







ORGANIC GROWING IN THE CANBERRA REGION

Quarterly publication of the Canberra Organic Growers Society Inc.



Autumn 2004

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From the Editor



It's been a hot summer and we've had Level 3 water restrictions. However, the reports and photos we have from around the gardens seem to suggest that we so value the healthy, delicious produce we grow organically that most gardeners have persevered and been well rewarded for their efforts. Frances Butterfield has found some tips for growing tomatoes she's going to put in place next year (see page 20)—thanks Frances! For those that have lots of summer produce we have some recipes and preserving ideas—and a reminder to bring along to our 'harvest night' for the year something for other members to taste, feast their eyes on or make them smile (see page 10).

In this issue of *Canberra Organic* we continue our recent focus on how much watering might be enough—thank you to Martin Butterfield for his article on pages 12-15. We also have more seed saving network news—thanks to Amy Glastonbury and Jude Fanton from The Seed Savers' Network at Byron Bay. The COGS Autumn planting guide is on page 31.

Thanks to Kate Black for letting us know about a special garden at Hennessey Rehabilitation Centre (page 9)—it's good to see the love of gardening being shared around in this way. Please consider volunteering your help to this enterprise. There are also community projects described on pages 13 and 23 seeking volunteers.

I couldn't resist including some photos from my recent brief visit to Japan for some more Autumn flavour—sorry you won't be able to see the glorious Autumn colours. I hope you will be interested in the short piece on Effective Microorganisms—please let me know if you would like some follow up on this.

Please consider how you could make a contribution to the pages of future issues of *Canberra Organic*—snippet or feature, perhaps your opinion piece on an issue such as GM— please write for us! Many of the photos in recent issues, including our cover photo last issue, are of the Cook community garden—more photos from other gardens would be very welcome!

Janet Popovic

Thanks to Arthur's Vegetable Clipart



President's Report Autumn 2004

The weather has been much kinder to us this spring and summer than last year with reasonably good rainfall and only one hot spell so far. Although we have had level three water restrictions throughout the growing season our gardens are coping remarkably well. Perhaps the water restrictions are a blessing in disguise. They have forced all of us to look at more efficient watering methods for our gardens. Hopefully, this will pay off in the future as the cost of water increases. As many of you will be aware the water abstraction charge has already doubled this year. I would like to thank all gardeners in our community gardens for ensuring that COGS has been able to comply with the current water restrictions.

2004 is shaping up as a busy year for COGS. A new Committee will be elected at the AGM which will be held on 23 March. COGS relies on the work of volunteers to function and I am sure all Committee members would agree that committee work is very rewarding. If you think COGS worthy of your support please consider nominating for a Committee position. It is important for the future of the organisation that there is an energetic and enthusiastic Committee with a mix of new and experienced members. Several of the longer standing Committee members will not be seeking re-election this year so this is an excellent opportunity for COGS members who have not yet served on the Committee to do so. Details of the AGM and the nomination process are given elsewhere in this issue. Don't forget that our first meeting for the year on 24 February is harvest night where we all get the chance to show off the results of our efforts during the season. We will also have Jeff from Nara Products demonstrating food dryers. Dehydrators provide an excellent way to store excess produce. For the remainder of the year we are also lining up a series of interesting speakers on organic related topics for our monthly meetings held, as usual, on the fourth Tuesday of the month in the Griffin Centre.

Many of you may have noticed the building works underway around the Griffin Centre. While this makes access to the meeting room a little more awkward than it used to be, we understand that the Griffin Centre will continue to be available for some time yet; however, the Committee will continue to monitor the situation.

In previous years some of our gardeners have had great success at the Autumn Show of the Horticultural Society of Canberra. This is an excellent way to demonstrate to the wider gardening community the practicality of organic gardening and the quality of produce that organic methods can produce. Please consider entering some of your best produce in this year's Show as a high quality product is the best publicity there is for the use of organic methods. This year is the Horticultural Society's 75th anniversary and to commemorate the occasion additional prizes will be offered. Details are on page 23.

Again, in 2004 COGS will be offering organic gardening courses for beginners in conjunction with CIT Solutions. The first course starts on Sunday 2 May. If you know of anyone who may be interested, please let them know. Details are included elsewhere in this issue.

This is my last President's Report for *Canberra Organic*. I have enjoyed the role of President of COGS during the last three years and I would like to thank everyone, and particularly the Committee, for their support.

Happy Gardening,

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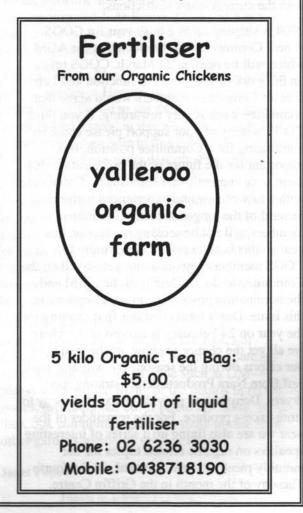
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Cover photos:

Front cover—Cauliflower, Cook community garden Back cover—Berry fruit, home garden, Ainslie ACT





Around the Gardens



Charnwood

Another successful COGS course for beginner gardeners was conducted by Keith Colls at Charnwood in December. Given the hot summer, water restrictions and work commitments, holding the proposed Open Day at Charnwood Community Garden this February is not feasible. We'll advise an alternative time through COGS meetings and a future issue of this magazine. John Turnbull

Cook

A number of gardeners left in September, but an influx of new gardeners has resulted in virtually all plots being taken up and actively worked. Gardening during the Summer has required a weather eye for the frequently visiting brown snakes that have had a habit of becoming entangled in netting.

The much welcome rainfall has ensured good growth but the cool nights and early mornings has delayed fruiting compared to last year, particularly with tomatoes. *Alan Robertson*

Cotter

Gardeners are putting in many tedious hours of hand watering. This is paying off with good summer crops being achieved despite the tight water restrictions. There has been excellent adherence by all gardeners to the watering restrictions. Water usage is being monitored on a weekly basis and is about half the usage rate of last season.

