Queensland Strawberry farmer wins Australian Organic Farmer of the Year

Jane Richter, Communication Manager, Berries Australia

Growing consistently high-quality fresh produce in today's challenging climate is definitely part science and part art. When you add the complication of growing to a certified organic standard, you have to think very creatively about ways to tackle some of the production challenges you face.

Brendon Hoyle from Ashbern Farms, a dual location strawberry business in southern Queensland, was recently named as Australian Organic Farmer of the Year, partly for his unusual method of managing the sucking insect Rutherglen bug in the 4.2-hectare organic part of their strawberry business at the Glass House Mountains.

In a radical innovation, Brendon uses an industrialsized vacuum machine mounted on a tractor to literally 'suck up' the Rutherglen bug and other pests from the strawberry rows. This innovation allows the farm to continue organic production without the use of pesticides into a time window when traditionally these pest numbers explode due to the warming temperatures of spring.

The bug vacuum is only used for a few weeks at the end of the Sunshine Coast winter strawberry growing season, carefully timed to avoid periods of the day where beneficial insects like honey bees are most active. If the Rutherglen bug is bad, they run over the crop every couple of days. The first pass generally picks up a fair amount of leaf litter, so the screens need to be decluttered a few times.

"The morning time is generally not that good for the Rutherglen bug activity, so we try to leave it to later in the day when the bees have stopped but there is still some warmth left in the day. The Rutherglen bugs sit on the fruit until late afternoon, whereas they seem to move well under the canopy or even under the plastic in the evening," explains Brendon.

Each season is different for pest pressure, but in the 2022 season this innovative way of tackling Rutherglen bug enabled the organic production to continue all the way to the effective end of the season in mid-October, giving the farm four additional weeks of viable high-quality production. The bug-sucker will also kill any other insects that are in the crop like Queensland Fruit Fly.

Brendon first saw a similar piece of equipment in use on a strawberry farm in California back in 2015, and with the help of some blueprints sourced from the internet one very handy team member fabricated a single row prototype to do a proof-of-concept, which is always a good idea when you are innovating. It worked and so a larger three-bed machine was made which operates via the Power Take-Off (PTO) at the back of a 50HP tractor. It also has an external hydraulic motor as it needs a lot of oil flow, and apparently it sounds like a Boeing taking off so good ear-protection is a must!

The farm also uses a significant number of beneficial insects, and to keep across the pest life cycles and populations almost daily crop scouting is needed. This means that the farm has developed significant in-house expertise to manage the day-to-day implementation of their program, supplemented by expert advice from a local agronomist and the IPM insect suppliers.



Australian Organic Farmer of the Year, Brendon Hoyle from Ashbern Farms in Queensland accepting his award from Nick Koch, Corteva Agriscience, 'Farmer of the Year' Award Sponsor. Photo credit: Australian Organic Limited



The bug vacuum unit can cover three rows in a single pass. Photo credit: Jane Richter



"You have to have an intimate knowledge about the pests – what's going on in the crop, what's going on in the weather – to try and help predict what's coming your way. This last year we used up to eight different beneficials. We had a lot of aphid activity which was a significant issue and did wasp releases several times across the season."

It all comes down to experience and timing – timing is everything.

Experience built up over the last few years has enabled the farm to be able to start anticipating likely pest issues before they occur, meaning they can take preemptive action and gain control over the population numbers more quickly.

"With Rutherglen bug, we've had some big infestations come in on the westerlies. You can pick up within hours when they've arrived, and if you can get on top of it right then and there, then it's only a matter of days before you can have it under control. If you don't know what you're looking for then the population just booms and it's too late."

"In some ways we're fortunate in our organic production as we're not able to use traditional chemical solutions, we've got to find other alternatives which forces us to be creative. And we can take those learnings over into our traditional production to reduce overall chemical use, and therefore input costs. There are a lot of techniques now that we honed in the organic section that we use over in our conventional production. In our conventional farm side, we're trying to get out of that mindset of spraying for fear – the 'what happens if I don't spray this' mentality."

"The focus in our organic production is to grow the best that we can and not the most that we can; we don't want to be the biggest, we just want to grow the best."

"We involve our team to help solve issues, drawing on their farming experiences and giving them a chance to be directly involved with a vested interest in the business."

"The Australian Organic Farmer of the Year award is such a privilege, and an achievement our team is proud to share for all the hard work, not only in growing but picking and packing, and tackling the challenges along the way," Brendon said.

The Organic Market in Australia

Australia remains the world's largest holder of agricultural land under certified organic management with over 23 million hectares of Aussie soil now organic. It's a number that reflects the rise in consumer preferences for organic and natural products that we've seen in recent years and that COVID-19 boosted in 2020.

The Australian organic food industry is continuing to boom. In 2021, the retail value of the organic market was estimated to be at least \$2.3 billion. Australia has seen a compound annual growth rate of 13% since 2012, with the number of certified organic operations increasing by 38% since 2011.

Consumer demand for organic food is growing at a rate of 20 to 30% per year. According to the 2021 Australian Organic Market Report, 80% of Australian food shoppers are receptive to purchasing organic food, with 63% of shoppers believing that "chemical free" is the primary perceived benefit of organic products and 9 million households purchasing at least one organic product in 2020.

About Australian Organic Limited (AOL)

Australian Organic Limited (AOL) is the peak industry body engaging with government and industry to promote the commercial and social interests of those who are certified and protect the integrity of the certified industry against fraud and misleading organics. AOL has been at the foundation of organics since 1987 and is identified by the most recognised mark in Australia, the Australian Certified Organic Bud trademark.

Organic food production is based on a system of natural farming that maintains and replenishes soil fertility without the use of pesticides or synthetic fertilisers and prohibits genetically modified organisms (GMOs). Once you have decided to convert to organic production, the next step is to choose an organic certification body. From the start of your certification application, it can take between 1-3 years to become certified organic for producers, dependent on previous farm chemical usage and history.



Acknowledgements

Part of this article has been reproduced with thanks from the interview with Jennifer Nichols published at ABC Rural https://www.abc.net.au/news/ rural/2022-12-04/bug-vacuum-strawberries-queensland-fruit-fly-australian-organic/101706370 and further information has been reproduced with thanks to Australian Organic Limited https://austorganic.com/brendon-hoyle-named-farmer-of-the-year-at-2022-australian-organic-industry-awards

Did you know that you can combine your organic and food safety certification audits to save time and money?

These Certification Bodies are approved to provide audits to the Freshcare Standards and organic standards, and may be able to provide a combined service for both audits.

Contact the Certification Body direct to discuss your options



07 3350 5706 info@aco.net.au www.aco.net.au



1800 630 890 fresh@ausqual.com.au www.ausqual.com.au



08 7231 7700 info@ncocertifiedorganic.com.au www.ncocertifiedorganic.com.au

AUTUMN 2023

AUSTRALIAN



EDITION 14