



Celebrating R&D adoption in Victoria's vegetable industry

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National Vegetable
Extension Network

VICTORIA - NORTHERN,
WESTERN & SOUTH EASTERN

Introduction

Victoria's vegetable industry embodies innovation and resilience. It continues to meet consumer demand in both domestic and international markets despite numerous challenges, driven by the passion of its growers to supply high quality produce and ensure the industry remains strong well into the future.

Key to this success is the ongoing investment in research and development (R&D) to bolster the productivity, profitability and sustainability of Victoria's vegetable industry.

It has been five years since the National Vegetable Extension Network (VegNET) projects in Victoria introduced the R&D Adoption Award at the AUSVEG VIC Awards for Excellence to highlight how the state's growers are benefiting from R&D outcomes on-farm – whether it's pre-harvest, post-harvest or sharing key findings with the wider industry.

The VegNET projects in Victoria are delivered locally in the northern, western and south-eastern regions by RMCG through VG19012 and in Gippsland by Food and Fibre Gippsland through VG19013. These projects are funded by Hort Innovation using the vegetable research and development levy and contributions from the Australian Government.

In this case study we take a look back at the evolution of the award and the winners who have applied R&D on-farm with great success.

Highlighting the role of R&D in veg production

Hort Innovation works with industry to invest the vegetable levy and Australian Government contributions into R&D initiatives to help growers be as productive and profitable as possible through the Hort Innovation Vegetable Fund.

The significant investment in R&D for the vegetable industry – usually more than \$10 million on an annual basis – led VegNET Victoria to develop and provide support for a dedicated R&D Adoption Award at the AUSVEG VIC Awards for Excellence in 2017.

“We were keen to highlight the important role of R&D in helping vegetable growers to improve their productivity and profitability on-farm, and strengthen the partnership between AUSVEG VIC and the VegNET projects in Victoria,” VegNET (Northern, Western and South-Eastern) Program Coordinator Carl Larsen explained.

Now in its fifth consecutive year in 2021, the importance of research translating to on-farm outcomes for growers was further bolstered through the integration of the Industry Impact category with the award from 2019 onward. The R&D Adoption and Industry Impact Award is now commonplace and sits alongside the coveted Grower of the Year category as part of the annual AUSVEG VIC Awards for Excellence.



Figure 1: The AUSVEG VIC Awards for Excellence celebrates the achievements of Victoria's vegetable industry, including advancements in R&D adoption on-farm. Image courtesy of AUSVEG VIC.

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The award recognises the R&D adoption achievements of growers and vegetable businesses as a result of the extension activities by VegNET to promote cross-regional collaboration and learning.

The award is now synonymous with industry leaders and influencers who demonstrate a commitment to, and gain value from, levy funded R&D projects.

"The AUSVEG VIC Awards for Excellence shines the spotlight on some of the highest achieving Victorian vegetable and potato growers in the industry," AUSVEG VIC Executive Officer Tim Withers said.

"The R&D Adoption and Industry Impact Award reflects our industry's enthusiasm for innovation in vegetable production, which is made possible by the range of industry-funded R&D projects which are being undertaken and applied on-farm both in Victoria and around Australia."

Award criteria

The criteria for the AUSVEG VIC R&D Adoption and Industry Impact award are:

- A vegetable grower who has demonstrated a commitment to industry funded research and development (R&D) projects.
- A grower who has hosted field trials, demonstration sites or events or contributed to a Project Reference Group for the benefit of the broader vegetable industry.
- A grower who has changed practice or adopted new technology on-farm because of being involved in a levy funded R&D project.
- An individual or business that has invested in creating or has implemented a system of technology or business practice outside of the industry norm.
- The technology or practice has resulted in a significant contribution to best farm practice or in cost savings through the value chain.
- A grower who is perceived by the industry and their peers as a leader and influencer to improve the productivity, profitability and sustainability of the vegetable industry beyond their individual business.



Figure 2: Andrew Fragapane hosting a field day at his farm in Werribee South, Victoria, in 2017.

2017 Winner: Andrew Fragapane, Fragapane Farms

Andrew Fragapane, a third-generation vegetable grower at Fragapane Farms in Werribee South, was the inaugural winner of the R&D Adoption Award in 2017.

Andrew hosted a demonstration site as part of the Soil Wealth ICP project to trial reduced tillage, cover crops and compost application on his farm, which produces a range of leafy vegetables and brassica lines.

A minimum tillage approach benefited the root structure and size of his crops, and led to savings in time, inputs, fuel and labour. The trial results encouraged Andrew to adopt a low tillage system on-farm with a greater focus on preparing his soils for upcoming crops, particularly through the use of compost to boost organic matter.

Andrew also helped to share the findings of these trials through field days hosted on the property.

"If you've got a cost saving in preparing your soil and still get the same result, I think that's a gain," he said.

"I believe compost is a great thing for your soil, for organic carbon and organic matter."

Find out more in this video: <https://youtu.be/jsde8JYo8A8>.