There is a full house at the Cotter Garden with one person on the waiting list. Andy Hrast

Erindale

When anyone asks, "How's your garden growing?" I reply, "It's a jungle in there!" The combinations of tall crops of corn, a thick, ferny hedge of asparagus not to mention an entire plot of tomatoes etcetera are limiting our ability to see or chat to each other!

As an example, the other day I heard someone cry out, "Oh no!" (and a few choice swear words) and to find out what the disaster was all about I had to work my way through a maze of greenery. I finally found the source (one of our new members) looking at his big, healthy zucchini plant in utter disgust. Apparently only yesterday he picked a bundle and now found three more whoppers he had to deal with! He tried to palm them off to me but I too have those blooming things growing in prolific abundance. If we conducted a poll, I wonder how many COGS members get rid of tons of zucchinis to their unsuspecting workmates or visitors to cart home. It also makes you wonder if that might be the reason why some people look a little hesitant when you say hello, as if they are mentally preparing to try to come up with some excuse or other!

Have since placed a 'help yourself' box outside our gate, which is conveniently adjacent to a public footpath. Mind you, I do hope little kiddies are not tempted to grab them and use them as head bonkers!

At present Erindale has one garden plot available but due to neglect it will need extra care and lots of compost. *Christine Carter*

Holder

Holder has 1 vacant plot and no waiting list. Several prospective gardeners from the waiting list declined to take up a plot due to the water restrictions.

Canberra Urban Parks and Places has commenced replanting the bushfire damaged shelter trees and bushes in the parkland surrounding Holder gardens.

CIT Solutions has volunteered to build a pergola next to the garden shed at Holder gardens for the cost of materials only, as part of their adult carpentry courses later this year. The pergola will enable grapes to be grown and provide some summer shade.

Our gardens are flourishing even though the water restrictions have caused a noticeable decrease in the amount and variety of vegetables being grown this year. Several gardeners have sown minimal amounts (if any) of those vegetables needing frequent regular irrigation

(lettuces, sweet corn, celery etc.). The allowable hours of watering (7am till 10am, and 7pm till 10pm, every second



Around the Gardens ... continued from page 5

day) do not easily fit in to the schedule of those people with full time employment - most people have departed for work around 7:30 - 8:00 in the morning and it is dark about 8:15pm.

We have had several visits from brown snakes this summer; two snakes have been found entangled in bird netting covering strawberry beds, both cases resulting in a call to the ACT Rangers to come and remove the very angry snakes. *Stephen Dean*

Kambah

Hot weather, very little water, lots of weeds, not much time, very few vegetables!! That is about the sum of it for our beautiful Kambah plot. A few of our gardeners have battled against all odds and are producing some great crops. Others? Well, lets hope they are motivated to plant some winter produce. We had a working bee where a few loyalists arrived and worked very hard all day. Between us, we had five large very full trailer loads of rubbish that went to the tip. There is still lots more for the next working bee. A few of our

gardeners have been regularly mowing our paths and 'common space', which I am sure we all appreciate. We have welcomed one new member in the last three months. We have four vacant blocks, including the unused seed saving bed—so there's room for some enthusiastic new gardeners to join us!

Shirley Irvin

Northside

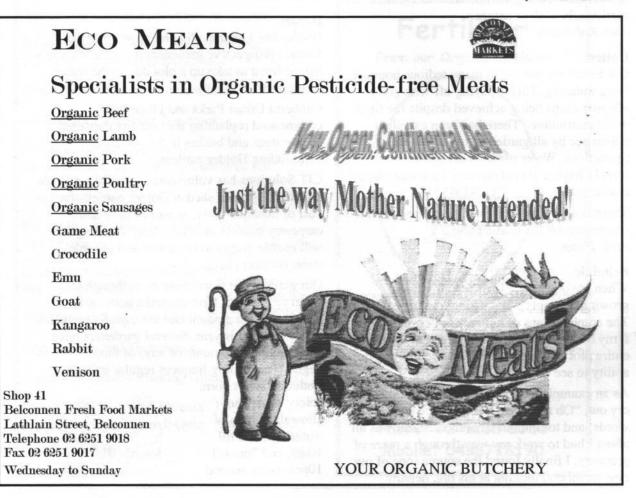
There are several vacant plots.

Oaks Estate

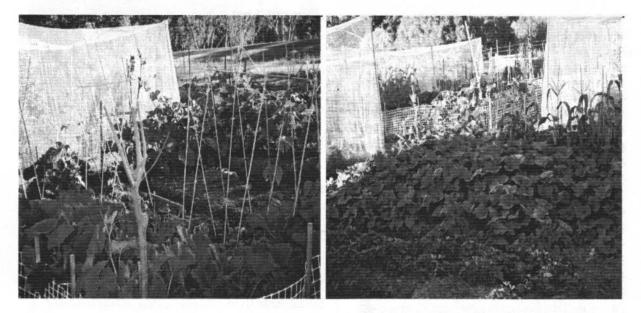
With the gardening members reduced to one and a high level of maintenance and renovation required, the COGS committee is regularly reviewing the future of this garden. *Alan Robertson*

