Canberra Organic Growers Society
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Summer

COGS QUARTERLY

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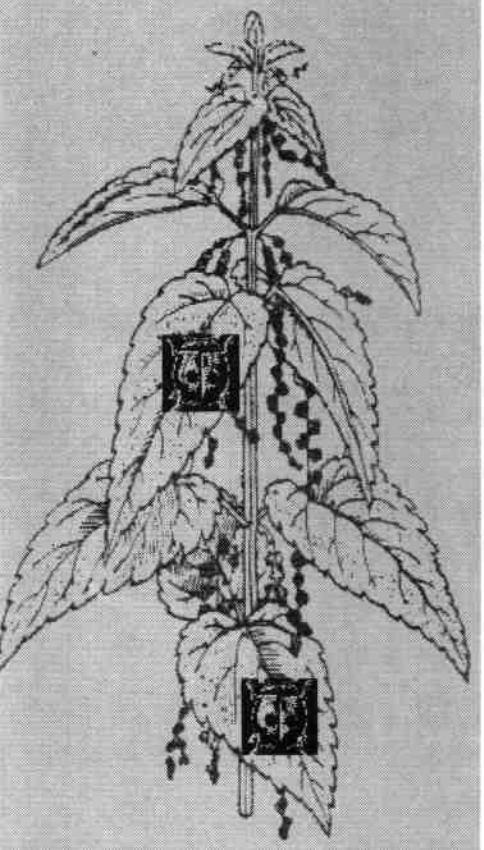
ORGANIC GROWING IN THE CANBERRA REGION



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CONTRIBUTIONS INVITED

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EDITORIAL WORKING GROUP

Editor:
Margaret Allen

Production:
John Allen

Illustrations:
Joan Buckie, Dominic Poelsma, Roger Bruce
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Advertising in the COGS Quarterly:
Contact Margaret or 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 500 but is continually increasing.

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CANBERRA ORGANIC GROWERS SOCIETY INC.
PO BOX 347 DICKSON ACT 2602
E-mail: jallen@pcug.org.au

COMMITTEE MEMBERS & HELPERS

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Vice President	John Ross	6241 4063
Secretary	Amanda Fowler	6237 5237
Treasurer	John Allen	6258 9004
Membership Secretary	John Allen	6258 9004
Editor - Quarterly	Margaret Allen	6258 9004
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Seed Librarian	Rosemary Scott	6299 0360
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COGS FLIER

Pilots: Steve & Michelle Sutton

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Environment Centre:	Ann Smith
Griffin Centre:	Rachel Wynd

INQUIRIES ABOUT ORGANIC GROWING

Elizabeth Palmer 6248 8004

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Northside	John Tuxworth	6257 5441
Oaks Estate	Pending	
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Tuggeranong	Christine Carter	6231 5862

COGS ON THE INTERNET

Web manager:	John Allen	6258 9004
E-mail:	jallen@pcug.org.au	
Web site:	www.pcug.org.au/~jallen/cogs.htm	

REMINDER

The November meeting has changed date and venue - see *COGS Notices* at the back of this publication. There will be no meeting in December or January.

From The Editor

Hello everyone, hope you all enjoy reading this edition of the magazine. COGS has recently had several new members join up just so they can receive the magazine.

It's lovely to hear from our distant (as in location) friend Shirley Carden who has written an article called "Chooks, Grandchildren and Christmas". There is also a very interesting article from Julia Veitch on Worms, plus lots of other interesting articles and information.

Michelle Johnson, John Allen and I hosted a visit to the Cotter garden and COGS Backyard by forty-one people from the Cooma Garden club. They wrote a thank you letter saying how much they had enjoyed their time with us.

I was recently bitten by a Redback spider (twice), and it really brought home to me just how we should all be more aware of the dangers in our gardens and take appropriate action to safeguard against such things as spider bites. A Redback bite is not painful at the time of being bitten, but the onset of pain can be anything from one to twenty four hours later. I would not like to experience this again and I now wear the correct clothing when gardening.

I still need your support with the magazine, so please lets see some more articles from members! There must be many stories members could tell - a success or failure in your own garden. Other readers will relate to stories told. How about some short stories, hints, poems, or recipes?

It's coming up to that time of the year again, when if you celebrate Christmas, people eat too much (well I usually do), drink and be merry, and some of us put on silly red suits and say HO HO HO!. So I wish everyone a happy, safe Christmas and good wishes for the coming year.

Margaret

How about a page for children?

It is important that children feel part of COGS, and learn about the value of organic food and respect the environment. I would like to introduce a page for children in the COGS Quarterly magazine, but I have not got the time to do it myself. I would like children to be primarily involved in the design. Perhaps a family or a team of members' children could get together and produce the page each quarter - this would be an excellent way of learning about organic growing, and publishing. John or I would be happy to help out.

The children's page should contain an organic theme, but the contents would be limited only by the imagination of the children (and adults) responsible. For example, we could have organic jokes, organic puzzles, organic poems, organic drawings & colouring-in, organic comic serial, gardening projects, competitions (COGS could provide prizes), spot-the-pest, spot-the-beneficial-insect, etc, etc.

Copy (electronic or paper) would need to be provided to me at least two weeks before the month the Quarterly is due out (ie February, May, August, November).

... Also, there is a section for children on the COGS Internet site (which does not contain very much yet) - perhaps the same team could develop that as well - John would be happy to help on the technical side.

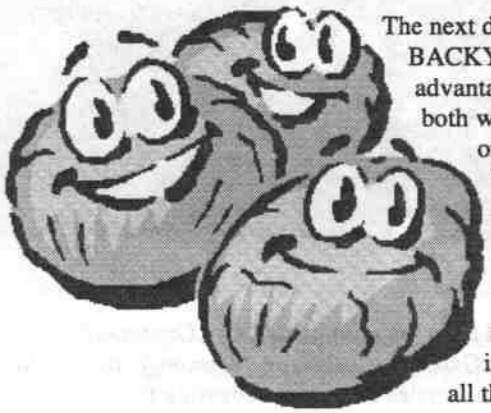
If you would like to take on this fun project please contact me. *- Margaret*

PRESIDENT'S REPORT

Welcome everyone! I hope this finds you all in good health. What a wonderful spring it has been, lots of rain and some nice warm sunny days. Hopefully this summer will be completely different from last with the long-range forecast predicting more rain and not as extreme heat.

It's been a very busy time in our house with the arrival of our baby girl (Lauren) and the usual refereeing of the arguments between the twins and our little three year old who knows everything. With all this going on I have still managed to get most things planted at home and my community garden plots are getting there ever so slowly. The addition of five new chooks has been an endless source of fascination for the kids. The chooks are about six weeks away from laying but the twins go out every morning to see if they have layed an egg. Michael has said that if they don't lay eggs soon then "off with their heads". This is from the mouth of a six year old.

On Saturday the 19th Margaret Allen, Jenny Waygood and Rachel Wynd ran an information table about Organic growing at the Griffith Shops fair, handing out leaflets and talking to the public. On the same day, COGS BACKYARD was open to the public - John Ross, Joan Buckie and myself were in attendance giving talks about Organic growing and meeting the public.



The next day John Ross Margaret Allen, John Allen and myself were again back at COGS BACKYARD. These events are a great way of informing the public about the advantages of growing the organic way, they can also be a lot of fun (Jenny and Rachel both won prizes at the Griffith Fair). I hope everyone was able to attend the talks on organic growing at Floriade which were given by Michelle Johnson, Joyce Wilkie, Elizabeth Palmer and Julia Veitch. Thank you to all those people who were involved in these events as this is what enables COGS to obtain a public profile, thus ensuring people understand the Organic way.

The November monthly meeting is being held at COGS BACKYARD on Sunday the 22nd with an organic sausage sizzle at the end of the meeting (details in the Notice Board at the back of this issue). I'm looking forward to seeing you all there.

New Library Items

The following new books/videos have been purchased for the COGS library:

Why we do it: Organic Farmers on Farming
by Diane Baltaz. (see review this issue)

Practical Organic Gardening video.
by Peter Cundall (see review this issue)

Eat Your Genes
By Steven Nottingham

Natural Farming Australia
By Acres Magazine

ACT Sport & Recreation Directory

Position Vacant

Supper Convenor

We all enjoy a cup of herbal tea and cake at the monthly meetings - but we are still looking for volunteers to help prepare the supper. 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).

Thanks to Sue Johnstone, Mary George and Cathy Franzi (and any other helpers not mentioned) for supplying suppers in the interim.

POSTCARD FROM BRISBANE

By John Allen

I met David & Kay Heaton on the Internet about a year ago - they have a great web site on herbs and organic gardening. David is now a COGS member. He has also prepared an impressive web site for the Brisbane Organic Growers. Margaret & I visited Brisbane in late July 1998 to see our daughter and her family, and we contacted David to see if we could meet him and look at their garden. David arranged for us to visit two other gardens as well. He picked us up from our city B & B early Sunday morning and off we went.

MYRTLE'S GARDEN [1]

First stop was Myrtle Charteris's garden at Rocklea. Myrtle showed us around her wonderful ¼ acre of vegetable gardens, and we met her husband Ray and their son Ron. We also met John Woodford, President of the Brisbane Organic Growers and had some interesting (albeit brief) discussions about BOGI and COGS.

In 1946, the Charteris family bought their property at Rocklea as a strawberry farm. This block of ground has provided the family with its challenges. During the 1974 floods the water reached a level of two feet over the ceiling. Apart from their personal losses, they lost their plants and had to start again.

Their life was changed when they listened to a speaker from Tasmania , Michael Roads, a farm adviser, who spoke on the damage to the environment caused by artificial fertilisers, herbicides and pesticides. This man was an inspiration to the Charteris family.

Over the years they have compared notes with Jackie French, Esther Dean, and have featured in the Open Gardens of Australia, on Burke's Back Yard. Their garden has also been featured twice on Gardening Australia, twice on Totally Wild Brisbane Extra, and Back to Basics with John Schluter. They provide working examples of Organic Growing for T.A.F.E. Classes and have set up stalls and attended workshops and seminars up and down the coast of Queensland and New South Wales.

To the side of the block a series of mulch, and compost heaps are in constant use. A mowing contractor brings grass clippings in every week. He is aware of organic growing and does not bring contaminated grass. A new mulch heap is made weekly. The grass is placed in a heap the size of one of the beds. A very healthy bed of comfrey is grown specially for adding to these heaps to make the compost, which is the secret to the Charteris's success. A sheet of black plastic is loosely placed over the heap and held in place with some bricks. This allows air to enter underneath the pile and keeps the heat in to raise the pile to the correct temperature (55°C) to allow the breakdown of the seeds of weeds and all the other material. After 3 months the compost is ready for use, black, fine sweet smelling soil. Myrtle's style of composting does not require turning and it certainly has proved its efficiency by the quality and abundance of their produce.

JOHN & MURIEL BOX'S GARDEN [2]

David's next stop was John & Muriel Box's 10 year old garden at Cleveland. We were welcomed there with a morning tea. We looked at some beautiful bark paintings which Muriel had created.

John Box has been a member of BOGI for the past eleven years. He is a long standing committee member and the coordinator of the BOGI shop. He and Muriel are both keen gardeners.

In the first two years the garden was quite a challenge, as the soil was saturated with chemicals and there were no earthworms.

The front of the Box's place is a picture postcard of flowers, many of them exotic and rare plants, including magnificent hibiscus which grow along the street front (and many passing motorists stop to admire it). The vegetable garden is at the back of the house. We walked through a pleasant enclosed fernery out to a meticulous garden. John spends a lot of time maintaining it.

He has a large variety of vegetables and tropical fruit trees, and has won many prizes for vegetables in the Redland Show and was 1st prize winner in the Strawberry Festival Gardening Competition (Vegetable Garden section), for the last two years.

