SPRING 2021

NASA

organic

## featuring

ORGANICS: THEN & NOW Reflections on the organic industry. pg%

BUILDING SOIL ORGANIC MATTER Hear what the experts say on building Soil Organic Matter. pg\*

YOU ONLY GET OUT WHAT YOU PUT IN

Soil Health: the perspectives from four Input Manufacturers. pg11

## ORGANIC INSIGHTS

THE MAGAZINE OF THE NATIONAL ASSOCIATION FOR SUSTAINABLE AGRICULTURE AUSTRALIA



/ Composed of Rhizophagus irregularis spores, symbiotic soil fungus, CONNECTIS has the ability to attach itself to crop roots to help them assimilate nutrients and water in larger quantities.

Untreated

/ CONNECTIS secures and optimizes plant emergence allowing uniformity planting, a guarantee of future production quality.

## STRAWBERRY PLANTS Untreated Control ated with ONNECTI

#### Total Strawberry Numbers at Harvest 130 -125 -CONNECTIS 120 -115 -110 -105 -100 Total Fruit No.

Independent Trial conducted in South Australia, by Staphyt AUS Ltd. Results showed an increase in total fruit numbers by 13 fruits per plot on average in comparison to untreated control, equating to approximately 13,000 more fruits per hectare. CONNECTIS was applied as a root dip prior to planting.





For registration and enforcement of your trade mark rights...

## Expert. Strategic. Responsive trade mark advice.

Protect your valuable intellectual property...your key business asset.

www.tm-logic.com.au

Brett Lewis +61 419 521 347



Tim Marshall / NASAA Organic Chair

## MESSAGE FROM THE CHAIR

Since its formation in 1986, NASAA has been at the forefront of organic industry development. NASAA was the first national organic industry association in Australia and the first to develop an Organic Standard – The NASAA Organic & Biodynamic Standard (NOS).

NASAA is acknowledged and trusted as a forerunner in international organic markets and trade, with strong IFOAM connections. The NASAA 'spring leaf' label is recognised as maintaining the highest standards of integrity. NCO (NASAA Certified Organic) certifies organic commodities to domestic and export market requirements.

In each decade, the message we must deliver changes subtly in response to changing awareness among producers and consumers. How will NASAA Organic remain relevant, and preserve its leadership in industry development, advocacy, education, policy and advice, in the current decade?

We are witnessing increased community consciousness and action about climate change, and personal health. Treatment of animals, social equity and fairness are also important in consumer food choices. These themes drive more people to seek out the products of sustainable agri-food systems which should be unquestionably good for organic. Unfortunately, we also see too-easy access to information, multiple competing voices, and sometimes misinformation.

Consumers can choose between almost 200 sustainability-related certification schemes.

One of the most rapidly growing claims is 'regenerative agriculture', a term that was first used by American organic pioneer, Robert Rodale. Enthusiasm for, and sense of community around 'regenerative' reminds me of the early days of NASAA and the rapid growth of organic. Regenerative can be an important concept in the delivery of climateresponsible and healthy food.

Unfortunately, both the term regenerative and certified organic are now under threat of hijack by industrial agriculture and marketing spin, including herbicide dependent no-till farming systems that claim to be regenerative. In the USA, we are witnessing the emergence of vast monocultures, hydroponics and Confined Animal Feed Operations (CAFOs) that make organic claims, and we already detect these pressures on our shores.

In response, NASAA Organic must find allies in regenerative agriculture, who understand the fundamentals of agroecology and holistic management. We should propose that truly regenerative systems must avoid degenerative inputs to the greatest extent possible, and that the ultimate achievement of regenerative agriculture is certified organic. / Continued from previous page

As we approach the tri-annual world congress of IFOAM - Organics International, an organisation with which NASAA has always maintained strong connections, I am again drawn to the four IFOAM principles of organic agriculture, which are equally applicable to Genuine regenerative agriculture.

- They are:
- Health: Organic agriculture should sustain and enhance the health of soil, plant, animal, human and planet as one and indivisible.
- Ecology: Organic agriculture should be based on living ecological systems and cycles, work with them, emulate them and help sustain them.

- Fairness: Organic agriculture should build on relationships that ensure fairness with regard to the common environment and life opportunities.
- Care: Organic agriculture should be managed in a precautionary and responsible manner to protect the health and well-being of current and future generations and the environment.

Tim Marshall, NASAA Organic Chair

### These days, soil health is a major issue for agricultural extension, and while chemical fertilisers and pesticide use is still mainstream, the importance of organic matter is well recognised.

Tim Marshall, NASAA Organic Chair





### MESSAGE FROM THE GENERAL MANAGER

As I write this, Australian States are in constant change with restrictions on opening and closing borders, and the need to remain flexible amidst the ongoing disruptions, has added another layer of complexity to doing ordinary business.

Alex Mitchell / NASAA GM

We are all coping with the seemingly, neverending changes in our home and working environments, caused by the ever-present COVID threat. I was confined to two rooms at the back of my home recently, undertaking home guarantine after being caught up in the snap lockdown of Darwin and surrounds. I had gone to Darwin to make a presentation at the 2021 Developing Northern Australia **Conference,** and one hour before registration, the lockdown was announced. I found myself scrambling to get a flight back home. With thanks to the quick response of NASAA Organic Staff (Kate and Lee), I was lucky enough to get on a flight the next morning, and then I was straight into 14 days home quarantine (released early, thankfully).

In emergency management, we are constantly reminded that usually the best decision is made at the time, with the information that is readily available. This is why it is always important to do an evaluation assessment, to document the information that was available at the time of important decisions. Namely, so you can go back and reflect on the lessons learned along the way.

It is with this mindset, that we have taken this Spring issue to 'take stock' and reflect a little on where we have been - and where we should be aspiring to go.

Much has changed. The technology available, the science and deeper understanding of the natural ecosystems that are within our farming systems.

In the last several issues, we have celebrated many long-standing businesses in our industry, and now we ask some more for this edition, to consider it all in the lens of 'Then and Now'. These are the voices who have lived the journey, and the variety of articles in this issue invite you to explore the varied perspective of their lived experiences. All valid, all authentic.

We have greater knowledge of the fundamental importance of our soils, as the building block for agricultural production. There is a growing understanding of the interconnectedness of things, and the need to promote and sustain natural systems and biodiversity for resilience and whole of farm operation. Driven forward by a deeper consciousness of agriculture's critical part in reducing carbon emissions.

We explore this momentum with some of our input manufacturers that are certified for inputs for organic production and in this edition, many who have been part of our journey to 'continual improvement'.

Hindsight may always be 20/20, but that is often because we now have the corrective glasses on that we didn't have before!

