

# COGS

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# QUARTERLY

## ORGANIC GROWING IN THE CANBERRA REGION



**VOL. 6 NO. 3**

**SPRING 1998**

# COGS QUARTERLY

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## CONTRIBUTIONS INVITED

Send on diskette (any format, but Microsoft WORD files preferred), or e-mail to [jallen@pcug.org.au](mailto:jallen@pcug.org.au) otherwise, clean typed copy.

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### Advertising in the COGS Quarterly:

Margaret & John Allen

The *COGS Quarterly* is a unique medium for reaching people in the Canberra region who have an interest in organic food, gardening and general environmental issues. Our circulation is currently 450 but we are planning to increase that.

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<b>Treasurer</b>	John Allen	6258 9004
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Alex Brown

Conrad Van Hest

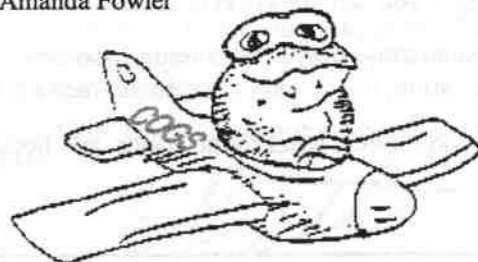
Amanda Fowler

### COGS FLIER

Pilots: Steve & Michelle Sutton

### MONTHLY MEETINGS

Book sales: Murray Dadds  
Produce table: Vacant  
Supper convenor: Vacant  
Librarian: Rachel Wynd



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Environment Centre: Ann Smith  
Griffin Centre: Rachel Wynd

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Oaks Estate	Amine Maia	c/- Georg Rehn 6297 1036
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### REMINDER:

Monthly meetings are held on the 4<sup>th</sup> Tuesday of each month (except December and January).  
Our meetings are held at 7:30 pm in Room 4 at the Griffin Centre in Civic.

~ VISITORS WELCOME ~

## FROM THE EDITOR



The distribution area of the Quarterly now includes several newsagents and retail outlets. After the initial delivery, we received phone calls from a number of them requesting additional copies of the magazine to be delivered - what encouragement! With the greater distribution, this could make the magazine an attractive way of advertising trash or treasures that you wish to dispose of for financial gain, or to promote your next activity or business venture, see inside the front cover for the very reasonable advertising rates.

You will notice that COGS is devoting more space to the genetic engineering topic, which is a hot topic in most organic magazines now, and is seen as a threat to the organic industry as we know it. We are kept up to date with events primarily via the

*Australian Gene-ethics Network* and we wish to pass on key information to members. You can help by raising awareness of the issue within your workplace and circle of friends.

I really would like to see more articles from the local area, as I believe that this is one of the methods in which we can all share our knowledge about growing and living in the Canberra Region, so please think about sharing some of your experiences with our readers. An article doesn't have to be of many words, and if you need any help in writing it you can always give me a call.

Thanks to those people who actually wrote or contacted me regarding the April farms visit, stating their appreciation, it is always good to get feed back from these events.

It is good to see a letter to the editor, and hope that as the magazine develops, more people will write to me.

Margaret

### LETTER TO THE EDITOR

Dear COGS

*Re Vol 6 No 2 Page 5 - Old Tyres & Carpet*

As to old tyres, I think that NASAA has a restriction on tyres in certified gardens for reasons stated.

As for old carpet and underfelt etc., manufacturers' and pre-sale treatments, or in-house treatments, make this material extremely suspect of organo phosphates and similar unwanted chemicals.

I have had soil test readings which I believe came from this source.

The treated timber - "copper logs" - have one or more chemicals in the treatment which would or could be taken up by plants, especially root crops in raised beds edged with this material.

R.B. (Dick) McNeill

*Old tyres also contain zinc*

... Ed.

### Position Vacant

#### Supper Convenor

The cup of herbal tea and cake has been something that we have all enjoyed in the past at the monthly meetings - but we are still looking for a volunteer for 1998. It would be great if there were two or three people who could share the supper job.

*If you would like to help out with either of these positions, please contact Steve Sutton, John Ross, or John or Margaret Allen (see inside front cover).*





## PRESIDENT'S REPORT

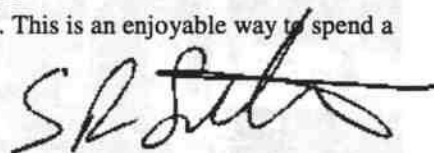
Welcome to all new members and people who are reading our Quarterly for the first time. Due to the wonderful effort put in by our editor, the last *COGS Quarterly* was a complete sell-out. A big thanks to Margaret and her helpers for a job well done.

The recent rain has been a welcome relief for our gardens. My garden has come to life because of the heat still in the soil; but as usual with good news has come the bad, as weeds have appeared from nowhere. They seem to grow in abundance when nothing else survives. I find that I just keep digging them in as a type of green manure. I do this before they form seeds so I don't have even more weeds to deal with.

Spring is in the air, you can see it in the budding trees. I hope that you didn't completely hibernate in the winter! This time should have been spent cleaning up those problem areas and planning for the next twelve months. Things just don't happen in the garden - some planning should be considered. From experience I have found that the best pumpkins seem to grow out of the compost bin, and that self-sown tomatoes grow more abundantly, but they usually appear in the wrong place. Pumpkins growing in the compost bin means you can't use the compost to prepare the beds for your winter produce. Maybe you didn't leave room for them? This is why planning is essential. It enables you to best utilise what space is available and plant the vegetables that you and your family enjoy. It is amazing how many times I have seen people plant produce that they and their family do not enjoy just because they find it easy to grow. So take a little time and plan; stagger your plantings so that you always have fresh produce that you and your family enjoy eating. If you like eating vegetables and fruits which are frost sensitive, make a cover so you can get them started before the frosts finish. In the long run the effort is well worth while.

The major promotional event COGS will be doing this year is a Stall/Information stand at the Horticulture Fair on the 7<sup>th</sup> and 8<sup>th</sup> of November. These events are an enjoyable way to meet interesting people who enjoy growing organically like ourselves. If you are able to volunteer a couple of hours help at this event, this would be greatly appreciated.

Thanks to all the people who turned up at the last working bee at COGS BACKYARD. This is an enjoyable way to spend a couple of hours on the weekend gardening and talking about different experiences.



### COGS' SEEDS

As those of you who have read the COGS Flier will be aware, I'm the new (well not so new now) seed librarian.

Having just placed the spring order with Phoenix seeds, I want to draw your attention to some of the stock I've ordered. As there isn't much we can grow in Canberra in the winter, I've ordered some things that can be planted all the year round:

- Rapid Red Beetroot - fast maturing, solid red flesh
- Daikon Radish - Japanese variety, mildly pungent, long white root to 40 cm
- Allseasons Carrot - fine quality 20cm roots with rich colour

Some others which can be planted in three seasons:

- Sugar Loaf Cabbage - early conical head, sweet flavour - sow sp,au,w.
- Tatsoi - tender and mild oriental green, hardy, easy to grow - sow sp,su,au.
- Swede - root vegetable larger and sweeter than turnips - sow sp,su,au.
- Mustard Spinach - fast growing, all season Japanese green - sow sp,su,au.
- Thumbelina Carrot - for heavy soils only 8cm deep, sweet - sow sp,su,au.

And some suitable for cooler climates:

- Sugar Baby Watermelon - small round melon, sweet orange flesh
- Nepal Tomato - smooth red fruits, delightful flavour, tolerates late, cool season
- Stupice Tomato - extra early, rich flavoured, best choice in cool/short season.

This list is not exhaustive and is well supplemented by our stocks of *COGS Own* seeds, which I've discussed in detail in the Flier. Our stocks of herb seeds include fennel, dill, parsley, coriander, nasturtium, rocket, soapwort, basil and land cress - all collected in the Canberra region. From Phoenix I've ordered chamomile, liquorice, marshmallow and yarrow, but only in small quantities as I'm not sure of the demand.

If you have special requests for seeds or we sell out of a variety mentioned here that you particularly want, let me know. I will be placing regular orders and the seed bank is here for the members' convenience and in the interests of promoting Canberra grown organic material.

I look forward to talking to you at the next meeting.

Susan Neild



# APRIL FARM VISIT

By Margaret Allen

*Oh what a wonderful day!*

The idea of a farm visit germinated when I received a letter from one of COGS' members asking for a trip to be organised.

First, I was approached by Wendy Rose and Julian Wood to say they would welcome a visit from COGS' members to their farm. I then made contact with Geoff Foster, who had previously offered to open up his place to COGS sometime in the future. He agreed, and now we had two farms on the agenda. It was also planned to include David & Faye Odell's farm, but due to family commitments David had to postpone the visit (hopefully to be included in our next farm tour).

Now that I had places to visit, how did we get there? The commercial bus companies charge too much for our budget. Most of the school buses are government owned so the schools are prohibited from leasing them out to groups such as ours. So I started the phone around and after about 10 negative calls was getting quite disheartened, so I made myself a cuppa and started on the phone list again, and success - Kaleen High School has a 22 seater bus and the price was just right. I made an appointment to see the bus and make the arrangements.



The bus and some of the group - Steve Sutton in the foreground

Who was going to drive the bus? I could drive, but I would prefer not to. Steve Sutton, our president, is an Action bus driver, so I gave him a call. The date that I was organising for the trip was his youngest son's birthday, but being the generous family that they are, Michelle (Steve's pregnant wife) agreed that Steve should drive the bus. What a relief!

Catering to the hungry hoards was my next concern, as I felt it should not be too much of a burden on our hosts. COGS would supply all the food except for the soup, which Wendy volunteered to make.

Now everything could go ahead, and the next Quarterly magazine and Flier advertised the event. The phone calls started to come in thick and fast, and I could have filled up three buses. Four groups were to follow the bus in their own vehicles. Unfortunately we had to keep numbers within a certain limit, for two reasons, one being the hosts could only take so many feet trampling around their home and property and the second being catering. So I apologise to those who were unable to be included in the tour.

Of course there were changes as people found out that they had other commitments, and names were added to the list from those eagerly waiting to be invited. The bus was in need of a good scrub, which Steve and myself gave it the night before the trip. But overall there were very few hitches in the organisation of it all.

On the day, the weather looked ominous for the travellers, but good for the farmers. Everyone arrived at the agreed meeting place well ahead of time. The convoy set off, making a stop at the Macs Reef turn-off to pick up another family in their own vehicle.

Geoff Foster and his family have been at Brooks Valley for four years this June. The farm covers an area of 20 acres, the vegetable growing area is approx  $\frac{3}{4}$  acre and this seems to be an expanding project. Geoff's background was as a research scientist in genetics, but he has been involved in backyard growing vegetables for quite a number of years before he moved to the farm. Scott Foster, Geoff's son, is



Scott & Geoff Foster



Geoff & Scott & the group at Brooks Valley

verandah, with scones made by John Ross and muffins made by Michelle Sutton and preserves made by yours truly, and much to the farmers' disgust it didn't rain.