DAVID & KAY'S GARDEN

Then we set off for David & Kay's place at Victoria Point, which is on the southern side of Moreton Bay. Their backyard is a treat to behold. The first section is mostly vegetables, intermingled with herbs (Kay's specialty), but there was a coffee tree on the side full of juicy beans. The back part of the garden is a nice piece of Queensland bush, complete with resident Koalas and frogs, and a variety of birds. The Heatons have been there since 1980. David has written a book on organic gardening and teaches organic gardening at TAFE. He is a past president of Brisbane Organic Growers.

The garden comprises one very large bed, full of surprises, which we wandered around (being careful not to squash anything). David does not generally plant vegetables in separate rows - he intermingles the different vegetables, so confusing pests. For example, cabbages are mixed with lettuce. During our walk through the garden Kay picked some interesting herbs for us to savour. David also treated us to the smell of his comfrey and chicken manure tea, which he uses extensively in his garden.

We saw some amazing tomato plants (yes - in late July!), about which David says: *My tomatoes are fantastic - 2.5 metres tall, the best I have had for years, I have tried out a little experiment, planted out the seedling in the garden, then placed a 150mm plant pot, with the bottom cut out, around the tomato plant. As the tomato plant grew, I then filled the pot up with compost, chicken manure and have also been feeding the tomato plant with comfrey water mixed with chicken manure, making a very good liquid tea. With the pot full of compost and manure, it has encouraged root growth up the stem of the plant, making a stronger and more prolific, and larger fruit.*

We had a lovely salad lunch there, then we checked out David's new digital camera with which he has taken some great photographs of organic gardens in the Brisbane area and placed them on the Internet. These photographs can all be seen on the following web sites:

Brisbane Organic Growers - www.bog.powerup.com.au/
David & Kay Heaton - www.powerup.com.au/~dheaton/page4.htm

David then drove us to the city bus station where we departed Brisbane.

Many thanks to David for organising such wonderful day, and thanks to everyone involved for their generosity and hospitality.

[1] *Extracts taken from a story by Helena Morton.*
[2] *Some information provided by Kay Heaton.*

CONSUMER FOOD NETWORK NEWS

With the imminent closure of the Canberra office of CFA, Dick Copeman has taken on a part-time paid position as coordinator of the Consumer Food Network based in Brisbane. This position has been funded substantially by the Australia New Zealand Food Authority (ANZFA), for one year initially. His role is to:

- consolidate and expand the existing CFA Food Network into a National Consumer Food Network; including a wide range of organisations and individuals with interests and expertise in food issues from the consumer viewpoint;
- improve the flow of information about food policy issues from ANZFA to consumers and the consumer movement, and to ensure that consumer views on these issues are fed back to ANZFA; and
- increase the number and skills of people able to adequately represent consumer views on ANZFA working parties and consultations.

Please contact Dick if you have any information, requests, ideas or opinions that could relate to this role.

Consumer Food Network
223 Logan Road, Buranda 4102
Ph 07 3217 3187, Fax 07 3217 3028
e-mail eco-cons@bit.net.au

BOOKS WRITTEN BY LOUIS BROMFIELD

by Betty Cornhill

When I visited Malabar Farm in 1972, I was full of enthusiasm for organic growing. My dream at that time was to have an organic farm where I could try out all the ideas I had read about or seen in operation in home gardens.

Most of my reading on organics had been from the English Soil Association magazine and the Henry Doubleday Research Association's newsletter.

In 1958, when Henry and I arrived in Australia as ten-pound immigrants, we found a house to rent in one of Melbourne's inner suburbs until we could look around and buy a house. The house we rented belonged to a couple in their sixties, who were going to the UK for a 6 months holiday. Before they left they gave me several copies of the little brown magazine of the Victorian Compost Society, and begged me not to use any chemicals on their garden.

To my amazement, I found an article about my cousin Lord Kitchener, who had visited Australia with his mother not long before. Henry and I had not seen much of each other at that time, as he was working in Cheshire when I had stayed with his mother before my marriage back in 1947.

I had no idea that they were interested in organic growing until I read that article.

My youngest (then four year old) son and I collected leaves from the gutters in a little cart, and made compost. Perhaps this was the beginning of his career in Soil Conservation!

My elder son began his gardening career by filling his seaside bucket with earth and emptying it out again at the age of 18 months.

The four books about Malabar Farm are, "Pleasant Valley", "Malabar Farm", "Out Of The Earth", and "From My Experience". It is the latter which I have just finished reading.

This book is full of interest for the organic farmer, but strangely enough, Malabar was not organic in the sense that we now know it. Bromfield used artificial fertilisers! In fact he used an invention of Cliff Snyder's to mix soluble fertilisers into the irrigation water, which was sprayed on the magnificent vegetables grown on the farm.

Besides being interesting, this book has some amusing stories. I particularly like the story about the young sow who was unexpectedly taken in labour in the middle of a field on a blazing hot day surrounded by disapproving, more experienced older sows.

This tale is too well told, but too long to quote here. It occurs in the second chapter of the book, and I went to sleep laughing and delighted after reading it.

Apart from the sparing use of soluble chemical fertilisers, very few chemicals were used on Malabar Farm, but much compost, barnyard manure and mulches were used instead.

"After watching and studying the gardens of the old farms in our valley, the reasons why the average long-established farm garden seems highly resistant to the attack of insects and disease have become increasingly evident. There is abundant organic material and bacterial life in these old gardens, and that they have a good balance of minerals frequently in organic form. All of these factors have been created by the annual use on these gardens of large quantities of barnyard manure.

The soils of many of these old gardens have almost the texture of compost. A large part of the fertility of the whole farm (in the form of its products, both forage and grain) has been transformed into barnyard manure and concentrated in these gardens year after year for generations.

However, in some cases the fertility of the fields has gone steadily downward through the use of insufficient green and barnyard manures, and a general depletion of organic material has occurred through the excessive production of 'cash crops'. The gardens, at the same time, have been fed lavishly and have constantly become more productive and more resistant to the attacks of both disease and insects.

This book and the others are highly recommended reading. They are full of information and they fill one with an atmosphere of peacefulness and love for one's fellow man. They are good bedside books.

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.

Organic Products and Resources

A list of retailers of organic products, and a list of places where you can purchase organic 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

GM INGREDIENTS UNACCEPTABLE TO VEGETARIANS

M2 Presswire

Vegetarian Society (UK)™

The Vegetarian Society of the United Kingdom has announced a new policy concerning genetically modified foods and the licensing of its symbol. The new policy states that:

"Genetically Modified products or products containing Genetically Modified ingredients are not acceptable to The Vegetarian Society because the Society believes it is impossible to guarantee that such products are completely in accordance with the Society's vegetarian principles."

The Vegetarian Society's symbol, the most trusted guarantee of vegetarian suitability, currently appears on over 2,000 food products. From 1st August 1999 all food products using the symbol will also be GMO free. Food companies, using the symbol, will be invited to sign a contract specifying that all the ingredients used in the manufacture of the product are from a non-genetically modified source. The symbol's existing free-range egg criteria, which exceeds current EC standards, guarantees that approved products containing egg or egg albumen will use only free-range eggs. The criteria also ensure that the product has not been tested on animals.

The Society finds unacceptable any form of genetic engineering that has a detrimental effect on the environment, on the health of individuals or on the welfare of animals. The new policy acknowledges that more research is needed into the potential long-term risks associated with the technology and that the development of GM foods brings in to effect ethical issues, which are a concern to vegetarians. The Society believes an effective and compulsory labelling scheme must be introduced to ensure consumer choice over the consumption of GM foods. The Society believes the imminent EC labelling legislation is insufficient.

"This change of policy will strengthen consumer confidence in the Society's symbol and will enable vegetarians in the future to eat vegetarian foods that are also free from GMOs. We are confident that the news will be welcomed by vegetarian consumers across the country and will further ensure a vegetarian diet is the healthiest and most compassionate dietary choice" said Chris Dessent, Head of Public Affairs for The Vegetarian Society.

The Society will continue to endorse those vegetarian cheeses developed with the use of biotechnology, which have been available for over ten years. The traditional cheese making process uses an enzyme extracted from rennet, which is taken from the stomach of a calf. The Vegetarian Society endorsed vegetarian cheese In 1987, in order to reduce the suffering of animals and with the long term view of bringing an end to the use of animal rennet In the cheese making process.

77% of the British public want a ban on the growing of GM crops until their Impacts have been more fully assessed (MORI poll, commissioned by GeneWatch).

KEEP THE GRUBS OFF BROCCOLI

Spray broccoli etc with 1 tablespoon of molasses in 1 litre of water, and 1 teaspoon of liquid soap (not detergent). .... *Mytle Charteris*

COGS INTERNET SITE POPULAR

An analysis of accesses to the COGS web site for the week 12 September - 19 September reveals that the site was accessed 1930 times. The most popular pages were: Genetic Engineering (504), COGS main page (319), Certification information (149), World links (75), WWOOF (60), Seed information (60), Children's page (58), Worms (45).

Recent additions to the site are pages on Marketing/ Business, and Weeds. The site has been upgraded to improve accessibility for people with a range of disabilities. A text search engine has also been added

The COGS site was also listed as an Internet reference in the OFA/RIRDC Newsletter.

Following are recent comments received about the site:

"Thanks for a great, well laid out and informative web site. I would like permission to link to your web site. It would be of interest to our members - cattle feeders - who grow their own crops etc. and require information that your site provides." - *Dael* Wallace, *M.A.Comm.,Manager Communication and Information, Alberta Cattle Feeders' Association.*

"I just wanted to let you know that your page is wonderful. My son is going to do a speech on Organic Farming and I found more than enough information on the subject for his speaking contest. We might even start doing it ourselves. Thank you very much!" - *CC La Grange (USA)*

WHY WE DO IT: ORGANIC FARMERS ON FARMING

by Diane Baltaz. With a Foreword by Ted Zettel
Sand Plains Publishers (R.R.#1, Ayr ON NOB lE0),1998.

Reviewed by Judy Hurvid (Canadian Organic Growers)

This book is available in the COGS Library. Note that Diane will be talking to COGS at a future meeting - *Ed*

What motivates organic farmers to take on the extra risks and demands of organic farming? This is the question that Diane's book answers, mostly in the farmers' own words.

Diane, a long-time COG member, gardens organically, eats locally and has written about organic farming and food for fifteen years.

Why do they do it? Diane's book answers: economics, health, family lifestyle, spiritual goals, social justice and a need to do good work. The phases "relationships with", "live with", and "connected to" recur repeatedly.

Although organic farmers feel for the most part that they are accepted members of the wider agricultural community their feelings of separateness motivate them to join groups such as COG (Canada) and Ecological Farmers Association of Ontario.

Organic farmers are concerned about our modern food system. They mention its "real cost" in terms of ecological damage, destruction of family farms and communities. The farmers question the health costs and quality of factory-farmed food and its "true value". "Let food be your medicine," says one dairy farmer. They are concerned with saving energy, and use renewable energy, low farm inputs and other ways to save.

Many organic farmers market apart from conventional systems. They use CSAs, farmers' markets and co-ops such as Ontario to sell their product.

It is obvious that organic farming is a holistic way of life for the people Diane interviewed.

WHY DIDN'T I GET A MEMBERSHIP RENEWAL REMINDER LETTER?

COGS has limited resources - all the work done by the executive is by a small number of volunteers. We try to keep the COGS office functions as simple and resource efficient as possible.

The address label production system automatically adds a warning to an address label for a member whose membership subscription is due either in the current month or the following month. This means that you get two warning messages on your address labels to let you know that your membership subscription is due.

You will only receive a letter after your membership has actually expired.

You can help make the work of the membership secretary a lot easier by keeping an eye on your address labels and renewing your subscription before it expires.

Members receiving the Flier by email will receive two warning email messages before their membership expires.

- John Allen

BENEFICIAL INSECTS

by Michelle Johnson

As we carry out our gardening tasks, we are often unaware of the great deal of work being done by our allies in the garden - the hoard of beneficial insects that play such an important role in natural pest control. There is a huge array of beneficials, including hover flies, lacewings, parasitic wasps and predatory wasps, ladybirds, predatory mites, spiders, ground beetles - and the list goes on! Many have fascinating life cycles, particularly the parasitic wasps.