The many conversations I have had in NASAA Organic's recent opportunities to attend and run events and expos have lightened my heart. The passion, commitment and sacrifice those businesses are making today, contributes to the combined aspiration for continual improvement – a path worth following. Some of the strong messages from our trips and farm visits have highlighted;

- There is a growing commitment to certified organic and biodynamic, and the integrity of the certification system.
- Businesses and farms are constantly rethinking, reinventing and reconsidering the way they do their business.
- The flood of science in sustainable land management and the improved technology in sustainable manufacturing, is offering the Organic supply chain long awaited solutions to some of their problems.

Whilst we still have a long way to go, attitudes are changing, with customers and consumers being in 'boots and all', wanting information that informs their decisions.

NASAA Organic remains committed to listening to people, and assisting them in finding solutions, or finding a pathway to collaboration so the many can be part of the solution.

Enjoy this issue, and as always, we invite you to contact us, and tell your story.



#### If anyone has seen the great changes in agriculture in Australia and growing acceptance and understanding of organic and biological farming, it's NASAA Organic Chair, Tim Marshall.

Tim is well known within the certified organic sector, as the original co-founder of NASAA and contributing Board and Standards Committee member, and as an organic consultant and author of five related books.

Here, he shares his reflections on over 40 years involvement in growing the organic sector in Australia, including the genesis of certification and NASAA.

When I joined the Soil Association of South Australia (SASA) in 1974, there was no national organic organisation.

In the 1970's, organic food was very hard to get. There were farmers who were consciously producing organic produce, but few outlets. We grew it ourselves and used barter or swap tables at SASA or Natural Health Society meetings, or the few 'health food stores' that had a small section for organic produce. We drove to Harry Dreckow's dairy to collect raw milk, or to the Dunn or Beck family farms to buy stone ground flour. When Ali Fricker started Fricker's Food Conspiracy at Stall 72 in the Adelaide Central Market in 1972, it was the very first dedicated organic outlet in Australia. It is still operating as Central Organic, NCO Certification No. 9089R, operated by Stephan Oulianoff (aged 88) and son Ivan. Stephan was Ali's main supplier, from his 40-acre farm in Penfield, before he took over operating the stall in 1982. The Stirling Organic Market was also an early player, established in 1982.

Ali Fricker and other SASA members made the first Australian attempt to create a certification system, with the formation of the Organic Food Movement in the 1970's, but there were too few growers to sustain it, and it only lasted a few years.

My fourth-year biology teacher (later a colleague in TAFE horticulture) had given me Rachel Carson's book *Silent Spring* a few years before, and we were facing major problems with organochloride pesticides. Other pesticide scares then arose, including Alar, and aerial application of chemicals was controversial, but there were few sources of

We were reminded recently of the wonderful review of the legacy of Rachel Carson's work by Margaret Atwood in 2012, with the reissuing of *Silent Spring* after 50 years.



information outside of SASA newsletters and meetings, with *Grass Roots* magazine being an exception.

Australia had featured highly in early organic farming literature, with writers such as Colonel H. White, P.A. Yeomans and Sir Stanton Hicks playing a role. The first organisation in the world to use organic in its title, the Australian Organic Farming and Gardening Society, was founded in 1944, but over confidence

in chemical solutions diminished their influence. When Glyphosate (Roundup) arrived on the scene, with over-blown claims for both personal safety and efficacy, most farmers lost interest in organic. Indeed, we were regarded as nut cases. They said we were about 'muck and mystery' and thought we would all fail to produce yields without superphosphate, and our produce would be infested with pests and diseases.

Conventional agriculture was supremely confident that pesticides were safe. The use of registered pesticides was heavily defended by agriculture industry organisations and government, even DDT and Alar, and with the introduction of Glyphosate, they thought they had an ultimate tool for weed control.

From the organic side, we saw problems with inadequate testing of environmental effects, almost no testing of multiple pesticide contaminations or interaction, and an approach to pesticide application based upon routine, and not observation or need. We also perceived a very close association between industry and the regulator.

When I started work at CSIRO Division of Soils in 1979, a colleague invited me to the Institute of Chemistry meetings. The room was divided, literally, down the middle. Government and a very few activists sat on one side, industry on the other. The scientists on both sides over-relied, unreasonably, on the LD50 test to defend the safety of Glyphosate, despite its poverty as a true assessment of harm. LD50 is now discredited, and no longer used in chemical registration. My organic colleagues and I were called 'unscientific' and 'emotional' for daring to question LD50.

At this time, chemicals were only regulated at the point of sale. Once farmers took them home, there was no control on their use. This was before the era of occupational health and safety, and in any case, most farmers as sole operators would not have paid much attention to labels or instructions. Off-label use, overuse and other unwise use was commonplace and would later get many farmers into health trouble. Industry began to wake up when it was revealed that the life expectancy of Tasmanian apple growers was a decade less than the population average. In the 1990s a new round of chemical legislation was brought in to control the use of chemicals, such as the SA Chemical Use Act.

I mainly tried to stay away from chemical protesting, preferring to be known for a positive message about organic, rather than a negative voice, although I did work with anti-pesticide activists, such as Kate Short, and got involved with some chemical trespass issues at Mount Shank and elsewhere. I was, for 11 years, a member of the South Australian Ministerial Advisory Committee on Agricultural Chemicals (MACAC), but MACAC refused to acknowledge the existence of organic farming. I was the gardening representative.

Pesticides were controversial, but conventional scientists were even more deeply offended by the organic view about the importance of organic matter, and how plants feed. The conventional view was to supply water soluble nutrition, and the plant will know no difference. Deep hateful relationships developed between organic pioneers, such as Peter Bennett and Department of Agriculture officers responsible for chemical registration, and the agronomists who advised on their use. There were extreme views about plant nutrition on the organic side (such as transmutation of elements), but only a small minority. Organic was hotly disputed by most agricultural scientists, even though they had never studied it. The best scientists must have open minds. Jack Harris, my boss at CSIRO, and Albert Rovira, only encouraged me, privately, to pursue my interest in organic. On public platforms, Albert claimed organic could not feed the world. His research team of 21 people was funded by TOP fertiliser company.

#### / Continued from previous page

In November 1984, SASA ran the first scientific conference on organic farming in the Southern Hemisphere. We brought to Australia the first professor of Organic Agriculture, Dr Hardy Vogtmann, from Wageningen University, and Dr R.D. Hodges, from the UK. It was at the associated organic fair that Sandy Fritz from NSW ran a workshop to discuss her proposal of a national organic association to promote organic agriculture, support organic farmers, share scientific information and lobby government on agricultural policies, including research and marketing. The workshop was part of a series of state gatherings led by Sandy, which resulted in the formation of a national working group to examine further how the association would be structured and operate. This resulted in the establishment of the National Association for Sustainable Agriculture Australia (NASAA). Lionel Pollard, from WWOOF, had been asked by Victorian organic organisations to start a certification scheme, and handed the role over to NASAA, which was inaugurated in 1986 and started certifying in 1987.

