

OrganicInsights

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Paradise found...
The story of Kokonut Pacific



Magazine of the National Association for Sustainable Agriculture Australia

Thinking organic, think NASAA.... you're in good company!

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*Cover photograph courtesy Kokonut Pacific
Coconuts can grow in stunningly beautiful coastal environments*

What's the big deal about GMOs anyway?

Suicide, "food fascism," and gene-jumping, among other things, says activist and scientist Vandana Shiva. But she sees a GMO-free future ahead.

Sometimes, protecting the future means going back to your roots...and back to the soil, to the seeds. That's how Vandana Shiva, PhD, world-renowned physicist and relentless eco-crusader, is leading the charge to save her country from a corporate GMO takeover. (GMO refers to genetically modified organisms; crops that have extra genes inserted into them in the lab.) Shiva, who studied in Canada to earn her doctorate in particle physics, took her knowledge back to her home country, India, where she leads the attack against GMO pollution. There, she launched Navdanya, a seed-saving organization that has helped save thousands of plant varieties from going extinct.

Shiva speaks of "freeing the seeds," which in turn frees farmers from reliance on failed biotech agricultural methods that are expensive and require increased use of dangerous pesticides because pests and weeds are growing resistant to chemical warfare. Growing GMO crops is also expensive. So far, 200,000 Indian farmers have committed suicide, overcome by the insurmountable debt they've accumulated after switching from traditional, sustainable farming to corporate, chemical, GMO-based "farming."

Shiva spoke with Rodale.com before her Tuesday-night speech to a packed crowd at Moravian College in Bethlehem, Pennsylvania, in which she made connections between GMOs and antibiotic-resistant superbugs, unprecedented chronic global hunger, and biopollution.

Rodale.com: What are the biggest dangers that GMOs pose to our environment and our health?

Vandana Shiva: They actually increase the toxification of our food system, even while claiming to be an alternative to chemicals. If you look at what has been achieved in the last two decades, you have herbicide-resistant crops and you have Bt-toxin crops. The former was intended to control weeds, the latter to control pests. What you have instead is the creation of super-weeds, which has increased the usage of herbicides and the creation of super-pests, which has increased the use of pesticides sprays. We have monitored the Bt cotton in India, 13-fold more pesticides are sprayed on Bt cotton.

That's the first problem, but the second problem is now you have the toxins built into the plants. With the Bt toxin you've taken the genes that produce a toxin and put them into the plant. And because it's such a clumsy technology, you don't just put a toxic gene into the plant, you have to add antibiotic-resistant markers to separate the cells that absorbed the gene from those that didn't. And because no

plant wants an alien gene in it, like no organism wants an alien element, what you have to add is a viral promoter to pump up the expression of the gene.

So for every GMO you have three lethal transformations: A toxic gene whose impact you don't know; antibiotic resistance markers—which already is a problem, given that antibiotic resistance is emerging both with farm animals and human beings; and if you have antibiotic resistance markers, you're going to have gene jumping. I think the whole issue of the H1N1 virus, the fact that it had genes for three influenzas, human, chicken, pig—all of these crossings are becoming possible because of the crossing of genes across species barriers.

Are we getting closer to eliminating or reducing GMOs, or are things getting worse?

VS: There is proof we are making progress if you look at data in the U.S. It's not just those who don't like GMOs who are turning away from them, it's farmers who went for GMO planting who are realizing it's more costly, they're losing more, you're better off in GMO-free agriculture. Monsanto shares are coming down, and the acreages they expected are coming down. I think because a false promise was sold with GMOs, I do believe we have a GMO-free future ahead.

What has been the experience with GMOs in India, and are there lessons for the U.S. and other countries to learn from it?

VS: The first GMO bought to India by Monsanto was in 1997/1998, Bt cotton. They put huge ads in the newspapers saying how they were going to bring this miracle seed. I know the laws of my country and checked with environmental administrator, and found Monsanto did not ask for approval, although we have an environmental



protection act stating any deliberate release of GMOs must go under environmental assessment. Just like they have dismantled any bio-safety laws in the U.S., they thought they could just walk into India and do the same. I filed a case. And we stopped them until 2002, when they managed to get approval. What we've seen from 2002 to 2010 is a very high epidemic of farmer suicides, which started when Monsanto started to control the cottonseed. Today, Monsanto has 90 percent control over the seed supply of cotton, in a land where we use to have 1500 varieties, including open-pollination varieties. That's how fast this monopoly can emerge. The cost for cotton seeds rose from 7 rupees a kilogram to 3,600 rupees, 2,400 of which was a royalty share.

It's a big issue in India. Because the technology is a failed technology, the pesticide usages have increased, farmers are in debt, and it's that indebtedness that has pushed 200,000 Indian farmers to suicide. Our studies show 84 percent are directly linked to debt caused by Bt cotton.

The next product Monsanto tried to launch this year in February was Bt eggplant. We have 4,000 varieties of eggplant; it was domesticated in India. We built up a movement from 2006 when the trial started. We've compelled the government to relook at the approval when it was granted. The environmental administrator held public hearings around the country, and after hearing people, farmers, citizens, scientists, he called for a moratorium.

I think the lessons India has for the U.S. is first it has to have bio-safety regulation. Also, there has to be democracy. Every time there is talk of democracy violated in China, I think of the democratic violations when people are denied their right to know and denied their right to choose. Monsanto is working right now to prevent labelling

laws in India, which have been drafted and are there, and they're preventing them. I don't think you can have a product where a company says, "I'm pushing it on you, destroying your alternatives, and I'm preventing you from knowing what's in it." Especially when it's food, it's not even the clothing we wear, it's food that goes in us. I think this food fascism must end. The kind of movements India has built on food democracy, I'd like to see in the U.S. I think in the U.S. we need far more community seed banks far more open-source seeds, especially now that the GMOs are failing, we can't leave the farmers without options.

Do you find it difficult to avoid eating GMO food? What advice do you have for avoiding it?

VS: In India, the only crop that has been genetically modified is cotton. We've prevented in our movements any food crop from being genetically modified.

In the U.S., because the main crops genetically modified are soy and corn, I think the best way to avoid them is to avoid processed food. I think there are such delicious alternatives. People should promote local markets and organic food; that's where you can ensure you're not being imposed with a GM diet.

I think de-industrializing our food system has to be the next human leap. We've been made to believe seed doesn't give rise to seed, so buy GM seed. You can't bake your bread or set your yogurt, everything has to be industrial. If we don't de-industrialize our food system, we're going to be killed by obesity, diabetes, and everything else.

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Organic Consumers will not accept any GMO contamination

By Andre Leu, Chairman OFA

Recent comments in the media that the organic industry should 'bend its rules' to allow GMO contamination shows a lack of understanding of the consumers who purchased over \$1 billion worth of organic products in Australia in 2010.

Credible research by Newspoll and other organisations has found that over 60% of Australian main grocery buyers purchase organic products and that the overwhelming majority of consumers are against GMO foods.

Organic consumers expect that the products they purchase have not been contaminated with pesticides or GMOs. This is one of the key reasons why they consume organic products.

The \$80 billion global organic market does not accept any level of GMO contamination. The European Commission passed a rule allowing 0.9% GMO contamination of organic food despite the strong objections from the organic sector. The EU market, however, has a zero tolerance. It is the market that purchases the products, not the European

Commission. Organic products from the USA have been rejected after testing showed very low levels GMO contamination.

Loss of income from contamination could result in legal action via common law to recover these losses.

There are specific laws for pesticide drift. It is the responsibility of the farmer using pesticides to ensure that there is no spray-drift contaminating neighbouring properties. The same precedent should apply to the drift of GMO pollen or seeds.