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Figure 3: Schreurs & Sons Technical Director Dr Marie-Astrid Ottenhof, with Production Manager Mark Bell, inspecting the electrolysed oxidised water (EOW) sanitation system installed at their packing facility in Clyde, Victoria.

2018 Winner: Schreurs & Sons

Using innovations in chemical-free sanitation for fresh produce led Schreurs & Sons to receive the R&D Adoption Award in 2018.

Schreurs & Sons is a third-generation business based in Clyde and Tarwin which produces celery, leeks and baby leaf lines for both Australian and international markets.

The business implemented an electrolysed oxidising water (EOW) system to wash its produce post-harvest and meet stringent food safety and quality standards in an environmentally friendly way.

The system is conducted through electrolysis, which generates a healthy cocktail of natural sanitising compounds. The system is self-monitoring and all that is needed is a small amount of table salt, added daily, to help speed up the reaction.

The system has since reduced the bacterial count in the wash water and helped to extend product shelf life. As it produces sanitisers from naturally occurring salts, it provides a safer alternative to pure chlorine systems.

“Using the electrolysed oxidised water technology to wash our pre-pack produce has been extremely beneficial for us, not only from a food safety and running cost perspective, but also for the environment, as it is considered a chemical neutral process,” Schreurs & Sons Director Chris Schreurs said.

“Being recognised for adopting this technology through the R&D Adoption Award in 2018 was an honour and a great opportunity for this technology to be brought to the attention of a much wider audience. We have had many growers and processors visit our site to look at the technology since implementation and several have successfully adopted it themselves.”

Watch more from the Schreurs & Sons team in this video: <https://youtu.be/cB77GbXpyps>.

2019 Winner: Mark and Darren Schreurs, Peter Schreurs & Sons

Established in 1964, Peter Schreurs & Sons produces leeks, parsnips, raddichio, Asian vegetables and cos lettuce in Devon Meadows.

Mark and Darren Schreurs were congratulated on their approach to sustainable production practices when they received the R&D Adoption and Industry Impact Award in 2019.

The use of cover crops and a variety of integrated crop protection methods allowed the growers to improve their soil quality and reduce the amount of chemical used to control pests and diseases.



Figure 4: Mark Schreurs from Peter Schreurs & Sons in Devon Meadows, Victoria, has trialled mixed species cover crops which have shown good weed suppression, particularly for nutgrass.

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This included implementing integrated pest management (IPM) practices which combine cultural, chemical and biological approaches to sustainably manage pests, reduce resistance and produce a cleaner product. Mark and Darren have witnessed how the use of beneficial insects can effectively control pests and create a more biodiverse natural environment and resilient crops.

The use of organic inputs and mature compost to support soil biology has also made it easier for the growers to prepare the ground and better manage pests and diseases.

“Our work in IPM, cover crops and soil biology is constantly evolving and we're a lot deeper into it now. We have ramped it up to use things like multi-species cover cropping – we always strive for a living root in the ground, not fallow ground, so we can keep something alive in the soil at all times,” Mark said.

“We use less tillage and we're crimp rolling crops, which has worked very well for us. There is a big focus on getting as much biodiversity as possible.

“It was nice to be acknowledged through the R&D Adoption and Industry Impact Award. We like to share our knowledge with others and we're very open about what we do. If we can share ideas, see what others are doing and adopt their ideas too, it's a winner for everyone.”

Hear more from Mark and Darren in this video:

<https://youtu.be/8Q8Lgslslyl0>.

2021 Winner: 2020 East Gippsland Vegetable Innovation Days (EGVID)

After being postponed in 2020, the AUSVEG VIC Awards for Excellence returned in 2021 where the R&D Adoption and Industry Impact Award was presented to EGVID 2020.

While EGVID 2020 was originally set to attract over 1,000 local and international visitors to Lindenow and coincide with the International Spinach Conference, organisers were faced with the decision to postpone the event due to the evolving COVID-19 pandemic.

Fortunately, the demonstration site successfully transitioned to a virtual event to help connect vegetable growers and industry members in Australia and around the world who could no longer visit the site in person.

Spanning over two hectares, the EGVID demonstration site showcased more than 20 vegetable crop types and around 2,000 varieties ranging from lettuce and baby leaf varieties to broccoli, cabbage, cauliflower and more.



Figure 5: EGVID 2020 received the R&D Adoption and Industry Impact Award at the 2021 AUSVEG VIC Awards for Excellence.

A strong virtual presence was achieved through social media and an online video series which helped to capture the extensive trial site. The videos can be accessed on the AUSVEG website at <https://ausveg.com.au/innovation-days-search/>.

“R&D is so important to support growers to develop and ensure our industry can continue to produce safe, clean, fresh produce for our population. It also shows the younger generation that our industry is progressive and it helps attract them to this sector,” EGVID Director Stuart Grigg said.

“To receive the VegNET award makes those late-night emails, frustrations, worries and joy all worth it. For the organising committee to get recognition for their collaboration is the icing on the cake.”

A video of the highlights from the 2021 AUSVEG VIC Awards for Excellence, including the announcement of the R&D Adoption and Industry Impact Award, is available here: <https://www.ausvegvic.com.au/awards-for-excellence/>.