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Chaff & Weed Seed Collection at Harvest Time in Organic Cropping Systems

Integrated Weed Management Needed

Weed management in organic systems needs to be an ongoing process. Each weed control tactic is partly reliant on previous treatments and paves the way for the following tactic. That is, it needs to be an *integrated* and planned process. As in other farming systems, weed seed collection at harvest must be used as part of a system. For example:

- Suppression of weeds during the previous pasture phase, using grazing and topping *and:*
- Conserving pasture as silage (making hay also works but not as well) and suppressing weed re-growth following cutting *and or:*
- The use of green manuring of plant material (preferably a legume) in the spring before cropping and suppressing any re-growth following cutting *and:*
- Achieving good weed control after the break and before sowing *and:*
- Establishing a competitive crop *and:*
- Chaff & weed seed collection. Note again that this has no effect on the current crop yield. It simply prepares the paddock for the next season.

Chaff Collection Systems

Chaff and weed seed collection at harvest is a management system to reduce weeds which have evolved with herbicide resistance. That is herbicides can no longer be relied on to control them. Since herbicides are never used in organic systems, there is every reason to expect that chaff and weed seed collection could be an effective tool for organic farmers.

Seed collected at harvest with the chaff reduces the amount returned to the soil to germinate in the following year. This will help production of a second year crop by reducing competition from problem weeds or at the very least reduce the weed burden that will compete with seedlings if going into a first pasture year.

Of the weed seed that is gathered during harvest by the header, some finishes up in the grain bin and some exits with the chaff. The fate of the seed depends on the shape, size and weight of the weed seed and how the header is set up. Either way, the seed is prevented from falling onto the soil.

The key to the chaff collection system working is that the weed seeds are still attached to the plants at harvest time and that the plants are high enough for the header to gather them up. Some producers use crop lifters to increase the proportion of weeds being gathered up.

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NSW DEPARTMENT OF PRIMARY INDUSTRIES

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Right: Chaff carting can collect up to 95% of radish or ryegrass seed.

Seed that is still attached to the weed plant at harvest can finish up in a number of places. Some will shake onto the ground as the comb hits them. Of the seed entering the header, some will finish up in the grain box, whilst the balance will exit the header along with the chaff.

There are a number of chaff collecting systems that have been or are being developed. Due to their cost effectiveness, two have been adopted widely, namely (1) Chaff blower & cart and (2) Concentrating the chaff into a narrow trail.

The other systems include the Ryetec sieve system, the Rotomill and coupling a baler directly to the header, collecting all straw and chaff. There are technical issues with the Ryetec sieve system and the Rotomill. There are large costs associated with the header-baler coupling although it works very well.

The Chaff Cart System

There are two major components to the system namely a chaff blower and a chaff cart. The chaff blower is located under the sieves on the header, collecting the chaff and blowing it up a chute. The chute delivers into a chaff cart that trails behind the header. When it's full, an automatic system opens the rear gate and a chaff heap is formed. Some farmers drive the header to a common site for dumping while others simply dump on the run.

The chaff heaps can be grazed (more effective with legume than cereal residue) burned or baled. Burning the chaff heaps in autumn can be a problem because the heaps burn for a long time (eg longer than a fire permit) and are often very smoky. Burning is however, the most common management option.

The chaff can be baled but this method requires some straw to be added so that the bales hold together. Grazing cereal chaff heaps tends to spread the chaff out with stock looking for weed seeds and grain.

The Narrow Chaff Trail

This is by far the cheapest option of all. A simple chute is rigged under the sieves so that the chaff is concentrated into a narrow trail. After harvest and with a permit, the chaff trails are burned. The role this technique can have will depend on the producer's attitude to burning. Attempts have been made to bale the header trails but too much seed is left behind.

Results Possible

Table 1 shows data from Western Australia comparing no collection, narrow header rows and chaff cart. Data also shows the additional impact of windrowing the crop before harvesting. Windrowing tends to gather more of the weed seed into a position where the header can pick it up. The harvest treatments were assessed the following autumn by counting weed seedlings.

Table 1 Percentage control of annual ryegrass with various seed collection techniques. (Bill Roy pers. comm)

Harvest treatment	Seedlings /m^2	Percent control
Harvested, using chaff spreader	721	0
Harvested, narrow header trail.	543	25
Windrowed, narrow header trail	256	65
Harvest with chaff cart.	131	82
Windrowed, harvest with chaff cart	67	91

While Bill Roy's data show quite good efficacy Table 2 shows that the results can be quite variable, depending a lot on the relative maturity of crop and weeds. Once again, Mike Walsh's data are from WA.