If the governments of Australia are truly interested in coexistence between the organic and GMO industries, they need to work with the OFA and other farming organisations on regulations that ensure realistic buffer zones that prevent contamination. This will avoid the prospect of neighbours suing each other for loss of income and the subsequent discord that it will cause in rural communities.



NASAA response to WA GM contamination

By Jan Denham, NASAA



Following the confirmation late 2010 that GM canola plants contaminated an organic farm certified by NASAA Certified Organic (NCO), NASAA's wholly owned subsidiary certification company, there has been a rash of correspondence from all sides of the industry, both organic and GM proponents, speculating the causes and outcomes of this particular case.

The fact is that NCO was left with little option than to decertify the contaminated portion of the certified farm until it is demonstrated that the GM canola plants have been removed.

There have been claims that decertification of part of the organic property was unnecessary and that it is NASAA's Standard requirements that have created this scenario. It has also been claimed that organic as a farming practice is obsolete

For NCO to decertify contaminated land is a serious matter and not something taken lightly. This has been the position in many cases in the past in relation to chemical overspray of certified organic land. The NASAA Standards and NCO certification systems are based on integrity, transparency and accountability which by definition ensures our operators produce the highest quality organic produce in Australia. Indeed this level of quality and confidence in our systems is exactly why businesses choose to certify with NCO.

NASAA Standards prohibit the use of GMO's which is in line with the requirements of the National Standard for Organic & Bio-Dynamic Produce and the Australian National Organic Standard AS6000. This is to ensure the integrity and quality of NASAA organic produce for businesses and consumers alike.

The supporters of GM technology put much emphasis on the need for NASAA and the Australian Organic industry to adopt tolerance levels, such as in Europe of 0.9%, for the inadvertent presence of GMO's in organic products.

Although the European Union allows for a tolerance level, the market place does not accept this and still requires zero GM tolerances in organic products. There are key niche markets for both organic and conventional farmers who do not wish to use GM technologies and this should be recognised and respected by the rest of the agricultural industry.

Consumers are the ones driving the demand for non GMO products and their requirements are a key factor in their demand for organic products as well as GM free products.

In line with this, the Australian Consumer and Competition Commission (ACCC) enforces zero tolerance for any GM processes or products when GM

free labelling claims are made or implied regarding such services and products.

Certified organic farmers are subject to close scrutiny to ensure that the products they are supplying to the consumer comply with organic standards. This demonstrates their commitment to the consumer, food safety and the environment to provide food that is organic and not genetically modified.

Why should an agreed standard adopted and endorsed by industry and consumers alike be revised to accommodate contamination risk that could be better managed by a more cooperative approach by the powers involved?

Far from being an 'obsolete industry', organic farming is one of the fastest growing agricultural sectors globally and a critical part of world agriculture providing viable and sustainable farming methods.

The IBIS Market Report in January 2011 indicated that organic agriculture would see a 14% growth in Australia, increasing by \$58 million, making it the largest growing commodity.

This occurrence clearly shows that farmers involved in growing GM crops need much stricter regulations and supervision to prevent future similar incidents of GM contamination. Indeed this issue highlights the risk to not only organic farmers but all farmers not wishing to grow GM plants on their farms.

Greater protection is needed for those who do not wish to be involved with GM crops; it is time that the industry recognises the long term importance of these recent unfortunate, avoidable events and takes appropriate steps to address these critical issues.

As a result of this GM contamination of an organic property NASAA has been involved in numerous radio interviews from WA stations, which were then replayed in many states throughout Australia, as well as writing to the WA Minister of Agriculture lobbying for a review of this contamination to ensure that practices could be put in place to ensure that it does not occur again.

NASAA will continue to lobby for certified organic operators rights to be protected against GM contamination.

Niulife - Kokonut Pacific

Certified Organic Virgin Coconut Oil

By Dr Dan Etherington, Kokonut Pacific, 2/34 Silver Avenue, Queanbeyan, NSW 2620

Kokonut Pacific is one of NASAA's long established operators delivering ethical, sustainable organic produce at its very best...

Kokonut Pacific Pty Ltd (KP), an ethical social enterprise, was founded in 1994 with the aim of enabling coconut farmers to produce virgin coconut oil (VCO) at a village level.

Over the next ten years trials and experiments were undertaken around the South Pacific – particularly in PNG, Fiji and Samoa. The result was the Direct Micro Expelling (DME) process for making VCO within just one hour of opening a coconut. DME equipment, manufactured at the Queanbeyan factory, has now been exported in order to build over 400 mini-factories in the remote communities of 28 countries around the Pacific, Caribbean, Asia and Africa.

Many of these tropical coastal communities are the custodians of unique cultures, languages, reefs and rainforests. These societies face the threats of rising sea levels, coral bleaching, unstable world markets, political instability, corruption, increasing death rates (from malaria, HIV and diabetes), rapid population growth and urban drift of the youngest and brightest.

This situation was particularly acute in the Solomon Islands where civil strife caused the collapse of domestic markets and of most central and provincial government services.

Peace in the Solomon Islands was restored with the intervention of the Pacific Regional Assistance Mission (“RAMSI”) providing a ‘God-given’ opportunity to implement a complete DME System and develop the national and international markets to make effective use of the village coconuts. In 2004 KP formed Kokonut Pacific Solomon Islands (KPSI) as a joint venture with a local Solomon Island company to launch a highly innovative smallholder virgin coconut oil (VCO) industry.

This industry is based on what is indeed the most sustainable agricultural resource of these communities. The coconut palm is called the “Tree of Life” because it meets so many basic human needs — for food, shelter, and fuel for transport. Remarkably, each palm produces a bunch of coconuts every month. So a family group who owns 250 palms (about 2 hectares) has

a constant supply of nuts all year round. As a low maintenance, long-life, subsistence crop it is so much a part of the tropical scene that it is often taken for granted. Commercial coconut farming is under threat because wildly fluctuating prices have discouraged farmers from processing their nuts into copra (dried coconut flesh) for the export market. Yet, for producers of organic virgin oil, the potential of this crop is huge. The oil has excellent nutritional benefits, anti-microbial properties, stability as a cooking oil, is a natural skin moisturiser or massage oil and can be used as an alternative biofuel for lamps and diesel engines!!

The goal of KP was to enable rural Solomon Islanders to earn meaningful incomes and improved livelihoods from their existing sustainable coconut resource. KPSI has now developed the framework for a highly profitable VCO export industry based on coordinating the output of numerous small but distinct DME business enterprises.

KPSI introduced the administrative systems and protocols for Organic Certification and is the only company in the SI to export a product that is Certified Organic (CO). NASAA assisted KPSI in setting up the requirements for a Growers Group and undertakes annual inspections of farmers, processors and headquarters operations. Currently over 500 farmers are registered growers collecting nuts from about three hectares each and delivering to about 30 DME mini-factories. Organic Certification does not end there. The operations of KP in Queanbeyan, NSW, are also inspected and certified annually.



DME production units are modest in scale and use local building skills

KPSI has facilitated the establishment and registration of the Virgin Coconut Oil Producers Association of the Solomon Islands (VCOPIA) for the processors.

Within two years the success of this risky entrepreneurial venture received significant recognition by winning a major international competition for the economic and social benefits it is providing to remote rural communities.

This is a remarkable achievement given the extraordinary constraints of widely spread communities with very poor communications over this chain of islands. Rust-bucket ferries, canoes and 'banana-boats' with 2-stroke outboard motors are the main means of transportation. Mail services only reach provincial capitals. Flights are limited to expensive short-haul 10 to 12 seat aircraft. Verbal communication has been restricted to occasional static-filled two-way radios. The Solomons is the 'last cab off the rank' as far as mobile phones are concerned. The main mobile network is only coming into operation this year - 2011.