We said our thanks and goodbye to the Fosters and during the next 45 minutes on the bus, there were games and quizzes to help the time pass quickly. The sun was shining when we arrived at Pumpkin Creek (near Tarago).



Julian Woods telling the group about Pumpkin Creek

character, incorporating two old Sydney railway carriages into the building. The WWOOF's accommodation is also a converted railway carriage.

Julian and Wendy have written a detailed article on their farm later in this issue called *Gardening at Pumpkin Creek, Lower Boro - a few notes after five years.*

Lunch was served in sunshine on the verandah, and what wonderful country hospitality we were all shown. Julian and Wendy, assisted by Marjatta Asa, served up a delicious home made soup with crusty bread and salad, plus all the salad, quiche, etc that COGS had supplied. By the end of the day I think we were all pleasantly stuffed with good food and interesting information; and to top it all off, it started raining as soon as we had all hopped on the bus for the journey home.

My thanks go to Geoff Foster, Scott Foster, Colleen Foster, Wendy Rose, Julian Woods, Marjatta Asa, John Ross, Steve Sutton, Michelle Sutton, Corey Sutton, John Allen and to everyone else that came along to make this day a success and so very enjoyable.

working as an apprentice on the property and has completed the course run by CIT on organic growing. The property has a frost hollow, so the method of growing in poly tunnels and the use of floating row covers means that the growing season is extended. I believe everybody in the tour found the discussions informative and interesting.

Morning tea was served on the



Morning tea at Brooks Valley

Wendy Rose and Julian Woods moved to Pumpkin Creek six years ago where they are operating a small organic vegetable business and the property is not currently certified organic. The property covers one hundred acres, of which just two small areas of that are under cultivation for vegetable growing. Wendy in addition to being a hard working farmer, is extremely creative, and there are many interesting and artistic creations of hers scattered around the property. Their home also has great



Wendy Rose with one of her sculptures

*"The game of life is not so much in holding a good hand as playing a poor hand well."  
- H.T. Leslie (from David Heaton)*



# POSTCARD FROM ENGLAND

By John Allen

I recently spent three weeks in south-west England and was amazed at the progress of the organic movement there. Also, the genetic engineering debate has a very high profile now that Prince Charles has come out with a statement on the subject and our friends Monsanto have commenced a massive advertising campaign to try and win over the consumers. I saw a full page advertisement by Monsanto headed "We believe food should be grown with less pesticide" (funny about that - Monsanto has sought a 200 fold increase in allowable chemical residues in soy products in Australia!).

In the U.K. and Europe, organic farming figures are growing steadily with a 20% growth in the last year. Assuming the growth rate is maintained, Nic Lampkin of the University of Wales projected that by 2005 there will be 0.5 million organic farmers farming 15 million hectares. In Europe, in the last eight years, there has been a ten-fold increase in organic farming, giving Europe a global market share of £5 billion (UK) compared to the U.S.A. with £3 billion in a global market worth £10 billion. *Elm Farm Research Centre Bulletin, Issue 33, Dec/97, reprinted from Cognition, Spring 1998.*

Many supermarkets now stock an impressive range of organic food - both the big chains such as Sainsburys, Tesco, and Iceland, and also the smaller fruit & veg shops. Most of the organic food is certified but there is quite a lot around which is supplied by small organic farms who cannot afford to obtain certification.

Supermarket giant Tesco (U.K.) is, according to a story by Amanda Crack in PA News, pouring £250,000 into a commercially-funded research program on organically grown fruit and vegetables that could push down prices and boost supplies. The story says that it is hoped the research, being carried out over the next four years at Aberdeen University, will culminate in a definitive guide to traditional organic growing techniques. *Reprinted from Cognition, Spring 1998.*

## Meat

There is a butchery chain in Devon which sells non-certified "organic" meat. They encourage small family farms to supply stock which is fed and raised according to their own strict "organic" standards. They have 25 farms supplying stock. The stock is prepared by their own abattoir. They claim that it is impractical to seek certification when there are so many small farms involved - they claim that their "organicness" is of a very high standard. Nowhere do they actually claim that the product is "organic", although they do boast a number of quality awards. I was impressed by this operation and the fact that small family businesses were

being encouraged in an environmentally sustainable way. Lack of certification is clearly a problem, though I can understand their predicament.

## Out of this World

A new national chain of ethical and environmental supermarkets springing up is the "Out of this World" chain - a supermarket which is "organic, ethical and cooperative". The supermarkets are owned by thousands of ordinary people who are using their spending power in a positive way.

- Organic - fruit & vegetables, meat & dairy, beers & wines, delicatessen, food & drink
- Ethical - recycled cards & wrap, fair trade crafts & gifts, cruelty free body care, recycled glassware, books & magazines
- Co-operative - five pounds buys 5 shares which gives regular newsletters, discounts, a vote, and a yearly dividend.

Each shop is a local supermarket which addresses global concerns. Every product in their range of thousands is chosen for its positive contribution to one or more of the following criteria:

- Healthy eating
- Community development
- Fair trade
- Animal welfare
- Environmental sustainability

Because the business is owned by its members, they are encouraged to do as much of their shopping there as possible - this is achieving what they call "sustainable consumerism". A mail order service is also available for people in remote areas.

## Genetic engineering

Prince Charles has a large certified organic farm and has come out with a strong statement about genetically engineered food entitled "Seeds of Disaster" (UK Telegraph, June 8 1998). He said that the genetic modification of crops is taking mankind into realms that belong to God, and God alone. He called for the segregation of such crops and the labelling of products made from them. He said that he would never knowingly serve his family or guests food which contained genetically altered organisms. This article was quickly followed by an assessment (UK Times, June 9 1998) by the highly respected reporter Libby Purves, who wound up a lengthy article as follows:

*"There will be plenty of scorn directed at the Prince of Wales. Some will say that he has got a ripe old nerve, a rich man like him attacking a technology which will produce cheap food. Phooey to that: when did the food industry ever want us to spend less on food? It wants to maximise its profits and ensure that if we do save a few pence on staples, we spend twice that amount on chocolate-coated pretzels, or chicken tikka-and-cappuccino dessert.*



Others will say that science must advance, and will be outraged by the shameless fundamentalist way that the Prince brings God into the argument. "We live in an age of rights" he wrote. "It seems to me that it is time our Creator had some rights, too." Fashionable thinkers will be horribly annoyed that a pragmatic rational argument should be defaced by this embarrassing mention of a creator with a capital "C", I was rather struck by it. Let him say what he believes. It does us good sometimes to get one man's strong

whole-grained belief, home-grown in natural soil and unmodified by electoral prudence, international politics, friendly phone calls from President Clinton, bio-chemical lobbyists the fear of looking silly, and other fishy alien genes. It is worth chewing over."

Consumers in small towns getting together and forming their own "genetix" groups to help fight GE. This is also happening in Australia, for example in Byron Bay.

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## DENMARK COULD GO 100% ORGANIC BY 2010!

Denmark has asked its environmental protection agency to determine the feasibility of making agriculture entirely organic by 2010. This European country reported that one-sixth of its farmers were organic in 1996. Thus, its plans to study the feasibility of not using any pesticides within 12 years are credible.

The impact of such a measure on the economy, environment, health, employment and agricultural production will be reported in late 1998 to the Ministers of Environment and Energy.

*Reprinted from Cognition, Spring 1998; source - Eco-Strategies News, Issue 4, Dec.11/97*

## OFA INDUSTRY WORKSHOP

The Organic Federation of Australia (OFA) conducted an industry workshop recently with over 100 participants from all over Australia attending.

Presentations covered: objectives of the OFA; R & D draft plan; grower issues and opportunities; consumer promotions; domestic legislation; marketing logo; export opportunities; relationship between Government and the OFA; and the role of the OFA as spokesperson.

There was a magnificent organic feast with produce and wine donated widely from members of industry.

Major discussions centred around the structure and funding of the OFA. Exact agreement was not reached, so the decision was made to recommend deferring elections and launch pending the release of a new structure to industry for public comment. As soon as the OFA committee feels satisfied that it has achieved a representative structure that has majority industry support, it will move to hold elections

and launch itself. No funds from existing members will be spent pending the outcome of the structure review, the OFA will likely refund to grassroots the membership fees collected so far.

Because of the delay in elections the committee has made the decision to invite another certifier and grower onto the committee to replace two people who have resigned.

The overwhelming feeling at the meeting was one of support for the OFA and for it to address key issues in our industry such as domestic legislation. In addition, this weekend was tremendously successful at raising the interest, understanding and enthusiasm of industry. There was strong support from Ewan Colquhoun manager of the R & D subcommittee for funding a yearly event like this. I look forward to the OFA committee inviting all members of industry to comment on a new proposed structure, which can take the OFA forward with the support of industry behind it.

- Summarised by John Allen

# USING TREATED TIMBER

By John Allen

My thanks to Cyndi Kirkpatrick for her assistance in researching this topic on the internet. Cyndi has a gardening site at <http://www.hollinet.com/~cyndik/NaturePage.htm>

**B**ased on scientific reports found on-line and in printed sources, it is advised not to use pressure-treated lumber for building a raised bed or for building children's play-sets; nor wood chips or sawdust from chemically treated lumber as mulch or as cushioning in children's play areas. The pesticides and preservatives in the wood are very strong and can be absorbed through the skin and through ingesting plants (particularly root vegetables) that have absorbed the chemicals. Keep this timber out of the garden and out of direct contact with humans - especially little ones!

In fairness, some lumber companies come to different conclusions based on the same reports. However, everyone, manufacturers included, agrees that if you are working with pressure-treated timber you should not make skin contact, you should not inhale the sawdust and disposal requires consideration, though there is some debate as to what those considerations should be. So if you work on your raised beds while wearing a mask, dressed head-to-toe in a plastic suit and don't let the plant roots come within one inch of the lumber, you're probably going to be fine using treated wood!"

The following references are provided. Although they relate to the USA, the warnings for us are clear.

## OHIO STATE UNIVERSITY FACT SHEET

Horticulture 2001 Fyffe Court, Columbus, OH 43210-1096  
Extracts from Gardening and Landscaping with Wood  
HYG-1151-94 Robert L. Romig

Wood is the construction material of choice by the home gardener. Wood products used in gardening projects include timbers for separated or raised beds, posts for decorative or protective fences, latticework, boards for decks, containers, and walkways. Lumber used in an outdoor garden or landscape must either be naturally resistant to insect and fungal attack or it must be treated to provide an extended service life. The safe application of treated lumber in the home garden or landscape makes economic and environmental sense, which results in the efficient use of harvested timber.