One parasitic wasp, Trissolus basalis, lays its eggs in the sulphur yellow eggs of the green vegetable bug. This wasp is black and very tiny, only about 1 mm long. It was introduced to Australia back in the 1930's, specifically to control this pest. However it probably cannot control bug numbers on its own, so it would be wise to also use other control methods for the vegie bug, such as the "squish'm" approach as summer comes on. For a more detailed account of the bug itself see the article "Green Vegetable Bug" by Sue Pettersson in the April 1992 COGS newsletter.

Other parasitic wasps lay their eggs inside the larvae of common garden pests. The larvae of the wasps feed inside the host, but do not actually kill the host until they burst out, at which stage they pupate on the collapsed skin of the now dead host (rather gruesome isn't it!). One, the Cotesia Glomerata, is a parasite for the Cabbage White Butterfly.

A third type of parasitism occurs with the aphidine parasitic wasp, which attacks aphids. In this case the wasp passes its entire larval and pupal stages inside the host body and bursts out as an adult.

Many wasps are predatory. Two predatory wasps are the paper wasps, which build their nests out of chewed wood "paper", often under the eaves of houses, and the mud wasps, with their familiar mud nests on the walls of buildings. Both will eat caterpillars and spiders. The paper wasp will also eat the pear and cherry slug. If you find these nests around your home don't destroy them just to tidy up, or you will lose valuable allies in the garden!

There are so many insects, it is impossible to describe a fraction of them here, but if you see an insect and you wonder if it is a beneficial one, the following may help:

"As a general rule, fast moving grubs and related creatures are beneficial. They need to be fast as their prey, small slugs and insects, is mobile. Plant eaters, pests from our point of view, tend to be more 'sluggish'." (Joy Larkcom, *Vegetables From Small Gardens*, p93).

Given the usefulness of many insects we need to encourage them in our garden. The HDRA Newsletter (from England) in Spring 1993 lists six steps you can take to attract them:

1. Stop using pesticides
Many pesticides kill beneficial insects as well as pests. Since pests tend to breed very fast, they will often come back first.

Remember: *"Whenever we kill a beneficial insect we inherit its job. And as novices we are attempting to take on the task of an expert. Whenever we fail, the environment suffers."* (Stuart Hill, Aeres Vol 1, No 7, p10 *Broad perspective on sustainable agriculture.*

2. Only use organic sprays if you must
Many sprays are not harmless, eg. sulphur fungicide harms parasitic wasps and predatory mites, insecticide soap harms hover fly larvae.

3. Grow flowers to feed them
Flowers are a source of food for many pest-controlling insects, ' particularly in their adult form. Many have short mouthparts, so simple open flowers or very small flowers are best. Among the favourites are flowers such as fennel, parsnip, parsley, daisies, dandelions, marigolds, sunflowers, thistle, and yarrow.

In a recent study, it was shown that the fennel flowers attract almost 500 different insects, of which 195 were partly predatory and 105 were parasitic.

4. Provide a nursery
It is essential to have some pests in your garden if you want the beneficial insects to come in as well. The idea is to control, not eradicate pests, so we need to tolerate a low number of them. There is no place for the "Rambo Syndrome" in an organic garden!

Therefore it can be useful to allow a small number of nursery plants in your garden. A "nursery" plant is one which supports pests with no ill effect. HDRA gives the example of the common nettle which supports the nettle aphid which however does not attack other garden plants. Nettles will therefore attract many beneficial insects, particularly ladybirds when they emerge from hibernation. The nettles can then be cut down in summer so the predators will move to garden plants. However don't let the nettles become a weed!

5. Provide safe cover
Ground dwelling insects do not like bare soil. Provide dark cool moist conditions with ground covers, carpet, bits of bark etc.

6. Don't be too tidy
Leave cover for other insects, including some old plant material. HDRA suggest you don't cut back your herbaceous borders in autumn as the hollow stems are a favourite hibernation place.

Following these six steps will encourage beneficial insects to stay in your garden and help keep down the numbers of garden pests. As an added benefit, the increased insect life will also create a more interesting garden to be in!

References:

1. CSIRO, Division of Entomology, "The Insects of Australia: A textbook for students and research workers", Volume I, Second Edition
2. French J., "Natural Control of Garden Pests", Aird Books 1990
3. HDRA Newsletter (England), Spring 1993, "Gardening with beneficial insects for natural pest control"
4. Larkcom, J., "Vegetables from Small Gardens"
5. personal communication with Dr Ian Neumann, CSIRO, Div. Entomology

WANTED: GROWERS OPINIONS!

Organic Weed Management - Industry Survey

Chance to win a 1-year subscription to Acres Australia!

For organic and bio-dynamic growers, weeds can be a major problem which never seem to go away. Several options are available to growers for managing weeds on their property, but these methods are often laborious, expensive or only partly effective. In a new research project on organic weed management at the University of New England, growers will have the chance to contribute their knowledge, experience and attitudes on weeds in organic crop production.

An important part of this project is a mail survey of organic and bio-dynamic growers throughout Australia asking about their experiences with weed management. For the survey to be meaningful and relevant to the needs of growers, it is vital that growers participate. It is hoped that the feedback from the survey will: * provide a better understanding of practices currently used by organic growers, and * review growers' experiences with the success and cost of each method for weed control, * assist planning our field trials.

In order to encourage people to get involved, a prize is being offered of a 1-year subscription to Acres Australia. This prize will go to one lucky person chosen randomly from the list of people who complete and return the questionnaire. Findings from the survey will be made available to the organic community through Acres Australia, organic newsletters and the project web page (see below for details).

The Rural Industries Research and Development Corporation has funded the project in response to interest from the organic industry. The general aim is to help develop more reliable and cost-effective weed management solutions for organic growers. Research is being carried out at the University of New England in Armidale, NSW by PhD student Paul Kristiansen. As well as studying and working in horticulture, Paul has been growing herbs organically for ten years. He has been following the development of the organic industry during this time and was very pleased, if not surprised, to see organic research receiving funding for the weeds project.

The success of the survey depends on your willingness to participate by filling out the questionnaire. The two-page survey should only take 10-15 minutes to fill out, with questions such as, What weeds get into your organic crops? What strategies do you find effective? How many hours do you spend on weed control? All information provided in the survey will be treated with strict confidentiality and all respondents will remain anonymous. A 'Reply Paid' envelope is supplied with the questionnaire so that there is no cost to you.

The researchers would be pleased to receive as much feedback as possible from growers, so if you are interested in completing the survey or just getting more information about the project, contact Paul Kristiansen at:

Agronomy & Soil Science University of New England
Armidale NSW 2351
Phone: (02) 6773-2962 Fax: (02) 6773-3238
Email: pkristia@metz.une.edu.au
Project Web Page:
www.une.edu.au/agronomy/weeds/organic/organic.html

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Two years old, 4 metal teats, plugs into normal hose. No water waste. Cost $300 new, will sell for $200 o.n.o.

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COGS MEMBERSHIP FEES CHANGE

Each year the COGS Executive Committee considers whether it is necessary to change membership fees. Due to much assistance by dedicated volunteers we have been able to maintain the same fees for many years. However, this year we have decided that it is necessary to make the following modest increase to the membership concession rates:

Concession rate	Old	New
Join fee	$2.50	$3.00
Annual subscription	$10.00	$12.00

These new rates apply from February 1999

Full membership fees have <u>not</u> changed

ARE WE STUCK IN AN ORGANIC QUALITY RUT?

Chris Alenson

Chris Alenson at the Organic Advisory Service is frequently asked to provide research papers to both consumers and to marketers of organic produce demonstrating that organic produce is nutritionally more favourable. Chris says "We are making a huge mistake if we look to push organic food on the basis of just a nutritional analysis."

The organic industry in essence challenges the accepted agricultural production paradigm which says that to produce food and fibre efficiently and economically the use of the latest technology such as synthetic fertilisers and pesticides must be utilised. This is the technocentric position. To produce more must be the aim of all agriculturists and don't worry about possible adverse environmental affects that may result.

In challenging this set wisdom organic and biodynamic farmers through a range of different management techniques have been able to demonstrate that production of quality food is possible while protecting and often enhancing our resources.

However in taking a holistic position in managing our farms we have at a marketing level fallen for the conventional trap of trying to demonstrate organic quality by only looking to promote the food on a nutritional "ours is better than yours" basis. We must look to promote our product on the basis of not just the final nutritional quality but on its wholeness, its unprocessed and untampered methods of production and its connection with the whole cycle of production.

What Do Nutritional Studies Show?

There have been many nutritional studies carried out over time comparing food grown under different management systems including organic.

Perhaps the earliest study was performed by McCarrison in 1936 who found that millet grown on soils fertilised with manure was richer in vitamins and other substances than chemically grown plants. Rowlands in 1930 found that rats fed on clover from manured fields gained weight almost twice as fast as those fed on clover from mineral fertilised fields.

A great deal of research has been carried out in order to ascertain whether soil fertility management can affect plant composition. The results are often conflicting, however many scientists have demonstrated that the produce derived from a fertile soil contains an increased level of nutrient components (Wallace 1943, Jones et al 1944, Sauberlich 1953, Albrecht 1968, Schuphan 1974, Hamner 1945, Lairon 1984, Wittwer et al 1945, Vogtman 1981, Lehane 1981, Leclerc 1991).

At a recent conference held at Tufts University, USA researchers presented a number of papers looking at how alternative management systems might impact on nutritional quality. Unfortunately for those people that were looking for irrefutable evidence that food produced under organic farming systems was of higher quality, the results were not illuminating. There were slight differences in the balance of nutrients in some of the studies but overall there was not a large difference.

What is Organic Quality?

What we should be saying and promoting is that a fertile soil balanced in its nutrient elements will result in produce that is as high in nutritional elements as conventional produce. Instead we search for analytical evidence which ultimately may not prove a great deal while at the same time often misrepresenting previous studies to prove our case (the much publicised Rutgers University study by Firman Bear 1941).

It is possible that new techniques for examining the quality aspects of food may become available. Certainly the biodynamic scientists with their belief in biodynamic quality are examining a number of techniques such as paper chromatography, enzyme respiration systems, etc in order to find quality parameters that might better describe the organic and biodynamic product.

The history of organic production is founded on the basis of health and nutrition emanating from food grown on revitalised soils. Organic food is of course food that has been produced from certified production systems that minimise the risk of chemical contamination from fertilisers and pesticides while providing a soil rich in humus and biological life.

This should be taken further however to a definition that includes food that is usually fresh from its source, that has undergone minimal processing, with little or no additives. It is whole food grown on a farm that satisfies the law of return as much as possible and which relies on natural cycles to supply much of the required nutritional elements.

It is this concept of wholeness and health which separates organic food production from the some of the more trendy farming system terms such as sustainable agriculture or low-input agriculture. We must not forget this. The fact that consumers mainly recognise organic food by its absence from chemical residues or look for some nutritional advantage illustrates how we have failed to educate the public to the true identity of organic food. Over several decades we have worked to promote an agricultural system that links the health of the farm, its inhabitants, the soil, its

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livestock and the environment with the quality of the final product, and this includes the processing, production, packaging and distribution process. These areas have been ignored in most of our promotional forays into the public arena.

It is high time that we examine our roots based on health and nutrition and not get caught up in the conventional economic malaise of agricultural production which is based on the exploitation of our resources in pursuit of economic growth. A growth which although appearing to produce large quantities of food actually results in millions of people starving every year due to the inability to distribute the food to those that actually need it. Here we have an agricultural system that not only produces a quality product with low risk of contamination but also protects the environment using energy conserving technologies, that assists with local and regional employment opportunities, that takes notice of inter and intra-generational equity and focuses on decentralised methods of production.