As pioneers in the production of Certified Organic Virgin Coconut Oil we are excited at the way in which this new industry has taken off. Sixteen years ago we were a lone voice focusing on "Empowering and Bringing Hope" to remote coconut farmers. Now, not only have we helped bring New Life to the farmers but we have brought Niulife to consumers! ("Niu" is a Polynesian word for coconut).



NASAA inspection means visiting a number of far flung island locations over a one week period each year – not a low cost exercise!

However, if it was all about supply and no demand farmers would again be in big trouble. Fortunately, Certified Organic VCO has proven to have a ready international market. Starting with the books of Dr Mary Enig (Know Your Fats, 2000) and Dr Bruce Fife (The Healing Miracles of Coconut Oil, 2001) there have been a spate of scientific articles and books on VCO discussing the remarkable health benefits and properties of this oil. It is reputed to help arthritis sufferers, those with Alzheimer's, diabetes, and a number of other degenerative diseases. It turns out that the rapid metabolising property of the short and medium chain saturated fatty acids in coconut oil make it an ideal fat for a range of needs – from premature babies to elite athletes and for people aiming to lose weight. When we started out on this journey we had no idea as to the extraordinarily wide range

of uses of VCO for food, medicine, cosmetics, fuel and soap.

There are now many competing brands on the market and the major coconut producing countries of the Philippines, India, Indonesia and Sri Lanka are producing more and more VCO. Some of these producers are also certified organic. When selecting a virgin coconut oil brand it is a good idea to check the label to verify the claims and, as with good wine, check the colour, aroma and flavour of the product. This is best done by buying small jars of 3 or 4 brands and testing them with your friends. Use the best for your cooking, the worst for making soap and feed the others to your pets – they love virgin coconut oil too!

Check out www.niulife.com for coconut products and books sold by Kokonut Pacific.



DME virgin coconut oil production adds value to village coconuts providing income for school fees, medicines and better nutrition.



Growers bring their dehusked nuts to the road for collection

International Grower Group Certification

By Stephanie Goldfinch, NASAA Certified Organic

The majority of agriculture practitioners worldwide are smallholders. Adoption of organic agriculture, a sustainable environmental friendly management system, is vitally linked to market access. It is imperative that small operators are not marginalized and unduly excluded from the organic sector due to factors beyond their control. IFOAM February 2003 www.ifoam.org

Local third party organic certification bodies are often not available in most developing countries today. For most smallholders in developing countries, it is impossible to pay for annual inspection visits by a foreign third party certification body. NCO certifies more than 13,000 smallholder producers in our International Grower Group Certification Program which has been structured to enable small holder groups to obtain organic certification. They are located in Nepal, Indonesia, Samoa, Sri Lanka, Papua New Guinea, Solomon Islands, Timor Leste and Tonga. The system supports trade in certified organic products from small producers, without compromising or diluting the strict requirements of international organic standards. NASAA Certified Organic has published its revised International Grower Group Certification Criteria recently and available on www.nasaa.com.au.

International Grower Group certification is based on the implementation of strong Internal Control Systems

(ICS) by the group or a managing processor that guide organic practices to international organic standards. This entails a single organic management system plan for the whole group, incorporating internal inspection. NCO then inspects both the ICS management system as well as the production units of the members and the processing facilities. The system of having a functional ICS together with an annual inspection by a third party certification body offers a sound organic guarantee system. The system offers two levels of control as opposed to one. It encourages group organisation, which enhances the overall capacity of individual members within the group to institute and further develop good organic management practices.

Over latter years, there has been a tightening of international scrutiny of grower group certification systems, starting with the USDA which initially refused to accept these under US NOP certification. In 2008, the USDA finally permitted group certification but published lengthy guidelines. The EU has also published rules for group certification. Fortunately these rules are all based on the IFOAM Small holder Group Certification Criteria which is part of NASAA Certified Organics' IFOAM Accreditation. Grower Group certification is available under the NASAA International & EU, NOP & JAS programs operated by NCO. The current Standard of the program for which the applicant has applied is also applicable. Exports from small holder groups can only be authorised into the EU, USA, Canada, Japan under accredited Grower Group Programs such as that which NCO operates.

Crops produced by grower groups include tea, coffee, herbs and spices, fruit, vegetables, essential oils, cocoa, coconut oil, honey and others. Most of the produce is exported to the EU and the US. NCO export documentation facilitates entry of produce into the EU and NOP certificates are required for the US and Canada.



OFA Organic Trust

OFA Environmental Research and Education Trust

Organic agriculture enhances soil structures, conserves water, mitigates climate change, and ensures sustained biodiversity.

Sadly, agriculture in general has been a major contributor to the environmental problems of our time. Agriculture need not cause such problems.

World-wide, farmers are discovering that organic farming can be part of the solution. But we need much more research and education in organic agriculture for a change to happen.

The Organic Trust has been set up to manage funds received from private and public sources for this research and education.

For information visit - www.organictrust.ofa.org.au
All donations are tax-deductible.



Funds are still short for Organic research in Australia



By Prof Peter Cornish, Chair OFA Environmental Research and Education Trust

Research plays an important role in improving farming practices, and nowhere in the world more so than in Australia. Whilst all farmers undertake their own 'research', there are some areas where special research expertise is needed. This is why we have research agencies and why the Australian government formed the Research and Development Corporations (RDC's) that are aligned with the commodities produced: the Grains RDC, Horticulture Australia, Meat and Livestock Australia, Dairy Australia etc. The Rural Industries RDC (RIRDC) and Land and Water Australia (now defunct) were established to deal with new and emerging industries and cross-sectoral issues.

Producers within the established rural industries in Australia pay a compulsory levy that is matched by the Commonwealth and administered by the commodity RDC's on behalf of producers and the Commonwealth. Unlike the other RDC's, RIRDC is largely funded by the Commonwealth, with levies raised only by the 'established' industries they support (e.g. rice and chicken meat).

RDC's fund the research in CSIRO, state agencies and universities that leads to new crop varieties, improved product quality, improved weed, pests and disease management, research to address soil degradation and climate change and so on.

In the past, the organic sector has been a small 'emerging industry', and levies paid by organic farmers have not been enough for any one of the commodity RDC's to consider much in the way of research specifically for organic producers. They have argued that organic producers enjoy the 'spillovers' from research undertaken for all other producers. As a consequence, the Rural Industries Research and Development Corporation picked up funding for the organic sector under its mandate for 'new and emerging industries'. So for the past 15 years or so, RIRDC has provided a small (approximately \$275,000 per year) but very valuable fund for organic research in Australia. As an example of its importance, both recipients of this year's OFA Lifetime Achievement Award have been beneficiaries of RIRDC funding. RIRDC allocations to organic research came from its 'core' Commonwealth funding and did not require an industry partner to make a co-contribution to the research.

Last year, RIRDC decided to no longer classify 'organics' as an emerging industry, and introduced a requirement that industry partners would need to significantly co-invest in projects. Whilst this at first seems reasonable given the growth of the organic sector, it presents a problem as most organic producers already pay levies to the various commodity RDC's on top of fees paid to certifiers. Producers rightly ask why they should pay again in order to receive partial funding from RIRDC for research relevant to their unique needs.

As I write, RIRDC is considering the future of the

organics program. It seems likely that, without a change of heart, there will be no dedicated organic program in RIRDC in future. And there is no sign yet that the other RDC's are ready to seriously increase their direct support for organic producers. The importance of the newly launched OFA Environmental Research and Education Trust becomes evident when seen in this context.