Table 2 Performance of chaff cart in a range of sites in collecting annual ryegrass seeds (from Walsh *et al*, pers comm)

Location	Total seed production	Seed left on ground after harvest	Seed removed in grain and chaff cart
		ryegrass seed /m^2	
Mingenew (no cart)	18,208	17,765	443 (2%)
Mingenew (1)	16,910	10951	6487 (38%)
Mingenew (2)	23,052	11872	11552 (50%)
Moora	8260	4914	3260 (39%)
lake Valley	20,456	9732	10701 (52%)

Mike Walsh has also shown that chaff carting can be very effective on wild radish as Table 3 indicates. Its worth noting that a very big proportion of the weed seed is collected in the grain box.

Table 3. Efficacy of wild radish seed collection with and without a chaff cart. (from Walsh *et al* pers comm)

Method	Total number of seeds entering header	Number of seeds in grain	Number of seeds in cart	Seed collected (percent)
No cart	15527	6237	-	42 %
With cart	15527	11042	3726	95 %

Note The fitting of chaff blowers tends to cause larger amounts of seed into the grain box, possibly due to more repeats to the threshing compartment.

Farmer Observations

A number of farmers have reported excellent results from using chaff carts with ryegrass and wild radish. One southern Riverina producer claimed not only to have almost eliminated ryegrass as a weed and greatly reduced radish (over a number of years of continuous chaff carting) but reduced his herbicide bill significantly.

The narrow windrow technique has been very widely adopted by canola growers where it is possible to burn the chaff trail without burning the rest of the stubble.

For further information contact: Steve Sutherland, NSW DPI, Regional Director (DPI Relations) South West, Email: steve.sutherland@dpi.nsw.gov.au

Spelt - selections for organic production underway

Above: The 'Cootamundra' spelt selection growing at NSW DPI's Certified Organic Site at Yanco Agricultural Institute.

Spelt is currently an important component of organic rotations in Australia's winter rainfall zones. In Australia, organic spelt is currently processed for flour and further value-added into bread, licorice, spelt flakes, and pasta. In addition, spelt has benefits for livestock, both for grazing and as a stock feed supplement. Environmentally, spelt is well adapted to organic systems. In addition to having lower nutritional requirements than wheat, anecdotal evidence suggests that spelt was unaffected by stripe rust in 2004 when the disease was widespread throughout Australia and appears more tolerant of waterlogging and salt (Ground Cover, Issue 55, April/May, GRDC 2005).

The seeming adaptability of spelt suggests that it may have a role to play in Australian agricultural systems as climate change impacts on traditional cropping. However, the yield of spelt (and other alternative grains) is variable (2 -4.5 tonnes / Ha) with reported yields in Australia well below that of wheat, indicating that there is potential to improve yields either through crop selection and/or by improvements to crop nutrition. Yield benefits, however, must not compromise the superior nutritional value or other unique attributes of these grains.

Organic farmers in the Cootamundra area of NSW are currently growing a spelt variety which is a mixture of two older strains. No other varieties are available commercially and little is known about the adaptability of the Cootamundra variety. NSW DPI in conjunction with Cootamundra organic producers David and Mary Booth (Buronga Organics) set out to test the available germplasm to see whether other varieties are an improvement.

A small number of seeds of each of these lines have been growing for the past 5 months in the glasshouse at the EH Graham Centre for Agricultural Innovation in Wagga Wagga. The harvested seed will be grown in the field next year. This is the beginning of the process to determine which of the varieties has commercial potential.

Left: Spelt genotypes near maturity in glasshouse at the EH Graham Centre for Agricultural Innovation in Wagga Wagga. Photo: Ray Cowley, NSW DPI Wagga Wagga.

As soon as sufficient seed is available, the best varieties will be evaluated on organic growers' properties and on certified organic land at NSW DPI's Yanco Agricultural Institute and at the Riverina Institute of TAFE's National Environment Centre in Albury.

Quality and 'organic' performance are essential attributes

The 43 spelt genotypes grown in the glasshouse have exhibited a huge and interesting range of different characteristics. Some lines were early 'spring' types, others were 'winter' types. There were striking differences in plant height, degree of tillering, leaf size and number, plant colour, and ear shape.

