstration unit to trial at the Gatton Smart Farm. This generated significant interest with four demonstrations of the Ecorobotix ARA high precision sprayer during the week of Hort Connections as well as updates on the Smart Farm and Veg Mech programs. This included the Hort Connections field tour group, a New Zealand grower group delegation, an onion grower delegation from across Australia and an international trade delegation. In total, over 100 attendees visited the site the week of Hort Connections to hear updates on the Veg Mech program and see the Ecorobotix ARA in action.



*Veg Mech and SmartFarm updates and demonstration of Ecorobotix ARA high precision sprayer, Hort Connections field tour*



**Schreurs & Sons field day (VIC)**

In July, the Ecorobotix ARA sprayer was showcased at a field day at Schreurs & Sons in Victoria. Thirty-six local growers and industry representatives attended to see how the machine’s vision systems and plant by plant precision targeting of chemical works in celery and leeks. The day included an update on the Veg Mech program, local grower experience with the ARA technology and a field demonstration of the machine in action in leeks.



*The ARA Smart Sprayer at the industry field day in Victoria.*

**Bowhill Produce field day (SA)**

In December 2025 and in conjunction with AUSVEG, James Smith, Bowhill Produce hosted a field day in South Australia to demonstrate the capabilities of the ARA smart sprayer technology. Eighteen local growers and industry representatives showed their interest in coming to see how the smart sprayer performed in onions. James delivered an excellent demonstration of all aspects of the machines operation from tank mixing, use of the tablet controller and precision targeting of the spray application.



*The ARA Smart Sprayer at the industry field days in South Australia.*

**Gatton AgTech Showcase**

The Gatton AgTech showcase held on October 15<sup>th</sup> and 16<sup>th</sup> saw approximately 1,500 visitors from across Australia and internationally. The event featured 18 live field demonstrations, 80 exhibitor booths and speaker programs and panel sessions focused on both field vegetable production and protected cropping systems. It showcased many of the technologies engaged through the Veg Mech project, giving industry an opportunity to see what is currently available and in development, connect with manufacturers and dealers as well as the broader horticultural agtech community.



Technologies ranged from drones, laser weeders, smart sprayers and mechanical weeders to protected cropping robots.

[Gatton AgTech Showcase Video.](#)

[AusVeg Gatton AgTech Showcase Video.](#)



2025 Gatton AgTech Showcase.

## Harvester Incursion

The Veg Mech project team is leading a one-year ‘Advanced mechanised harvester program’ which commenced in mid-2025. Through this program DPI and Hort Innovation have partnered with Western Growers Association (USA) to develop a roadmap to advance automated harvesting in Australia.

In October 2025 the project team coordinated an incursion by two leading international automated harvesting manufacturers, CYTHE ([CYTHE – First in our field](#) - USA) and SamiAgtech ([Sami Agtech – RELIABLE HARVESTING](#) - Canada), into Australia. CYTHE and SamiAgtech manufacturer robotic harvesting machines for broccoli and broccoli and cos lettuce, respectively. The incursion included visits to vegetable farms in Victoria and Queensland to understand how Australian vegetable systems currently align with these emerging technologies. Grower workshops were also delivered to update on status of development of these technologies and discussion of key considerations for transitioning to mechanised harvesting systems and potential farming system changes. The tour included visits to 7 different farms, engagement with a further six businesses and participation in panel sessions as part of the Gatton AgTech Showcase.



QLD DPI team with CYTHE and Sami Agtech representatives looking at current harvesting systems in Australia and presenting their technological solutions to Growers.



## Agritechnica 2025

DPI’s project leader Julie O’Halloran attended the 2025 Agritechnica in Hannover, Germany in November. As the world’s leading trade fair for agricultural technology, Julie was among nearly 500,000 visitors to see over 2,800 exhibitors showcasing the best of global agricultural technology. This provided an opportunity to identify new technologies of interest to the Veg Mech program, engage further with global manufacturers and progress negotiations for new technologies into Australia.

Julie attended as part of a larger delegation, participating in the first Australian pavilion at Agritechnica, Hannover which also showcased Australian agtech companies.



*DPI’s Julie O’Halloran meeting international partners and manufacturers while visiting Agritechnica in Hannover.*

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We sincerely appreciate the ongoing support of all stakeholders and look forward to continued collaboration. This program was funded by Hort Innovation through the Vegetable levy fund.

If you have any questions or require additional information, please don’t hesitate to reach out.

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