Certification generated confidence in organic claims and organic food started to become more available, leading to what IFOAM calls the Organic 2.0 era (ifoam.bio/ about-us/our-history-organic-30). By 1990, NASAA was in negotiation with Uncle Tobys who would turn Vita Brits, the best-selling breakfast cereal in Australia at the time, into the first widely distributed organic product available in supermarkets across the continent. Sadly, Vita Brits is no longer organic, as it was involved in the first major organic fraud case in Australia. Rod May, Steph Goldfinch and I spent many days in a Brisbane courthouse, facing up to Queensland civil libertarian Terry O'Gorman and other highly skilled barristers. The grower was dobbed in by a farm worker and spent six months in prison.

Certification provided the confidence that supermarkets, major food manufacturers and distributors needed to invest in organic, and that consumers were required to pay premium prices for organic food. With the growth of organic, came additional incentive for false claims, reinforcing the need for certification and vigilance in the marketplace. The path to increased confidence in organic will not be complete, until we have achieved domestic regulation.



Certification provided the foundation for government to support organic exports, and the process that lead to the National Standard for Organic and Biodynamic Produce started in 1990, after NASAA executive members Sandy Fritz, Els Wynen, David Dumaresq and myself made multiple lobbying visits to Canberra, and achieved support from the Minister for Primary Industries, John Kerin, and Department of Agriculture bureaucrats Ruth Lovisolo and Lawrie Erwin. This achieved the first government supported standard for organic in the world, in 1993. The USDA National Organic Program was instigated before 1993 but was not fully operational until later.

NASAA went on to achieve many other firsts, including introduction of separate processor and input certification, the first southern hemisphere certifier to achieve ISO 65 accreditation and inclusion in the first batch of IOAS accredited certification bodies (in 1996, at the same time as the Swedish certifier, KRAV), amongst other firsts.

These days, soil health is a major issue for agricultural extension, and while chemical fertilisers and pesticide use is still mainstream, the importance of organic matter is well recognised. To the surprise of the critics from the 1970's, organic still survives, and is growing in extent and market share.

Other than SASA, organisations that were actively engaged in the Steering Committee that planned the formation of NASAA, and in the first few years of establishment, were Canberra Organic Gowers Society, the Organic Gardening and Farming Society of Tasmania, Henry Doubleday Association, East Gippsland Organic Agriculture Association, and Organic Growers Association of Western Australia. L to R Tim Marshall, Professor Hardy Vogtmann, and Chris Penfold (still a current NCO inspector)

## building soil organic matter

#### Building soil organic matter was a hot topic at the recent Australian Organics Recycling Association (AORA) conference.

With over 200 people attending (including 30 virtual attendees), the conference featured a diverse range of presenters, with topics spanning the theoretical to practical research projects and outcomes.

All pointed to the significant benefits of applying compost and soil amendments and encouraging microbial activity within various farm systems to build soil organic matter.

## Broadacre cropping was the focus for several presenters.

Compost for broadacre cropping has had a slower rate of adoption than other crops, but the potential benefits are immense.

When it comes to incorporating composts into broadacre systems, however, the need to overcome farmer perceptions and advocate for transformational change, was the main message from *Regen Soils*' **Declan McDonald**.

Prepared in collaboration with **Bill Gran**, from *Blue Environment*, Declan's presentation looked at the 'why' of composting, the 'what' and 'which' compost to apply, the method of application (surface or sub soil), and expected outcomes.

Declan says that informing farmers about the attributes of different composts and how to get good results, is key. He believes there is currently a poor understanding of the relationship between organic matter and soil structure, and its link to productivity.

He reinforced that incorporating compost

#### / Continued from previous page

into cropping systems assists nutrient use efficiency, water holding capacity, and deep soil structure; that it addresses subsoil constraints, access to deep water, and longterm climate change adaptation through building and maintaining soil carbon (humus).

Declan identified that there is a lack of commercial research and testing to measure changes in soil condition, but highlighted some positive <u>long-term research trials</u> funded by the Grains Research & Development Corporation (GRDC) and conducted through SE Australia, that looked at sub soil amelioration, through application of plant based and animal manures.

The research examines the effectiveness of different amendments and placement

Dr Greg Bender & Norman Marshall

FROM AUSTRALIAN SOIL MANAGEMENT ALSO SPOKE OF THE BENEFITS OF COMPOST, AS A COST-EFFECTIVE INPUT FOR BROADACRE CROPPING, THIS TIME IN NSW.

Australian Soil Management provides independent consulting advice on the registration and management of carbon sequestration projects. The company has undertaken EPA funded on-farm studies involving compost application with broadacre farmers in NSW for over 6 years. As Greg says, initially the research was carried out to "convince ourselves that it is possible to increase soil carbon on broadacre."

The studies consider both the science and agronomic synergy between compost use and carbon sequestration projects. The main goal has been to increase productivity and profitability, and deliver environmental co-benefits; storing more water, providing a buffer for droughts, and increasing nutrition. It also looks at the impact of stakeholder communication, and its importance in effecting change.

Greg says that they have observed spectacular results with compost use on six farms in Wagga and Forbes, Marra and Temora, so it has become "a no brainer." What they did find, however, was that the same compost applied to the six farms at the same rate, produced a variety of different strategies in both low, high, and medium rainfall zones, with soils ranging from sandy to clay. According to Declan, it found that compost application resulted in increased grain yields (by an average of 19% and 26% respectively), although the residual benefits were found to be shorter lived for animal manures.

Declan also pointed to past research carried out with Monash University, that looked at compost use on conventional dairy farms in South Western Victoria. This research again found that the best performing were those that were applying compost, with cropping land showing an improvement in deep soil structure.

positive results. He says that this highlights, each system is unique, and that systems respond differently.

Following Greg's presentation, **Norman** looked at the value proposition presented in increasing soil carbon from a farmers' perspective, and the link to compost.

Norman says that the Australian Financial Review recently identified soil carbon as the next big opportunity for Australia. He says the economic proposition is clear, as a bigger change is happening globally, to not only reduce emissions, but to draw down carbon in the atmosphere.

He also says that farmers can see the marketing opportunity, and there is a keener interest in soil organic carbon, how to build it, and how to manage it. Norman says that a farm can register as a soil carbon project, with the use of compost (as a non-synthetic input) now deemed an eligible activity.