Queanbeyan

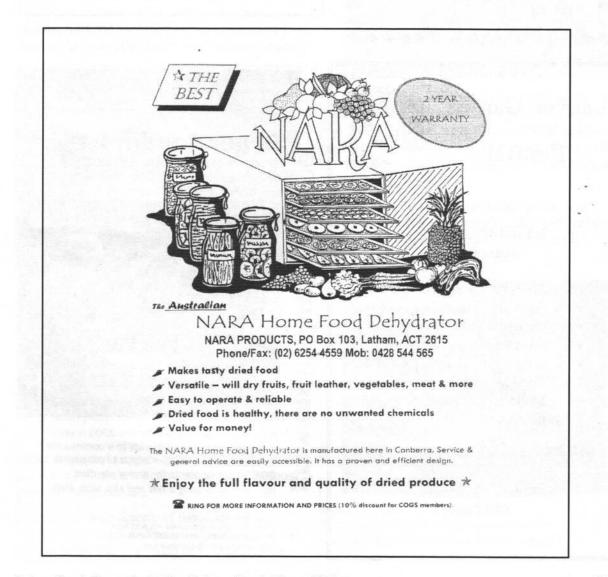
We have two new members and just two plots vacant. *Katrina Willis*



Thriving community gardens



Photos above: Summer growth at Cook community garden-left: beans, right: pumpkin and corn



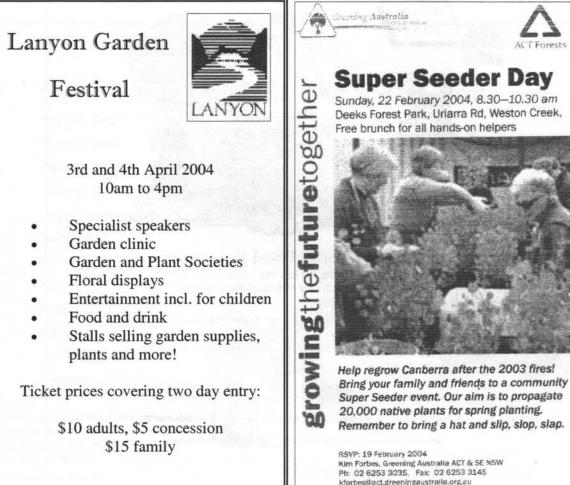
Coming Events



Green Living Fair at the Canberra Environment Centre Kingsley Street Currently scheduled for Saturday 27 March 2004

Ring The Environment Centre for details Ph 6248 0885

Sustainable living displays, demonstrations and supplies, including COGS stall.



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A calming and healthy organic garden



The "Bee Bizzee Rotary Garden" is located in the Brian Hennessey Rehabilitation Centre in the grounds of Calvary Hospital, Bruce. The garden was first envisioned with the idea of helping out clients who are dealing with mental illness, creating a place for people to relax whilst enjoying the care and maintenance of a fruit, vegetable and flower garden.

The garden is full of fruit and veggies, flowers and herbs. With an organic theme in mind, clients, staff and members of the community have used techniques advised by the Canberra Organic



Growers Society to grow healthy fruit and vegetables that are great to eat or use in a favourite recipe. Some of the techniques used include *crop rotation*—where potatoes have been rotated with spinach and beetroots rotated with lettuce, and *companion planting*—when looking at the garden you can see marigolds repelling the slugs from jalapeno peppers, tomatoes, lettuce and more.

Other fruits and veggies growing wildly in the garden are tomatoes, beans, squash, leeks, snow peas and strawberries.

Colour is a main feature of the garden with sunflowers, azalea and pansies giving life to the garden beds. There are also three stunning rose bushes growing which were donated to the garden by Rotary and planted in October 2003 by the ACT Minister for Health, Mr Simon Corbell (*pictured below*). The rose bushes came from the historic rose gardens at Old Parliament House and inspire the garden with their beauty and health.

In the future, the Bee Bizzee Rotary Garden is hoping to branch into wider areas of gardening and one of the big aims is to grow seedlings as a potentially income drawing project, raising funds that will be used to buy further materials for the garden.

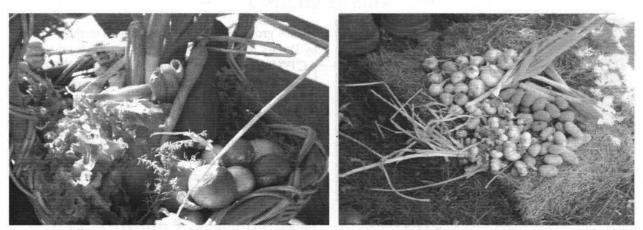


Brian Hennessey Rehabilitation Centre needs volunteers to help out with the garden so if you feel you have some spare time and would like to be involved in this rewarding project, please call their office on Ph: (02) 6251 6133 to express your interest.

There will be further updates later in the year about the Bee Bizzee Rotary Garden and further projects surrounding it so keep an eye out in future issues of *Canberra Organic*.



Item provided by Kate Black Thanks Kate. COGS members interested in volunteering help please see Kate or ring. JP



Photos: Top left-garlic, spring onions, carrots, zucchini, lettuce, onions. Right: Onions, spring onions, garlic, potatoes.

Harvest Night-COGS Meeting 24 February 2004

Once a year we have a harvest night at our regular COGS meeting when we ask members to bring along produce from their community/ home garden to show off to other members. This isn't just for the longtime membership—we would like to have lots of members bringing in their produce for display, swap or give away—sell if you have excess supplies. You may or may not wish to get up and talk about it but we would love you to do so: tell others about how you managed growing under the Level 3 water restrictions—what was especially good or downright awful to grow this season; how you coped with weather conditions and pests; what varieties of particular vegetables you tried out for the first time; what seeds you are planning to save or you are looking for; your tried and true or experimental recipes/ storage/ preserving methods. PLEASE come and PLEASE bring seeds to swap, PLEASE bring some produce, or a good story as to why you could not! We'll have seeds, including green manure seeds for Autumn planting for sale also!

On harvest night this year we will also have Jeff Vivian, distributor of the Nara Home Food Dehydrator, to talk to the COGS meeting about preserving using a dehydrator. I'm sure he'll have some good tips for you if you have lots of fruit, flowers or vegetables to preserve. JP



24 February 2004, Room 4, Griffin Centre, Civic, 7:30 pm

Photos: Left-Tomatoes ripening. Centre-Beans Right-Corn and cosmos. Cook community garden produce and plants.