Organic producers seek research funding equity with conventional producers, and rightly expect to see some of their levies applied to their unique issues; or without this, to see Commonwealth funds applied to that end. This is an issue for the OFA to pursue with the Commonwealth on behalf of all organic producers, but in the meantime it looks increasingly like the organic sector will need to dig deep again to support its research, one avenue being the tax-deductible OFA Trust.

As a farming systems scientist I am concerned that, although 60 years of post-war research has lifted Australian farm productivity enormously, it has led to no improvement in the profitability of conventional agriculture. Despite the levies paid for research, economic and social decline is undeniably ripping rural Australia apart. Something is very wrong. At the same time we are witnessing unprecedented demand by consumers for food that is uncontaminated by pesticides and produced in ethical ways.

In growing numbers, farmers are jumping off the treadmill of conventional agriculture that has eroded their fair share of the value of their production, favouring input suppliers, down-stream 'middle men', retailers, and of course consumers. Farmers embracing organic systems are seeking a fairer, healthier and environmentally more responsible way, and they deserve the support of both researchers and the funding bodies to improve their prospects for a successful transition. In doing so, I expect we will learn a great deal about how to farm less unsustainably.

Paradoxically, it is the reverse 'spillover', from organic research to conventional agriculture, that ought to excite the interest of the commodity RDC's and RIRDC.

If you want to know more about the OFA and Organic Trust, please visit www.ofa.org.au



Sustainable methods for Botrytis control

Dr Dean Metcalf, Biocontrol Australia Pty Ltd, 211 Wyre Forest Rd, Molesworth, Tasmania 7140.

Botrytis control is high priority for many of our certified operators at this time of the year, Dean Metcalf gives an insight into the disease and how to control it...

Botrytis cinerea is a fungus which is the cause of grey mould disease. The disease is best known for its impact on wine and table grapes, but many other fruit and vegetable crops are also effected, including strawberries, stonefruit, black currants, raspberries, peas, beans and onions. The disease costs Australian grape growers \$30 million in an average season. Unfortunately the season which has just passed was very much worse than average, with a number of large wineries reporting that they have had to dump half of the crop from the combined effects of *Botrytis* and *Powdery Mildew*. The disease is inadequately controlled by chemical fungicides, which leave unfavourable residues in the produce, and contaminate the environment. Some of the chemical fungicides which have been sprayed to control *B. cinerea* in vineyards for years have been withdrawn from use due to human health concerns. Sustainable disease control alternatives are urgently needed.

The life cycle of Botrytis

Botrytis cinerea infection is favoured by cool temperate weather and high humidity. *B. cinerea* can survive in decayed crop trash (rotted grapes, stems, fruit) in the form of seed like structures called sclerotia. Sometimes the sclerotia are embedded in the stem as in **Figure 1**. In a season like the one which growers have recently experienced where a lot of produce has been lost to *Botrytis*, there will be a very heavy load of sclerotia on the plantation/vineyard floor, so the danger of a repeat epidemic is presently quite high. Unfortunately, the sclerotia are attuned to know when the weather is right for further infection and in the spring, the sclerotia produce microscopic spores called conidia (**Figure 2**). The conidia are carried by air currents to wherever the wind blows them. They are particularly well adapted at infecting flowers and *Botrytis* seems to do this in a wide



Figure 1: This dark spot on a stem is a *Botrytis cinerea* sclerotium, the sclerotium has produced spores which are released into the air



Figure 2: microscopic view of the conidia (spores) that are produced by the sclerotia

variety of crops. Flower tissues are very soft and are covered in high levels of sugars from the pollen which makes them extremely susceptible to infection. *Botrytis* has evolved for thousands of years with the plants it infects and it has developed the clever strategy of waiting for the fruit to ripen before it causes decays. This can confuse growers who see the ripening fruit decay and don't realise that the infection actually occurred months before the decay. In some crops such as onions, the bulbs with latent *Botrytis* infections do not decay until they are packed and half way to the European market. This has resulted in financial ruin of a number of onion exporters over the past two decades.

In 2002, after an approach from organic grower Tony Scherer of Frogmore Creek Vineyards, Biocontrol Australia set about the process of developing a biological control agent for *Botrytis* in grapes. The first task was to learn more about what microbes were present in the grape flowers in the first place. We found that at flowering there were two main groups of fungi on the flowers (*Cladosporium* and *Candida*). We monitored the population of fungi right through the season and were able to see a diverse population of fungi gradually develop on the fruit, and it was not until veraison (ripening) that we found the first colonization by the beneficial fungus *Trichoderma koningii*, which is a natural predator of *Botrytis cinerea*.

From this survey it was clear that the beneficial microbes that could suppress *Botrytis* do not appear on the grapes until very late in the season, and there are very few beneficial microbes present at the susceptible time of flowering. The best approach for developing a biological control was to change that, by establishing a population of beneficial microbes in the susceptible grape flowers from the beginning of the season.

The beneficial fungus *Trichoderma*

The genus group *Trichoderma spp.* are a group of beneficial fungi that are antagonists (predators, parasites, competitors), of other fungi that cause crop disease. There are two main groups of plant pathogenic fungi that *Trichoderma* can attack enough to act as a biological control agent, these are the sclerotial fungi (*Botrytis*, *Sclerotinia*, *Sclerotium* & *Rhizoctonia*) and the lower fungi (*Phytophthora*, *Pythium*).

There are thousands of different races of *Trichoderma* and they are all adapted to growing in different climates, and in different crops, in different soil types and they attack different diseases.

In many cases *Trichoderma* has been produced and sold to control crop diseases under circumstances for which it is not adapted to grow (the situation is the equivalent of planting a rainforest fern in the desert, where it will not survive). Growers who are offered *Trichoderma* based products should ask to see the results of an experiment that is related to their crop, their disease problem and in their climate before they commit to try the product.

With the above information in mind we began to search for *Trichoderma* races which were adapted to growing into grape flowers and were able to attack and kill *Botrytis cinerea*. A wide variety of *Trichoderma spp.* were collected from grape foliage in southern Tasmania (which is a prime location for *Botrytis*).

Screening for a biological control agent

Over three seasons of initial screening a race of *Trichoderma koningii* (called Td67) became consistently the best candidate for control of *B. cinerea*.

- In 2002, two sprays of Td67 at flowering reduced the number of berries infected by 25%.
- In 2003, three sprays of Td67 at veraison reduced berry decays by 50%.
- In 2004, Td67 was applied to the grapes five times between flowering and veraison. At harvest the percentage of berry decay was reduced from 10.2% to 1.9% (Figure 3). This was a very significant decrease in the amount of infection.

Following three more seasons of field evaluation it was found that in most seasons only two sprays (one at flowering and one at veraison) were needed and a production plant was established to produce a formulation of Td67 which has been named "Colonizer" and the treatment is being widely adopted in the grape industry.

It was also necessary to optimise the rate of application, the correct timing for application and the compatibility with other crop protection agents that are sprayed on the foliage at a similar time of the season. There are a few chemical fungicides that do inhibit Td67 and these need to be avoided for a few weeks after Colonizer has been applied. In most cases this has not been a significant impediment and spray program timings can be adjusted.

Using biological control agents instead of chemicals to manage *Botrytis* has the advantage that the treatment is safe and environmentally clean, and can be used at any time of the season without fear of leaving a chemical residue in the produce.

Minimising disease carryover

The sclerotia of *Botrytis cinerea* which release the spores in spring really are where the trouble starts as far as infection goes. Sclerotia of some fungi (such as onion white rot) can survive in the soil for 30 years, but in the case of *Botrytis* the sclerotia usually only survive long enough to produce spores in spring. Some beneficial fungi (again, different races of *Trichoderma*) can parasitise the resting sclerotia in the soil. If the sclerotia can be killed before they release spores in the spring they do not get a chance to infect the flowers and the annual disease cycle can be broken.