Currently, Australian Carbon Credit Units (ACCU) can be sold to the Federal Government at a rate of AUD\$18.50 per unit, to the private market, such as Oil and Gas at around \$20/ unit, or on the spot market or overseas, where the current EU rate is USD\$70/unit and Korea at USD\$40/unit.

This value is set to increase, with the World Bank putting a future USD\$250 dollar figure a credit because of the acknowledged downstream benefits.

#### IN HIS PRESENTATION,

#### Johannes Biala FROM UNIVERSITY OF QUEENSLAND SAYS THAT IT IS AN UNDISPUTED FACT THAT SOIL ORGANIC CARBON DECLINED BY 30-60% AT THE COMMENCEMENT OF AGRICULTURE IN AUSTRALIA.

His collaborative research project looked at developing models to determine the potential for enhancing soil carbon levels using organic soil amendments. Johannes says it was designed to address the lack of systematic quantitative and qualitative assessment of the benefits of organic amendments - despite their obvious contribution to soil organic carbon turnover and stocks.

Johannes again highlighted the new Emissions Reduction Fund (ERF) methodology allowing use of non-synthetic fertilisers (including composts) as inputs – although noting that so far, there are currently no farm ERF compost use projects that have received credits.

He pointed to the need to develop validated models for use in ERF methods to estimate soil organic carbon sequestration, saying that the current method, involving soil sampling, was laborious.

Johanne's research included field trials that looked at 3 simulated scenarios of compost application at several locations in Queensland with varying soils and climatic conditions – Toowoomba, Maranoa, Roma, and Rockhampton.

- Manure application at 3 t/ha and 10t/ha annually and at 3-year intervals
- Compost application at 5 t/ha and 15t/ha annually and at 3-year intervals.
- No compost or manure application.
  - The findings of the model were mixed.

Results showed that use of organic amendments can result in increased soil carbon stocks (carbon sequestration) in favourable conditions. In most agricultural conditions, however, carbon sequestration appears unlikely to occur, but importantly, the decline in soil carbon is reduced.

Overall, Johannes highlighted the need for further R&D and collaborative advocacy to provide confidence, validate findings and overcome knowledge gaps.

## crafting quality compost for viticulture

NASAA Organic is pleased to be teaming with AORA to present a field day session on 'Crafting Quality Compost for Viticulture.'

Featuring NASAA Organic Chair Tim Marshall, the event will be held at Wirra Wirra winery in the McLaren Vale district on Monday 20<sup>th</sup> September.

For further information, visit aora.org.au



1300 622 906 www.woodshield.com.au

## BUILD THE BEST SOIL WITH PEATS INNOVATIVE SOIL CONDITIONERS.

#### AT PEATS SOIL WE ARE PASSIONATE ABOUT IMPROVING THE QUALITY OF SOILS FOR ALL.

Our team tailor solutions for the soil enhancement needs of horticultural, viticultural and broadacre farmers and growers.

Our compost and soil conditioner products are manufactured to Australian Standards (AS4454) and designed to improve the yield and quality of produce grown.

We also work with landscapers, from large commercial projects to residential gardens to ensure their vision becomes a reality.

#### BENEFITS OF PEATS INNOVATIVE SOIL CONDITIONERS INCLUDE:

- Permanently change soil structure
- Build topsoil and organic matter
- Increase water holding capacity
- Increase microbial activity
- Improve soil carbon
- Reduce fertiliser costs



To find out more about the best Peats products for your needs visit <u>peatssoil.com.au</u> or call us on 08 8556 5295.









## you only get out what you put in

Our input manufacturers that are certified for inputs for organic production are passionate about achieving the balance of soil health that stimulates productivity in natural systems.

Like organic producers, suppliers of inputs are experiencing resurgent interest in biological solutions, with the movement toward regenerative farming practices, and a better understanding of the fundamental importance of soil health.

Here, we speak to four well established companies about the changes they have experienced over the years.

### **Peats Soil**

Speaking at the recent AORA conference, Peter Wadewitz OAM, Chair of AORA and owner of Peats Soil said that "the industry had the biggest growth potential that I have



seen in 50 years of being part of it."

Peter pointed to recognition as part of the National Soil Strategy, recent Federal Government funding for FOGO programs nationally, the National Packaging

Covenant Organisation compostables strategy and AORA's own 10-year Roadmap to achieve 80% recycling rates. "All the ducks are lining up at last," says Peter.

"The conversations are better than they have ever been around waste recycling, composting, bioplastics.... the circular economy, basically."

"It's like all the pixels on a page are coming together to form a clear picture."

Peter says that there is a real feeling now, that Governments want to get all these things right, which "makes sense when you look at industry capital investment, jobs, and value."

But it was a different story 30-40 years ago.

"Back then, hardly anyone knew anything about compost for example," he says.

"If we'd talked about compost even 20 years ago, we would have been chased off the farm."

Peter believes the momentum has been building over time, particularly over the last 15 years.

"There is more understanding of soil and plant health in agriculture; consumers have also been educated... with the influence of cooking shows...people have become so food conscious," he says.

"We would like to think that we have been influencers in this, and we need to keep working together as an industry to get this bigger and bigger."

Peter's own business **Peats Soil** has grown steadily over 45 years, with four sites now in South Australia, one in the NT, and projects

#### / Continued from previous page

in the Top End. Peter also created the **BiobiN®**, a mobile, modular organic material processing system that has been exported to international markets, with projects in Qatar, South Africa and Mauritius. The company also has an agent based in SE Asia.

"In Qatar, we've taken the Zero Waste (policy framework), developed in South Australia, as the blueprint policy documentation for the country."

Peter says that SA has always been far in front, a fact that he puts down to successive governments driving a more and more ambitious policy program, starting back with the container deposit recyclable scheme introduced in the Dunstan years.

In terms of compost use, Peter says that a massive spike in fertiliser prices 10 years ago was also a catalyst that sent a number of industries looking for alternatives.

"We've since had fantastic adoption in vegetables and horticulture. In vineyards, potatoes. The whole area of Virginia [SA market gardens] is a big adopter," says Peter.

He says that broadacre is probably the

biggest growth area now, but points to a need to educate growers.

"There's a real interest in organics, but we have to get out and communicate better with growers."

Peter is confident of the future of the company with his grandson joining the business four years ago.

"He's just as passionate about the industry so I think that is a good thing from the point of view of succession planning."

Reflecting on his own life philosophy, Peter has a simple message about "**Participation**".

"If you want to complain about something, it's your fault, not ours, because you didn't Participate, and you didn't get involved in something," he says.

It's the Participate of previous AORA Board members that has got us to where we are at today in terms of policy."

"We wouldn't be where we are if it wasn't for policy. Policy, policy, policy."

"If you're not at the table, you'll be on the menu."