Organic growers require crop varieties that are deliberately bred to perform well in their production systems. Currently, organic farmers have to rely on varieties bred for high-input systems (fertiliser, herbicide, insecticide, etc.) which will not necessarily have the attributes most suited to the organic environment. Furthermore, organic growers really want varieties to be 'bred organically'. That is, bred using traditional methods and without the use of more modern interventionist approaches such as, tissue culture, artificial mutagensis, or transgenics. It remains to be seen whether some breeding is required for Australian spelt but experience over the years in many crops worldwide has shown that breeding may be required to make long-term progress in yield. Perhaps the biggest challenge for organic spelt production is weed control, and having a variety which is very competitive against weeds will be essential.

An equally important aspect of spelt wheat is its grain and flour quality - which is different to normal bread wheat. The Bread Research Institute Australia Limited recently undertook a review of the health attributes of spelt for the Grains Research and Development Corporation (GRDC). They found that spelt has a similar composition to modern wheats - high in carbohydrates, low in fat, with good protein, fibre, vitamins and minerals.

Right: Spelt genotypes grown in the glasshouse have exhibited a huge and interesting range of different characteristics. Photo: Ray Cowley, NSW DPI Wagga Wagga.

Zinc levels however, can be up to twice as high in spelt as in modern wheats. Spelt may be higher in vitamin E activity and have a higher proportion of monounsaturated fats to the total fat content. However, the content of total and insoluble dietary fibre has been reported to be considerably lower in spelt than modern wheats (Griffins, T. 2005). A vital part of any selection process is to ensure that the quality of promising varieties retain these characteristics and meets the quality requirements of the spelt processors and consumers. Quality will be tested as soon as sufficient seed is generated from field trials.

A complete production package

As they say "the proof of the pudding is in the eating" and it is hoped to undertake extensive on-farm evaluations of the selected lines. Subject to the success of a pending funding application, future trials will evaluate agronomic and quality attributes of the spelt selections within organic crop rotations. This will include a time of planting and sowing rate / row spacing trial and the determination (and provision) of critical soil P and N levels for spelt under organic systems. The ultimate aim is to present organic producers with a comprehensive production package which provides them with a selection of high quality; higher yielding spelt lines and production strategies which are well adapted to their local organic management conditions.

It is likely that future spelt wheat varieties will not be the pure, uniform types we are currently used to. Organic growers will, in fact, require locally-adapted populations which suit their individual conditions and which continue to evolve under natural selection. The plant breeder's job in this scenario is to produce the genetically-mixed populations by hybridisation and then let nature takes its course (along with a helping hand from the participatory organic growers). The end result will be 'landraces' - much like the crops of centuries past. So, it is back to the future!

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The StubbleStar® – star by name, star by nature

In September, the StubbleStar® (see Organic News, April 2004, Volume 1, Issue 4) was awarded the prestigious "Best Australian Agricultural Machine" award. This award is presented by the Tractor and Machinery Association of Australia and was presented at the 2005 Henty Machinery Field Days. This award followed StubbleStar® being a round winner and finalist of the ABC's "New Inventors" programme.

In conservation farming environments, herbicides are commonly used to knock down weeds and crop residues, after which, crops are sown into stubble and weed trash. The quantity and quality of crop and weed residue currently limits the ability of some machinery (in particular tined openers) to sow crops in narrow rows. Planting in narrow rows allows the crop plants to compete favorably with weeds for resources such as light, moisture and nutrients. In addition, stubble on the soil surface and in the seed zone, and the amount of soil disturbance at sowing, can all affect where and when weed species grow, and the early health and vigor of the crop. This factor is particularly important in organic cereal production where weeds can have a high negative impact if not properly managed during early crop establishment.

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The StubbleStar® technology was developed by David Gregor, Agricultural Engineer for the Cropping Systems Program of the Cooperative Research Centre for Australian Weed Management in answer to these complex challenges of effective weed control, reduced chemical and fuel use, improved soil structure and higher yields. The innovative no-till crop seeder opener, developed at the EH Graham Centre for Agricultural Innovation (a joint venture between NSW DPI and Charles Sturt University) at Wagga Wagga in southern NSW is expected to be commercialized in the next six months.