ANNUAL GENERAL MEETING Canberra Organic Growers Society Inc. 23 March 2004

The Annual General Meeting of the Canberra Organic Growers Society Inc. will be held at 7:30 pm, Room 4 of the Griffin Centre on 23 March 2004. In accordance with Section 22 of the COGS Constitution the business of this meeting will be:

- to confirm the minutes of the last preceding Annual General Meeting and of any general meeting held since that meeting;
- to receive from the committee reports on the activities of COGS during the last preceding financial year;
- 3. to elect members of the committee, including office-bearers; and
- to receive and consider the audited statement of accounts and the auditor's and committee reports that are required to be submitted to members pursuant to Subsection 73(1) of the Act.

Committee members will be elected according to Section 13 of the COGS Constitution which states:

1 Nominations of candidates for election as office-bearers of COGS, or newsletter editor, or librarian, or as ordinary Committee members shall be made in writing, signed by 2 members of COGS and accompanied by the written consent of the candidate (which may be endorsed on the nomination form).

2 If insufficient nominations are received to fill all vacancies on the committee, the candidates nominated shall be deemed to be elected and further nominations shall be received at the Annual General Meeting.

- 3 If insufficient further nominations are received, any vacant positions remaining on the committee shall be deemed to be vacancies.
- 4 If the number of nominations received is equal to the number of vacancies to be filled, the persons nominated shall be taken to be elected.
- 5 If the number of nominations received exceeds the number of vacancies to be filled, a ballot shall be held.
- 6 The ballot for the election of office-bearers, newsletter editor and librarian and ordinary committee members shall be conducted at the AGM in such a manner as the Committee may direct.
- 7 A person is not eligible to simultaneously hold more than one position on the committee, except:
 - (a) the position of Public Officer; and
 - (b) the position of Membership Secretary, which can be held by the Honorary Treasurer.

Please contact Keith Colls on 62517729 if you would like a nomination form.

Organic Gardening for Beginners

COGS in partnership with CIT Solutions will be conducting the next beginners organic gardening course starting on Sunday, 2 May. The course will be conducted for COGS by Keith Colls. It will run over four consecutive Sunday afternoons starting at 1 pm and all sessions will be held at the COGS Charnwood garden. The course includes free use of a plot in a COGS community garden for six months.

This course is aimed at complete beginners and no prior knowledge or experience of gardening will be assumed. There will be a mix of theoretical information and practical gardening experience provided at each session. By the end of the course, participants will be in a position to confidently start their own organic garden, either in their own backyard or in a COGS community garden.

If you know of anyone who may be interested in attending this course, enrolments should be made through CIT Solutions (course code ACT1188), phone 62074441, or contact Keith Colls on 62517729 for further information. The course fee is \$100.

An analysis of rainfall records at Cook Community Garden 2003

The objective of this report is to summarise the rainfall observations at Cook Community Garden and to assess these records against the water budget offered by Keith Collsⁱ in the Summer 2003 edition of this publication. As with Keith's work this paper benefits from the useful information in Richard Stirzaker's article reproduced in the same publication.ⁱⁱ

Rainfall at Cook Community Garden

A rainfall gauge was installed at Cook Community Garden by Alan Robertson, and since August 2002 the falls have been noted each day on a sheet hung up in the garden shed. Table 1 summarises the records for each month.

Month	2002 mm	2003 mm	Diff
January		6.5	
February		184.8	
March		56.0	
April		17.0	
May		11.0	
June		46.5	0.000
July		22.0	
August	9.0	107.0	98.0
September	59.0	38.0	-21.0
October	7.0	60.8	53.8
November	8.9	91.5	82.6
December	15.6	78.5	62.9

Table 1: Rainfall by month, August 2002 to December 2003

The figure for February 2003 stands out as being very unusual. This is almost completely explained by a recording of 180mm (over 7 inches for those who can better visualise in Imperial measures) on 21 February. It is almost impossible that this amount of rain could have fallen in one day at this site since the Canberra Airport recording on that day was 40mm and the highest daily rainfall ever recorded at the Canberra City meteorological station was 74.4mm.ⁱⁱⁱ No-one has been able to explain how the high reading occurred. However for the purposes of the analysis which follows the author has decided to replace the value for 21 February by the Airport reading as being more sensible. This has some impact on some annual measures as shown below.

Table 2: Rainfall Indicators 2003, before and after adjustment of record for 21 February

Indicator	Total Rainfall (mm)	Number of Rain Days	Average Fall per Rain Day (mm)
Before adjustment	719.6	60	12.0
After adjustment	579.6	60	9.7

As well as the total amount of rain, the number of days upon which rain was recorded is

important, as is the length of time between falls. As shown in the table above rain was recorded on 60 days.^{iv} (Note that this is not affected by the 21 February adjustment). The average number of days between falls was approximately 6. However the maximum number of days between falls was 38, from 1 January to 8 February. The second longest dry spell was 24 days from 27 April to 21 May.

As noted above, this comments on the number of days between falls ≥ 0.5 mm. A fall of this magnitude might "lay the dust" but would not really get worthwhile moisture into the soil where plants' roots are seeking it. I have followed Keith's approach by ignoring the first 5 mm of any fall.

I have departed slightly from his approach by making an allowance for run-off when the rainfall is very heavy: from observations at Cook water appears to run off from the plots (and in one case pour out the gate) when there is much over 25mm of rain. I have incorporated this in my calculations by ignoring half the rainfall over 25mm per day. (By way of example 50mm were recorded on 22 November. Of this 5mm are ignored as simply laying the dust; 20mm are added to the soil water as is half the rest (12.5 mm), with the remaining 12.5mm wasted as runoff.) For the year in question this was not hugely important since there were only three days on which more than 25mm were recorded, but the idea could need some refinement in a very wet year with more days of heavy rain, when the losses could be expected to be higher.