## Bactivate

Victorian based **Bioptiv** manufactures and markets Bactivate5, Bactivate Bioboost Enhance, Bactivate Seaweed, Bactivate 3, Bactivate Sequest and Bactivate Guard as a total biological soil solution.

Peter Briscoe, Head of Global Sales at Bioptiv, describes himself as a **Bactivate** convert and has been on a crusade to spread the word over the last 13 years.

Peter is a qualified horticulturalist and previously worked for a rural farm distributor supplying conventional fertilisers and chemicals.

It was during this time that he first attended a seminar run by Bioactive Soil Solutions, the original company that developed the Bactivate system.

"I was sceptical when I listened, I thought they were full of it, and I came away thinking this is too good to be true," says Peter.

It was trialling the product with the Bass Coast Landcare Network that turned Peter around, when results of application showed a significant decrease in salinity around the soil roots. He quickly turned to advocate and set about to transform other people's thinking.

Now, Peter says that there is a lot of

information out there about regenerative and biological farming, but before, "people would have thought you were speaking Swahili."

He says that there is a generational change taking place in the way farmers think about their soil, but that conventional farmers have been indoctrinated, and that chemicals are so ingrained.

"What they don't understand is that this is causing the problems and it becomes a circular thing."

Weaning off the chemicals is a process of transition, according to Peter.

"Where 1-2 years of low yield can have massive impacts, there is a big fear of change," he says.

"It's important to step them through. Quantify the ROI. The cost reduction in chemicals and synthetic fertilisers."

Peter would like to see a biological approach as the norm, a philosophy he describes as "pro-biotic, not anti-biotic."

"Feed the microbes, the bacteria, the fungi and let them do the work," he says.

"The Bacillus genus that we use, for example, manipulates the environment around, physically changing the soil structure. This means it can be used anywhere, even in the worst soil conditions."

He says the challenge is to help others, to become more educated.

"13 years in the business and I find the science complicated."

"So, my question is always, how can we take the science and make it simple for farmers."

### **Terragen BioTech**



Terragen BioTech is an agricultural biotechnology company that currently has two products on the market in Australia and New Zealand: a microbial feed supplement, Mylo®, for animals, and a soil conditioner called Great Land Plus®. ASX listed parent company Terragen Holdings Limited (ASX:TGH) went to IPO in 2019.

Terragen's new Head of Sales, Warren Ramsey, came from a background working for conventional chemical and fertilizer companies, but says the move wasn't a major change.

"There has been a quantum shift in the last 5-10 years, and all of the big multinationals are looking at developing better, more sustainable solutions," Warren says.

"The concepts of biological farming have become much more acceptable in mainstream farming and there is increasing interest in regenerative ag."

"I think that if you gave anyone the choice between using a natural product or a synthetic one, and the performance was there, then they would always go for the natural one."

And, he says that the research backs this up.

"We have published data from credible, independent research. The science is there to measure the benefit that can be brought to the system.... quality and yield is there."

"Nature provides all the solutions."

Warren says that with any 'disruptive technology', however, there is a period of acceptance.

"You have your early adopters, and you will always have your sceptics," he says.

"Once people understand the benefits, it becomes a no-brainer."

#### **Further Information**

Bactive Soil Solutions are distributed through a network of selected retailers across Australia.

Visit <u>Bactivate.com.au</u> for further information.

"They have to see it first, accept it and then it becomes normalized."

"30 years ago, all the talk was about micronutrients."

"We are experiencing the same thing now when we talk about the soil biome."

Warren says there are several products out there now, but it is important that farmers are educated on the real benefits of microbials as a category, and then, "they can make a choice whether it's our product or someone else's."

WOM is still the most critical method of education, and Warren says the "best person to talk to is the farmer."

"Seeing someone you trust, a peer, is still the best way to find out about new things."

He says that it's important to understand that soil is life and made up of many different parts, and that all components in a system need to work together.

"Agriculture is a dynamic thing, conditions differ, systems differ."

"It's about finding what works for them."

Warren is excited about the pipeline of products and technologies that Terragen have in development.

"We are applying science to a commercial system to deliver a valuable outcome – and that's inspiring."

"We're only at the base of the mountain."

#### **Further Information**

Terragen products are available across Australia through selected distributors.

Visit <u>terragen.com.au</u> for further information.

## **Omnia Nutriology**

Omnia Nutriology Managing Director, James Freemantle, says that the global market for biological products and biostimulants continues to grow as demand outstrips supply.

The Gippsland based company is the largest Australian manufacturer of specialty fertilisers, including humates, fulvates and seaweed products; as well as trace elements, bio-stimulants and plant health products. Omnia also provides an extensive range of lab, consulting and agronomy services.

"There has definitely been a changing shift in focus," according to James.

"Farmers are wanting more information about what I call the softer, green technologies; there's a greater focus on soil health and nutrition," he says.

"This shift has been evolving, and we've seen a rapid increase in the last 5 years, with a lot more enquiry for our product."

"We've found demand from the high value, horticultural industry, particularly irrigators in the arid regions, with sandier soils."

"Also, in broadacre; wheat, barley and canola."

"The whole of the agricultural industry is looking outside of traditional systems with a focus on soil biology and the building of soil organic matter," he says.

Providing confidence to the grower, however, is key.

James acknowledges that the biggest challenge for Omnia, and other reputable suppliers, is the presence of the 'snake-oil salesmen' that market product with minimal product quality control and unproven claims.

He believes, though, that farmers are becoming increasingly educated and are asking more questions.

"They're asking for trial data, how was the trial conducted and what are the results," he says.

That's where quality control processes, solid R&D, and results on the ground come into play.

"Omnia is investing significantly in medium to long term R&D on biologicals and bio-

stimulants, the improvement of soil health, and the link to better yields and quality," he says.

"Our R&D program has ramped up in the last 5 years, and we've been working with several global Universities, including Monash, Federation Uni and recently, the University of Adelaide in Australia; and with others on some big trials in the US and Europe."

"We also continue to work with our distributors and end users to educate on the benefits; and we've grown a lot of our digital and social media marketing to provide evidence-based information on the benefits of bio-stimulants."

As an input manufacturer, certified for inputs for organic production for 20 years, James says the accreditation gives confidence to the grower as a third-party validation that the company is "doing

the right thing." It also opens new

markets for the business.

"We've seen organics move from niche to mainstream; and even the conventional guys are looking at adopting biological management practices," he says.

#### **Further Information**

Omnia has experienced substantial growth, with products distributed across Australia and exports to 30 countries in South America, the Indian Subcontinent, Africa and Asia.

The company will continue to invest in its manufacturing capacity in Morwell, Gippsland, and in future R&D to meet increasing global demand.