## Causes Of Decay

Wood products used in gardening and landscape environments are susceptible to deterioration from insects and fungal attack. Decay organisms grow most rapidly at temperatures between 70° to 90°F, wood moisture content above 20 percent, and in the presence of oxygen. The

protection requirements of wood products used in the garden or landscape depends to a large extent on end use. For example, wood used above ground is not exposed to the same level of decay organisms as wood used in-ground. It is most appropriate to use a level of treatment commensurate with the end use. Wood is most vulnerable to decay at the ground-line. Below ground-line there is insufficient oxygen to support fungal growth. Above the ground-line with proper care, wood moisture content will be too low to support fungal growth.

## Outdoor Wood Products

The home gardener has several choices regarding wood products suitable for outdoor use:

- Lumber with natural preservatives
- Lumber treated by the home gardener
- Pressure treated lumber
- Treated landscape timbers
- Recycled products such as rail ties

The home gardener must also feel comfortable with issues associated with the safety of products chosen for use in the garden and landscape.

## Natural Decay Resistance

Lumber or timbers containing natural preservatives can be used effectively in gardening and landscape applications. Certain lumber species naturally resist attack by decay organisms. It is important when using naturally resistant species that the lumber contains a high percentage of heartwood, the dark-colored, center portion of the tree. The heartwood contains extractives that provide the decay resistance. The sapwood or light-colored, outside portion of the tree does not contain these extractives and therefore is not decay resistant. Examples of commercially available species with natural decay resistance include redwood, cedars (western red, eastern red, northern white), walnut, Osage orange, white oak, and locust. At a minimum, these species can have a service life in excess of 10 years. However, some woods when green, like oak and walnut, have extractives that are harmful to plants.

## Home-owner Treatment

The lumber or wood can be treated by the home-owner with a variety of available products. Since the wood preservatives used commercially are classified by the Environmental Protection Agency as pesticides, these products are not available to the home-owner. There are a number of water-repellent finishes from which the home-owner can choose for preserving wood above ground. Typically, exterior finishes contain a resin or drying oil, paraffin wax, solvents and possibly a preservative that may include materials toxic to decay organisms. Exterior finishes are a product in which quality is closely aligned with price (higher price usually indicates higher quality).

### **Treated Lumber**

Pressure treated lumber that has the characteristic green or light-brown color is the result of a treating process in which the preservative is forced into the wood and bound in the cell wall. This wood is then resistant to attack by fungi and insects. The three primary chemical preservatives are creosote, pentachlorophenol, and chromated copper arsenate salts (CCA). Most wood products marketed through retail lumber yards and home centers as pressure-treated lumber contain the preservative chromated copper arsenic (CCA). This product usually includes a 30 to 40 year guarantee. All CCA pressure-treated products will have a quality stamp that indicates the level of preservative treatment. The quality stamp specifies whether the material can be used in-ground or above ground. The absence of a quality stamp on the lumber means the product is not pressure treated. The retailer should also provide a Consumer Information Sheet (CIS - USA only) that includes guidelines regarding the handling and use of the products treated with preservatives.

### **Landscape Timbers**

A product developed specifically for gardening is the treated timber that may be advertised as "landscape timbers". This product is the unused center of a log resulting from plywood manufacturing. The product is machined flat on two sides and rounded on two sides. These products are usually treated, however they are not pressure treated and therefore do not conform to the standards required for extended in-ground use. This product will not contain a quality stamp, however it will be treated (soaked or dipped) with preservatives. Use and handling Precautions are similar to pressure-treated products. The expected service life of this product is difficult to predict. Due to the high percentage of heartwood, an estimated in-ground service life would be five to seven years. Tests of untreated southern pine posts resulted in a service life of slightly more than three years.

### **Recycled Products**

Treated rail ties and utility poles are examples of products taken out of service and often marketed to the home-owner for use in landscaping. These products have been pressure treated with one of the three major chemical preservatives pentachlorophenol, creosote, or chromated copper arsenic (CCA). Most often, the preservative used is either creosote or pentachlorophenol and therefore these recycled products are not recommended for use in gardening applications.

### **Safety**

Chemical products forced into lumber as preservatives will leach out into the soil and water. The important question is whether chemicals leached from treated lumber used in a raised bed represent concentrations sufficiently high to cause damage to plants or humans. The use of CCA treated lumber has been reported as safe to humans and plants (Hickson Corp., 1993) in raised bed applications. Human health problems attributed to treated lumber have occurred in lumbar treating plants and manufacturing facilities. Concerns regarding the use of CCA treated lumber in garden applications have focused on potential hazards from the

toxic chemicals rather than demonstrated results. Specific guidelines must be followed when using treated products.

*Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Keith L. Smith, Director, Ohio State University Extension.*

### **CONSUMER INFORMATION SHEET FROM PRESERVED WOOD MANUFACTURERS**

*Here is the Consumer Information Sheet about pressure treated wood from the American Wood Preserver's Association that is SUPPOSED to be provided to every purchaser of CCA, ACA, and ACZA treated wood (in the USA).*

"This wood has been preserved by pressure treatment with an EPA registered pesticide containing inorganic arsenic to protect it from insect attack and decay. Wood treated with inorganic arsenic should be used only where such protection is important. Inorganic arsenic penetrates deeply and remains in the pressure treated wood for a long time. Exposure to inorganic arsenic may present certain hazards. Therefore, the following precautions should be taken when handling the treated wood and in determining where to use or dispose of the treated wood.

#### **Use site precautions**

Wood pressure treated with waterborne arsenical preservatives may be used inside residences as long as all sawdust and construction debris are cleaned up and disposed after construction. Do not use treated wood under circumstances where the preservative may become a component of food or animal feed. Examples for such sites would be structures or containers for storing silage or food. Do not use treated wood for cutting boards or counter tops. Only treated wood that is visibly clean and free of surface residue should be used for patios, decks, and walkways. Do not use treated wood for construction of beehives that may come in contact with honey. Treated wood should not be used where it may come into direct or indirect contact with public drinking water, except for uses involving incidental contact such as docks and bridges.

#### **Handling precautions**

Dispose of treated wood by ordinary trash collection or burial. Treated wood should not be burned in open fires or in stoves, fireplaces, or residential boilers because toxic chemicals may be produced as a part of the smoke and ashes. Treated wood from commercial or industrial use (e.g. construction sites) may be burned only in commercial or industrial incinerators or boilers in accordance with state and federal regulations. Avoid frequent or prolonged inhalation of sawdust from treated wood. When sawing and machining treated wood, wear a dust mask. Whenever possible, these operations should be performed outdoors to avoid indoor accumulations of airborne sawdust from treated wood. When power sawing and machining, wear goggles to protect eyes from flying particles. After working with the wood, and before eating, drinking, and use of tobacco products, wash exposed areas thoroughly." *Continued next page*



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#### **TRANSFER OF CONTAMINANTS FROM CCA-TREATED LUMBER TO AQUATIC BIOTA**

Summarised from Weis, Judith S. and Peddrick Weis. 1992. J. Exp. Mar. Biol. Ecol. 161(2):189-199. (ERL,GB X761).

Green algae collected from bulkheads made of wood treated with chromated copper arsenate (CCA) had substantially elevated metal levels. Snails, collected from an area distant from CCA-wood, were placed with experimental algae. All the snails feeding on experimental algae died. Thus, metals in the treated wood are taken up by attached algae, and can be toxic to grazing herbivores. Oysters were collected from a CCA dock, a bulkhead in a canal lined with CCA wood. Animals from the single dock had elevated Cu, and those from the bulkhead had 12 times the reference levels of Cu, and significantly elevated As. Fiddler crabs were collected from burrows close to or distant from CCA-treated wood structures and were analysed for metal content. Those living near CCA wood had elevated metal content, as did the sediments in which they resided. This indicates that sediments, which can absorb contaminants leached from CCA wood, are a route of exposure of benthic biota to these contaminants.

#### **UPTAKE OF METALS FROM CHROMATED COPPER ARSENIATE (CCA)-TREATED LUMBER BY EPIBIOTA.**

Summarised from Weis, Peddrick, Judith S. Weis and Emile Lores. 1993. EPA/600/J-94/014. Mar. Pollut. Bull. 26(8):428-430. (ERL,GB 792).

Previous studies have shown that Cu, Cr, and As leach from chromated-copper-arsenate (CCA) pressure-treated wood and can be toxic to estuarine organisms in the laboratory. In this study, algae, barnacles, and mussels were collected from CCA-treated wood in open water and in a residential canal, and were analysed for the metals. Those from the open water had significantly elevated concentrations of contaminants from wood, while those living inside the canal had considerably higher concentrations. The highest concentrations in barnacles were found in those barnacles growing on new (1 year old) wood within the canal, reflecting the greater leaching of new wood.

#### **PENTACHLOROPHENOL**

##### **Hazard Summary (brief)**

Pentachlorophenol is extremely toxic to humans from acute (short-term) ingestion and inhalation exposure. Chronic (long-term) exposure to pentachlorophenol by inhalation in humans has resulted in effects on the respiratory tract, blood, kidney, liver, eyes, nose, and skin. Studies are inconclusive regarding exposure and reproductive effects. Human studies are inconclusive regarding exposure to pentachlorophenol and cancer. Animal studies have reported increases in liver tumors and two uncommon tumor types. EPA has classified pentachlorophenol as a Group B2, probable human carcinogen.

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## **COLES LOOKING AT ORGANICS**

**C**OLES Supermarkets, which already carry organic produce in some stores is considering a move into the organic food market. The company is planning to trial sales of fresh organic produce in 10 selected stores. Organic Federation of Australia co-chairman Scott Kinnear said Coles management approached the OFA for comment on the proposed entry into organics.

After consulting widely with certifiers, wholesalers and retailers, the federation encouraged Coles to have its packing shed certified and to use only certified produce from AQIS-accredited organisations.

Certification of the packing facility would ensure an audit trail back to the grower, Mr Kinnear said.

The move by Coles has brought the idea of a national logo for organic and biodynamic produce to the

forefront of the industry's agenda, he said, and the OFA will be discussing a national marketing logo at its April meeting.

The concept of a national marketing logo had been discussed on and off by the industry over many years without agreement being reached, he said.

Mr Kinnear expects the federation will set up a working group to pursue issues relating to a common organic logo.

- John Allen

*While the introduction of organic food in supermarkets is good news for the organic industry and the wider community; We should continue to make an effort to support the small specialist organic retailers who have made this all happen and who will find it increasingly difficult to compete.*

- Ed.

# GARDENING AT PUMPKIN CREEK, LOWER BORO

... a few notes after five years

by Wendy Rose & Julian Woods

**W**e have been growing a variety of vegetables and marketing them by the subscription method to an average of 15 private customers in Goulburn, two of which are restaurants. We have proved that with good old-fashioned methods, strong commitment to organic principles (as far as practicable), and a van for transport and delivery, that a younger couple than us, could make an average weekly wage off an acre or less without large overheads or investment. It seems to us that Australian towns and villages need a ring of small organic farms in their vicinity (as they used to have in the past) providing a large proportion of the fresh food consumed by the local community.