A process has been developed to multiply *Trichoderma* races that kill sclerotia in compost. The compost therefore provides nutrition, organic matter, improves soil health and soil structure, and assists in disease control. The treatment is still relatively experimental, but we are very keen to hear from growers who have had a *Botrytis* problem who would consider trying such a treatment on their farm.

Overall integrated control

The key to beating a disease such as *Botrytis cinerea* is in using an integrated approach. There is no single measure that will beat the disease, measures that reduce the disease have to become part of the growers annual cycle of production. By reducing the survival of sclerotia there are less spores in the spring. By protecting flowers using beneficial microbes in the spring and following this up with suitable protection late in the season there are less infected berries which will fall to the plantation or vineyard floor to make sclerotia. There are other measures such as pruning the canopy for maximum airflow and avoiding humidity in the canopy which have not been described in detail here. This annual cycle gradually beats down the problem.

For further information visit - www.biocontrol.net.au

A list of allowed Copper Fungicides for Plant Disease Control can be found in the NASAA Certified Organic Update section on page 17.

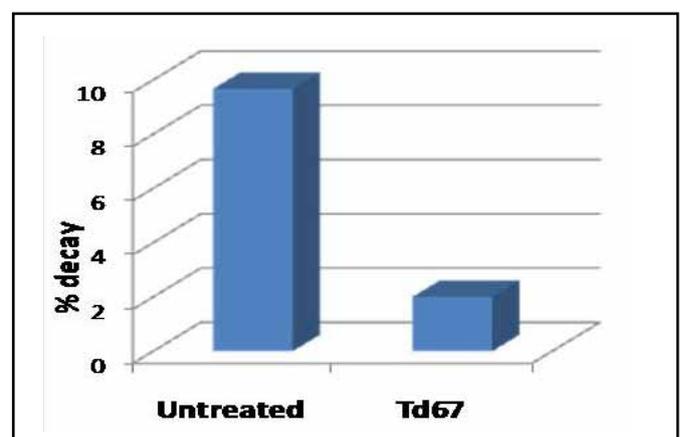


Figure 3: Reduction *Botrytis* infection from applying Td67 to grapes at veraison ($I_{sd}0.05=3.49$)

New spelt genotypes selected

By Robyn Neeson, Organic Farming Liaison Officer, NSW Department of Primary Industries, Yanco, NSW 2703

Research project investigates the value of spelt as a high value grain for organic production...

A collaborative research project investigated the agronomic and quality attributes of spelt and its potential as a high value grain for organic production. The project's main objective was to select superior lines that are well adapted to organic production systems, and which have acceptable nutritional and processing quality.

The project, funded by the Rural Industry Research and Development Corporation's (RIRDC) Organic Produce Program, involved researchers from NSW Industry & Investment's (NSW I&I) Yanco Agricultural Institute and the EH Graham Centre for Agricultural Innovation (an I&I NSW and Charles Sturt University collaboration) Wagga Wagga, and Victoria Department of Primary Industries at Rutherglen.

From 2006-2009 over 100 spelt genotypes were screened for their yield, quality, disease resistance and response to limiting levels of phosphorus. Trials were located at NSW Department of Primary Industries Yanco Agricultural Institutes' Organic Research Site and Wagga Wagga Agricultural Institute, Victoria Department of Primary Industries Rutherglen Research Institutes' Organic Research Site and David and Mary Booths organic farm 'Buronga' at Cootamundra.



Growers and processors were asked to evaluate spelt genotypes during a field day at NSW DPI's Organic Research Site at Yanco

Following initial seed increase and field observations the spelt genotypes were DNA and disease screened. This reduced selections to the top 20 lines which were then further evaluated on the certified organic trial sites at Yanco and Rutherglen and at 'Buronga'. A final selection of two genotypes was made in 2009 and these were then seed increased at Yanco and 'Buronga' in 2010.

Key findings

The spelt genotypes exhibited a wide variation in agronomic and quality attributes. Spelt wheats were lower yielding, later maturing, generally produced more biomass and tillering, and had a lower grain harvest index and lower P efficiency for grain production, than common bread wheat cultivars.

Our research identified two genotypes as potential replacements for the industry standard spelt (known colloquially as 'Kamarah'). The new spelt genotypes (ST1040 and ST1041) exhibited superior yield and disease resistance characteristics when compared to 'Kamarah'. Yields equivalent to 35 % greater (an additional 0.6 tonnes per hectare) were achievable with the new genotypes under organic production.

The genotype ST1041 is typical of spelt in that it is not free-threshing, retaining its tightly bound hull at harvest. The genotype ST1040 is partly free-threshing. Figures 1 and 2 show the spelt genotypes.

Optimum performance of the spelt genotypes was achieved by sowing in May through to mid June, although earlier sowing may also prove successful.

The spelt genotypes exhibited a wide variation in genetic and agronomic attributes. DNA (DArT) analysis indicated that some spelt



Figure 1: Spelt genotype ST1040 grain



Figure 2: Spelt genotype ST1041 grain (hulled and de-hulled)

genotypes are spelt / wheat hybrids. A range of disease (stripe and stem rust) & aluminium tolerances were also identified.

Results of the phosphorus uptake trials revealed that spelt genotypes were more efficient in converting internal P into biomass, but were less efficient in converting applied P or internal P into grain yield.

The spelt genotypes achieved (on average) 16.7% grain protein compared to 15.7% for wheat. Several spelt genotypes were found to have comparable or better flour extraction rates than wheat. Further assessments of end-use suitability (baking, pasta) are required for the new genotypes.

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A rock and a hard place

By Isobel Thomlinson, Soil Association



New threat to global food security as phosphate supplies become increasingly scarce....

A recent report from the Soil Association reveals that supplies of phosphate rock are running out faster than previously thought and that declining supplies and higher prices of phosphate are a new threat to global food security. 'A rock and a hard place: Peak phosphorus and the threat to our food security' highlights the urgent need for farming to become less reliant on phosphate rock-based fertiliser. [1]

Intensive agriculture is totally dependent on phosphate for the fertility needed to grow crops and grass. Worldwide 158 million tonnes of phosphate rock is mined every year, but the supply is finite. Recent analysis suggests that we may hit 'peak' phosphate as early as 2033, after which supplies will become increasingly scarce and more expensive. [2]

This critical issue is missing from the global policy agenda - we are completely unprepared to deal with the shortages in phosphorus inputs, the drop in production and the hike in food prices that will follow. Without fertilisation from phosphorus it has been estimated that wheat yields could more than halve in coming decades, falling from nine tonnes a hectare to four tonnes a hectare. The current price of phosphate rock is approximately twice that of 2006. When demand for phosphate fertiliser outstripped supply in 2007/08, the price of rock phosphate rose 800%.

In Europe we are dependent on imports of rock phosphate, having no deposits of our own, but the geographical concentration of reserves adds further uncertainty to the future security of our sources. In 2009, 158 million metric tonnes

of phosphate rock was mined worldwide. 67% of this resource was mined in just three countries - China (35%), the USA (17%) and Morocco and Western Sahara (15%). China has now restricted, and the USA has stopped, exports of phosphate. [3] Author of the report, Dr. Isobel Tomlinson, said: "A radical rethink of how we farm, what we eat and how we deal with human excreta, so that adequate phosphorus levels can be maintained without reliance on mined phosphate, is crucial for ensuring our future food supplies."

'A rock and a hard place' sets out the actions needed to close the loop on the phosphorus cycle. These include:

Changing how we farm

Different farming systems vary enormously in their reliance on mined phosphate. Organic farms are more resilient to the coming phosphorus rock 'shock', as it can only be used as a supplement to nutrient recycling (including crop rotations, green manures, and composting), and not as a replacement. Organic crops generally have a lower fertiliser requirement than non-organic crops, with a greater capacity to scavenge for nutrients through denser and deeper root systems.