If we fail to communicate the intimate connection to the public between the health of our farms, our organic production systems and our communities, then we will merely be trying to sell our organic product based on the same economic rationale as the supermarket product which markets purely on the basis of cosmetic quality.

In the western world we are starting to see the economic growth phenomena start to spring leaks from its seams. Industrialisation is starting to falter and certainly in agriculture we are almost at the end of the road as far as squeezing *another* dollar from the farmer's costs. A new paradigm of agricultural and economic well being is required and organic farming with its ability to embrace the whole production process and the communities in which it operates has a lot to offer.

COGS has a detailed research paper on this topic called "Nutritional Quality of Organic and Conventionally Grown Food", by Steve Diver from ATTRA (Appropriate Technology Transfer for Rural Areas), the national (USA) sustainable agriculture information centre. If you would like electronic copy of this publication please send an e-mail request to me at jallen@pcug.org.au. For a printed copy, send a stamped self-addressed business size envelope to the address below- <u>also include two loose 45c stamps to cover costs</u> ... John Allen

COGS Information Papers, PO Box 347, DICKSON 2602

KOOROOL'S WOMBAT

By Chris Allen

Koorool is a lovely organic farm at the foot of the Tantawangalo Mountains near Candelo. My brother Chris is part owner. For years Chris has lived with a wombat which decided to make its home under his kitchen near the stove. Chris tried to persuade the wombat to leave using many different ploys - but - we all know that wombats are very determined creatures! Crunch time eventually came, and here is Chris's rendition of events. - John Allen

There we were sitting round at morning tea at our place talking about this and that and the subject of wombat came up (this particular one has been under the house for months). I talked on about a scheme of I had thought of to lift the floorboards one night and shine the spotlight down to frighten him (I was sure it was a him) out, encourage him in a particular direction along one of his routes by torchlight, through a hole in the fence and into a cage that we had set up.

Anyhow we came to the conclusion that maybe we should give it a go there and then - chase it out and block up all the holes in the fence. So a friend and I - with two others in interested attendance - lifted a floorboard and there it was, looking rather surprisedly at us. It didn't move! We looked at it and stroked it and talked with it and then I shone the spotlight at it. No response. We poked it with a broom - still no response - it just turned its back on us and moved away a little. I had heard that they didn't like water so I got the hose and aimed it through the air vent in the stonework at the back of the house in the direction that I knew it was. It moved! But only just along to by the piano. By looking under from where we had lifted the floorboard we could see its back end - and there between its back legs was a baby poking its head out of her pouch. Cruelly I aimed the hose and fired. She moved on and hid by the bedroom chimney. I brought the hose around and fired again and that was enough, off she went through the fence and into the kitchen paddock. The poor thing - she looked rather wet and bedraggled.

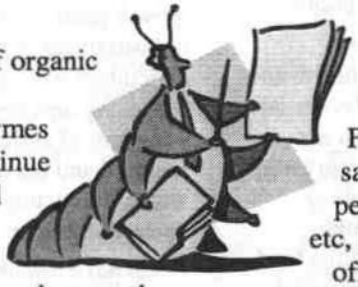
And then in the pouring rain we fortified the fencing and waited. Wombat returned two nights later so.....

We lifted that floorboard again and turned on the hoses. It took a lot of water to budge her but budge she did. She came out into the garden then ducked back under the house. More water and she came out again. She ambled round her exit points along the fence - we just stood and let her sort it out - until she came to one that did not have tin belted into the ground and she started digging. It took her thirty seconds to get underneath the barricade and then she was away. An astonishing sight. We followed her down to the hay-flat and she disappeared into a big hole there.

WORM CASTINGS - PROS and CONS

by Julia Veitch

What are worm castings?



Castings are worm poo, the end result of organic matter ingested by a worm. They are biologically active, full of bacteria, enzymes and undigested remnants. Castings continue to break down and increase in biological activity after coming out of the worm.[1] They are full of nutrients both stored and immediately available for plants such as nitrates, also a growth hormone called auxin. which stimulates rapid germination. Worms have been around for over one billion years, co-evolved with plants, so it is not surprising that they produce stimulants to plant growth, which in turn stimulates production by plants of organic matter for worms to feed on.

Also, we need to distinguish between worm castings and vermicompost. Castings are what come out of a worm's anus. It continues breaking down in a mixture of organic material, bedding, worms and other compost critters and becomes - Vermicompost! [2]

I should specify what sort of worm we are talking about here, since there are three main types: earthworms which live, feed & breed below ground and never come to the surface; earthworms which feed on organic matter at the surface but live and breed below surface; and surface dwellers which live above surface and feed off rich masses of putrescing organic matter.

The latter are used in worm farms and are called 'compost worms', since they live in composting surface litter rather than earth. Compost worms enjoy high density populations, and do best in a temperature of 23 C degrees (the average temperature of the Earth's ground level atmosphere).

Are all worm castings the same?

The short answer is No. The value of the castings depends on what feed stock the worms have had (which will give different mineral content) and on the conditions under which they are produced. I did an experiment comparing four lots of worm castings:

(1) RELN worm farm

These worms were fed fresh kitchen waste including citrus peelings, coffee grounds, tea bags, ripped up paper & given the occasional sprinkle of Dolomite. They were also watered frequently.

(2) ACT Waste

Feed stock was obtained from Woolworths' waste fruit and vegetables and first 'hot' composted in large windrows. The semi composted matter was then fed to the worms.

(3) Dept of Environment

Feed stock was from office workers' scraps: sandwich crusts, cakes, citrus and banana peels, coffee grounds, tea bags, dead flowers etc, combined with shredded paper from the office paper waste and regular applications of Dolomite to raise the pH. (Citrus peelings, coffee grounds, tea bags and paper are all somewhat or very acidic). This matter was composted first in a large outdoor bin, turned regularly and worms introduced after temperatures from the decomposition process had come down.

(4) my Kingston garden worm farm

Feedstock was all garden and kitchen wastes plus straw, lucerne and autumn leaves. The organic matter was placed in a large (2x2m) mesh sided compartment where it incremented slowly, thereby seldom reaching a volume at which the contents would reach high temperatures (as happens in 'hot' compost heaps). Worms could therefore occupy this organic matter immediately.

All lots of castings were mixed 50/50 with coprapeat and a handful of rock dust, placed in a ten litre foam box, then seeded with salad plants. Results were very interesting. The Reln worm farm mix was slowest to germinate, but all were up within 7 days. Thereafter, ACT Waste powered ahead, followed closely by the Dept of Environment and Kingston mixes. The Reln worm mix seedlings remained slow to grow and did not reach full size.

Why? My guess is that, despite the addition of coarse fibrous organic matter (the coprapeat) the Reln worm castings were waterlogged and did not have enough air spaces for rapid and successful growth, whereas the other mixes were more aerobic and had relatively good drainage.

In general, the research says that for optimal growth you only need a relatively small proportion of castings (see references at end of article). This is not only from its nutrient value, but from its physical quality of holding water. Too high a proportion of castings in a mix will make the mix too wet and anaerobic. However, worm castings also leach quickly, losing their immediately available nitrates. There seems to be better long term nutrient availability in compost.

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Worm castings vs compost

I did another experiment comparing worm casting propagation mixes with compost propagation mixes, and found that:

(1) the casting mix yielded earlier germination and faster initial growth

(2) the compost mix held nutrients longer - that is, the seedlings did not yellow off nearly as quickly as the seedlings in worm casting mix

(3) there were hundreds more volunteer seedlings in the worm castings. Worms' guts scarify seeds as they pass through their intestinal tract, and the result is better germination from those seeds. Compare this with the cooking that happens in compost heaps. Very few seeds can survive a 70 C spell (except tomatoes!) so your propagation mix will be much less trouble if you use compost, or vermicompost. That is, castings which either have been composted or produced from worms feeding on compost.

What are worm castings good for?

Worms themselves accelerate the decomposition process, which is one reason it's useful to have a worm farm. Also, research suggests that the worms' gizzard and intestinal tract have an antimicrobial action on pathogenic microbiota such as e.coli, salmonella, pseudomonas and other enteric bacteria.[3] That is, raw organic matter teems with pathogens, and after compost worms eat it, their castings have an undetectable level of these microbial pathogens.

I think a good propagation mix for salad plants (what I know the most about) would be 20% castings (preferably composted to kill seeds and increase biological activity), 20% compost, 60% coprapeat (or 50% coprapeat 10% sand). The castings will provide auxin for rapid germination and nitrates for rapid growth; compost will provide long term nutrients, and coprapeat improves drainage and moisture retention. Mixes can be tailor made for different propagation requirements. My current experiment comparing this mix with the 50/50 worm casting/coprapeat is showing a big difference in performance - the compost mix is doing much better.

You can also use worm castings direct on the garden, since it is a 'cool' manure and will not burn seedlings, provides nutrition and adds organic matter to your soil. However, remember that if not hot composted, you will get volunteers of whatever seeds went through the worms guts.

Common problems with container worm farms:

(1) Fed too much, it goes anaerobic, stinks, and the worms die. This is especially problematic in Reln worm farms which are poorly ventilated (just the few small holes in the lid. Though the floor of each compartment is mesh, allowing drainage, when the compartment becomes filled with dense worm castings there is very little air circulation.

(2) Neglect - dries out, the worms die

(3) worms aren't given bedding (paper, sawdust, etc), they are started in all food - horrid for them, they won't do well

(4) Too high expectations & farm is abandoned - populations take a while to build up. Also, the yield of worm castings to volume of organic matter put in will vary from about 1:4 to 1:10. Though you will usually get plenty of liquid i.e. worm pee and leachings in the drainage tray.

Worms are living creatures, and if you keep them you need to pay attention to them. It helps to read some literature. I've found Mary Appelhof's Worms eat my garbage, Flower Press, Michigan USA 1982 ISBN 0942256034 very accessible and useful. There is also a little serial publication, Worm Digest, ISSN 1090560x, PO Box 2530 Southport 4215 email: mail@wormdigest.org which is very practical and features worm projects from all over the world.

In summary - keep on or start worm farming, but be aware that there are pros and cons to using castings. With a bit of knowledge and observation you can arrive at a superlative result in the end!

A caution: As said above, raw organic matter is full of pathogens. Vermicompost is not pure worm castings, i.e. it does have a component of unbroken down organic matter. Be careful handling this material since disturbing it will generate clouds of airborne fungal spores and toxic bacteria, which can give you what's called organic dust toxic syndrome (ODTS). ODTS features symptoms such as gastrointestinal upsets, influenza type symptoms and irritation to the airways.[4] You'll be more likely to have problems in summertime, when everything is dustier, so wearing a dust mask is recommended.[5]

References

[1] Appelhof, Mary, Worms eat my garbage, Flower Press, Michigan USA 1982, p.68

[2] Ibid

[3] Finola, M., Rodriguez C., Beoletto, V. "Gastrointestinal bacteriology of the earthworm Eisenia foetida grown in composted broiler litter." Rev Argent Microbiol 1995 Oct-Dec; 27(4):210-3. Abstract in Medline, PMID 8850134

[4] Poulsen OM, Breum NO, Ebbehoj N, et al. "Sorting and recycling of domestic waste. Review of occupational health problems and their possible causes." Sci Total Environ 1995 May 19; 168(1):33-56. Abstract in Medline, PMID 7610383

[5] Ivens UI, Ebbehoj N, Poulsen OM, Skov T. "Season, equipment, and job function related to gastrointestinal problems in waste collectors." Occup Environ Med 1997 Dec;54(12):861-7. Abstract in Medline, PMID 947089

CHOOKS, CHILDREN (GRAND) & CHRISTMAS HOLIDAYS

by Shirley Carden

Our five acres are certified A Grade Organic. I like to think that all the wild life that visit us are safe from the many poisons that people feel the need to use. We resist the temptation to own cats or dogs for the same reason. We still haven't found the time to improve on the temporary state of the accommodation for our chooks and goats and as a result we have to be very wary of crows, foxes, neighbours' dogs and the occasional spotted quoll. The crows are the biggest problem.