In a similar style to a conventional double disc, the StubbleStar® consists of two 20-point star-shaped blades off-set at four degrees to the vertical. Where a conventional double disc pushes straw deep into the furrow, the 'Star' points (termed 'fingers') instead part the straw prior to soil entry. Straw that is not deflected is sliced both by the edges of the 'Star' and at the intersection where two fingers join. Uncut straw is pulled back up from the furrow as the 'Star' rotates. Fertiliser is deposited into the imprints left by the star teeth. These are then filled, and seed and starter fertilizer go into this loosened soil. StubbleStar® creates an ideal seed furrow. The 'Star' lifts and aerates soil, unlike a conventional double disc which creates a 'v' shape furrow prone to smearing and compaction.

Depending on the crop being grown, the StubbleStar® can make a significant contribution to managing weeds in organic cereal production. It checks weeds in four ways:

- by disturbing the soil less, so that fewer weed seeds germinate
- by maintaining a heavy blanket of straw on the surface
- by narrow row spacing, so the crop beats the weeds to moisture and light
- by fertilizing the crop, not the weeds.

Trials conducted in Western Australia in 2004 showed that the StubbleStar® can get as many seedlings out of the ground as conventional tines without the hassles of straw blockages, weed flushes and tractor wheel slip. The WA trials led to some minor modifications of the StubbleStar®, including a new flexible seed tube to give deeper tillage and positive separation between seed and fertiliser, a snake chain for better seed covering, and a press wheel for improved seed/soil contact.

The CRC for Australian Weed Management team is seeking a commercialization partner that can take this new technology to the world market.

For more information contact: David Gregor, Weeds CRC NSW Dept of Primary Industries Tel: +61 (0) 2 6938 1907, Mob: +61 (0) 409 471 320. Email: david.gregor@dpi.nsw.gov.au

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Organic strawberry trial update

Organic strawberry trials located at NSW DPI's Bathurst Agricultural Research Station (first reported in Organic News February 2004 Edition, Vol. 1, Issue 2) are now in their second year. As Karen O'Malley, Extension Horticulturist - Organic Systems and Olives reports, despite financial limitations and fairly trying weather conditions the team at Bathurst have been able to produce a very healthy crop of organic strawberries with minimal inputs.

Of the four varieties on trial, 'Seascape' is shaping up to be the clear winner both in hardiness and flavour. 'Lowanna' is running a close second, 'Lowanna' is running a close second, whilst 'Alinta' and 'Red Gauntlet' both appear too susceptible to environmental and pest influences. Yield tallies and marketability for all varieties are still being collated.

A commercial foliar seaweed preparation is applied weekly to help the plants fight disease and maintain good health. Compost, processed chicken manure and interrow legumes have been used to supply the crops with their nutrient needs. Weed control has been carried out with black plastic mulch and mowing.

All four varieties have been through two quite different seasons characterised by drought, which was good for avoiding fungal problems but which resulted in sunburn toward the end of the season, and a migration of Rutherglen bugs. 'Alinta' and 'Red Gauntlet' were more susceptible to the Rutherglen bug while 'Seascape' and 'Lowanna' suffered minimal damage. Rutherglen bugs distort young fruit. Slug damage was beginning to show up at the beginning of the season but an application of an organically approved slug and snail bait proved effective enough to protect the developing berries.

Sunburn could be better managed with extra leaf cover and a less heat absorbent mulch; however these management technics would most likely increase fungal problems in a wet year.

Left: Organic strawberry trial at NSW DPI's Bathurst Agricultural Research Station

Spring 2005 started off with very heavy rainfall and humid conditions – perfect for fungal disease development and a good test for the four varieties. Again 'Red Gauntlet' and 'Alinta' showed more problems in this area. It was actually wet enough for the seeds on the 'Alinta' fruit to start germinating. 'Seascape' and 'Lowanna' held up very well considering the crop was under considerable pressure from the weather conditions. A commercially available fungal preparation with garlic, vegetable oil, seaweed and other ingredients was applied, providing some relief, but a fortunate week of drier weather also helped.

Botrytis is one of the most virulent diseases or organic strawberries, and this disease can cause considerable crop losses in a wet year. Due to the low concentrations of soil nitrogen, organic strawberries are less susceptible than conventional crops.

The use of raised beds with black polythene mulch encourages moisture runoff and also helps to reduce the level of fungal infection. Drip irrigation (such as T-tape) rather than overhead irrigation reduces the incidence and spread of disease, whilst maintaining good crop hygiene by regularly removing all ripe and infected fruit also reduces the source of infection. The disease is less severe in well-ventilated crops.

The post harvest handling of organic strawberries in warm, humid weather becomes extremely important in order to increase the level of commercial pack out and the quality of the product at point of sale. Rapid processing of good quality fruit that is too small to market would also be desirable.