Changing what we eat

Eating less meat can reduce the demand for mined phosphate. This is because vegetable-based production is more efficient in its use of phosphorus than livestock production. Although different types of meat have different levels of mined phosphate demand depending on the farming system used to produce

them. Meat from livestock grazed on grassland that has not been fertilised with artificial fertilisers, will perform much better than meat from livestock grazed on fields that have been, or livestock fed on grain grown using artificial fertilisers.

Changing how we deal with human excreta

The report recommends a radical change in the way we treat human excreta and the need to abandon our current 'flush-and-forget' toilet systems in favour of Ecological Sanitation. The report also calls for a change to EU organic regulations to allow the use of human sewage - rich in 'natural' phosphate - on agricultural land to ensure phosphate levels are maintained. Globally only 10% of human waste is returned to agricultural soils. Urine alone contains more than 50% of the phosphorus excreted by humans.

Notes:

[1] 'A rock and a hard place: Peak phosphorus and the threat to our food security' Download the report here: <http://www.soilassociation.org/peakphosphate.aspx>

[2] Cordell D, Drangert J, and White S (2009), 'The story of phosphorus: global food security and food for thought', *Global Environmental Change*, 19, p292-305.

[3] The geopolitical realities of the sources of phosphate rock, which are highly geographically concentrated, add a further level of uncertainty in securing future phosphate supplies. The uneven distribution of reserves led to an article in *Scientific American* to declare, phosphorus "a geostrategic ticking time bomb".

About the Soil Association:

The Soil Association was founded in 1946 by a group of farmers, scientists and nutritionists who observed a direct connection between the health of the soil, food, people and the environment. Today the Soil Association is the UK's leading organic organisation, with over 200 staff in Bristol and Edinburgh. It is an educational charity with some 27,000 members, and its certification subsidiary, Soil Association Certification Ltd, certifies over 80% of organic farming and food processing in the UK. Visit us at - www.soilassociation.org

NASAA approved cosmetic label

By Jan Denham, NASAA

NASAA launches a new addition to their comprehensive range of standards for cosmetic products in response to client requests and market feedback

In response to a number of requests from our certified operators and after careful consideration, NASAA has introduced a new labelling system for some of the beauty care products that previously fell outside the organic certification criteria.

By the very nature of their composition and make up, some Health and Beauty products, cannot fully meet the requirements for use of the "NASAA Certified Organic" label ie minimum 95% certified organic ingredients.

On the basis of this, NASAA has reviewed it's labelling policy for Health and Beauty Care products and we are pleased to announce that NASAA has now introduced a "NASAA Approved Cosmetic" label for products with between 70% and 95% certified organic ingredients.

While the approved cosmetic standard recognises and acknowledges the need for this tolerance, it should also be noted that the remaining ingredients may not contain prohibited substances or involve prohibited manufacturing processes as listed in the NASAA Standards.

This new option for Health and Beauty Care operators will complement our existing "NASAA Organic" cosmetic label and the use of this label will require the operator to be certified by NCO, NASAA's certification company.

The new label will indicate to consumers the percentage of certified organic ingredients in the product as well as giving consumers confidence that the claims

of organic percentages are validated and that there are no deleterious products or processes used. The label will be able to be used on the front panel of product labels but the product will not be able to be labelled as an 'organic' product hence giving clear differentiation for those beauty products that can be certified as 'organic'.

If you would like more information about this new addition or wish to apply to use the "NASAA Approved Cosmetic" label please contact the Certification Office for a 'Change of Scope Form' to apply for the new product in your certification. The form may also be found on the NASAA website.

We hope that the introduction of this additional product to the NASAA range of standards gives you the opportunity to include beauty products from your business which would not meet the "Certified Organic" standards in your NASAA labelled range.

NASAA would also welcome any feedback that you may have regarding this new product and the benefits to your business.



Organic Industry Standards Certification Council (OISCC)

Genetic modification policy statement

OISCC membership includes all AQIS accredited certifiers (NCO, ACO, BDRI, OFC, AusQual, SFQ, TOP)

Products or by-products that are derived from genetic modification, are not compatible with the principles of organic and bio-dynamic agriculture.

Therefore AQIS Approved Organic Certification Organisations have agreed that:

1. The use of genetically modified organisms or their derivatives is prohibited on organic or bio-dynamic operations. This includes but is not limited to, animals, seed and farm inputs such as fertilisers, soil conditioners, vaccines, crop production materials, food additives or processing aids.
2. Inputs, processing aids and ingredients shall be traced back one step in the biological chain to the organism from which they were produced to verify that they are not derived from genetically modified organisms.
3. Where genetically modified crops or livestock have been grown or used on a production unit, a minimum of at least five years must have elapsed before products grown in or on that land can be certified organic or bio-dynamic.
4. The certification of organic crops, livestock or agricultural products will be withdrawn where genetically modified crops, live stock or agricultural products are grown or produced on the same farm.

National Vegetable Expo 2011

By Gaye Lamb, NASAA

NASAA recently attended the National Vegetable Expo at Werribee with Gaye Lamb on hand at the NASAA stand...

Background

Every two years the National Vegetable Expo provides a venue for vegetable growers, seed companies and industry suppliers to gather and discuss the best our industry has to offer.

This year the 2011 National Vegetable Expo was held at Werribee on Thursday 5th and Friday 6th May 2011 with a focus on 'Growing a Healthy Australia'.

The Expo features spectacular displays of new vegetable varieties offered by seed companies which provide the major draw card with many growers returning time again to discuss the merits of the varieties on display.

The Event

NASAA are happy to report that there were several serious enquiries from operators throughout the event considering certification with NASAA and we were able to distribute both promotional and certification information to a number of interested parties.

Visitor numbers for the Expo were good with some 1,231 plus visitors to the field days.

The Stand

NASAA had booked a stand in the marquee which was located near the entrance/exit gate and the food area with a well illuminated corner position.

The marquee positioning allowed ample room for each of the ten inside sites and very wide aisle space. NASAA promotional materials were placed both outside and inside the marquee to attract visitors to the stand.

Enquiries

There were a range of enquiries coming from people recognising the signage and seeking details on the certification process. This is great news both for NASAA



Certified Organic as a business and in demonstrating that NASAA still retains its well recognised and acknowledged presence in the organic market place.

Generally the questions were well informed with people seeking clarification on the certification processes and the options open to their businesses through NASAA.

In summary the National Vegetable Expo provided NASAA with an opportunity to get out and meet with some of our existing clients, potential clients and consumers with a genuine interest and commitment to organics and the industry.

Summary

With a good range of enquiries and interest from a number of different areas, NASAA hopes to bring on board some new NASAA Certified Organic operators and clients in the not too distant future!

Humane Animal Treatment – Choose NASAA Certified Organic

Recent airing of the ABC TV 4 Corners program regarding treatment of live exported cattle to Indonesia is something that will not happen with certified organic livestock. In the first place it is highly unlikely that organic livestock transportation would be certified as there are animal health and wellbeing criteria that have to be met under International Organic Standards (such as NASAA Organic Standard).

Livestock would not be able to be treated inhumanely once at the abattoir under organic certification.

The purchase of NASAA certified organic meat is a

guarantee to the consumer that the animal was not only raised on a healthy organic feed diet, but that any housing and yarding was not injurious or inhumane and that transportation does not stress or injure the animal. Maximum transport distances are set and electric prods are not permitted under the NASAA Organic Standard.