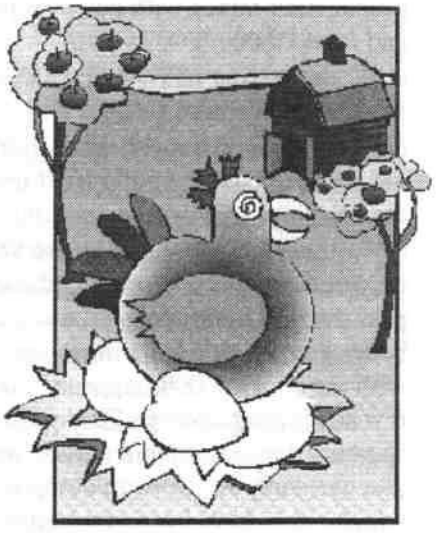
They sit in the large surrounding trees and fly in to take the eggs when the hens come off the nest. Already this season they have been flying off with young chicks. I saw one fly off with a baby chick, I rushed down to find the crow had made a hole in the chicken wire big enough for the chicks to escape. By the time I had arrived, two more chicks had escaped. If I had not been around I'm sure all 17 chicks would have disappeared.

I consider the chooks a very important part of our set-up. They give us beautiful eggs that are in great demand. We have even managed to persuade several people to pluck and clean our many roosters for the table. Unfortunately as yet they baulk at chopping off the heads, so my better half has to do that. We have now perfected cooking them and enjoy the occasional rooster, but there is a limit to how many we can eat. I try to have new chicks ready for each school holiday, because the grandchildren enjoy them so much. Occasionally the chicks have been taken home to be looked after for a while. This includes a visit to school or preschool. Of course after they have been returned, complete with names, we must ensure that they never end up in the pot or are given away.

The chooks play a very important part in our garden. Their yard slopes away from the chook house. When we slash the grass it goes into the shed in generous amounts. It ends up eventually thoroughly scratched over at the very bottom of the slope mixed up with feathers and chook droppings. This is used to mulch the orchard and vegetable garden. After it is removed, leaving bare ground, the chooks are left to scratch over the newly exposed earth for a couple of hours. This gives us a substantial supply of beautiful fine soil to use in potting mixes or anywhere else it is needed. I always perform this task after rain so that it is not dusty.

Our grand children are particularly fond of our "Berry eggs". Master Ten arrived from far away clutching a small box. He hadn't been here more than 15 minutes when he politely asked if he could have a soft boiled egg with hot buttered toast fingers. From the box he produced a beautiful egg-cup and matching teaspoon. He will have three soft boiled eggs at a time if allowed, but I feel two is enough.

Miss Five usually tightly clutches grandad's hand when visiting the chooks and the goats. Recently we had her and her slightly older brother to mind plus a few other grandchildren. In case she was homesick I kept an eye on her to make sure she was happy. The grandchildren returned from the chook yard one afternoon with the eggs they had collected, but Miss Five was missing. I enquired as to her whereabouts, to be told she was still in the chook yard waiting for a hen to lay an egg. Apparently she had missed out collecting any eggs and was waiting for a lone hen which was on a nest trying to produce one. Knowing how frightened she was of the roosters I thought I had better check on her. She was sitting on the old up-turned laundry tubs with a bit of four-by-two across her knees doggedly watching the nest waiting for the hen to do its job. Master two comes up from the chook yard with a newly laid egg clutched in his hand and manages to get across the message that he would like it cooked for him immediately.



Having barely recovered from the school holidays, last break before Christmas, I am already planning for the Christmas vacation. Our five acre property is jokingly referred to in the family as the Carden health farm. In actual fact I do try to run a healthy establishment because it is much easier to have a house full of people if they are all well. The grandchildren know me only too well not to expect anything with white sugar in it. But there must be a trade-off to prevent a revolt. I have to come up with delicious food they all enjoy. But after all, that has been a hobby of mine for as long as I can remember. After a miserable childhood due to various illnesses, I was determined to make sure my children did not endure a similar existence. Initially I succeeded, but my own children felt deprived because they were not allowed all the goodies their friends enjoyed. It was hard work. Now I have so many recipes they all enjoy, including those with my own organically grown herbs freshly picked, that the acceptance of such fare is assured.

Take hot herb bread for example. I buy good quality wholemeal rolls and store in the freezer in readiness. The herbed butter (or margarine) can be prepared the day before. Soften the butter at room temperature then stir through the chopped herbs. I use about half an inch thick of chives, about three stems of parsley, (from near the centre of the plant, not the tough old pieces from the outside of the plant - they are fed to the goats to keep them healthy). Include about three stems each of oregano, marjoram and thyme stripping the leaves from the woody stems if necessary, and about four sage leaves. Chop the herbs finely then stir

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through the butter. This will last in the fridge for a couple of days. The rolls can be quickly prepared by slicing them in halves while partly frozen with the herbed butter already softened at room temperature applied generously. Then I place them in a hot electric frypan with the lid on and the vent open until the butter is melted on top and the halved rolls are golden underneath. These are great as an entree before a barbecue or on a chilly night with a large pot of pumpkin soup.

Raw sugar can be substituted in recipes for white sugar. In sponge cakes, for example, I grind the raw sugar to a finer consistency in an electric coffee grinder. Be careful not to ruin the gadget by running it longer than necessary. I find the raw sugar in Christmas cakes dissolves when the eggs are beaten through. Biodynamic flour is substituted for white flour. My Christmas cakes and puddings are drooled over in family circles in spite of substituting these healthier ingredients. Instead of covering the cake with white sugar icing it is attractively decorated before cooking with nuts and dried fruits. If icing is absolutely necessary a combination of ground raw sugar and powdered milk combined with any of the usual flavourings is quite successful. Two-minute icing is also popular. Just boil for two minutes on low heat 3/4 cup raw sugar with 2 tabs butter and 1/2 cup milk. Beat through 1 cup powdered milk, 1 tab vanilla or cocoa etc. to suit the need.

RESEARCH SHOWS ORGANIC FARMING OFFERS BENEFITS

By Julian Lee (Reprinted with permission)
ANU Reporter - October 1998 (www.anu.edu.au/pad/ANURep/V29-15/organic.html)

Controversy has raged for years over whether organic farming offers significant environmental benefits over conventional farming, but for one ANU scientist, the answers are coming to light.

After 10 years of research, David Dumaresq of the ANU Department of Geography believes that not only are there benefits, but the difference between the two systems may be vital to Australian agriculture's long- term productivity. "There is something about organically farmed soils that is different," he said. "The organic site consistently shows better soil characteristics than conventionally farmed sites."

With soil structural decline a long term problem for the sustainability of Australian wheat production, most conventional farmers have responded by using conservation farming techniques including herbicides and reduced use of ploughing.

But Mr Dumaresq believes these conservation techniques have created new problems. "For example many farmers have seen an increase in soil diseases," he said.

Research on the soils at a commercial organic farm in Ardlethan indicates that improvements in soil properties may be achieved through other techniques - in particular the avoidance of soluble phosphorus fertilisers. Improvements include greater soil stability, water penetration and recovery from ploughing, resulting in decreased erosion potential compared to equivalent conventionally farmed soils.

"These improvements occur despite aggressive ploughing in the organic system to control weeds and prepare seed-beds," Mr Dumaresq said. Traditional agricultural wisdom attempts to explain improved soil characteristics by increases in soil carbon. But Mr Dumaresq has found that organic farms with better soil structure have no more carbon than comparable conventional farms.

What he discovered is that some carbon in organic soils may be a different type. More soil carbon on organic farms is derived from a non-disease-causing "VAM" fungi, Mr Dumaresq said.

He believes that the greater densities of VAM fungi in the organic system are responsible for the decrease in erosion potential by increasing the soil's ability to hold together.

"Organic farming regimes promote the growth of VAM fungi because soluble phosphate fertilisers are not being used.

"There is a trade-off however because wheat production is limited by the amount of phosphorus available. Therefore it would be expected that organic farm yields would be significantly reduced," Mr Dumaresq said.

What scientists have found however is that VAM fungi are able to explore large volumes of soil and bring phosphorus back to the soil that the wheat would otherwise not be able to access.

There is an overall cost to the wheat plant as the VAM fungi cannot provide anywhere near as much phosphorus as the fertilisers, Mr Dumaresq said. "Therefore increased soil structural properties in the organic system are purchased at the cost of reduced yields," Mr Dumaresq said. "Conversely, in the conventional system, increased productivity is gained at the expense of soil structural decline."

Organic farmers are no better or worse off than conventional farmers financially, despite decreases in productivity. Premiums for organic wheat and lower input costs from reduced usage of fertilisers and herbicides mean that organic farmers are getting equivalent returns for their wheat, Mr Dumaresq said.

This situation may reverse if too many farmers convert to organic methods however. "With many more organic farmers, the premiums current farmers enjoy on organic produce may be lost and Australia's productivity as a whole may decline," Mr Dumaresq said.

Rather than discouraging farmers from taking up organic farming, he believes that this highlights the current environmental cost of our current mainstream agricultural activities.

"The aim for the future will be to design farming systems that will achieve necessary levels of production at lower environmental cost or that are able to revert existing degradation. The study of present organic farming systems may give us insights into how to do that," Mr Dumaresq said.

TRAUDI & MARY'S TIPS FOR SUMMER

By Sylvia Maseyk

Reprinted from the COGS Quarterly - Summer 1993

This article is the result of another wonderful morning spent chatting with Mary Flowers and Traudi Kalivoda. The main theme of our conversation was that when planting summer crops, judgement is needed when deciding which vegetables to put in early and which to leave until you're absolutely sure of no late frosts.

The following vegetables are frost tender and are safer planted from November onwards unless very well protected: beans (runner and French), capsicum, cucumber, eggplant, melons, potatoes, squash, sweet corn and tomatoes.

The following are less sensitive and can be planted from September: beetroot, carrots, lettuce, parsnips, radishes, silverbeet, spinach, white turnips.

Seeds planted in November will develop into much stronger plants which will quickly catch up in size with those transplanted earlier as seedlings

Direct sunlight is the best provider of strength to young plants, although some may be interested in establishing seedlings in a glasshouse. For community glasshouses the main worry is keeping a tab on seedlings. The lack of moisture, overheating and ventilation must be monitored. It would be ideal if one could check the glasshouse at least twice each day. Those interested should read relevant literature on glasshouse management.

Late Starters (Frost Sensitive)

The following are best planted from November onwards:

Tomatoes - seedlings will lose up to one-third of their size and strength when transplanted out in cold weather - Traudi's golden rule is not to plant tomatoes out before 15 October. Tomatoes benefit from a sunny, warm and sheltered aspect such as a north-facing brick wall. A neighbour of Traudi's has successfully grown tomatoes in the same bed against a north-facing brick garage wall for some 20 years, each year replacing the soil.

Tomatoes need really good, well-composted soil and ideally should be planted following a green manure crop. Mary and Traudi have had mixed success with early varieties such as Apollo and suggest these be protected from frost by encircling with empty bags such as those used for superphosphate. Heat can be generated by placing lawn clippings (mostly dried out, so as not to draw nitrogen from the soil) over the edge of the bag which touches the ground.

Capsicum, Cucumber and Eggplant - much the same requirements as tomatoes - good soil, plenty of organic matter and don't plant too early. Plants should be mulched after soil has warmed up (applies also to tomatoes). Plants cannot take up nutrients unless the soil is warm but mulching too early slows soil warming.

Cucumbers - these can be established in a glasshouse but Traudi doesn't recommend this as cucumbers don't transplant well. She remembers her mother planting cucumber seeds in half eggshells and transplanting the seedling with eggshell intact. This method reduces stress on the seedling. Traudi suggests gently cracking the eggshell to make it easier for the roots to pass through after transplanting.