For further information, visit omnia.com.au



# Soil & Plant Health. It's in our nature.

Here at Omnia, our team of Specialist Agronomists are passionate about soil health.

If you share our passion, call us about our range of plant and soil health products that are "NASAA certified inputs for organic production".

www.omnia.com.au/agronomists

Omnia Specialities (Australia) Pty Ltd shall not be liable for any consequential or other loss or damage relating to the supply or subsequent handling or use of this product, unless such liability by law cannot be lawfully excluded or limited. All warranties, conditions or rights implied by statute or other law which may be lawfully excluded are so excluded. Where the liability of Omnia Specialities (Australia) Pty Ltd for breach of any such statutory warranties and conditions cannot be lawfully excluded but may be limited to it re-supplying the product or an equivalent product or the cost of a product or an equivalent product, then the liability of Omnia Specialities (Australia) Pty Ltd for any breach of such statutory warranty or condition is so limited.

© Copyright 2020. Omnia Specialities (Australia) Pty Ltd

1800 4 OMNIA www.omnia.com.au



NAS0721

## **GREAT LAND**<sup>®</sup> plus

Live Microbial Product

Quality Assured

Australian Made

#### LIQUID BIOLOGICAL SOIL CONDITIONER



#### What is Great Land Plus?

Great Land Plus is a liquid biological soil conditioner used to improve soil biology and condition in pastures, cropping, viticulture and horticulture.

#### How does it work?

- Great Land Plus increases the ability of plants growing in the treated soil to access and use nutrients.
- Great Land Plus contains live, naturally occurring bacteria species from the Lactobacillus and Acetobacter strains.
- Through changing the mix of bacteria in the soil, Great Land Plus enhances root development, and improves the plant's ability to withstand periods of stress.

#### What are the benefits of using Great Land Plus?

- Great Land Plus benefits the environment and lowers input costs for farmers through improving plant nutrition and reducing the need for chemicals and fertilisers.
- Great Land Plus can also rehabilitate degraded soil.
- Great Land Plus is used by conventional and organic farmers. It is a certified organic in Australia and New Zealand and complies with the USDA National Organics Program (NOP).



**Figure 1** – The roots of seedlings following application of Great Land. Seedlings were grown with either no treatment or with 10 µl or 50 µl of Great Land. The micrographs show that compared to no treatment control plants, those plants treated with Great Land had more numerous and longer root hairs. This was particularly evident at the root tips of each plant.

Compliant with the USDA National Organic Program (NOP)



Terragen Biotech Pty Ltd Unit 6, 39-41 Access Crescent Coolum Beach QLD 4573 Ph: 1300 837 724 (Terragen) E: info@terragen.com.au www.terragen.com.au



### CIRCULAR 'COMPOSTABLE' ROADMAP For Australian Packaging

Officially launched at the recent AORA conference in June, the National Compostable Packaging Strategy provides a comprehensive roadmap for a more environmentally sustainable packaging industry in Australia.

The strategy, developed by the Australian Packaging Covenant Organisation (APCO), in partnership with AORA and the Australasian Bioplastics Association (ABA) over three years, is designed to support Australia in meeting the 2025 National Packaging Targets of 100% packaging being reusable, recyclable or compostable. It recognises that the recovery system for compostable packaging is currently under-developed nationally and has significant gaps.

Lily Barnett, APCO Program Manager, outlined the Plan for industry at the Conference, highlighting the need for a coordinated approach across the packaging value chain, from brand owners, to waste collection and recycling companies, to recycling end markets. The Strategy addresses each of these points in the value chain, with outcomes and actions focused on improving frameworks around Design and procurement, Collection systems and Recycling end markets.

Ms Barnett also spoke to the challenges faced in increasing the collection of organics within the food sector, navigating varying State based waste management strategies, minimising contamination, and labelling for recovery, as well as the need to raise consumer awareness and education of what certified compostable packaging is, and how and when it should be used and recycled.

There is obvious confusion for consumers with various options for bioplastic and biodegradable packaging and cutlery now available. Not all bioplastics are compostable, however, and the strategy makes this distinction, reinforcing that only bioplastics that are certified compostable to Australian Standards AS 4736 or AS 5810 support 'true' compliance.

The Compostable packaging strategy follows the release of the *National Plastics Plan* in March 2021, recent Federal Budget funding of \$67 million to be invested in new FOGO initiatives, as well as State based waste initiatives designed to eliminate single use plastics.

It is designed to support investment in compostables across the value chain to achieve greatest environmental and commercial benefits.

#### **Further Information**

Download the <u>National</u> <u>Compostable Packaging Strategy.</u>

#### OUTCOME 1 DESIGN AND PROCUREMENT

**Strategy 1.1** Phase out fragmentable plastic packaging

**Strategy 1.2** Educate the packaging value chain about appropriate use

Bio-based feedstock

Fossil-based feedstock

**Strategy 1.3** Eliminate false or misleading claims

**Bioplastics** 

e.g. bio-PA. bio-PE, bio-PET bio-PT

#### OUTCOME 2 COLLECTION SYSTEMS

Strategy 2.1 label for correct disposal

**Strategy 2.2** Minimise

contamination in organics collection services **Strategy 2.3** 

Increase collection of organics from the food service sector

Biodegradable behaviou



**Strategy 3.1** Greater collaboration between the packaging and recovery sectors

**Strategy 3.2** Undertake processing trials for compostable packaging



Logos indicating compliance with Australian Standards



THE ELLEN MACARTHUR FOUNDATION'S GLOBAL PLASTICS PACT NETWORK IS A NETWORK OF COMPANIES THAT HAVE PLEDGED TO ENSURE THAT ALL PACKAGING WILL BE REUSABLE, RECYCLABLE OR COMPOSTABLE BY 2025.

The Australia New Zealand chapter (ANZPAC) estimates that in Australia, only 18% of all plastic packaging is currently recovered for future use. Find out which companies have taken the pledge **here**.

In some good news at the retail level, Coles is stripping entire shelves of single use plastic tableware for good in July. Find out **more**.



Ion biodegradable behaviour

## mandy hall

IT'S SPRING, THERE IS **SUNSHINE** AND COLOUR. IMAGINE **SPARKLING** LEMONADE WITH FRESH. TART AND SWEET FLAVOURS. **IMAGINE IT BEING FULL OF** PROBIOTICS. IMAGINE FERMENTING **IT YOURSELF** AT HOME WITH EASE!

#### **RHUBARB & GINGER WHEY SODA**

This is a super easy, zero waste recipe using seasonal and easy access ingredients, with whey as the star attraction!

Whey is full of brilliant and varietal lactobacillus strains providing many human health benefits.