For further information contact: Karen O'Malley, Extension Horticulturist - Organic Systems and Olives, NSW Department of Primary Industries Bathurst NSW. Phone: (02) 6330 1212 or Email: karen.omalley@dpi.nsw.gov.au

News, Publications, Commentaries & Events

Organic Expo 2006: 'organics for everyone'

Following the resounding success of the 2005 event, Sydney's Darling Harbour will once again be the venue for one of Australia's premier certified organic and environmental products & services expos in 2006. Organic Expo 2006 will be held at Darling Harbour, July 21-23, 2006.

Next years Expo will feature:

- 8,000 – 10,000 enthusiastic & qualified attendees (estimated)
- Complete Lifestyle show with 120 plus exhibitors (estimated)
- Premier location @ Sydney Exhibition Centre
- Industry and government endorsement
- Celebrity Appearances & Demonstrations
- Industry Professionals & Experts
- Exciting trade & public seminar series
- Organic Café offering a range of organic food & drinks
- Incorporating the Australia / New Zealand Organic Wine Show
- Key Interest Features
    - Farmers Market
    - Organic Vineyard
    - Organic Garden
    - Speakers Corner
    - Celebrity Stage

Exhibiting at the Organic Expo is a great way to increase your business's exposure and sales in this growing market. An Early Bird Discount is available for exhibitor if bookings are made by 31.12.05. To find our more, visit: Organic Expo website: http://www.organicexpo.com.au Email: exhibitors@organicexpo.com.au or call (02) 9451 4747

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The Viticulture Committee of Mudgee Winegrape Growers Association invites you to two special events

ON: Thursday 8 December 2005

VITICULTURIST OF THE YEAR LUNCHEON

Time: 11.30 pm for 12.00 start (registration 11.00 – 12.00)
Venue: Craigmoor Restaurant, Poets Corner Wines
Guest Speakers: Mr Des Walker , Gooree Park Vineyards
Ms Rosie Dorney, Frog Rock Wines
Judges: Tony Somers, Greg Johnston

VINEYARD SOIL MANAGEMENT FIELD DAY

Venue: Lowe Family Wine Company
Presentations include:
The Soil Food Web: Ms Merline Olsen,Soil Foodweb Institute Pty Ltd Lismore
Composted Mulches for Grape Production in NSW: Dr Girja Sharma, The University of NSW, Sydney
Soil Variability Mapping: Mr Jamie Lees, Jammel Pty Ltd Mudgee
Mulching Economics for Vineyards: C R Beckingham, NSW DPI Mudgee
Case Studies: Composts and Mulching -

- Viticare Trials: Sheri Robinson
- Lowe Family Wines: Jane Wilson
- Louee Wines: Phil Murray

IMPORTANT: To assist with seating and catering, please register
Registration: $45 per person: includes both events. Please register to assist with seating
RSVP: 5TH Dec Mike OMalley 6372 7409 Clarrie Beckingham 6372 4700

Network to provide much needed promotion of organics

OTACNet (Organic Traders' and Consumers' Network) has been set up by Helen Wallace and Catriona Macmillan to broaden public awareness of the value of organically grown products, to support and promote organic businesses, and to encourage consumers to base their product purchases on full information.

OTACNet will keep members up to date with all the latest domestic and international news about organics, new products and current research on farming, nutrition, fair trade and the sustainable environment. The Network will also provide business information and staff education in organics and customer service to help support members' businesses.

The network will provide a way for organic traders to communicate with each other and provide business and referrals to each other, as well as providing group buying and marketing initiatives.
Contact Helen Wallace 02 9557 0500, fax to 02 8214 6800 or email helen@otacnet.com.au

New Book

The Biology of Soil, a Community and Ecosystem Approach. Oxford University Press.
by Bardgett R (2005)

- An up-to-date, comprehensive overview of the causes and consequences of biodiversity in soil, providing an accessible and authoritative summary of the field of soil ecology

- Provides unique combination of information on the biology of soil biota and their roles in ecosystems at different spatial and temporal scales, including wider ecological issues such as biodiversity, ecosystem functioning and global change
- Global case studies illustrate the importance of biotic interactions in soil for properties of different ecosystems, placing soil ecology in the context of real world issues in terrestrial community and ecosystem ecology
- Boxes throughout the text give background information on important soil biological properties and processes, facilitating student tuition

From: 'Soil life' edited by Justine Cox, Soil Scientist, NSW DPI, Alstonville.