We have neither the energy for full-time gardening, nor a hothouse to extend the seasons, so our winter income apart from egg production (we have 130 hens), has been low. However, we have averaged \$10,000 a year over the five years. Small as this seems, we have spent no more than 50% of our efforts on the farm as we are also involved with art and writing. So, \$400 to \$600 a week income for a younger couple working full-time is not unrealistic.

Our expenses in setting up the garden were as follows: Dam, \$2200; Pump and pipe \$800; Tiller \$940; Rock phosphate \$280; Ag.lime \$90; fuel for tiller \$100; Seeds and seedlings \$450; Fencing \$600. These have been the total expenses. Other items such as truckloads of manure were free except for our labour. Transport of produce costs nil as we only deliver weekly to Goulburn where we shop and socialise in any case.

We can always compete with any price as there are no middlemen so helping to make organic produce the norm and within the reach of all incomes. We disagree with the exorbitant prices charged by many organic outlets as this restricts the expansion of the organic movement.

The WWOOF scheme (Willing Workers on Organic Farms) is something to consider as both an aid in terms of labour, and as an experience. There are some duds, but from 24 such visitors over four years, we have had only one complete failure who did neither work nor fit in and several valuable friendships have ensued.

Absolute prerequisites include dams that will give abundant water during the longest dry period, reliable and powerful enough pumps that need little servicing and fences that keep out, absolutely, all animals. Small birds should be encouraged by leaving abundant trees and shrubs in and near the garden. Net and row cover are used whenever a particular bird clashes with a particular crop. On the whole we prefer to leave all birds alone. We think that the common meat ant also does good work eating some insect pests.

We have used garlic spray from our own garlic, and derris dust on brassica, and then only in the early stages. We are fortunate in our attitude to "weeds", a term we don't like in

the first place. As soil aerators, nitrogen producers, feed for poultry and for composting and green manuring - coupled with the more determined pulling up of the most insidious ones, these plants are an asset, and alternatives such as carpet, paper, flame etc. are time consuming. Also, we believe constant close covering of any soil reduces its friability and fertility. Approaching a weeding job in dismay and dislike is to ignore the benefits (which include reflection and meditation) and spoil much of the pleasure of gardening.

Temperament counts a lot. More than in most types of modern farming, which are structured like factory work, gardening has no hours or days, but simply times, any day, any night, any week, when things must be attended to. It follows that one must have a serene and passive acceptance of the vagaries of nature. Other interests are then woven in. If one's temperament requires absolute slabs of time, set days "off" etc. then the garden will not be successful. It follows too, that two adults is the minimum, three or four the ideal, to give greater flexibility. These days, with careers, small families and the general disappearance of manual labour amongst adults (and most glaringly in children) finding extra hands is very rare. Thus the WWOOF scheme is a Godsend.

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## INFORMATION PAPERS

(Service available to members only)

### Gene-Free Food List

Did you know that a large range of food products in Australia now contain genetically engineered (GE) ingredients?

As a general rule certified organic and bio-dynamic foods are free of GE ingredients. The *Australian Gene-Ethics Network* has released a comprehensive list of GE-free foods.

### Local Produce and Resources

A list of local retailers of organic produce, and a list of places where you can purchase fertilisers and other material for your garden.

For a copy of either of these papers - send an note with a self addressed stamped envelope to:

**Information Papers**

**COGS**

**PO Box 347**

**DICKSON ACT 2602**

→ *Please include your membership number*

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We have never worried unduly about the lack of experience. In any case every garden is different and needs patience to understand the characteristics of its soil and weather. We did do Ph tests in the beginning, we followed local advice on the acidity of the soil and have assumed failures to be inevitable. Organisations such as COGS are invaluable. Other gardeners can always tell one something new from their experience, trial and error is endless and re-sowing is common. But so what. A futile attempt in the beginning to grow Kiwi fruit and citrus, (even with covers and hurricane lamps all night) has led to our conviction that personal triumph in growing items out of season or in inappropriate climates is not worth the effort or time which could be used to grow more suitable crops .e.g. garlic. Soviet Russia claimed at one time that they were growing pineapples under Arctic ice and look what happened to them. We adhere to no dogma or overall theory other than the protection of

plant, soil, animal life and the life cycle from contaminants, and we believe in the age-old idea of balance - what you take you must give back. More broadly our way of life is a reaction against industrialisation in its worst sense, where economics overrides all other considerations including personal liberty.

Perhaps our most reprehensible omission is not to be certified organic. We were 60 and 54 years of age when we began, and we had neither topsoil nor the means to buy organic manures. If we had waited to develop our own manures, years would have been spent in bringing the garden up to any production at all. We have been as organic as we could be and the only dubious item imported has been (very old) sheep manure from a known but non-organic property. So we think and hope that our future certification has not been jeopardised.

## ORGANIC ENERGY

*By Karen Medbury*

*Organic Energy* began humbly under an oak tree in a Narrabundah garden 12 years ago. Being a severe asthmatic looking for a different way to live other than being reliant on doctors and medication for survival, I was inspired by the health of two people I had met who lived almost entirely on an organic raw food vegetarian diet. Four influential books further confirmed that raw organic fruits and vegetables are a fundamental component of success in a health rebuilding program, and were part of the initial inspiration for creating *Organic Energy*. They were: *Mucusless Diet Healing System* by Arnold Ehret, *Survival into the 21<sup>st</sup> Century* by Viktoras Kulvinskis, *The Hippocrates Diet and Health Program* by Dr Ann Wigmore, and *Raw Energy* by Leslie and Susannah Kenton. Being virtually the only outlet in the ACT at that time, my enthusiasm for the produce was met by an equally enthusiastic response by others who were also looking for fine tasting, high quality, clean food. Subsequent work experience at the Boston Hippocrates Health Centre USA added direction to the evolution of *Organic Energy*.

*Organic Energy* is today one in a cluster of businesses and services at the Griffith Shops emphasising quality produce for one's health, well-being and enjoyment. We continue to offer the best organically/biodynamically certified produce we can source; grow superb wheatgrass for juicing; and are currently developing a fresh cut buckwheat and sunflower salad greens bar. Numerous customers continue to enjoy the ease of our Tuesday night home delivery service, also linking up with services provided by our organic neighbours (at the Griffith shops). In the spirit of waste minimisation, we encourage our customers to return cardboard boxes, bags, jars and wheatgrass mats. While fruit and vegetable scraps are composted and used in local food gardens, produce which is non-saleable but nutritious and edible is

collected by Stacia (a small woman with a big heart) who runs the Civic Soup Kitchen on Friday nights. We are also currently changing our pricing system so that for those who wish to buy large quantities of any line sold in the shop, the price will drop by approximately 20% on that line. Details will be set out on each price tag.

### THE CATALYST LIBRARY AND MEETING ROOM

Drawing on my past experiences and knowledge, which were gained from detoxifying my system and rebuilding my health using only fresh raw organic produce; linking up with those who have similar experiences; and meeting the current ever increasing call from others to help rebuild their health using this system; has led to the innovation of the Catalyst Library and Meeting Room, now ready set to go.

The meeting room and library are primarily designed to educate and support those who wish to experience the wonderful feeling of health well-being, vitality and vigour through detoxifying and rebuilding their health, using raw and some cooked organic foods and other healing support modalities which help support the body to heal itself.

*For those who wish to learn and know more please call me at the shop to discuss times and the advent of regular group meetings, talks and events.*

The library is open for browsing and borrowing during shop hours. The shop hours are: 9-7 Monday to Friday, 9-5 Saturday, closed on Sunday.

**Karen Medbury - Organic Energy  
Griffith Shops  
Ph: 6295 6700 Fax: 6296 6701**

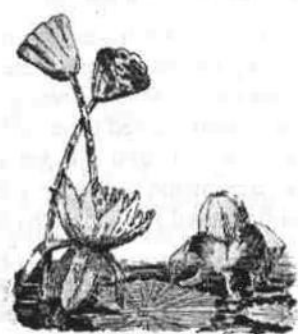


## SEED SAVERS

Each Quarterly will contain an extract from *The Seed Savers' Handbook* by Michael & Jude Fanton, from the Seed Savers' Network in Byron Bay. This issue looks at the watermelon. The handbook can be purchased from COGS for \$20 per copy plus \$2.50 postage. You can order a copy at the monthly meeting or send an order with cheque to COGS. .. Ed

"Without seed savers' networks, seed exchanges and local seed banks, we gardeners would have lost most of the seeds developed by our ancestors. It is a public scandal that these seeds have now been patented or subject to legal controls. It is also scandalous that large multinational corporations have gained control over our main food plants by seed patenting"

Bill Mollison



### WATERMELON (*CUCURBITACEAE*)

*Citrullus lanatus* - in Latin *citrullus* is the diminutive for citrus and *lanatus* means "wool", referring to the fuzziness of the young fruit.

**Origins:** Africa. Nineteenth century explorer Dr. David Livingstone found large patches of watermelon growing wild in central Africa. They are cultivated as well as found in a semi-wild state in Namibia and Botswana. In southern Russia and the Middle East, watermelons have long been grown and their seeds roasted. A thousand years ago they reached China, where their seeds are still the sole source of oil in some remote areas.

**Description:** A rambling vine which has small all male and female flowers that become large foot-ball sized fruits.

**Cultivation:** Watermelons need a long, hot, growing season and a lot of space, but are easy to cultivate in the right climate. They prefer loamy soil. Pruning of the vine is beneficial but less so than for rockmelons.

**Saving the Seed:** Watermelons will not cross with any other *Cucurbit* except other watermelons, Pie Melons and Citron Melons (*C. lanatus* var. *citroides*).

Depending on bee activity, isolation distances should be adjusted. In the USA it was found in a series of trials that a variety that did not cross in one locality at 200 metres, crossed at 800 metres in another. Isolation of different varieties by 400 metres was recommended for commercial seed and 900 metres for stock seed (USDA 1961).

Hand pollination ensures purity but is only seventy five percent successful. Use several males for one female. As with other *Cucurbits* the first female flower to appear is the surest to set in most varieties, but there are a few varieties whose fruit does not set until several weeks after the first female blossoms appear.

The watermelon is ready to pick when the little tendril next to the fruit turns brown and a sharp tap with the finger produces a hollow sound. Store for a week longer until totally mature. Scoop out the seed, or save while eating,

wash in a colander and dry them on a cloth. Seeds from the central portion are the most robust and fully developed, being the first to form. It is neither necessary nor advisable to ferment the seeds.

**Storage:** Seeds last five years. There are six seeds to the gram.

**Usage:** Citron varieties have a thick rind that is used for candying and jam. Americans pickle watermelon rind.

Melons in their native African deserts are a major source of water for cooking in the dry season. Kalahari Bushmen are known to have survived months on melons as their sole source of water.

In Botswana, where the fruit is cut into slices and dried on frames in the sun, nothing goes to waste. The seeds are roasted, and pounded without shelling, to an edible meal. A porridge is made of ground corn and melon flesh. The Chinese, Armenians, Turkish and Iranians are amongst the peoples who relish roasted watermelon seeds. They are often seen sold on street corners in cones made of recycled office paper.