For this recipe, we are going to use the clear whey that you find on top of your yoghurt. It may already be sitting in a pool on the top of your yoghurt container. Or, if not, simply line a strainer with cheesecloth, spoon in some yoghurt (1-1.5 cups), place over a bowl and into a fridge. By straining the yoghurt, you will capture more whey and the remaining strained yoghurt can be used any way that suits you. If you're a cheesemaker, you'll have access to plenty of whey from the process of making cheese.



#### Ingredients

- l bunch of Rhubarb washed and cut into l inch pieces
- 3/4 cup of sugar (you could substitute with honey)
- 1/2 cup water
- 1' piece of ginger, peeled and sliced
- 1/2 cup of whey
- 1.5 litres of filtered water

2 x 1-litre STRONG glass bottles or recycled 2 x 1-litre plastic bottles with well-fitted lids.\*\*

\*\* Please ensure that you use very strong glass bottles designed for carbonated drinks or use/ recycle plastic soft drink bottles - this is a very safe method of fermenting soft drink. Make sure all equipment has been washed well in very hot soapy water and preferably rinsed with boiling hot water. Air dry to cool down before use.

#### Method

In a medium to large saucepan, place rhubarb, sugar, ginger and 1/2 cup water. Heat over medium flame and cook until the fruit is soft and the sugar is dissolved. Over a bowl, strain the fruit through a fine strainer. The fruit solids can be kept in a sealed container in the fridge and used as a compote or in a dessert.

Once the juice is cool, pour half into each bottle, do the same with the whey (1/4 cup in each bottle) and then pour 750mls of filtered water into each bottle. Secure the bottles with a lid and let them sit at room temperature for 4-6 days or until you see a lot of carbonation. Make sure you keep an eye on carbonation levels and gently release any gases (burp the bottles) if you feel that the ferment is too active.

Transfer the bubbly ferments to the fridge and let cool, store until ready to serve.

Consume your probiotic fermented drink within 7 days.

### NEWS WRAP UP

#### FEDERAL BUDGET FOCUS ON IMPROVING SOIL, BIODIVERSITY.

Two funded Agricultural programs released in the Federal Budget 2021-22 are designed to achieve sustainable outcomes through promoting improved soil health and biodiversity.

\$196.9 million in new funding over four years will be allocated to implementing the **National Soil Strategy**, a 20-year strategy released at the Federal Budget in May that sets out how Australia will value, manage, and improve its soil.

By June 2022, the Australian Government will work with the States and Territories to develop a National Soil Strategy Action Plan, with the goal to prioritise soil health, empower soil innovation and stewardship, and strengthen soil knowledge and capability.

The Action Plan will detail specific programs and activities to achieve these goals.

The \$32.1 million Agriculture (Carbon + Biodiversity) Stewardship Package represents a commitment to support increased sustainability on Australian farms. The bulk of funding will be allocated to deliver a pilot program, to protect and manage existing high value native vegetation, with further funding to implement an Australian farm biodiversity certification scheme, and to establish a Biodiversity Trading Platform.

The National Farmers Federation (NFF) is working with the Department of Agriculture, Water and Environment (DAWE) to develop and trial a framework, and critical success factors, for the biodiversity certification scheme.

#### **Further Information**

Find out more about the <u>National</u> <u>Soil Strategy</u> and download a <u>Fact</u> <u>Sheet</u>.

Read the <u>Minister's</u> <u>Announcement</u> on the Agriculture Stewardship Package.

Below: From our vision to a National Action Plan

**Our vision:** Australia's soil is recognised and valued as a key national asset by all stakeholders. It is better understood and sustainably managed to benefit and secure our environment, economy, food, infrastructure, health, biodiversity, and communities – now and into the future.



National Soil Strategy Action Plan



#### INDEPENDENT REVIEW OF THE PESTICIDES AND VETERINARY MEDICINES REGULATORY SYSTEM IN AUSTRALIA

#### Final Report of the Independent Review of the Pesticides and Veterinary Medicines Regulatory System in Australia was handed down in early July.

NASAA Organic made an original submission on behalf of industry during the public consultation period.

The submission was strong on its position that the organic sector is seeking principles that place a far greater emphasis on reduction, and that protect and improve choice, efficiency, transparency and responsibility.

The greatest concerns of the certified organic industry around:

- Supporting co-existence
- Overuse and misuse of ag chemicals that can post direct threat to organic systems.

It also noted that the organic industry had a role to play in informing systems to reduce the reliance ag chemicals as part of a broader integrated pest/disease management system.

#### NASAA CERTIFIED ORGANIC (NCO) TO DELIVER FRESHCARE FOOD SAFETY AUDITS

#### NASAA Certified Organic (NCO) has recently achieved accreditation to deliver Freshcare Food Safety Audits.

Freshcare Standards are one of three food safety schemes recognised under the Harmonised Australian Retailer Produce Scheme (HARPS) introduced in 2016 to streamline the (then) varying food safety requirements of major retailers.

The Standards are aligned with the Global Food Safety Initiative (GFSI), an international benchmark model for best practice in food safety. They are designed to provide a practical, cost effective and industry focused food safety program for all types of grower businesses.

NCO is now accredited under the Freshcare Food Safety & Quality Standard Edition 4.2 for producers; and the Freshcare Food Safety & Quality-Supply Chain Standard Edition 2 for processors and supply chain.

## What does it mean for certified operators?

NCO's accreditation provides the opportunity for operators to have their organic and Freshcare audits completed at the same time, which will provide both cost and time benefits to operators.

The flagship changes include introducing a single national law to control the use of agvet chemicals across all states, greenlighting chemicals that have been approved by overseas regulators and establishing a Commissioner for Pesticides and Veterinary Medicines.

In February, NASAA Organic participated in the series of roundtables that the Department was undertaking to highlight issues or concerns on the draft report which was released on 16 December 2020. It was noted there is serious disconnect between the changes being proposed, and the ability for the States to implement the measures needed to govern and police the use.

The Commonwealth Government agency – the <u>Australian Pesticides</u> and Veterinary Medicines Authority (<u>APVMA</u>) – regulates the supply and sale of agricultural and veterinary (agvet) chemicals nationally. The State Government's are responsible for regulating their use and some aspects of supply.

As always, it is the policing of misuse that can be of greatest concern to our farming sector, as it exposes our organic farms to greater risk of overspray exposure. The panel proposed significant changes to how agricultural chemicals should be regulated. As well as speeding up approvals of chemicals licensed overseas, the panel proposed a form of co-regulation, where data and responsibility would be shared between the regulator and the industry.

NASAA Organic continues to monitor the process and the outcomes from the report. The Australian Government will consult with relevant agencies and organisations to develop the Government Response to the Panel's recommendations.