New organic publications from RIRDC

Production of Organic Vegetable Seeds and Seedlings

by Robyn Neeson and Dr. Greg Howell

Addresses some of the needs to facilitate the uptake of the production of certified organic seedlings across Australia's horticulture sector. The project included a series of National workshops to increase awareness of the requirements for organic seedling production, and a telephone survey of organic vegetable producers and seed and seedling suppliers to determine their preparedness to adopt the changes or to supply this market and to identify issues impacting on their ability to do so. Technical information describes regulatory and production information for organic certified stock.2005, 99pp, Pub No 05/118

Should I Convert To Organic Farming? Information To Support Your Decision.

by Viv Burnett, Robyn Neeson & Dr Els Wynen

This project aims to provide information on organic production to broadacre grain farmers that will assist them with the organic conversion process. Consumer demand for organic produce is increasing rapidly, yet the rate of farm conversion to organic agricultural systems is still relatively slow. In economic terms, this means that opportunities for increasing organic exports are being missed. Two important reasons for the slow rate of conversion are the inadequate provision of information to farmers on organic production, and the relative isolation (geographic, information support) of farmers who wish to convert their farms. This project addresses both these issues through the provision of timely information, and the opportunity for farmers to attend an annual workshop. 2005, 52pp

Both publications are available to purchase on-line through RIRDC at: http://extranet.rirdc.gov.au/eshop/

Antibiotic uptake by plants from soil fertilized with animal manure

Published in J. Environ. Qual. 34:2082-2085 (2005)

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Antibiotics are commonly added to animal feed as supplements to promote growth of food animals. However, absorption of antibiotics in the animal gut is not complete and as a result substantial amounts of antibiotics are excreted in urine and faeces that end up in manure. Manure is used worldwide not only as a source of plant nutrients but also as a source of organic matter to improve soil quality especially in organic and sustainable agriculture. Greenhouse studies were conducted to determine whether or not plants grown in manure-applied soil absorb antibiotics present in manure. The test crops were corn (*Zea mays* L.), green onion (*Allium cepa* L.), and cabbage (*Brassica oleracea* L. Capitata group). All three crops absorbed chlortetracycline but not tylosin. The concentrations of chlortetracycline in plant tissues were small (2–17 ng g^{-1} fresh weight), but these concentrations increased with increasing amount of

antibiotics present in the manure. This study points out the potential human health risks associated with consumption of fresh vegetables grown in soil amended with antibiotic laden manures. The risks may be higher for people who are allergic to antibiotics and there is also the possibility of enhanced antimicrobial resistance as a result of human consumption of these vegetables.

Published online, 12 October, 2005. http://jeq.scijournals.org/cgi/content/abstract/34/6/2082

Soil biology basics leaflets now on the internet

NSWDPI's leaflet series on soil biology are now available on the DPI website at http://www.dpi.nsw.gov.au/aboutus/resources/factsheets/soil-biology-basics.

New US 'sustainable' certification

A US coalition of farmers, environmentalists, and public officials is promoting sustainability certification that they say will be less costly than organic certification. The system sets standards for water quality, soil management, and wildlife protection, and allows use of synthetic pesticides, but participating growers are rated on their pesticide practices. Source: http://www.signonsandiego.com/news/state/20050907-0020-ca-sustainabletomato.html

Search for natural fungicides

Qld research shows the strategic use of natural fungicides such as cow's milk and silicon have potential to effectively reduce or prevent powdery mildew in capsicums and chillis in tropical regions. *Source: http://www.dpi.qld.gov.au/news/NewsReleases/18086.html*

New organic certifying group

A new group, the Organic Certifiers of Australia (OCA) will now represent the collective interests of the organic industry on certification and related matters. The OCA comprises six Australian organic AQIS approved certification bodies. *Source: Organic Advantage newsletter November 2005 issue.*

Do you have any Organic News?

Do you have any research results, field day reports or other information that may be of relevance to organic agriculture? If so, let us hear about it! Send your contributions to:

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YANCO NSW 2703

Email: robyn.neeson@agric.nsw.gov.au

Note: Electronic format is preferred. Text - Times New Roman 11 point.

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DISCLAIMERS

The information contained in this publication is based on knowledge and understanding at the time of writing. However, because of advances in knowledge, users are reminded of the need to ensure that information upon which they rely is up to date and to check currency of the information with the appropriate officer of New South Wales Department of Primary Industries or the user's independent adviser.

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