Watermelon is recommended for kidney weakness and for cleaning skin.

**On the Lookout:** Watermelon flesh colours include red, pink, orange, yellow and pure white. Butter and Champagne melons are examples of yellow fleshed ones.

The Barwick white-seeded watermelon, named after a farming family, arrived in the mid 1850's with the ancestors of Harry Barwick, a farmer from near Gunnedah, NSW. The seeds have been saved ever since. It is a round watermelon with heavy dark stripes not unlike modern watermelons. It has a wonderful fine flavour and a crystal, sugary texture but it would be useless for the market as it is very brittle and cracks open when bumped. Harry grows it and passes seeds on to family and farming friends.

Oliver Carter from Toowoomba, Queensland, has kept a variety of watermelon called Port Said, going for sixty years. His brother had brought the seed back from Egypt after World War One.

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Ron Cousins from Rosewood, Queensland, has been growing the Mississippi watermelon organically since 1945 for his local market. It was given to him by an American soldier who wanted to see if his melons would grow "out there", as he intended to settle in the region after the war. It is a large melon with a very thin rind and better coloured and flavoured flesh than the modern ones, Ron reports.

Moon and Stars, dark green with large and small yellow spots on the skin and with yellow speckled leaves, is an old native American variety rediscovered by the Seed Savers Exchange in America and now grown by many seed savers

in Australia. It is one of the American heirlooms sold by Diggers Seeds in Dromana, Victoria.

Look also for Kleckley Sweet with white seeds and a fine grained, super sweet broad stringless heart. The white-seeded Ice Cream Melon was one of the earliest fruits to be grown in Australia. Desert King, a yellow-fleshed one is the most drought resistant and can stay on the vine for a month after it is ripe without losing quality.

King and Queen, which is also called Winterkeeper and Winter Queen, will last until mid-winter if dipped in wax.

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## ORGANIC PRODUCERS COUNCIL CHANGES NAME

*Betty Cornhill*

**T**he Organic Producers Council of NSW & ACT has changed its name to NASAA NSW. This required an Extraordinary General Meeting, which was held on Sunday 26th April 1998 at UWS, Hawksbury. This means that all State Councils of NASAA carry the same organisational name.

At this meeting the membership was also changed from organisations to individual members. Thus, instead of having delegates who represented growing groups in NSW and ACT, such as HDRA, COGS, Hunter Organic Growers, etc; any person who is interested in the larger picture of organic growing may attend meetings, usually two a year; and get news of what is happening on the broader front; and help with any project which will benefit Organic Growing.

This means that any person or family who is interested in working towards the spread of organics in Australia (and the world) can join for a cost of \$10 per annum.

After much discussion, a majority decision was reached by the committee that "ACT" would not be included in the new name. The reasons were that COGS represents most "organic" individuals in and around Canberra, and there were no representatives from the ACT at the meeting other than myself. (*COGS ceased membership of the OPC two years ago - Ed.*)

I am a member of NASAA NSW, and have again been elected secretary. Graham Clark is now President, and we welcomed Ross and Marianne Riddett from Quaama near Bega, who are well known to Canberrans for their Lemonthyme Honey. They are now also selling delicious blackberry jam, certified organic by NASAA. Ross is now Vice-President, Andy Ward has taken on the treasurer's job and Bette Thomas remains the minute secretary and Public Officer.

### **Review of Major Activities for the Past Year.**

These are all ongoing activities, and will continue.

- One of the most active State Councils in NASAA, creating a strong national body and helping maintain grass-roots ethics and objectives.
- Member of the small Resource Working Party on the Department of Agriculture "Sydney Basin Agriculture Strategy Committee" - full strategy will be published by the Department early June.
- Coordinator Nature Conservation Council (NCC) Sustainable Agriculture sub-committee: Graham Clark and Ted Floyd helping to identify and articulate a substantial policy - for completion and adoption at the NCC Annual Conference October 1998.
- Lubke-McNeill Memorial Prize for academic critique of organic farming. Inaugural prize-winner announced at UWS Hawksbury.
- School Education Program commenced with Betty Cornhill organising primary schools to adopt the classroom program.
- Ted Floyd a member of the Premier's Cabinet Committee on Sustainable Agriculture (representing NCC).
- Easter Show Committee & volunteers organiser.
- Five-farms study brochure.

*For further information regarding NASAA NSW please contact Betty Cornhill directly on 6249 8323 ..Ed*

# ROUNDUP: A REVIEW OF THE LITERATURE

by Sydney Penner

*Reproduced with permission from the Winter 1998 edition of COGNITION, The voice of Canadian Organic Growers.*

A review of the scientific literature clearly indicates that Roundup is not the environmentally safe herbicide widespread ad campaigns suggest. It's sold under the Green Cross label [in Canada], although it is anything but "green". It seems to me the manufacturer is hoping that some growers will be fooled by this name into thinking that Roundup is safe. (Names that imply safety and environmental friendliness are quite popular. For example, the division of Monsanto that introduced the "Newleaf" genetically engineered potato is called Nature Mark, despite the fact that genetically engineered vegetables are about as far removed from nature as possible.)

Whether or not the Green Cross label gives the impression that products carrying it are beneficial to health and the environment, Roundup is not benign. Even as early as 1956, Roundup was known to disrupt normal amino acid synthesis in plants. This in itself should have terminated Roundup as a herbicide because of the far-reaching implications this would have on all flora. But it is still with us today and in wide use.

The active ingredient in Roundup is glyphosate. The U.S. Fish and Wildlife Service has identified numerous plant and insect species that could be jeopardised as a result of glyphosate use. And glyphosate is acutely toxic to fish: depending on various factors such as species, age and water quality, the concentration of glyphosate required to kill half of the fish (LD<sub>50</sub>) varies from 10 to 1000 parts per million (ppm).

Even more toxic is polyethoxylated tallowamine (POEA), the surfactant, a so-called "inert" ingredient added to the active ingredient to aid Roundup's penetration; it is associated with irritation of the eyes and the gastrointestinal tract. Isopropylamine, added to Roundup as a neutralising agent, is destructive to mucus membranes and tissues of the upper respiratory tract.

One advertisement in a national gardening magazine reads 'Roundup is biodegradable too:' the implication is that within a short time Roundup breaks down into harmless components. Yet tests conducted by the manufacturer indicate it takes up to 140 days for half the glyphosate applied agriculturally to break down or disappear. Residues have been found in vegetables planted one year after glyphosate application. Routine government testing of pesticide residues in food does not include glyphosate since testing for it is laborious and costly.

Glyphosate eventually breaks down into AMI'A (aminomethylphosphonic acid). Although it has relatively low toxicity, it does have toxicological effects on rats. And it is much more persistent than glyphosate. Studies report half-lives in soil from 119 to 958 days.

Though glyphosate isn't rated highly toxic, it was one of the most commonly reported causes of pesticide illness among agricultural and land-scape maintenance workers in California. Of course, we have to take into account that glyphosate is one of the most extensively used pesticides (for example, 3.4 million pounds in California in 1992). But even with that factor included, glyphosate ranked twelfth in California as a cause of pesticide illness.

Roundup's cancer-causing potential is quite controversial. One point that should be noted is that the studies evaluating potential carcinogenicity used only glyphosate. Yet other studies show that the surfactant (POEA) used in Roundup is more toxic than glyphosate and the combination is even more toxic! This synergistic effect, known as potentiation, reveals an inherent problem in any testing of a pesticide's safety. What happens in real life, outside the laboratories, where glyphosate may or may not come into contact with any number of the hundreds of pesticides used? What is certain is that when we eat glyphosate-tainted strawberries, glyphosate is not the only chemical present.

Perhaps the most serious health danger posed by Roundup is its mutagenicity. Alabama researchers found that Roundup and Pondmaster (also a glyphosate herbicide) included a high rate of lethal mutations in larval *Drosophila* chronically exposed to a concentration of 1.0 ppm of Roundup and 0.1 ppm of Pondmaster. To put that into perspective, a Canadian study of glyphosate residues in grains and pulses found residues as high as 15.9 ppm.

Given the widespread use of Roundup, I wonder whether farmers are aware of the impacts it can have on their crops. Numerous studies have found that glyphosate is highly toxic to beneficial insects, nitrogen-fixing bacteria, mycorrhizal fungi, and earthworms. The International Organization for Biological Control found that 50% of a parasitoid wasp, a lacewing, and a ladybug species were killed from exposure to Roundup. A fourth species, a predatory beetle, fared even worse, with 80% killed. And of course, any herbicide use inevitably reduces bird and small mammal populations as a result of reduced diversity in sprayed sites.

Even minute quantities of glyphosate were shown to affect earthworms in a New Zealand study. Earthworms took longer to mature, were smaller, and had higher mortality levels after repeated biweekly applications at 1 / 20 of typical application rates.

Nitrogen-fixing bacteria and mycorrhizal fungi, both beneficial and very important in agriculture, are inhibited by glyphosate. Mycorrhizal fungi live in and around plant roots, helping them absorb nutrients. Nitrogen-fixing bacteria's function, of course, is evident from their name.

Since glyphosate harms these bacteria and fungi, one can assume that using glyphosate means crops will require more

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fertiliser and generally be of lower health. It has been well demonstrated that glyphosate use increases disease susceptibility; obviously that means more fungicides are needed.... We can easily see, then, why pesticide use creates such a vicious circle requiring ever more pesticides.

And what company produces this herbicide "that forever changed the face of agriculture"? Monsanto. Incidentally, the quote is originally from the New York State Vegetable Growers' Association; while meant as honour, I consider it condemnatory. Many readers will no doubt recognise Monsanto as the company involved with recombinant bovine growth hormone (rBGH), aspartame, genetically engineered potatoes and other bio-engineered crops.

Sydney Penner is a freelance writer presently living in Berwick, Nova Scotia. He was born in Belize "back in those years when all the homes were soaked in DDT twice a year under government orders to kill the malaria-carrying mosquitoes that supposedly existed in the houses".

### **Bibliography**

Arnold, Steven F. et al. (1996): "Synergistic activation of estrogen receptor with combinations on environmental chemicals." *Science* June 7).

Breeze, V., G. Thomas and R. Butler (1992): "Use of a model and toxicity data to predict the risks to some wild plants from drift of four herbicides." *Annals of Applied Biology* 121:669-677.

Christian, F.A., R.N. Jackson, and T.M. Tate (1993): "Effect of sublethal concentrations of glyphosate and Dalapon on protein and aminotransferase activity in *Pseudosuccinea columella*." *Bulletin of Environmental Contamination & Toxicology* 51:703-709.

Cox, Caroline (1995): "Glyphosate, part 1: toxicology". *Journal of Pesticide Reform* 15(3): 14-20.

Cox, Caroline (1995): "Glyphosate, part 2: human exposure and ecological effects." *Journal of Pesticide Reform* 15(4):14-20.