Melons - although frost-tender, these need to be planted early (October to early November) as they have a long growing season. Melons should be planted in the sunniest and warmest available part of your garden. Because they require such a long, hot growing season, melons are not recommended for Canberra: even for experienced gardeners success is difficult.

Beans - require a nice rich soil and are best not planted before November in case of a late frost.

Squash and Zucchinis - seeds should be sown direct where possible, but the requirements for one household can be met with a couple of seedlings, which it is probably more economical to purchase.

Pumpkin - can be established in the glasshouse or a very warm, protected spot with a rich soil. Pumpkins are hungry feeders and will benefit from the application of some blood and bone.

Sweet Corn - seeds should be sprouted on damp paper before sowing. For corn, the 'sprouts' are really roots, not shoots. To ensure that the newly-sprouted roots don't tangle or break, make sure that seeds lie flat on the paper and handle them as little as possible. Any seeds that don't sprout using this method should be thrown away as they will not germinate in the soil either. A recent example from Traudi was the germination of only 14 of 30 seeds. This certainly saves digging, planting and watering garden beds for less than 50% germination success. With the pre-sprouting method, all the sprouted seeds you sow should become seedlings. When sprouted roots are about 1cm long, (this takes about 5 days), seeds should be sown in small individual punnets and the seedlings thus obtained transplanted as per suppliers instructions.

Potatoes - should be planted in a good friable soil without too much nitrogen, which makes the tops leggy at the cost of tubers, or lime, which causes scale. Potatoes like potassium and plenty of compost. It is usually recommended that rows be 75 to 90cm apart, but if the soil is rich and well-composted, rows can be as close as 60cm. Sets within rows should be about 30cm apart. When plants are about 15cm high, bring the soil up around them into hills. When soil is warm, the plants should be mulched heavily with compost, or with semi-composted straw or leaves retained from autumn.

Traudi has unsuccessfully tried growing potatoes by covering the sets with hay or straw, a method recommended on the Gardening Australia TV program. Traudi has found too much light is able to get in, turning the potatoes green and inedible. Rice husks may be a good alternative as they settle closer around the plant, and should allow in less light.

Sweet Turnips - these are better left for January planting as winter vegetables. These are very susceptible to green butterfly, which is also more prevalent in earlier months.

Hardy Crops

Brassicas - for winter crops plant seeds in late November to January for transplanting from February onwards. Brassica seeds need the soil to be firmly packed to germinate. It is possible to grow cauliflowers for summer eating but Mary believes that it is not worth the trouble for the home gardener as they are very susceptible to butterfly and usually all ripen within a short period, creating a glut.

Traudi suggests that it is uneconomical to try to grow Brussels Sprouts in Canberra.

Root vegetables, including carrot, parsnip, beetroot, white turnips and radishes - all require nice deep ground and rich friable soil, improved with manures. Parsnip will self-seed quite well anywhere in your garden while turnips will germinate very quickly (about 4 days) provided the nights aren't too cold. Long white radishes are recommended for taste and ease of growing.

Lettuce, Spinach and Silverbeet - these are all easy to grow, responding well to good, nitrogen-rich soil.

General Tips

Mary and Traudi recommend keeping up with liquid manure. This should be applied after watering, not to dry soil. Watering the plant first assists to further dilute liquid manure, which should already be diluted to the colour of weak tea before being applied. A couple of sad tales were recounted of the demise of plants fed on liquid manure without watering! The other important thing to keep up is the mulching of plants, after the soil has warmed up. Anything can be used, including sawdust, straw or grass clippings which have already been somewhat decomposed. For strawberries, pine needles can be used, but these are not recommended for other plants.

IMPRESSIONS OF INDIA

By Chris Allen

See the article "Koorool's Wombat" for some information about Chris.

In February/March 1998 I travelled with three other members of our family through north western India. We have gardened and farmed organically for many years, and Indian land management practices were of particular interest to us.

While we were there media attention focused on a social and ecological tragedy experienced by a large number of cotton farmers in a particular province. On the promise of substantial earnings, many of these people had recently shifted from self-sufficient mixed-farming to cotton monoculture, but had lost their crops to pesticide-resistant cotton weevils. As the problems developed the farmers had applied more and more pesticides in a desperate frenzy to try and save their crops. But this had killed all the pest predators and only made things worse. Many farmers had mortgaged and lost everything. When we were there 180 of them had committed suicide, some by drinking the pesticide that was the cause of the disaster.

The brief impressions that we gained left us with a sense that western agribusiness had captured the heart of Indian agriculture.

However, we did stay at one organically run farm. This is called Rasulia (Friends Rural Centre) and it is on the edge of the small town of Hoshangabad, which itself is on the Holy River Namada. Quakers from England and Australia have had a long history of involvement with this 45 hectare farm. However, Indian Quakers have taken responsibility for running Rasulia in recent times. Apart from a few years in the 70's the farm has always been managed organically; indeed we had a sense of this being an organic oasis in a sea of chemicals. Originally the dairy herd of European breeds was established to maximise milk production but now it consists only of Indian breeds providing a much lower milk yield, but healthier cattle that are much easier to manage. Bullocks are used for farm work and surplus cattle are sold. Wheat and soy beans are the predominant crops, these are sown mechanically but harvested by hand. Although intensive farming methods enabled large numbers of people to be employed, the farm has been through financial difficulties recently and this has precipitated significant reduction in employment levels.

We were privileged to meet Winin Pereira and other staff members of the Centre for Holistic Studies in Bombay. Winin was an eminent nuclear scientist who left his profession in the 1950's to become an environmentalist committed to supporting truly sustainable ways of living. For many years he lived in a rural Indian village but recently ill health has forced him to move to Bombay. Winin is the author of many books on the environment, agriculture, technology and sustainability in India. The most well-known of these, *Tending the Earth*, is a history of the decline of Indian agriculture brought about, he argues, by the economic and social impacts of the British Raj. One item of information that he presents that astonished me is that before then there were approximately 200,000 varieties of rice in India and each had a specific purpose in a specific location.

We visited a region in the Himalayan foothills where terraced farming practices on sometimes extraordinarily steep slopes had remained largely unchanged. The terraces were beautifully constructed. The irrigation channels were accurately designed to allow water to flow gently to every tiny field at every level. There was no sedimentation on the riverbed below. Many people were working there; using wooden hand tools or bullocks pulling the hand made wooden ploughs. Life is hard there, undoubtedly, but compared with street life in the big Indian cities, this was paradise.

STINGING NETTLE

The Soil Association of UK

Heading the list of beneficial weeds must surely be the stinging nettle, for its uses are legion. It is one of the most companionable, or symbiotic plant that exists and it is amazing how much time, energy and money the average gardener will expend on trying to get rid of this most valuable plant.

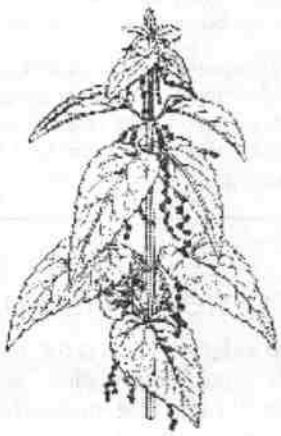
It has the ability to stimulate the growth of other plants growing nearby, perhaps because of its high nitrogen content, and to make them more resistant to disease. More than one gardener has found that the yield and quality of soft fruits have been improved if nettles are allowed to flourish near the plants.

As a companion plant to herbs it seems to increase the essential oils in aromatic herbs.

It breaks down into almost perfect humus and is invaluable as a mulch between rows of vegetables, providing both humus and nutrients.

Because of its high mineral content it is an essential addition to the compost heap. When added freshly cut, or only slightly wilted, it has the effect of raising the temperature of the heap almost at once, encouraging the nitrogen bacteria in the breaking down and decomposition of vegetable matter, especially its own tough fibrous sterns and roots.

Nettles can be left to soak in rainwater for two to three weeks until they disintegrate. The rather smelly liquid thus produced makes a very effective plant food, and is especially good for tomatoes. Again, the amount of nettles to be used is immaterial. In many cases the supply will dictate this. However, the more you use, the stronger will be the plant food, and bear in mind that there is more nitrogen in fresh, young nettles during the spring and summer than there is in the old plants during the autumn. This liquid can be used as an insect repellent and as a foliar feed. Or an infusion can be made by covering a handful of the fresh nettles with a pint of water, bring to the boil, remove from heat and cover while cooling. Strain and dilute with four parts of water to one of liquid. This can be used as a spray against mildew, blackfly, aphis and plant lice in the greenhouse or outside. When used as a foliar feed a dessertspoonful of liquid soap can be added to the spray to help it to stick to the leaves, but this should be omitted if the liquid is to be used as a fertiliser.



That seems to be a pretty impressive list of uses. The stinging nettle is also a plant very rich in protein, vitamins and minerals, especially nitrogen, iron and calcium, and not only is it of tremendous value in the garden, but it has long been recognised for its medicinal and culinary uses.

Ladybirds & Nettles

Ladybirds (as we call them in Europe, when speaking English - in Irish it's bóín Dé, or *God's Little Cow*) really like nettles, which have their own specialised aphids which don't eat other plants.

If you have a small bank of nettles in the garden, the ladybirds will lay their eggs near it, so the babies can hatch out and find a ready supply of food, since the nettle aphids are the first aphids to appear each year.

ps - the yellow ladybirds go red as they get older.

Source "gardener in Ireland"

Eat Beet Greens!

The leaves of beetroot are more nutritious than the beetroots themselves and should not be discarded, but included raw and chopped in salads or lightly steamed for a few minutes. Nutrient content of both leaves and roots is so high that they are now being considered particularly effective against degenerative diseases including cancer.

Beet greens contain 91 % water, 2.2% protein and very high levels of minerals - calcium, potassium, sodium, magnesium and iron. Carotene at 0.7mg is very high and there are excellent levels of B vitamins. Vitamin C is 30mg per 100 grams. (The carotene at 0.7mg is per 100 grams).

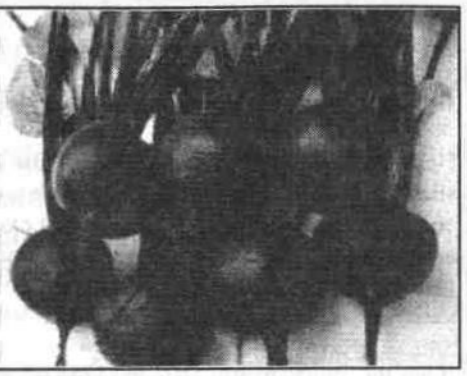
Reference: A N.H.S. of Australia magazine

SEED SAVERS

www.seedsavers.net

Each *COGS 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 beetroot. 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*



BEETROOT (*CHENOPODIACEAE*)

Beta vulgarts - beta is the name that the ancient Romans gave to the beet, vulgaris stands for "common". Silver beet (chard), sugar beet, mangels and fodder beet are also classified as *B. vulgarts* (see Silver Beet). The other three are grown as animal food and are not dealt with in this handbook.

Origins: Wild beets are native to northern Africa and the coast of Spain and Portugal. They were introduced to northern Europe by the Romans, who fed them to their troops and horses. Beets adapted very well to cold northern winters and from them, sugar beet and the round red beet were developed. Collections of the wild relatives of beetroot are being made in Sicily and Calabria for large scale gene banks.

Description: The many forms of beet share the common characteristics of having a swollen root and spear shaped leaves.

Cultivation: Beetroot is a biennial. It is not very hardy in prolonged harsh winters but will take some below zero temperatures. It is sown in winter in warm climates and late summer in cool climates.

It is salt tolerant by nature. For seed production, an application of common salt at thirty grams to the square metre (an ounce to the square yard) or boron in the form of borax at one tenth of that rate is beneficial.

Saving the Seed: The roots attain full size during their first year of growth and in the second year send up an angular stalk. The plant then dies off. This is typical of a biennial. However, in places where the difference of day-length between seasons is not marked, such as far northern Australia, beetroot may not go to seed at all.