Measures of evaporation

Keith's article uses actual measures of evaporation (reduced by 20% to allow for the difference between an evaporation pan and a tomato crop). However as I was looking at the entire year time didn't allow me to do this separately for each day. Instead I used the long term average reading for each month, from which a daily average within the month was calculated. These averages are also available from the BoM website (http://www.bom.gov.au/ climate/averages/tables/cw_070282.shtml) but for day to day monitoring it would be better to use the daily figures (also published in *The Canberra Times* each day).

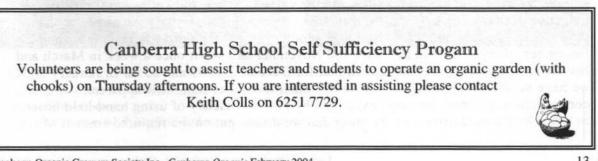
I did give some thought to using evapotranspiration (ET) data from the BoM website since that seemed to be more reflective of "reality" than measures based upon an evaporation pan. However, the values given for ET were approximately half those for evaporation and applying them to the budget produced a very strange result with no watering appearing to be needed in the second, wetter, half of the year.

In summary I concluded that it was best to use the measure of evaporation and that for the purposes of this experiment it was acceptable to use the long term average measures of evaporation. For practical use of the budget using actual evaporation data will certainly give a more precise result.

The Water Budget and its Implications

Table 3 summarises some statistics for each month of 2003. The key measure is the number of watering days: some detail of how this was calculated follow the table.

continued next page



continued...An analysis of rainfall records at Cook

	2003		Long Term	Suggested watering		
Month	Actual Rain mm	Useable Rain mm	, Av (x 0.8) Evap/Day	No. of Days	Water Applied mm	
Jan	6.5	1.5	5.6	9	166.5	
Feb .	44.8*	27.5	4.8	6	110.2	
Mar	56.0	23.5	3.6	4	72.9	
Apr	17.0	5.0	2.2	4	77.3	
May	11.0	11.0	1.3	1	19.2	
June	46.5	40.5	0.9	0	0	
July	22.0	22.0	1.0	0	0	
Aug	107.0	97.0	1.4	0	0	
Sept	38.0	21.0	2.2	0	0	
Oct	60.8	27.0	3.2	3	56.2	
Nov	91.5	60.0	4.4	5	86.2	
Dec	78.5	52.5	5.5	6	100.4	

Table 3: Summary (adjusted) rainfall and evaporation statistics for each month, 2003

*adjusted to avoid "impossible" measure of 21 February 2003.

The approach adopted was to add up the evaporation, substracting any useful rain, until it appeared that adding an extra day's evaporation was going to exceed 20mm. That amount was then assumed to be applied by irrigation. An example may help, noting that 15.3 plus 5.6=20.9 (which is, obviously, >20!)!

Example (below):

Date	ET/Day	Rainfall Actual	Rainfall Adjustments first 5mm runoff	Adjusted Rain	Daily deficit	Cum deficit (1)	Irrigation
1-Jan	5.6	6.5	5	1.5	-4.1	-4.1	
2-Jan	5.6				-5.6	-9.7	
3-Jan	5.6				-5.6	-15.3	15.3

Although I used average evaporation and the value of 20mm only applies to tomatoes, the irrigation patterns given by this budget work out rather well. <u>In theory</u> it suggests that in the absence of useful amounts of rain we should water every third day in January and December, every 4th day in February and November and about once a week in March and November. <u>In practice</u> we have found that for December 2003 and so far in January 2004 we have needed to water every second day other than after rain. This apparent contradiction is almost certainly explained by the inefficiency of using hand-held hoses, as noted by Richard Stirzaker, meaning that we do not put on the required amount of

water when irrigating and thus don't reset the meter to zero.

A final comment is that the outcome of this analysis works well for tomatoes. If other crops have drastically different water demands they may not do so well under these restrictions. However looking at our plot: potatoes are doing magnificently; silver beet, beans, peppers and onions performing well; cucurbits are threatening to dominate the universe and sweetcorn is growing nicely.

So far at least the Stage three restrictions appear to be compatible with achieving respectable crops since within their regime it is possible to keep up with the water demands of tomatoes. Perhaps it will be possible, using the budget approach to reduce watering to every second allowable day in February although this will depend upon actual evaporation not being above average.

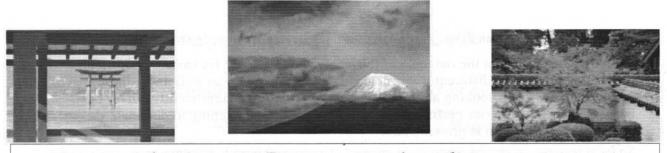
Martin Butterfield

Notes

- "The Seasonal Climatic Outlook Coping with Stage 3 water restrictions" Keith Colls, Canberra Organic v11 n4, pp 20 -22.
- "Watering a vegetable garden in Canberra" Richard Stirzaker, Canberra Organic v11 n4, pp 6-9.
- Bureau of Meteorology (BOM) through the webpage http://www.bom.gov.au/climate/averages/tables/ cw_070282.shtml
- iv. The average over 14 years was 102.7 rain days per year. Source as above.