Eberbach, P.L. and L.A. Douglas (1983): "Persistence of glyphosate in a sandy loam." *Journal of Soil Biology & Biochemistry* 15(4):485-487.

Estok, D., B. Freedman, and D. Boyle (1989): "Effects of the herbicides 2,4-D, glyphosate, hexazinone, and triclopyr on the growth of three species of ecto-mycorrhizal fungi." *Bulletin of Environmental Contamination & Toxicology* 42:835-839.

Hassan, S.A. et al. (1988): "Results of the fourth joint pesticide testing programme carried out by the IOBC/WPRS Working Group "Pesticides and Beneficial Organisms": *Journal of Applied Entomology* 105:321-329.

Jaworski, E.G. (1965): "Biochemical action of CDAA, a new herbicide." *Science* 123: 847-8.

Johal, G.S. and J.E. Rahe (1988): "Glyphosate, hypersensitivity and phytoalexin accumulation in the incompatible bean anthracnose host-parasite interaction." *Physiology & Molecular Plant Pathology* 32:267-281.

Kale, P.G. et al. (1995): "Mutagenicity testing of nine herbicides and pesticides currently used in agriculture." *Environmental & Molecular Mutagenesis* 25:148-153.

Martinez, T.T. and K. Brown (1991): "Oral and pulmonary toxicology of the surfactant used in Roundup herbicide." *Proceedings of the Western Pharmacological Society* 34:43-46.

Monsanto Canada, Inc. (1995): Advertisement in *Plant & Garden* (Summer, 1995):42.

Muller, M. et al. (1981): "Fate of glyphosate and its influence on nitrogen-cycling in two Finnish agricultural soils." *Bulletin of Environmental Contamination & Toxicology* 27:724-730.

New York State Vegetable Growers Assoc. (1996): "Roundup's anniversary." *Dept. of Agriculture & Marketing Vegetables Newsletter* 8 (Aug. 7,1996): 4.

Servizi, J.A., R.W. Gordon, and D.W. Martens (1987): "Acute toxicity of Garlon 4 and Roundup herbicides to salmon, *Daphnia*, and trout" *Bulletin of Environmental Contamination & Toxicology* 39:15-22.

Smiley, R.W. (1992): "Influence of glyphosate on *Rhizoctonia* root rot, growth, and yield of barley." *Journal of Plant Disease* 76:937-942.

Springett, J.A. and R.A.j. Gray (1992): "Effect of repeated low doses on the earthworm *Aporrectodea caliginosa* in laboratory culture." *Journal of Soil Biology & Biochemistry* 24 (12):1739-1744.

Tu, C.M. (1994): "Effects of herbicides and fumigants on microbial activities in soil." *Bulletin of Environmental Contamination & Toxicology* 53:12-17.

U.S. EPA Office of Pesticides and Toxic Substances (1982): EPA Reg. #524-308; "Lifetime feeding study in rats with glyphosate". Memo from William Dykstra, Health Effects Division, to Robert Taylor, Registration Div. Washington, DC (Feb.18).

U.S. EPA Office of Pesticides and Toxic Substances (1985): "Use of historical data in determining the weight of evidence from kidney tumor incidence in the glyphosate two-year feeding study; and some remarks on false positives." Memo from Herbert Lacayo to Reto Engler (both Office of Pesticide Programs, Health Effects Div.). Washington DC (Feb. 26).

Wigfield, Y.Y., F. Deneault and J. Fillion (1994): "Residues of glyphosate and its principal metabolite in certain cereals, oilseeds, and pulses grown in Canada, 1990-1992." *Bulletin of Environmental Contamination & Toxicology* 53:543-547.

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# USE OF FRESH MANURE RAISES RISK OF E. COLI: ORGANIC VEGETABLES SUSCEPTIBLE TO CONTAMINATION

The following article was sent to COGS by the Organic Federation of Australia via Robyn Neeson, NSW Dept of Agriculture. It suggests that we should take care when using fresh manures directly on our gardens. ... Ed.

The Spectator, June 8/98 - Natalie Southworth A5

The organic farming industry prides itself on producing natural and healthy vegetables. But its unregulated use of fresh manure is undermining the foundation the industry is based on.

"They (farmers) try and say that this is the natural way of producing vegetables, but they can have E. coli bacteria in them (the vegetables) because of untreated manure," said food microbiologist Derrick Bautista.

The article noted that organic farmers use manure instead of commercial fertilizers in hope of developing more natural products and that although vegetables have been grown in manure for centuries, manure has only recently become infected with the dangerous strain of E. coli, E coli 0157:H7. The article said that this was because this strain is less than 20 years old.

Doug Powell, an assistant professor in the department of plant agriculture at the University of Guelph said, "There is a trend to buy natural and fresh food. People say 'it's better for me,' but it's not. The world is changing. Nature is not benign." The article also reported that Powell refuses to buy organic vegetables.

Bautista went on to say that manure must be treated before it is used to fertilize organic vegetable crops or the risk of E. coli contamination is high. "It's like dumping raw sewage onto the crops." There is no requirement in Canada for either organic or conventional farmers to treat the manure they use on their crops. Andrea Hall, who co-owns the organic food eatery Edible Roots, said most organic farmers do treat manure. She said fresh manure is so strong it burns the crops.

However, most manure is not properly treated, said Jeff Wilson, a medical epidemiologist. "Manure is often just dumped in a pile. It needs to be treated at a high temperature to kill the bacteria," said Wilson, also a professor at the University of Guelph.

Donald Hilborn, a waste management specialist for the agriculture ministry, agreed. He said most farmers don't have the high-tech composts necessary to kill off the bacteria. However, Hilborn said the main issue for both organic and conventional farmers is irrigation water that is contaminated with manure. He said that because the contaminated water is sprayed directly on vegetables close to harvest time, the risk of infecting the vegetables is greater than growing them in fresh manure.

The ministry is working with farmers to improve the way manure is stored on farms to prevent manure from getting into water and onto vegetables. The Canadian General Standards Board is also in the process of developing a standard for manure handling by organic farmers. Bautista said washing lettuce or other vegetables such as carrots and radishes will not kill E. coli.

Raw vegetables, like meat, must be cooked to kill the bacteria. The article went on to cite some steps that should be taken to reduce the risk of food poisoning. Escherichia coli are bacteria that normally live in the intestines of healthy people and animals. There are hundreds of strains of the bacterium and most are harmless. But E. coli 0157:H7, found in contaminated ground beef, produces a powerful toxin and causes serious illness.

Source: U.S. Department of Agriculture

Peter Szlapinski (from ACTEW) recently mentioned at a COGS meeting that the main cause of acid rain is farmers spreading manure obtained from feed lots directly on fields.

The manure is unstable and concentrated and it releases ammonia gas into the atmosphere which forms solid nutrient which falls in rain & causes putrefaction of rivers etc. Such manure must be made non-volatile first by composting or other means. The use of raw manure on fields is now banned on European farms. ... Ed.

## ERRATUM

The reprinted article in the Winter 1998 edition of the COGS Quarterly called *Organically Grown vs Non-organically Grown* (p.12) misrepresents the original report. The study was done in 1941 by Firman Bear (Rutgers University). It compared the nutritional quality of some vegetables grown on soils of low fertility and soils of high fertility. For some reason over the years this has been distorted to comparisons between organic and conventional. Every few years this study seems to surface and is published and circulated - Ed.

## PESTICIDES IN BABY FOOD

*Pesticide Action Network North America Updates Service*  
<http://www.igc.apc.org/panna/children/babyfood.html>

*The following article is reprinted with permission from the Pesticide Action Network, North America Regional Center (PANNA) – a non-profit organization working to advance ecological alternatives to pesticides.*

*PANNA asked that we invite you to subscribe to the Global Pesticide Campaigner (GPC), PANNA's quarterly periodical on pesticide and sustainable agriculture news from around the world. The GPC features articles about health, labour, food security, the environment, agriculture, pesticide corporations and politics. It also includes brief descriptions of recent publications and other resources related to pesticides.*

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*Subscription fees for the GPC are as follows: US\$25 for individuals and non-profit organizations; US\$50 for small businesses, government agencies and libraries; US\$100 for corporate subscribers.*

A recent study based on an independent analysis of U.S. baby food products found 16 different pesticides in eight major baby foods. Researchers with the Environmental Working Group (EWG) commissioned a food industry lab to analyze eight foods which form a significant part of the average infant's first-year diet: apple sauce, peaches, pears, plums, green beans, squash, sweet potatoes and garden vegetables (or pea and carrot blend).

The products tested were made by the three largest U.S. baby food producers, Gerber, Heinz, and Beech-Nut, whose sales account for 96% of all baby food sold in the U.S. They were tested for pesticides using the Food and Drug Administration's standard pesticide analytical methods. In the case of five of those foods, pesticides were detected in two-thirds or more of all samples. The study found 16 different pesticides including three probable human carcinogens, five possible human carcinogens, five pesticides that disrupt the endocrine system and eight nervous system toxins. The pesticide found most often and at the highest levels was iprodione, a fungicide used primarily on peaches and plums, and classified as a probable human carcinogen by the U.S. Environmental Protection Agency.

According to the report, researchers found that the baby foods containing fruit had more pesticides and at higher levels than did those made from vegetables. Five different pesticides were found in pears, four in apple sauce and three in peaches, plums and green beans. While all of the pesticides were at levels well below federal limits, according to the EWG, federal limits do not provide adequate protection for infants and children, nor do they account for the toxicity of these pesticides in combination or in terms of the overall load of pesticides to which an infant may be exposed.

The study strongly criticizes the weakness of current U.S. standards to protect infants from pesticides, and current efforts by Congress to weaken Federal environmental safeguards, including pesticide safety standards. In a EWG press release for the study, Philip J. Landrigan, M.D. stated that instead of heeding the recommendations of the 1993 National Academy of Sciences (NAS) report on children and pesticides, Congress is engaged in actions that will make already weak pesticide standards even weaker. Landrigan chaired a five year study released by the NAS in 1993 that strongly recommended tougher safeguards to protect infants and children from pesticides. According to Landrigan, "While no single residue found in baby food presents an immediate health threat, exposure to pesticides that begins in infancy may contribute over a lifetime to an increased incidence of diseases, such as cancer, or to subtle or serious loss of function in delicate and rapidly developing organ systems such as the nervous, immune, or endocrine systems that are highly vulnerable during infancy."

A bipartisan poll released at the same time as the report found that 78% of U.S. voters would like to see elimination of pesticide residues from baby food even when told that this would mean "higher costs to businesses that are passed on to consumers." The poll also found that 83% of voters agree that "if a baby food manufacturer finds that its products contain pesticide residues, even at levels below current government standards, the company should act immediately to eliminate them."