Electric prods are not allowed but this is not the issue in this media case it is the issue of 'stunning' before death by bleeding - the NASAA Standards do mandate that 'stunning' of animals prior to death by bleeding

NASAA Certified Organic update



National Organic Program (NOP) Update

NASAA Certified Organic received confirmation last month that our USDA Accreditation has been renewed following our annual audit process. NCO is in good standing to continue to conduct NOP certifications for all operators exporting to the US and Canada from anywhere in the world that NCO operates.

The good news for NOP certified operators is that the NOP certification now delivers two certifications in one. With the US- Canada Equivalence Agreement, NOP certification is valid for entry to the Canadian market.

Canadian market certification changes

Operators wishing to access the Canadian Organic Market can now do so with a US NOP certification and an Equivalence Attestation from NCO.

The Equivalence Agreement signed between the US and Canada (USCOEA) enables operators certified by NCO under the US NOP to label organic goods for export to Canada providing the following conditions are met:

- The Chain of Custody must be fully NOP compliant – this means that for any product to be exported to Canada, each part of the chain must be NOP certified.
- An Equivalence Attestation is required to accompany organic raw and processed products shipped to Canada under the NOP Organic certification. This is obtained from NCO and is in the form of a certificate. This is a requirement so that products crossing the borders are verified to meet the terms of the USCOEA and must appear on documentation travelling with the shipment.
- Organic labelling rules in Canada are different to that of the US. US labels can have “100% Organic” and “Made with Organic” on the front panel, but Canada does not allow this. Canadian labels have to be bilingual (ie French and English).

To apply for export approval to Canada under NOP certification, please send details of the products to be exported and the label to be used. Labels must be approved by NCO prior to export to Canada. The NOP label may be used. NCO may authorise use of the Canadian label.

For US NOP and Canadian Certification Information Contact Lee, our Certification Applications Officer for a NOP Certification Info pack and answers to your NOP certification questions, email enquiries@nasaa.com.au or phone 08 8370 8455.

Locust Control Update

Our review of locust activity throughout mainland Australia indicates that the infestations were not nearly as dramatic in general as was originally anticipated by authorities. Most operators have not had to use any treatment. For operators that do find there is an issue with locusts in forthcoming months, please note that AQIS has determined that it does not accept the use of Green Guard SC Premium (or Green Guard SC) under the National Standard for Organic & Bio-Dynamic Produce. Therefore, all operators must only use the ULV formulation or other allowed insecticides (eg pyrethrum).



Coal Seam Gas Mining and Organic Certification

NASAA Certified Organic (NCO) has conducted a review of the issues surrounding the prospecting and drilling for coal seam gas on certified organic properties, based on material available to us to date. Anyone interested in the impact of coal seam gas exploration or mining to land and operations under organic certification is referred to the NASAA Organic Standard May 2008. The NASAA Organic Standard is an industry leader in environmental sustainability on organic farming operations. This is available from the NASAA website nasaa.com.au

NCO Operators who may be affected by coal seam gas mining need to contact NCO once they know mining is imminent. They will need to supply NCO with a program of operations from the mining company for assessment by NCO.

There may be other issues depending on whether prospecting and/or drilling do go ahead on a certified or applicant property, NCO always assesses each operation on a case by case basis. It is the responsibility of the certified operator to manage their operation in compliance with organic standards and to keep NCO informed as soon as there is evidence of an actual or potential impact occurring.

Mouse Plague

With growing numbers of mice in cropping areas in southern Australia proactive early attention involving monitoring is best practice. Regional Departments of Agriculture usually can supply good advice on monitoring methods.

When mice are present during sowing, damage can occur from loss of seed, especially seed of pulse crops, but losses of cereal seed can also occur. Mice will follow planted rows and dig up all the seed. This occurs particularly when alternative food is scarce. Sowing deeper can reduce mouse damage but it will slow germination. Nevertheless, it may help when farmers want to sow crops during periods when mice are active.



There is no magic bullet for control of mice in organic operations, but the following are permitted:

- The use of sufficient numbers of physical traps around the perimeter of buildings and storage facilities for monitoring activity and physical control.
- Rodenticides may not be used in crops or inside buildings or storages.

Operators should contact NCO to discuss their control methods if they are not sure that they comply with the NASAA Standards prior to use.

Allowed Copper Fungicides for Plant Disease Control

Due to the build up of fungal spores following the recent wet growing season, early planning for control of fungal diseases will be needed. Fungicides Sulphur is also allowed as a fungicide.

Refer to Annex 2 NASAA Organic Standard: Products for Control of Plant Pest & Disease and for restrictions and specifications prior to selecting your product. The following copper products are allowed:

Trade name	Active Ingredient	Notes
Bordeaux mixture	Copper	Hydroxide is the preferred form. Use only on dormant tissue. Mix 90g of copper sulphate (bluestone) with 4.5 litres of hot water in a non metallic container and leave overnight. Next day mix 125g slaked lime with 4.5 litres of cold water in a non metallic container. Combine both mixtures by stirring vigorously. Use immediately. An oil can be added.
Burgundy mixture	Copper	Hydroxide is the preferred form.
Bluestone copper sulphate pentahydrate powder	Copper sulphate	Copper sulphate pentahydrate (powder)100%
Kocide	Copper hydroxide	
Kocide Blue	Copper hydroxide	
Norshield WG	Cuprous oxide	

Organic news...

GMO and organophosphate pesticide residues effect the unborn

The body of peer reviewed scientific studies showing the adverse health effects from the pesticides used in food production continues to increase.

The three latest studies published in Environmental Health Perspectives show that prenatal exposure to organophosphate pesticides effects a child's neurological development resulting in lower IQs. Organophosphates were originally developed as nerve poisons for chemical warfare and were later modified to be used as insecticides. There are more than 60 years of published scientific studies showing the damage that they cause to the nervous system.

A scientific study published in the peer reviewed journal Reproductive Toxicology has found the residues from the

herbicides glyphosate and gluphosinate in women and of even greater concern the residues of Bt toxins in pregnant women and their unborn babies.

These residues have come from consuming the food produced from the most common GMOs.

Food is a major route of exposure to pesticide residues for most people. The best way to avoid them is to eat organic food. These studies show that this is especially important for pregnant women to avoid permanent neurological damage to their children



The Future of Organic Products: Brands or Retailer Private Labels?

A recent article from the Organic Monitor raises some interesting points regarding brand perception and labelling of organic products from a consumer perspective

There is some debate about the future growth of the organic products industry. Is it with brands or retailer private labels? The industry has been built by brands that have crossed over from specialist to mainstream retailers. However, new research shows retailer private labels are showing the highest sales growth in the current environment.

O Organics is becoming the leading brand of organic foods in the US. Launched by Safeway in 2005, the private label now houses over 300 certified organic products and exceeds USD 400 million sales. In Germany, the leading brand of organic & natural cosmetics is the private label of a drugstore.

Retailers are very successful with private labels as they enable organic products to be marketed at competitive prices. In some cases, the organic products are even cheaper than conventional ones. For instance, Lidl's organic yoghurts are priced GBP 0.35 (EUR 0.40) compared to GBP 0.50 (EUR 0.58) for similar conventional yoghurts (150g pots) of a leading UK supermarket. Some argue that large food retailers are taking advantage of the 'organic' brand without making any of the associated investment. Indeed, the industry has been built by certification agencies and pioneering brands; the very same logos and brands that are slowly disappearing in supermarkets and mainstream retailers.

Sluggish market growth rates and rising consumer price sensitivity have popularised retailer private labels. Private labels for organic foods are most successful in Germany where they have been introduced by discounters, drugstores, supermarkets as well as organic food shops. In most product categories, private label products are outselling branded products of organic foods. With consumers preferring value organic products, some manufacturer brands are becoming marginalised and are having to re-focus on specialist retailers.