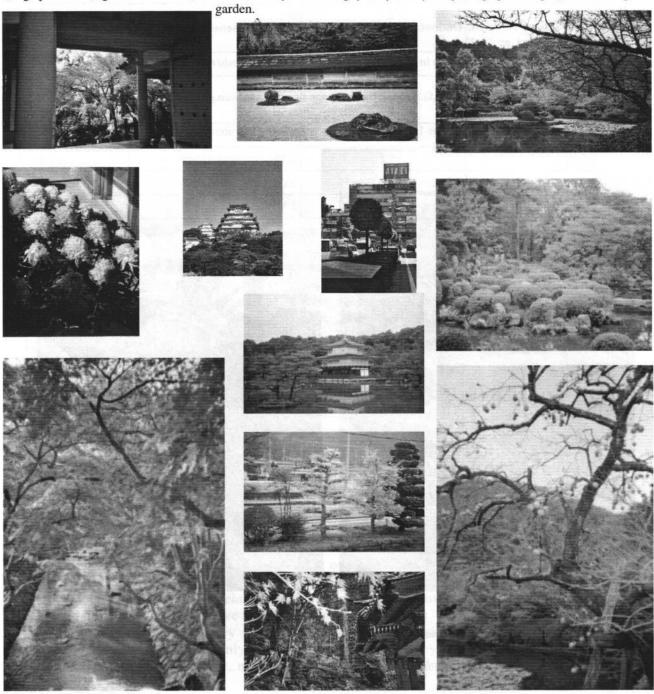


Photos: Above Left—Cucurbits with tomatoes; Above right—Corn. Both photos from the Butterfield's plot at Cook garden



Autumn in Japan ... garden glimpses

Photos on this page were taken by Janet Popovic during a trip to Japan, November-December 2003, at the height of Autumn colour in Japan. Left to right, by row from the top— Miyajima: Shinto temple Tori gate; Fuji; Kyoto Toji–in; Nara Shinto temple; Kyoto Ryoan-ji (2 photos); chrysanthemums: entrance to Himeji Castle; approach to Himeji Castle; clipped alternating red and white camellia trees near Himeji Station; Kyoto Toji-in; Kyoto Golden Pavilion; Nara Park (large photo left); garden en route (from train) Takayama to Nagoya; Kyoto Ryoan-ji (large photo right); Nikko temple



... and from Japan, Teruo Higa's Effective Microorganisms

The blur of the photos below is explained by their having been taken by me from very fast trains (shinkansen). I knew it would be difficult to capture but I wanted to have a record of 1) the very productive vegetable gardens (photo below right) that were to be found along every train line both in suburban and rural areas in Japan, and 2) the extensive plantings of rice fields (photo below left) in small holdings. As a tourist in Japan briefly for the first time I wondered, but have no way of knowing, whether principally organic methods were being used (it was obvious that the gardens were mulched with spent crops) or whether there was any great usage of the "Effective Microorganisms" (EM) methods I had been reading about just before my trip.* However, the literature suggests that there was a very quick take up of "EM technology" by many communities, local government organisations and commercial farmers throughout Japan (and also in a number of Asian and South American countries).

"Effective Microorganisms" is the term coined by Teruo Higa, Professor of Horticulture, Kyushu University, Okinawa, to describe what he discovered while researching possible alternatives to using agricultural chemicals and artificial fertilisers. EM is described as a heterogeneous grouping of organisms, some of which are aerobic (requiring oxygen to survive) surprisingly coexisting with anaerobic streams of microorganisms (that thrive in the absence of oxygen). The effectiveness of these microorganisms is described by Professor Higa as their power to dictate the thrust in nature toward either regeneration or decay/ degeneration. An example given is the capacity to raise the quality of the decaying process to fermentation (II, p27). A key to the effectiveness of the heterogeneous grouping of microorganisms appears to be its capacity to create conditions where a wide diversity of antioxidants is produced (II, p29).

The major product arising from Professor Higa's initial work is *EM Bokashi*. This is material that turns kitchen garbage into compost. It is prepared from a mixture of liquid concentrate and molasses plus ingredients such as rice bran. A ready-made product 'is available commercially, though not necessarily very readily'in Australia.

Agricultural applications of *EM Bokashi* include improvement of the condition of the soil and as a fertiliser and animal feed (at the same time vastly reducing household garbage disposal operations). Later developments have been to use EM in the treatment and purification of waste water for recycling and in various industrial cleansing processes including in hospitals and for the reduction of algae in water. These applications have been aided by the discovery that certain EM bacteria can withstand great heat and can therefore be baked into ceramic form where EM is stabilised and therefore able to be retained in a location with delayed dispersal.

There are people within the Japanese fraternity in Canberra who have used the EM products for some time. I note also from the internet that New Zealand local government agencies are promoting the use of bokashi buckets for home recycling of kitchen waste. An advertisement in a recent gardening publication indicates that that one company in Australia is also starting to market bokashi bins.

I am proposing to obtain and trial the use of *EM Bokashi* and ceramic EM beads and if there is sufficient interest within COGS, to see if we can either obtain a visiting speaker or to report further on availability and trial usage of EM, at a future COGS general meeting. Please give me some feedback on your level of interest.

Janet Popovic

*L An Earth Saving Revolution, Teruo Higa, Sunmark 1993, ISBN-4-7631-9157-8 C0030 English translation Anja Kanal 1996 II. An Earth Saving Revolution II, Teruo Higa, Sunmark 1994, ISBN-4-7631-9214-0 C0030 English translation Anja Kanal 1998





Junior Organic

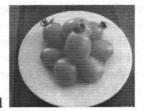
Easy Seed Saving

Try saving seeds now for planting in your garden later from the following:

- Vegetables—peas, beans, tomatoes
- Flowers—calendula, marigold, honesty, love-in-the mist, nasturtium.

You should be able to locate these vegetables and flowers in flower going to seed at this time of the year.

For peas and beans let the pods dry on the bush, then collect the seeds and store in a cool dry place until Autumn/Spring (peas) or Summer (beans).