*Source: Pesticides in Baby Food, Richard Wiles and Kert Davies, EWG and National Campaign for Pesticide Policy Reform, 1995; EWG Press Release, July 25, 1995.*





## GENETIC ENGINEERING NEWS

There is a lot happening on the genetic engineering front. The Internet is an excellent medium for disseminating information and mobilising consumer forces around the world against such an important issue, and there has been a major success in the USA. Let me know if you would like full text of any of the following summaries.

John Allen

### A win for Organics in the USA!

*From the Australian Genethics Network*

There has been a major success in the USA which has world-wide implications for the organic industry. On May 8, the Department of Agriculture announced that it would make fundamental revisions to its proposed national organic standards as a result of the 200,000 comments USDA received on the initial proposal.

The earlier draft (December 1997), proposed new standards for growing, processing, labeling, importing, and certifying organically grown food. The bulk of the extraordinary number of comments opposed the inclusion of the products of biotechnology, the use of irradiation in food processing, and the application of bio-solids (municipal sludge) in organic food production. The new proposals will exclude these products and practices, and food produced with these products and practices will not be allowed to bear the organic label.

However - there are still other items in the original draft which are of concern and hopefully changed, such as: reducing bias against small and medium-sized organic farms and small-scale certification; ensuring that organic livestock standards require 100% organic feed, limiting the use of antibiotics, and not allowing factory farming; and not prohibiting truthful and verifiable Eco-labels which describe different methods of production.

### GE in Australia

*From the Australian Genethics Network*

CSIRO Plant Industry has applied to the Genetic Manipulation Advisory Committee for General Release of a Bromoxynil-tolerant subterranean clover and transgenic lines of peas with resistance to pea weevil. If recommended by GMAC and agreed to by other authorities, these GE crops would undergo no further evaluation or monitoring by regulators!

What is alarming about these proposals is that they both encourage greater pesticide/herbicide usage.

### Physicians and Scientists Against Genetically Engineered Food

This group has just launched a global campaign with the aim to inform millions of people all over the world that an immediate moratorium on GE-foods is absolutely necessary - anything else is unethical and irresponsible."

They say: "The imminent global avalanche of Genetically Engineered food represents a dangerous threat to the health of mankind and to the ecology, unprecedented in seriousness".

### Supermarket says NO

*Source: Anthony Dillon. NASAA Bulletin May 1998*

A British supermarket chain (Iceland) is refusing to market genetically modified food under its own brand name.

This policy guarantees that almost 400 grocery products in Iceland's 770 stores will not contain genetically modified food after May 1<sup>st</sup>.

Iceland's founder and chief executive, Malcolm Walker, said in a radio interview: "Consumers are being conned. The use of genetically modified ingredients is probably the most significant and potentially dangerous development in food production this century."

### Organic Grower seeks ban on 'mutant' maize

*The Guardian. Thur. May 7*

Britain's leading organic grower is seeking a High Court Injunction to prevent his crops being contaminated by a company planting genetically engineered maize next to his fields in Devon. Guy Watson has been warned by the Soil Association that he may lose his Organic status if cross-pollination occurs between the genetically engineered crops and his own. Mr Watson fears he may lose his business if the experimental maize flowers. *PS. I have just been advised that he lost the case but will lodge an appeal.*

### Swissair Update

*Source - Eco-Strategies News, Issue 3, Feb. 4/98, reprinted from Cognition, Spring 1998.*

**DO YOU BELIEVE THIS?** Swissair has been forced to re-examine its promise to carry natural or organic foods in its flight meals. Pharmaceutical and biotechnology giant Novartis is one of several Swiss companies that have asserted that Swissair's meal plan publicity casts unfavorable aspersions on genetically modified foods. It is not known at this time whether Swissair will abandon its plans to have all of its flight fare organic by 2000, or whether it has only backed out from providing its passengers publicity materials on such foods.

### Schools cut out GE Foods in UK

*The Independent (UK) Sat, 27 Jun 1998*

More than 1,300 schools in six council areas have taken genetically modified (GM) foods off their menus in the past few months. Two other councils, with hundreds of schools in their care, are expected to join them soon, as public debate about GM foods grows.

# ORGANIC AGRICULTURAL PRODUCTION IN AUSTRALIA

Summarised from

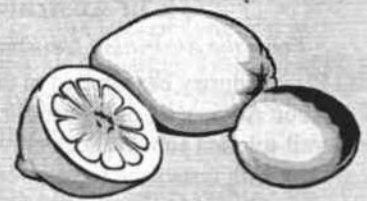
*"The Domestic Market for Australian Organic Produce, an Update"*

Rural Industries Research and Development Corporation

- The value of organic agricultural production has grown from \$28 million in 1990 to \$80.5 million in 1995. This growth of 38% per year may not be sustained in the domestic market but current advice suggests very high current and projected growth in overseas markets.
- Total area of certified organic land has risen from 150,000 ha in 1990 to 335,000 ha in 1995, an increase of over 100%. This is only 1-2% of all Australian agricultural land which is under organic farming. It is expected that the growth in the domestic industry will continue to be strong but not at the exceptional rate experienced to date. However, this growth may be further improved if the apparent export opportunities are realised.
- The number of organic growers was estimated to be 991 in 1990, 1,462 growers in 1995.
- 22% of growers had been organically farming for more than 10 years, 40% for less than 5 years
- People became organic producers for the following reasons (in order of importance):
  1. Concern for the environment
  2. Concern for family health
  3. To secure long-term viability for their properties
  4. Life style reasons
  5. To reduce input prices
  6. Because conventional farming systems were not working
  7. Possibility of price premiums
- Organic horticultural farmers were 75% of all organic farmers, 12% were broad-acre, 10% livestock.
- 55% of horticultural growers produced fruit and nuts, 30% produced vegetables, 24% produced herbs.
- Twice as many organic farmers thought that yields decreased during organic conversion
- With the exception of poultry farmers, most organic farmers report lower input costs than conventional farmers.
- With the exception of meat producers, most considered that labour costs were higher than for conventional farming
- 45% thought that a premium of between 10% and 20% would provide income similar to conventional farmers.
- Meat and poultry farmers were not receiving the premiums required. Nuts and seed producers were hardly receiving sufficient premiums. Vegetable, herb, cereal and fibre producers were nearly receiving required premiums.

## Eco-Tip

Lemons contain citric acid which is ideal for cleaning. Make a paste with salt to remove rust from clothes



(soak for a few hours, rinse & dry).

### For enquiries please contact RIRDC:

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## USEFUL RECIPES (Part 2)

By Jackie French

*These are the remaining 'useful recipes' I didn't have time to give at the COGS AGM (In case either the audience or I fell asleep). A lot of them are from 'Seasons of Content' - which is my latest book about a year in the Araluen, about food and wombats and mooching through the bush, and a few other things.*

*All the best, Jackie.*

### Drinking the Smell of Flowers

Most people don't like herbal teas because they've never tasted a good one. (They may also be repelled by advertising suggestions that just by drinking Winds of Heaven Lemon Blossom or Nature's Whisper Rose Hip you are improving your karma, curing your dermatitis and saving the dusty footed quokka simultaneously.)

Herbal teas used to taste like compost. (OK, I haven't really mixed a brew from compost - they taste like compost smells like...).

The more recent blends are better; sweetish with a heavy emphasis on lemon and rose hip or hibiscus. But nothing, NOTHING tastes like a tea harvested from your garden. It's like drinking flowers - which in fact you often are.

We harvested our chamomile today - a bowl of incredible fragrance sitting out there on the garden table as I write, with in amongst them a few English lavender flowers because I happened to be passing them.

Lavender tea tastes surprisingly good. Her Royal Britannic Majesty, Queen Elizabeth the First, drank up to nine cups of lavender tea a day to help relax her - but then given some of Her Majesty's other habits (like lopping off the heads of her opponents - not to mention her sister - and sticking them on pikes) there is no reason to feel you have to emulate her. (Lavender tea imbibing may well have damaged her liver - making her a bit crotchety and snappy.)

Also rose hips. I love picking rose hips. They are one of the fattest fruits in the garden. Not little withered Hybrid Tea rose hips, plucked from your Queen Elizabeth (the Second this time)-but lovely juicy things from our Rugosas. Peel the flesh off the seeds with a sharp knife. (There's something infinitely comforting about fat fruit. Who could love a peach or apple if they were slender?)

It's almost impossible to kill a Rugosa, even if you are a possum or black spot spore, which is another reason to adore them.

Later when the chamomile flowers out on the table are truly dry I'll add lemon verbena leaves and mint leaves.

DO NOT use ordinary culinary mint for mint tea - you'll feel like you're imbibing an insipid mint sauce without the lamb. Nor spearmint either, which is even worse - like drinking toothpaste.

You need peppermint for mint tea, either white or black peppermint (there's not much difference to the uninitiated and the taste is much the same) though menthol mint is wonderful if you have a cold and ginger mint tea welcome on a rainy day. But I'm digressing.

What I mean to say (it's the scent of chamomile and rose hips on my fingers that's distracting me) is that anyone, even with only a sunny balcony, can grow their own herbal tea and it is definitely worth it.

Go and buy two chamomile plants (perennial, so you don't have to bother planting next year), one small pot of real peppermint, ditto lemon verbena (but bung it in a large pot, as it grows into quite a large shrub or small tree), and a Rugosa rose, if you want to go all out (it needs a big pot too). Also buy a bag of potting mix and slow release fertiliser and, if you are addicted to the convenience of tea bags, one of those dangly stainless steel steeper things, either plain or fanciful (my son gave me one in the shape of a house last Mother's Day - I'm not sure why the makers chose a house...). You just fill with dried herbs and dangle in hot water....



Pick the flowers when they flower- even a ning-nong can't go wrong - and the leaves at any time. Use them fresh or dry for winter (both lemon verbena and peppermint die back when it's cold, though they come good again).

A home blend makes an excellent present for more discriminating friends and if their coffee pot is the possession most likely to be carried out first in case of fire, just wave a fresh pot of your own brew under their noses.

It really does taste like flowers.

Some other excellent herbal tea combinations:

- lemon verbena and hibiscus flowers
- true peppermint (which is not ordinary culinary mint, but *Mentha piperata*) whether by itself or with a little lemon verbena: a VERY good after dinner tea for improved digestion
- FRESH annual chamomile (perennial is a bit more bitter, though medicinally still good) with just a hint of rose hip
- cinnamon bark, fennel seeds and dried grated orange rind (NO white - it turns it bitter) - a good 'tea with oomph' when you need a pick me up
- dried chopped mandarine peel and lemon verbena with just a tiny hint of cinnamon bark
- lemon grass and dried grated orange peel
- lemon grass, fennel seeds and a hint of cinnamon bark
- green tea leaves (*Camellia sinensis*, the true China tea camellia - available from Green Patch Seeds, PO Box 1285, Taree, 2430) with a hint of lemon grass, grated orange rind or a very few lavender flowers.
- bergamot leaves, and a few bergamot flowers for attractiveness, with lemon verbena and/or a little dried orange zest

All herbal teas (and barks and peel) must be well dried (preferably in a dry, hot place but not in direct

sunlight for too long or the volatile oils that gives them their flavour will evaporate). Make sure they are very dry or they will rot. But if they dry too long they'll lose their flavour. Store wrapped in cellophane if possible - they can breathe a little, as they can't in a glass jar, but don't go stale. If they are very dry, glass is okay.