In cold climates the roots are lifted for evaluation at the beginning of winter, stored in moist sand, then re-selected for replanting in spring according to their true-to-typeness, appropriate size and uniform colour. They will go to seed in the summer. To preserve the diversity of the strain, a good dozen (at the very least six) plants should flower together, especially if the variety is rustic and shows a lot of character.

To encourage larger seed balls on the lower pans of the branches, the top and side branches should be tipped. Seeds can be picked individually as they ripen, or the whole stalk cut down and hung to dry further. Strip the branches by hand into a bin or an equally wide container. Each seed ball contains from two to six individual seeds. As they are hard to separate, you will end up with small groups of seedlings wherever you plant a seedball. Plant breeders have developed a strain of sugar beet with a single seed ball, so that there is no need to thin the seedlings.

Beetroot is pollinated by both insects and wind. The pollen is very fine and can fly long distances. Depending on wind direction and ferocity, commercial seed growers isolate beetroot from silver beet, sugar beet and fodder beets, that are flowering at the same time, by 250 to 500 metres. Few gardeners actually allow their beets to get to the flowering stage, so there is little chance of crossing.

Storage: Seeds keep for four to six years. This is uncommon longevity for a vegetable seed and there is usually less than fifty percent germination at that stage. There are fifty seeds to the gram.

Usage: Beetroot is grated raw and dressed, or steamed, sliced and covered in vinegar and a touch of sugar - the old Aussie way. The leaves are edible and make a nutritious spinach.

The root is not recommended for diabetics because of its high **sugar** content.

On the Lookout: The Italians introduced red beetroot to the rest of Europe, and French gardeners made numerous selections. Ask Middle Eastern folks for red ones and look for yellow ones in old German settlements, such as the Barossa Valley, the Murray flats, and York Peninsula in South Australia, and Tarrington, the Mallee and Geelong in western Victoria. In New South Wales, German settlers also established themselves on the edges of cities, often as market gardeners.

Bull's Blood, an ancient variety, is also grown for its reddish, purple leaf. Early Wonder is an old flat type that is suitable to early planting and has been replaced by both Early Market and the Dutch bred Boltardy. Detroit Dark Red is often used as a main crop for the mid-season. In New Zealand, Crimson Globe, Rapid Red, Dewar's Dwarf and Early Flat Egyptian, which Yates distributed from early this century until the mid-thirties, may still be grown in some North Island gardens.

The long and half-long types are often of good quality but their hairy appearance and lack of uniformity made them less popular in the past, so many tasty strains have disappeared. Century, Obelisk, and Winter Keeper are in this long-rooted group.

The Heaton Allen Greenhouse

By John Allen

Margaret has been on my back for a while to build a greenhouse. When we were in Brisbane a few weeks ago (see separate report) we saw a greenhouse built by David Heaton. It was clear plastic clipped onto a frame of semicircles of 2" irrigation pipe, held in place by slipping the ends of the pipes over short star-pickets.

We thought this was a brilliant idea, so on our return to Canberra I built a similar, but larger greenhouse. Our green house is about 2m square and the centre is 2.4m high. The frame comprises three semicircles of 2 inch irrigation pipe which are jammed onto star pickets which protrude about 400mm out of the ground. The outside edge of the centre pipe is at the same level as the inside edge of the two outer pipes - the centre pipe supports the plastic but the plastic is not clipped to it.

Clips for the plastic were made by cutting a piece of the irrigation pipe into sections about 50mm long then cutting a small piece out of each section. I used about 80 clips. To avoid the sharp edges of these clips damaging the plastic, I filed the inside corners a little.

Heavy-duty clear plastic was then clipped to the front & rear pipe frames. First, a single main sheet around the pipes forming the roof and sloping sides - it is important to put this sheet on first and bring the plastic over the centre pipe and under front & rear pipes, wrapping the plastic well around these. A sheet goes onto the back; and then a sheet for either side of the doorway. Due to the curved frame and to maintain a smooth finish, cuts were made in the plastic up to the level of the pipe about 100mm apart.

To stabilise the pipes laterally a single piece of timber joins the front and back pipes (under the plastic) at top-centre. Three other pieces of timber were fixed to form a door-frame. Timber is attached to the plastic pipe using very fine bolts (large holes may make the pipes susceptible to buckling).

The door itself is a double piece of plastic fixed at the top, weighted at the bottom - eyelets and canvas clips are down the sides. A vent, made of plastic, which can be clipped up or down, is above the door.

The unit is stable, but in high wind areas it would be advisable to secure the pipe-ends on the start pickets either with bolts through the pipe and start pickets, or by attaching a chain to buried bricks.

Be careful that the irrigation pipe is not forced too far out of it's natural shape otherwise it could buckle in strong heat.

We put some shelves in it and the *Heaton-Allen* greenhouse is now chock-a-block with seedlings and performing beautifully!

The whole unit cost under $200.

CHILDREN AND PESTICIDES

http://www.igc.apc.org/panna/children/homeuse.html
April 4, 1995

Home Pesticide Use and Childhood Cancer

A study recently published in the American Journal of Public Health has found elevated rates of cancer in children exposed to pesticides in their homes and yards. The study by researchers in North Carolina examined the association between childhood cancer and home pesticide use in a case-control study of children under 15 years of age. The study found a four-fold increase in the risk of soft-tissue sarcoma in children whose yards were treated with pesticides, and a link between use of pest strips containing dichlorvos and incidence of childhood leukemia.

Researchers interviewed parents of 252 children diagnosed with cancer between 1976 and 1983 in the Denver, Colorado, area, as well as 222 control subjects, about their use of home pest extermination, yard treatment and pest strips. Respondents were asked details regarding extermination and pesticide use for each residence in which they lived for six months or more, beginning with the time of the mother's pregnancy. Researchers point out, however, that a primary weakness of this and other studies looking at home pesticide use and childhood cancer is the inability to accurately measure any exposures.

Findings include:

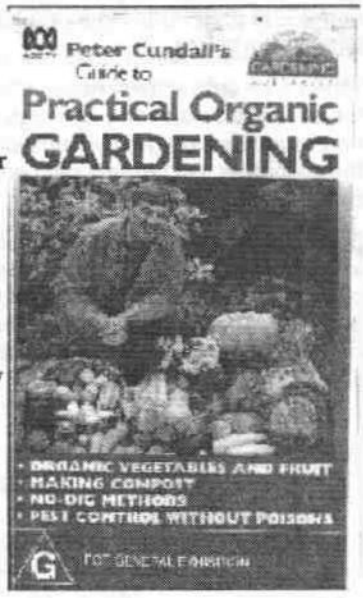
1. Analysis of data gathered from these interviews found evidence of an association between home extermination and lymphomas, but not other cancers. In cases examined for the study, pesticides most likely used for home pest control were chlordane, heptachlor, diazinon and chlorpyrifos (Dursban).

2. The study found relatively strong associations between use of pest strips containing dichlorvos and leukemias. Dichlorvos is a known carcinogen in animals, and previous studies have linked the insecticide to leukemia in adult men. Pest strips present an exceptional health risk because they emit a continuous vapor of dichlorvos into the household air that people breathe continuously.

Sources:
"Home Pesticide Use and Childhood Cancer: A Case-Control Study," American Journal of Public Health, February, 1995; NCAMP Press Release March 2, 1995; Pesticide and Toxic Chemical News, March 22, 1995; Journal of Pesticide Reform, Fall 1992 and Winter 1994.

Gardening Australia Video

The COGS library has recently obtained a copy of Peter Cundall's *Practical Organic Gardening* video. It is an excellent introduction to organic gardening, taking the viewer through the full development cycle of an organic garden.



Children would find it easy to follow.

Even the pros can learn new tricks from it.

We have only one copy, so we ask that borrowers ensure that it is looked after and returned at the next meeting.

GENETIC ENGINEERING NEWS

LABELLING IN AUSTRALIA

From the Australian Genethics Network

The campaign to have all genetically engineered foods labelled in Australia and New Zealand continues. A Health Minister's decision (30/7/98) only agreed to the labelling of gene tech foods "where they are different in a property (such as taste), in nutrition or in use."

In practice this means that all products of gene technology reaching the food supply in the foreseeable future will be unlabelled. They include foods from crops containing antibiotic resistance genes, herbicide tolerance genes, insect toxins, virus particles and other high-risk foods offering no benefits to food buyers.

Ministers will decide at their December 1998 meeting whether or not these will be labelled, based on food labelling decisions in Europe.

The Organic Federation of Australia (OFA) committee is opposed to the use of GMO'S in the production or processing of organic food and would like to see mandatory labelling of food containing "GMO'S". The OFA.has written a letter to the health ministers, urging them to " tread warily in exercising your responsibilities for regulating this new and potentially dangerous technology."

Two Infant Formulas Contain Genetically Engineered Soybeans

The Australian GeneEthics Network commissioned tests on infant formulas for the presence of the foreign genes and proteins in Roundup-ready, herbicide tolerant soybeans.

These new substances, never in food before, enable the beans to be sprayed with high doses of Roundup herbicide, also leaving synthetic chemical residues in the soybeans. US farmers get better weed kills and we get more residues!!

BioTest (an independent testing company) bought infant fomulas containing soy from a local supermarket and tested them. Two of the eight samples were positive, and six negative, at the operational limit of detection of 1/1,000. The results of the tests, dated July 24 1998, were as follows:

Negative

Karicare. Soya Infant Formula
Karicare. Soy Follow On
Wyeth. SMA
Wyeth. S26 Progress
Wyeth. S26 Toddler
Nestle. NAN2

Positive

Wyeth. Infasoy Progress
Heinz. High Protein Cereal

ORGANIC FOOD DEMAND UP

Guardian (London) July 29, 1998

The price of organic food looks set to drop as the number of farmers applying to go green hits record levels.

Organic food is finally becoming big business, after 50 years in the crank club. Nearly 140 applications have been received so far this year by the Ministry of Agriculture from farmers wanting to join the Organic Aid Scheme. There are 445 organic farmers in England and Wales.

Prices for organic food have been higher than for non-organic food partly because demand far outstrips supply, according to Dr Younie, the organic specialist at the Scottish Agricultural College.

MORATORIUM IN FRANCE

PARIS, France, August 3, 1998 (ENS) - The French government has announced a partial moratorium on the introduction of genetically modified crops for the next two years. Prime Minister Lionel Jospin said last week that no approvals would be given for the commercial-scale growth of oilseed rape, also called canola, or any other modified crop which poses the risk of gene transfer to related species.

US PRESSURE ON UK

THE INDEPENDENT ON SUNDAY London, Sept 6, 1998.

Bill Clinton has personally intervened with Tony Blair to stop Britain from halting the controversial production of genetically engineered foods. The US President telephoned the Prime Minister during the summer to try to persuade him that genetically modified (GM) crops - worth millions of pounds to the US economy - would not be bad for Britain.

RR SOYBEANS IN COLUMBIA

COLUMBIA, Mo. (AP) -- A soil-borne fungus is threatening soybean crops in parts of central and northern Missouri, a problem some farm experts are linking to a sought-after genetically altered soybean.

The state's worst-ever outbreak of Sudden Death Syndrome is afflicting soybean crops and could affect production levels, officials said. Heavy rains during the spring and summer fed the syndrome, known scientifically as Fusarium solani.

But another factor in the outbreak was the enormous demand for genetically-altered soybeans that are resistant to Monsanto's Roundup herbicide, agriculturists say. Though Roundup-resistant beans aren't necessarily more susceptible to Sudden Death Syndrome than other beans, high demand for them meant farmers weren't as careful in choosing varieties that were disease-resistant.

Roundup-resistant beans make up 80 to 90 percent of the soybeans planted in Boone County this year, said Dave Schlemeyer, area sales manager of field crops with MFA.