Pictured above: Tomato Principe Borghese

For tomatoes follow these steps:

- 1. Pick from the garden two or three good looking ripe tomatoes of one known variety, e.g. Tommy Toe. Only process one variety at a time because it's too easy to mix the seeds by mistake!
- 2. Cut the tomato open and scrape its pulp into a cup.
- 3. Leave the jelly-like pulp in the cup for a minimum of three days and watch it ferment, stirring say twice a day. This fermentation process might smell! It breaks down the seed coating and kills some bacteria and fungi that can be a source of tomato disease.
- 4. If the pulp is drying out very quickly, add a small amount of water.
- 5. As the seed coating breaks down, good seeds sink to the bottom. Then rinse the contents of the cup several times, pouring off the liquid pulp and any floating seeds, leaving the clean seed.
- 6. Dry the clean seeds on paper towel or newspaper, spaced evenly into rows and columns.
- 7. Dry the paper with seeds in the sun-the seed will stick to the paper.
- 8. Write on a paper bag the tomato variety and the date you picked the tomato seeds.
- 9. Store the paper with seed in the paper bag in a cool dry place until Spring.
- 10. At planting time place the paper with seed in a box of seed raising mix, cover with seed raising mix, water. (You can cut the paper into separate squares per seed and plant in separate containers of seed raising mix.)
- 11. Note what percentage of seeds germinates from your planting and write this on your paper bag with any remaining seeds as a record of the seed viability (percentage and month/year).

For selected flowers:

The seeds of the flowers listed above can be readily collected from these plants, dried and kept in separate envelopes marked with the name of the seed and the date you collected it or in labelled airtight containers, in a cool dry place. You can sow the seeds of all these flowers in Autumn.

A good reference on seed saving is The Seed Savers' Handbook, M & J Fanton, The Seed Savers' Network, Byron Bay NSW.



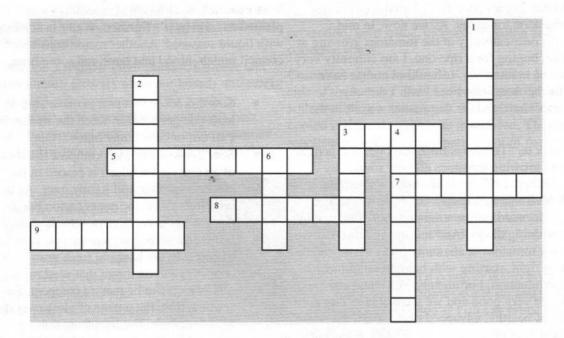
Pictured at left: Calendula bush with flowers and seed pods.

Pictured at right: Honesty seed pods. It's fun to rub the dull outer coating as you collect the seeds and find the shiny translucent casing used in flower arrangements.



Junior Organic Puzzle Page

1. Vegetable Gardening Quiz



Across

- 3. Ancient creature that improves soil.
- 5. Cabbage belongs to what family?
- 7. The potato is related to it.
- 8. Name of pea/bean family.
- 9. Season for growing tomato, capsicum.

Down

- 1. Month of COGS Harvest Night 2004.
- 2. Peas and beans give this to the soil.
- 3. A precious resource.
- 4. Changing crops in a bed each year.
- 6. Acronym.

Created with Puzzlemaker on DiscoverySchool.com-thankyou!

Solutions on page 35.



2. Vegetable Cut-Outs







Write the names of the vegetables these cut-outs come from. Take at least one letter from each vegetable name to make the name of a season:

What I needed to know about growing tomatoes!

Looking through the gardening section of the Belconnen library recently, I found a promising paperback on tomatoes. As we now, in mid January, peer carefully at the tomatoes growing at our plot, hoping for a ripe one, I am currently very interested in tomatoes. I should of course have read the book in July, but I wasn't directly interested then, and for that matter wasn't in the country.

The book is, "Tomatoes for Everyone: A practical guide to growing tomatoes all year round" by Allen Gilbert, 1997, Hyland House Publishing, South Melbourne, 635.642 GILB. It was full of straight forward information and lots of ingenious ways of doing things. And left me amazed that we have any tomatoes at all, as we hadn't done much that was right, starting with being total failures at seed germination. Fortunately, Adrienne and others are very good and we were able to buy a variety of healthy, advanced plants from the COGS stall at the open day at the CIT at the end of last year. This is a wonderful service as you can buy 20 single plants and as many different varieties - much more fun than the punnet of Grosse Lisse from the local nursery.

This book was so good that I decided to take notes, so that I can start my new life as a successful producer of early tomatoes next year. Here's what interested me, although there was much more. I'm sure the chapters on pests and diseases are very good, but at this stage I'm just hoping they will stay away if I keep the ground clear and don't water the leaves often. These notes are my guide from seed to seed.

PREPARATION

Dig beds and add 1 barrow of animal manure per square metre, 2-3 months before planting tomatoes. Add calcium, which can be garden lime at the rate of 1 handful per square metre to help prevent blossom end rot.

Tomatoes can be grown in a no dig way. Put down a layer of:

- newspaper on the base to suppress weeds
- Lucerne, 10-30 cm
- Animal manure, sprinkled on
- Straw, 10-30 cm
- Animal manure

Natural compost

Water as each layer is added. Seedlings are planted as soon as it's finished. Water in seedlings with liquid seaweed. Another recipe consists of council mulch, blood and bone and some lime.

SOWING

- Sow 2-5 seeds to a pot, to make sure at least one germinates. Keep the strongest. Pull out or cut off any others. OR
- Sow 2-3 seeds in each compost filled cup of an egg carton which is placed in the garden. Sprinkle soil lightly over. As the seedlings grow, the paper carton breaks down and the roots grow into the soil. OR
- Sow seeds in polystyrene boxes, with lots of holes. In the base put fresh grass clippings and on top of that seed raising mix, which can be mature compost. Sow seeds in that. Put a pane of glass over the top of the box. The heat from the composting green grass and the retained heat from the sun is sufficient to ensure good germination.

Put seed tray or pots in a warm place which gets lots of light.

• Sow seeds in the garden, keeping plants' roots warm using heating from animal manure. Place thick layers of fresh manure (20-30cm / 8-12 inches) in trenches and cover with top soil. The heat from composting manure can also be used to heat the immediate environment in a green house.

WARMTH AND PROTECTION Bubble wrap can be used to cover pots, propagating trays or plants.