For a copy of the Panel's report go to: Independent review of the pesticides and veterinary medicines regulatory system in Australia -<u>Department of Agriculture</u> / Continued from previous page

#### UK TRADE DEAL HIGHLIGHTS STARK DIFFERENCES IN FOOD AND AGRICULTURAL STANDARDS.

As the UK seeks to negotiate global trade deals in the wake of Brexit, the issue of safety and quality standards 'equivalence' when it comes to food and agricultural products has presented issues for negotiators.

The UK (and EU) have some of the highest standards in the World when it comes to animal welfare, the environment and worker conditions. Concerns have been raised about the potential for lowering standards when allowing imports from countries with varying protections around these issues. The President of the UK's National Farmers Union (NFU) has been quoted in recent media as saying that "We must not tie the hands of British farmers to the highest rung of the standards ladder, while waving through food imports, which may not even reach the bottom rung."

The recent free trade agreement with Australia is a case in point around 'equivalency' with concerns surrounding our continued use of livestock hormone growth promotants (HGPs) and 'precautionary approach' to use of several pesticides and herbicides that are considered carcinogenic and banned in the UK and EU. Other practices like intensive farming of pigs and chickens are outlawed in the UK and EU. Australia also falls behind in the introduction of measures and targets for agricultural practices, that seek to address and mitigate climate change.

While these details are being hammered out.... Why don't we lift our game Australia and go Organic!

#### **Further Information**

Find out more about the issues in this <u>article</u> from the Institute for Agriculture & Trade Policy and recent ABC News <u>article</u>.



Industry began to wake up [to the hazards of chemical use] when it was revealed that the life expectancy of Tasmanian apple growers was a decade less than the population average.

Tim Marshall NASAA Organic Chair

## OPPORTUNITIES FOR Grants and awards

#### N ominations for the 2021 State Landcare Awards are now open. There are 8 National categories, including:

- Australian Government Individual
  Landcare Award
- Australian Government Partnerships for Landcare Award
- Australian Government Landcare Farming Award
- · Coastcare Award
- ACM Landcare Community Group Award
- Woolworths Junior Landcare Team Award
- KPMG Indigenous Land Management Award
- Young Landcare Leadership Award; and
- the Green Adelaide Urban Landcare Award which is open to all urban land carers in SA.

For further information visit landcareaustralia.org.au

The Export Market Development Grant (EMDG) is available to any small to medium enterprise (SME) exporters, or companies ready to export, to support marketing promotional activities undertaken from 1 July 2021.

Grants of up to \$40K are available for first time exporters, rising to \$80,00 - \$150K for existing exporters looking to expand, or to make a strategic shift into new markets.

The grants are designed to support SMEs in their export expansion journey, and exporters can apply for grants over a total period of 8 years for eligible promotional activities.

#### Grant applications open 9 am AEST on 16 August and close 5 pm AEDT on 30 November 2021.

For further information, visit <u>EMDG</u>.

#### The 2022 Science and Innovation Awards grants for Young People in Agriculture, Fisheries and Forestry are open!

This competitive annual grants program supports young Australians aged 18-35 by funding projects that will benefit Australia's primary industries. There are 12 industry categories each worth up to \$22,000 (inc GST).

Visit <u>agriculture.gov.au</u> for further information.

The AgriFutures Rural Women's Award Gala Dinner & National Announcement planned event in Canberra on Wednesday, 25 August 2021 will now be conducted online on Wednesday, 20 October 2021.

Visit <u>AgriFutures Rural Women's Award</u> sets new date and format for National Winner and Runner Up announcement for 2021 | AgriFutures Australia for further information.

## Capacity building opportunities for Emerging Industries

AgriFutures Australia is committed to supporting the people who are driving, and will drive, the future prosperity of Australian rural and emerging industries and communities. There are currently some great capacity building opportunities available to individuals working in Emerging Industries.

Applications are now open for the Australian Rural Leadership Program, Nuffield Scholarship and Drought Resilience Leaders Program.



## AUSTRALIA'S CERTIFIED ORGANIC INDUSTRY

## SEPTEMBER 1-30<sup>TH</sup> 2021

## Always look for a certification mark Why Certified Organic?

- Sustainable and Regenerative
- Synthetic Herbicide, Pesticide and Chemical Free
- Free Range and No Artificial Additives and Hormones
- All GMOs are Prohibited

### #AOAM2021 whyorganic.com.au







### UPCOMING EVENTS AT HOME & AROUND THE GLOBE

#### CRAFTING QUALITY COMPOST FOR VITICULTURE

Date: Monday 20 September Location: Wirra Wirra, McLaren Vale For more information, please visit <u>aora.org.au</u>

#### REBUILDING THROUGH REGENERATIVE AGRICULTURE

**Date:** Friday 24 September and 29 October **Location:** Lobethal Bierhaus

#### NASAA ORGANIC AGM

Date: Early November Location: TBA

#### EVOKE AG – PERTH – FEBRUARY 2022

Date: 15 – 16 February 2022

Location: Claremont, Perth, Western Australia

evokeAG. is Asia Pacific's premier agrifood tech event. It allows delegates to explore what's next in the agrifood tech space, covering three main themes; food – farm – future. This exclusive event is an immersive experience delivering diverse topics and cutting-edge innovation from across the region and around the world, bringing people together to connect, collaborate and evolve all things agriculture.

## THE ORGANIC CHOICE FOR FAST WEED CONTROL

Beloukha

Beloukha is a non-selective, bio-degradable, broad-spectrum, foliar applied herbicide that acts exclusively on contact, attaching and destroying the cell membrane of the plant epidermis causing rapid tissue dehydration.

Features	Benefits
680g/L Nonanoic Acid	Highest load Nonanoic Acid on the market
	Lower use rates per treated hectare
Rate: 6 – 8L of product/100L of water	Rate range to give more flexibility
Applied in 200 to 300L of water/Hectare	More treated hectares per spray vat
	Less time wasted filling spray tank with water
	Lower rates of product per hectare
Fast acting with visible effects on green plant tissue	Most weeds show effects within hours of applications
Derived from natural occurring substances sourced from Sunflowers	Derived from plants to kill weeds
Biodegradable	Breaks down into carbon dioxide and water
Many use patterns	Orchards
	Paths, driveways, around sheds, gardens, amenity horticulture areas, protected cropping situations, around nursery stock
Extra use patterns	Spot spraying in lawns and turf
Available in 1L, 5L, 20L, 200L & 1000L packs	A pack size for every situation





**Crafting Quality** 

**Compost for Viticulture** 



australia

### **CONTACT DETAILS**

PO Box 768 Stirling SA 5152 Phone: (08) 7231 7700

Email: info@nasaa.com.au Web: www.nasaa.com.au Facebook: /NasaaOrganic Instagram: @nasaaorganic