Most brands were built in this channel; they crossed over into mainstream retailers as the market gained momentum. However, the rise of private labels are making them target organic food shops and health food retailers once again. Increasingly crowded retail space is making many brands re-invent themselves. Being organic is no longer good enough as organic foods have become 'commoditised' in the marketplace. Some, such as Green & Black's have positioned themselves as ethical brands.

In the US, Organic Valley has positioning itself as a sustainable brand that supports family farms. It has also adopted a brand extension strategy, expanding from

organic dairy to several product categories. Its success has made the co-operative the largest organic food enterprise in North America, reporting USD 520 million sales in 2009. Pioneering brands are re-inventing themselves to widen consumer appeal. However, retailer private labels are also evolving with some transcending traditional boundaries.

The O Organics private label has expanded from Safeway retailers into foodservice outlets in the US. It has also developed an international presence, marketed by numerous food retailers in Latin America, Asia and Africa. The lines between brands and retailer private labels are becoming increasingly blurred in the global organic food industry. Private labels are leveraging organic values and winning consumers by marketing products at competitive prices.

Organic brands are having to re-invent themselves, with many focusing on new values to broaden consumer demand. With increasing commoditisation of organic products, there is growing pressure for leading brands to differentiate themselves. Those that do not maybe confined to specialist retailers, the same channel which they have worked hard to expand from. Sustainable Foods Summit The future development of the organic food industry is a major theme of the upcoming Sustainable Foods Summit, taking place in San Francisco on 18-19th January 2011. The summit will discuss the role of brands and retailer private labels, bringing together Safeway (O Organics), Organic Valley, Earthbound Farm, Honest Tea, Bonterra Vineyards and other leading brands.

More details are on the website Upcoming Report: Global Market for Organic Food & Drink (2010 edition)

About Organic Monitor

Organic Monitor is a specialist research, consulting and training company that focuses on the global organic and related product industries. Since our formation in 2001, we have been providing a range of business services to operators in high-growth ethical & sustainable industries. Our services include market research publications, business & technical consulting, summits, seminars & workshops.

Visit us at - www.organicmonitor.com



Events & expos

some upcoming expos & events in the organic industry...

Organic Expo & Green Show Sydney International 5-7 August 2011 Melbourne 15-16 October 2011



NASAA is pleased to announce that we will once again be an active supporter and exhibitor at this year's Organic Expo & Green Shows.

We will be attending both the Sydney and Melbourne Expos where the Organic Expo & Green Show continues to be recognised as a major trade and industry networking event.

Last year's Sydney Expo gave us opportunity to catch up with clients and meet new customers from a variety of backgrounds.

Visit the expo if you have chance and see what's on offer, it would be great to catch up with you there!

For more information visit www.organicexpo.com.au

Natural Products Expo Asia 25-27 August 2011 Hong Kong Convention and Exhibition Centre, Hong Kong

Natural Products Expo Asia continues as one of the leading organic trade shows in the Asia-Pacific region.

The Expo is steadily growing as a result of consumer awareness and the increased demand for organic produce across these emerging markets.

More information can be found online at - www.naturalproductsasia.com

BioFach America 22-24 September 2011, Baltimore Convention Centre, Baltimore, Maryland

Back to the roots: BioFach America returns to Baltimore. The organic and natural products sector meets on the East Coast of America from 22-24 September

At Biofach, you'll see established organic brands on display alongside new and innovative products from fledgling companies entering the global organic markets.

More information at www.biofach-america.com

NASAA Annual General Meeting 2011

The place to meet your NASAA Directors and fellow NCO certified operators.

Provisional arrangements for our 2011 AGM are that it will be held in mid October 2011 in Melbourne to coincide with the Organic Expo & Green Show.

This will hopefully help assist people attend without having to travel additional distance and spend time away from your businesses.

Date and venue to be confirmed, more information will be made available at - nasaa.com.au

17th IFOAM Organic World Congress 2011 Korea 26 Sep - 5 Oct 2011 Namyangju Sports & Culture Center, Namyangju City, Gyeonggi Province

The Organic World Congress will be based on the IFOAM Principles of Organic Agriculture: Health, Fairness, Ecology and Care.

The OWC will offer platforms and to build bridges between different cultures, regions, in time and space, with the help of leading personalities from Sciences and the Arts.

More information at www.ifoam.org

BioFach Japan 1-3 November 2011 The Tokyo International Exhibition Centre, Japan

BioFach Japan, the platform for organic food, natural cosmetics and organic textiles, attracted

256 exhibitors and 17,132 visitors to the Tokyo Big Sight.

The demand for organic food is growing rapidly in Japan and it is expected to continue in the future. Potentially, Japan can be an enormous organic food market.

Currently, consumer demand exceeds domestic supply and most organic products are imported.

The expo gives businesses an intro into the growing Japanese organic market with its health conscious consumers and business customers.

More information at www.biofach-japan.com



Join NASAA and support the organisation that supports the organic industry...!

APPLICANT DETAILS

Name	<input type="text"/>	Business Name (if applicable)	<input type="text"/>	Certification No. (if applicable)	<input type="text"/>
Address	<input type="text"/>			Suburb	<input type="text"/>
State	<input type="text"/>	Postcode	<input type="text"/>	Email	<input type="text"/>
Do you wish to receive NASAA information electronically Y / N					
Tel	<input type="text"/>	Mob	<input type="text"/>	Fax	<input type="text"/>

All applicants agree to abide by the NASAA aims & objectives set out in the NASAA Constitution which can be found at www.nasaa.com.au/welcome1.

MEMBERSHIP DETAILS

Please sign me up as NASAA member

General Membership	January - June (period 6 months - 1 Jan - 30 June) \$49.50	<input type="checkbox"/>	July - June (period 12 months - 1 July - 30 June) \$99.00	<input type="checkbox"/>
Junior Membership	July - June (period 12 months - 1 July - 30 June) \$49.50	<input type="checkbox"/>	(for applicants under 26 years of age)	
NCO Certified Operator Membership	January - June (period 6 months - 1 Jan - 30 June) \$27.50	<input type="checkbox"/>	July - June (period 12 months - 1 July - 30 June) \$ 55.00	<input type="checkbox"/>

YOUR INTEREST IN ORGANIC

If not a NCO Certified Operator, please give a brief description of your interest in organics and why you would like to become a member of NASAA (100-150 words)

How did you hear about us? certification referral internet media event other

PAYMENT METHODS

Please fax or post application form together with correct payment either by cheque or money order made out to NASAA Ltd, or make your payment by Credit Card or direct deposit.

Cheque	<input type="checkbox"/>	Direct Deposit	<input type="checkbox"/>	VISA	<input type="checkbox"/>	MASTERCARD	<input type="checkbox"/>	Other	<input type="checkbox"/>
Cardholders Name	<input type="text"/>			Card Number	<input type="text"/>				
Expiry Date	<input type="text"/> / <input type="text"/>	Signature	<input type="text"/>			Date	<input type="text"/>		

Direct payment to NASAA Ltd - NAB bank account; BSB 085-436, Account No 04-995-5748 For International Transfers: BIC/Swift Code: NATAAU3303M

PRIVACY AND CONFIDENTIALITY

NASAA is committed to handling personal information about you in accordance with the Privacy Act.

NASAA may collect and hold information about you for the purposes of assessing, reviewing and making decisions about your suitability for NASAA membership. You may have access to your personal file held by NASAA.

NASAA will handle all such personal information confidentially and will not divulge it to any party outside NASAA without your written permission except that:

- Generalised information may be extracted to be used for statistical purposes without disclosing personal details

National Association for Sustainable Agriculture Australia Ltd

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