"That's all they wanted because they had such tremendous weed control with Roundup", Schlemeyer said. *"You put one quart of Roundup on and clean up the fields."*

MONSANTO - HOME PRODUCTS MERGER OFF

MADISON, NJ - October 13, 1998 -- American Home Products Corporation (NYSE: AHP) and Monsanto Company (NYSE: MTC) announced today that they have terminated their merger agreement by mutual consent. The Board of Directors of each of the two companies has determined that the transaction is not in the best interest of their respective stockholders.

HOUSE OF COMMONS BANS GE FOOD

http://www.sunday.ninemsn.com.au/

The UK's House of Commons has banned 'transgenic' food from its bars and restaurants

GE LABELLING IN EUROPE

The Guardian Leader, Tuesday September 1, 1998:

From today, European laws will insist that food manufacturers clearly label products containing genetically modified, or GM foods. This is an important step in boosting consumer confidence in these novel foods which may in time dominate global diets, and the Government should be credited for pushing the legislation through after years of weak proposals being tossed backwards and forwards in Brussels. Despite massive corporate PR campaigns and the blandishments of scientists that these foods pose no risk whatever, European consumers continue to resist for quite reasonable environmental, health, even religious reasons.

rBGH REPORT SUPPRESSED

Sept 1998 issue of Alive: Canadian Journal of Health and Nutrition

The Canadian National Farmers Union and consumer groups are requesting access to a recent report written by Health Canada scientists on the safety of genetically-engineered bovine growth hormone (rBGH). The hormone, which is not yet approved in Canada, is injected into dairy cows to increase milk production. The National Farmers Union claims that the report is being suppressed by Health Canada because of the potential hazards of rBGH described in the report.

LINK BETWEEN rBGH & CANCER GROWS

Sept 1998 issue of Alive: Canadian Journal of Health & Nutrition.

Bovine somatotropin (BST) is also called recombinant Bovine Growth Hormone (rBGH). As far as we can ascertain, BGH is not currently used in Australia. - Ed.

An article on May 9 in the Lancet showed that the rate of breast cancer is up to seven times higher in women with a relatively small increase in blood levels of the growth hormone Insulin-like Growth Factor I (IGF-1). Elevated IGF-1 levels have also been correlated with other major cancers, particularly colon and prostate. The January 1996 issue of the International Journal of Health Services reported that IGF-1 concentrations are up to 10 times higher in rBGH milk. As IGF-1 can be absorbed through the intestine, scientists are concerned that drinking rBGH milk could increase the risk of cancer.

ENGINEERED PLANTS MAY SPREAD GENES TO WEEDS

University of Chicago Medical Center
Joy Bergelson <joy@pondside.uchicago.edu>

Crops engineered to contain genes that give them resistance to pests or the ability to produce lots of seeds, could pass these genes to their weedier cousins producing hybrid strains of super-weeds, says Joy Bergelson, assistant professor of ecology and evolution at the University of Chicago. Her findings will be reported in the September 3 correspondence pages of Nature.

SCIENTIST RECEIVES GAG ORDER

Oct. 1998 issue of Alive: Canadian Journal of Health and Nutrition

On Monday July 13, Shiv Chopra, PhD, a scientific evaluator in Health Canada, received a registered letter from Health Canada forbidding him to speak that evening at a public information session in Ottawa. The meeting was about genetically engineered foods.

Dr. Chopra is one of a growing number of doctors and scientists working for Health Canada who have expressed publicly their concern that Health Canada is risking the safety of consumers, for the sake of industry profit. On June 11, Dr. Chopra and Dr. Margaret Hayden, who also works in Health Canada's Bureau of Veterinary Drugs, were interviewed on CTV (Canada AM).

The scientists stated that they are being pressured by their department to approve antibiotics and hormones (such as genetically engineered bovine growth hormone or rBGH) for use in cattle, even though there are unresolved human safety concerns, such as antibiotic resistance, cancer, and other possible dangers.

Health Canada has also begun disciplinary action following this interview, preventing the scientists from expressing these concerns in public.

ACTION & ACTEW SELL-OFF

The Conservation Council has asked for our support on this issue. It is very concerned about the ACT Government's proposals to contract out ACTION and to privatise/franchise ACTEW as both proposals have direct and indirect impacts on the environment.

ACTION - The Council, largely through its Sustainable Transport Working Group has been working long and hard toward improving the ACT's public transport system.

ACTEW - On 8 October 1998 the Government released a consultants report on the future of ACTEW. That report has recommended the complete trade sale of ACTEW. This is not surprising given the poor terms of reference provided to the consultants by the Government. In short, the terms of reference asked for advice on the best way to Sell ACTEW.
Chief Minister Kate Carnell has announced instead that the Government will be seeking approval from the Legislative Assembly for the sale of the electricity business and the combined sale and franchise of the water and sewerage business.

The motion for the approval will be put forward during sittings this month for full debate in December.

Contact the Conservation Council on (02) 6247 7808

Organic Federation of Australia - Update

The first quarterly Organic Industry Newsletter has been released - it is a joint effort between the Rural Industries Research & Development Corporation (RIRDC) and the OFA.

About RIRDC

RIRDC manages and funds priority research and translates results into practical outcomes for rural industry development. Put simply, their business is about new products and services, and new and better ways of producing them. Their three core areas of business are new and emerging industries, established rural industries, and future agricultural systems. In 1998-99 they are funding 600 projects across 21 research programs, totalling around $22m.

About OFA

The Organic Federation of Australia aims to be the new national industry body to promote and represent the organic industry. It was incorporated in NSW in March 1998. The OFA has been operating with the generous assistance of a funding grant from RIRDC's Organic Produce R&D Program.

R&D

RIRDC has recently published the Organic Produce Program Five-Year R&D Plan for 1998-2003 for distribution to industry, researchers, and the wider public. Contact Mr Ewan Colquhoun on 07 3831 7330.

Successful first workshop

The first OFA workshop was held in June in Sydney with about 120 stakeholders in the organic industry. These included organic growers, retailers, wholesalers, exporters, processors, certifiers, educationalists, and representatives of State and Federal governments.

OFA Committee Members

Five certifier representatives, and one representative from each of the following groups: grower, retailer, wholesaler/exporter, processor, consumer, government, and ORGAA.

COGS FLIER BY E-MAIL

If you are a COGS member and on the Internet then you should consider receiving the COGS Fliers by e-mail.

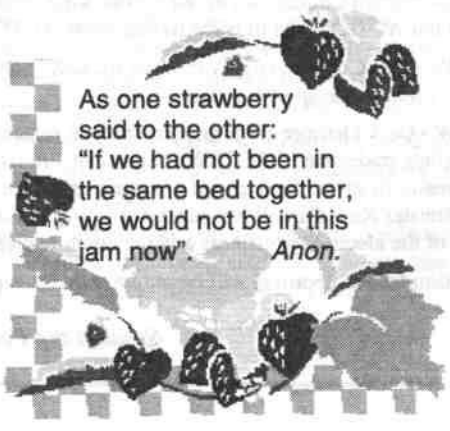
31 members are currently on the Flier e-mail list.

- ✓ *Receiving the Flier by e-mail* helps busy volunteers because each copy of a printed Flier has to be folded, taped and labelled. All e-mail Fliers are dispatched with the press of a button.
- ✓ *Receiving the Flier by e-mail* saves members funds because we have less printing and postage costs (E-mail dispatches are free of charge).
- ✓ *Receiving the Flier by e-mail* can save paper as in most cases you don't need to print it out, or you need print only the bits you need.

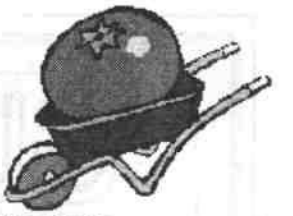
How to register

New members - tick the "Send Flier by E-mail " box on the membership application form.

Current members - send a request to jallen@pcug.org.au



SUMMER VEGETABLE PLANTING GUIDE



In summer, it is a good idea to mulch your garden to help keep the soil cool and moist. One experiment has shown that a 4cm layer of straw reduced evaporation by 73%! Be careful, however, not to lay down a thick layer of sawdust or lawn clippings which can pack down to form an impenetrable barrier to water.

Soil with lots of compost will contain all the nutrients your plants need for strong, healthy growth. In addition, it will retain water and act like a sponge to keep your plants moist through the dry summer days.

On days of extreme temperatures, your plants may need to be physically protected from the heat. This can be achieved by covering the plants with shade cloth secured on a frame, for example 'weldmesh' bent over to form a tunnel (secure the shade-cloth with some pegs).

Try not to leave water on the leaves of plants which are susceptible to fungal diseases, for example tomatoes, cucumbers, pumpkins, zucchinis. Preferably water with drippers, or if you must use overhead sprinklers, water in the cool of the morning so that the water can evaporate during the day.

Remember to leave space in your vege patch for those winter vegetables which must be planted in late summer to early autumn. Brassicas and other winter crops need time to mature before the extreme cold of winter sets in.

Keep those weeds down! They compete with your plants for food, water and sunlight. It is best to tackle them when they are small - before removing them becomes a back-breaking and exhausting exercise.

Pests can multiply rapidly over summer. Don't reach for the pesticides! Observe if there are natural predators present, remembering that there will be a delay between the appearance of the pest and the subsequent build-up of its predators. If you must spray, then use an environmentally benign spray. Read books on this subject such as Jackie French's *Natural Pest Control.*

Make sure that you harvest your crop regularly - in most cases this will encourage your plants to continue cropping, and you get to eat your produce at its peak.

Summer Vegetable Planting Guide

	December	January	February
French Beans	S	S	
Beetroot	S	S	S
Broccoli	ST	ST	T
Brussel Sprouts	ST	ST	T
Cabbage	ST	ST	T
Cauliflower	ST	ST	T
Carrots	S	S	S
Celery	T	T	S
Chicory	S	S	S
Chinese	S	S	
Cucumber	ST	T	
Endive	S	S	S
Kohl Rabi	ST	ST	T
Leeks	S	S	
Lettuce	ST	ST	ST
Marrows	T		
Parsnips	S	S	S
Potatoes	S	S	
Radish	S	S	S
Silver Beet	ST	ST	T
Squash	ST		
Swedes		S	S
Sweet Corn	ST	T	
Tomatoes	T	T	
Turnips		S	S

S = Seed sowing
T = Transplant

Notes:

(1) This table is a guide only, please observe the seasonal weather patterns before deciding when to plant, as there will often be distinct differences in summer weather from one year to the next.

(2) Planting times will vary for different varieties of the one vegetable, for example, December planting of Heading Lettuce should be successful; in February, plant the Butterhead variety.

Merry Christmas

HORTICULTURAL FAIR

Saturday 7th and Sunday 8th November

9 am. To 4 pm.

At the Xeriscape Gardens, Heyson Street Weston

COGS will have a stall at the fair.

XERISCAPE GARDEN TALK

Saturday 28th and Sunday 29th November
1:00pm and 3:00 pm:

Use of Garden Pesticides and Safe Alternatives
(CIT speaker)

At the Xeriscape Gardens, Heyson Street Weston

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.

COGS NOVEMBER MEETING

The November meeting will *not* be held at the Griffin Centre, but will be held at *COGS Backyard.* Members, friends and children are welcome.

Date: Sunday 22 ***Time:*** 3.30pm ***Place:*** "COGS Backyard" at the Xeriscape Garden, Weston

Access will be through the back gate off Unwin Place. Turn off Streeton Drive into Unwin Place. The gate is on the right hand side, after the police training centre.

The following displays will be there:

GUNDAROO TILLER Environmentally friendly & technologically advanced tools & equipment "Appropiate Technology". Michael Plane will be bringing along the tools he uses and sells to show us.

KURRAJONG ORGANIC STOCK FEEDS "For a Vibrant Garden and Happy Hens". Morgan will have his range of products there for us to see.

At the end of the meeting an organic sausage sizzle will be held. For catering purposes we need to know how many people will be coming. *Please let Margaret or John Allen know as soon as possible.*

Ph: 6258 9004 Fax: 6258 5780 Email: jallen@pcug.org.au