Try to use all herbal teas within a year of drying-

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preferably three months. Unlike coffee, herbal teas should be viewed as seasonal' produce - forget about chamomile in later winter and try the orange, fennel and cinnamon bark instead.

All herbal teas have health benefits - they may soothe stress, help inflammation, relieve indigestion or help the digestive process; the regular drinking of some (like green tea) have been associated with a lower rate of some cancers, and there's the odd vitamin and mineral too. But unless you're drinking the tea for health reasons, choose the one you like best (coincidentally you may find it's one that suits you health-wise too).

*Jackie French*

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**Jackie's latest books are "Seasons of Content" & "Daughter of the Regiment" (Harper Collins) - Ed**

## MONSANTO ACTIVITIES

*Summarised from GENO-TYPES: The "Monster" Strikes Again*

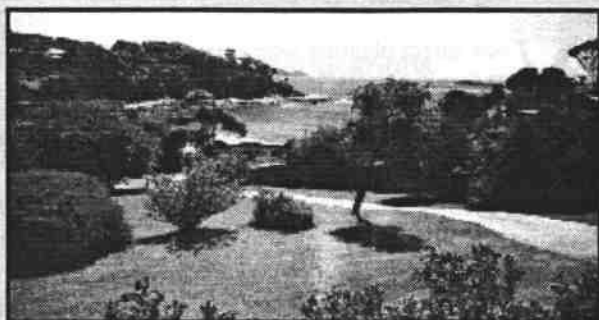
Monsanto recently signed a \$33.5 billion merger agreement with pharmaceutical company American Home Products. Monsanto/American Home Products will now be buying Cargill's international seed business for US \$1.4 billion. The latest seed industry takeover is particularly alarming in South America where the addition of the Cargill assets gives the company massive market share to deploy a technology called anti-farmer and anti-poor, by farmers's groups around the world.

The newly patented Terminator technology (US #5,723,765) sterilises and renders useless farm-saved seed by irrevocably halting a plant's reproductive process. Providing no agronomic benefit, the Terminator's sole goal is to force farmers to return to the commercial seed market every year and thereby fatten industry profits.

The transformation of the Terminator from *cause for concern* to *imminent threat* in muscular multinational hands has been astoundingly swift.

The comparatively small Delta and Pine Land Co. (US) patented the Terminator in March 1998. In May, DeltaPine was swallowed whole by Monsanto for \$ 1.76 billion. DeltaPine - and its hottest asset, the Terminator - haven't been Monsanto's only seed company targets. Since 1996, Monsanto has spent a staggering \$8.1 billion buying seed companies, approaching monopoly market share in several major food crops and threatening global food security.

The company estimates that its potential to deploy genetically engineered seeds outside the USA is twice that of its domestic market.



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## Jamison Fruit Market

# SPRING VEGETABLE PLANTING GUIDE

**W**hen direct planting with small seeds, for example carrots, bulk out first by mixing the seeds with sand. You can help the plants pre-germinate by keeping them in moist sand for about 4 days (no longer - don't let them actually germinate!) before planting out.

When planting out large seeds, for example pea or corn, soak overnight in a weak seaweed solution prior to planting; alternatively, keep seeds moist between two pieces of moist kitchen paper for 3 or 4 days until seeds germinate, then plant out carefully. This is particularly useful if you are not sure of the seed's viability.

A seed should be planted at a depth of 2-3 times its diameter, although it is better to plant too shallow than too deep.

Check your seed packets for their 'use-by' date as poor germination may result from planting after that time, or plants may show a lack of vigour when seedlings come up.

Be prepared to protect your frost-tender seedlings, as Canberra can experience harsh frosts throughout spring. Make your own cloches from plastic bottles with the bottoms cut out, or cover rows for larger plantings.

## Crop Rotation

Remember to rotate the crops which you grow in a particular garden bed. Crop rotation is a most important practice for organic gardeners. Successive crops should not make the same demand on nutrients, i.e. follow heavy feeders with light feeders. They should also not share the same diseases or attract the same pests (this prevents a build up of disease problems and losses from pests).

There are numerous crop rotation schemes used, but try to keep at least a four year rotation period (see *What to Plant & Where* - indexed on COGS main page) and do not grow the same members of a plant family in the same bed in consecutive years. For example, the solanum family - tomatoes, capsicums, eggplants, potatoes.

## Plant Varieties

It is important with crops such as cabbage and lettuce to choose the appropriate variety for the time of year. Lettuce varieties best suited to early spring are Cos, Salad Bowl, Butterhead varieties, and Mignonette.

**Spring Vegetable Planting Guide**

	September	October	November
Globe Art	T		
Jerus Art	T		
Asparagus	S		
French Beans	S	S	S
Beetroot	S	S	S
Broccoli			S
Brussel Sprouts		S	
Cabbage	ST	ST	ST
Capsicum		S	
Carrot	S	S	S
Cauliflower			S
Celery	S	ST	ST
Cucumber	S	S	ST
Eggplant	S	T	T
Endive			S
Leeks	ST	ST	T
Lettuce	ST	ST	S
Marrows	S	S	ST
Melons	S	S	ST
Onions	ST	T	
Parsnips	S	S	S
Peas	S	S	S
Potatoes	S	S	S
Pumpkins	S	S	ST
Radish	S	S	S
Rhubarb	T	T	
Salsify	S	S	S
Silverbeet	S	S	ST
Spinach	S	S	
Squash	S	S	ST
Sweet Corn		S	ST
Tomatoes	S	ST	ST
Turnips, white	S		

S = Seed sowing

T = Transplant



# ABOUT COGS

## General Information

**T**he Canberra Organic Growers Society is a non-profit organisation started in 1977 with the aim of providing a forum for organic growers to exchange information and encourage society to adopt organic growing methods.

COGS is part of the broader organic movement. As stated in the back of our newsletter, "The organic movement endeavours to provide an alternative to the mass of toxic chemicals, fertilisers, fungicides and herbicides used in modern agricultural methods by utilising more natural means of improving and preserving our soils and to produce nutritious, less contaminated food."

The alternatives are: "By enriching the soil with compost, manure, green manure and mulches, we avoid disease and control pests through non-chemical methods, including:

- Encouraging the presence of beneficial insects to feed on pests;
- Growing companion plants to discourage pest attacks;
- By growing healthy plants to resist pest attacks and disease and by tuning in to nature with love, harmony and gratitude."

## Monthly Meetings

Meetings of members are held in Civic at the Griffin Centre, Room 4, at 7.30 pm on the fourth Tuesday of the month, (except in December and January). Each month a different speaker discusses organic growing or related issues. For example:

- Marketing Organic Produce
- Backyard Self-sufficiency
- Bees and Worms
- Natural Control of Insects on Native Plants
- Permaculture in the ACT

After each talk a light supper is available. At all meetings, there is a produce and seed exchange table, information table and a bookstall. Members may also borrow from the COGS library (currently two books may be borrowed each month).

*Visitors are welcome (donation).*

## Flier and Quarterly Publications

Each month, all members are sent either a *COGS Flier* or *COGS Quarterly* (except December and January). These publications inform members about the speaker at the next meeting, and any other activities coming up. They also contain articles on organic growing as well as tips specifically for the Canberra region, such as a monthly planting guide.

## Community Gardens

COGS currently operates 6 community gardens in the Canberra area at Mitchell (called the Northside Garden), Curtin (called the Cotter Garden), Erindale, Charnwood, The Oaks Estate, and Theodore. Members may obtain a plot(s) at one of these gardens to grow organic produce for home-consumption.

These gardens provide a wonderful opportunity for people to garden with other organic growers- to share their expertise and hopefully learn something new at the same time!

The ACT government has supported the establishment of these gardens through giving us licences to use unused government land, and the setting up of these gardens has been greatly assisted by grants obtained from the ACT Office of Sport and Recreation.

Each garden is administered by a garden committee, which is elected annually by the plot-holders at the garden. At each garden, plot-holders may be required to contribute to the cost of water for the garden, and may also have to pay other small expenses to cover incidental costs (such as bulk purchases of straw, or hose and tap replacements)

## Internet

COGS has an extensive web site devoted to organic growing. The site contains many of the COGS papers on organic growing, certification information, a page for children, links to related organisations and information sources, picture gallery, the latest on genetic engineering, about Canberra, and much more. *Listen to Mozart while you browse the site.*

[www.pcug.org.au/~jallen/cogs.htm](http://www.pcug.org.au/~jallen/cogs.htm)

## Other Activities

From time to time COGS organises other activities for its members. For example we arranged an open day at an organic farm at Gundaroo and a visit to Jackie French's property in Araluen. Seminars and workshops are also conducted..

## HORTICULTURAL FAIR

Saturday 7<sup>th</sup> and Sunday 8<sup>th</sup> November

At the Xeriscape Gardens, Heyson Street Weston

COGS will have a stall at the fair. We will be giving talks on soil preparation and planning for the growing season, at 1 pm and 3 pm. Seeds and back copies of magazines will also be on sale. We are looking for volunteers to staff the COGS stall for a couple of hours.

Contact Steve Sutton, John Ross or Margaret Allen



## FUTURE SPEAKERS AT COGS MEETINGS

**25 August:** John Brummel, topic will be - Youthhaven and how it has progressed.

**22 September:** Paul Dann, organic farmer, will speak on his activities and progress

**27 October:** Panel of experts to answer all your questions - fun night

## ORGANIC TALKS AT FLORIADE

*All talks will be in the marquee at Floriade village*

Tuesday September 22: **Michelle Johnson** - topic - "Spring Planting"  
1:30pm - 2:00pm

Friday October 2: **Joyce Wilkie** - topic - "Organic Growing"  
11:30am - 12 noon

Friday October 9: **Elizabeth Palmer** - topic - "Organic Vegetable Growing"  
1:15pm - 2:45pm

Friday October 16: **Julia Veitch** - topic - "Backyard Organic Growing"  
1:30pm - 2:00pm

## ORGAA CONFERENCE

On Saturday 29th August the Organic Retailers & Growers Association of Australia will be hosting a conference on organic farming at VCAH Burnley. The theme is "Sustaining People and the Land". With a fantastic organic lunch provided people will have to book early to avoid disappointment.

Inquiries to the ORGAA office (03) 9737 9799 or outside the Melbourne area 1800 356 299

## PERMACULTURE ACT (PACT)

PACT meetings are on the first Tuesday of the month

7.30 pm at PCHQ Kingsley Street Civic.

(South east corner of the building that the Environment centre is in)

✓ ..Don't forget to  
Tune in to Jackie  
French's regular spot  
on 666 2CN every  
second Thursday at  
10:30 AM.