Cover a potted tomato plant with plastic bags. Place 2 small bamboo sticks or wire hoop inside the pot. Place a plastic bag over the whole pot so that the bag is held up by the supports away from the foliage, and tie the bag. To provide warmth and extra heat, place a second plastic bag over the first, tie and seal. This can be left unwatered for 3-5 weeks at a time. Do not place in direct sunlight. A position under shade cloth or beneath trees or shrubs which receive morning sun or mottled shade is ideal.

... Tomatoes continued

Tomato seedlings in pots can be placed on the side of a building where they will receive morning sunlight; then lean plate glass windows over them. The ends are closed in with cardboard, timber or plastic.

To provide a warmer environment, Chinese and Italian tomato growers often put boards or timber on the cool side (south side in the southern hemisphere). The wood absorbs the sun's heat during the day and radiates it out at the tomatoes at night. The wood also shelters plants from the wind.

A simple green house can be made by using plastic sheet stretched over wire hoops and tied or buried at both ends. If another set of hoops is placed near the outside of the tunnel and another plastic cover placed over the first to create an air gap, the heat will be retained better within the structure.

TRANSPLANTING Before you transplant the seedlings from the seed trays or pots, you need to harden them off. Take them from the warm protected environment in which they

germinated and place them in 40-50% shade for a few days.

When the seedlings have begun to grow their second lot of true leaves (the first leaves are cotyledons and thus part of the seed rather than true leaves) put them in 1 litre pots or the garden bed. When transplanting don't hold them by the stem, instead grip them by the leaves. Space individuals 30-45 cm (12-18 in) apart in garden beds. Put in the stake now, if they will need to be staked.

Bury the stem deeply, just making sure some leaves are above ground. The tomato will grow extra roots from the buried stem.

Protect from wind. A hessian barrier can be used or climbing plants such as beans can be grown around the edge. Corn also provides wind protection. Chinese tomato growers plant their seedlings in trenches, then grow climbing beans on a tepee structure over the seedlings to given them protection, save space, increase cropping and conserve water.

Companion plant basil with 4 plants, one on each side of the tomato. The basil roots open up the soil, providing extra oxygen. The soil surface is cooled and the weed growth is reduced. The repellent nature of the aromatic scent of the basil deters insects and pests.

CARE

Fertilise seedlings weekly, with manure tea or liquid seaweed. Mulch in early summer.

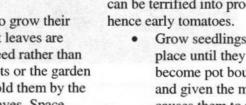
To prune or not to prune? Some people do and some don't. You can prune off the lower leaves to allow more light, improve air circulation and prevent the build up of diseases.

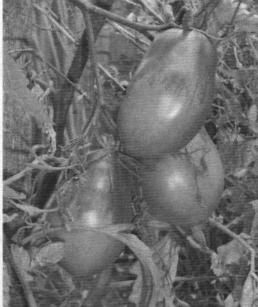
Pruned laterals can be stuck in the ground as cuttings. Usually plants grown from cuttings will be more fruitful than the parent plant.

Promoting early flowers

Starving and chilling are two ways that tomatoes can be terrified into producing early flowers and hence early tomatoes.

- Grow seedlings in small pots in a warm place until they reach 30 cm. The plants become pot bound and are then starved and given the minimum of water. This causes them to respond as if they are going to die, so they begin to flower. The flowers are then pollinated and as soon as some fruit has set, the plant is transferred to a larger pot or the vegetable garden and normal feeding and watering is resumed. OR
- Chill the small seedling plants for a short period before planting into bigger pots or the garden. The plant begins to flower soon after being planted out.





... Tomatoes continued

COLLECTING SEED

Select a ripe fruit and spoon out seed into a small kitchen strainer. Place the strainer containing the pulp under running water and press against the pulp with a spoon to force it through the strainer mesh. The seed will be left behind.

If you want to clean the seed which will help germination and get rid of some of the diseases, you can ferment the seed. Select very ripe fruit, squash them and put in an open container. Leave to ferment for a week or more, but not so long that the seeds start to germinate. emove seeds from rotting mess, wash and dry them.

Drying seed

Place seed on a hard or slippery surface, e.g. plate

and place in sun. Or you can put the seed in neat lines on absorbent paper. When the seed is dry, the paper can be cut into ready to plant strips.

Storing seed

Seeds can be placed in an open paper bag, or a sealed jam jar or wrapped in tin foil and placed in a dry, airy, cool storage place. Packets of silica can be placed in the jars.

USEFUL VARIETIES (that I didn't previously know about)

Apollo Improved (hybrid):

Sets fruits even when cool nights; early cropper. Begins cropping about 8 weeks from planting and continues for an extended period. A hybrid tomato resistant to verticillium. **Break O' Day:** Early; resistant to wilt. **Burnley Bounty:** Ripens on vine early; resists Fusarium wilt; cold tolerant; grows in most soil types.

Burnley Gem: Dwarf bush; OK for pots; resistant to Fusarium wilt; heavy cropper, will do well in cool areas.

Hardy Tom: Masses of small fruit for many months; resists fruit fly attack; cold tolerant. **Longkeeper:** Can be picked when semi ripe; long life tomato that will store up to 3 months; suited to cold climates.

Rouge de Marmande: Cold tolerant. Stupice: Early 7-8 weeks; good for cool areas.

Photo: Frances' tomatoes are pretty good anyway JP



Frances Butterfield

COGS Green Manure now available

Each year COGS makes up a green manure mixture which is available at the monthly meetings during Autumn.

Green manure crops are grown to provide bulk organic matter for increasing soil fertility. Generally they are planted in Autumn in beds which would otherwise be left vacant in Winter. The mixture is of grains and legumes and can either be dug in four to six weeks before Spring planting or cut and used as a feeding mulch. Sold in 500gm packets which is sufficient to cover approximately 30 square metres.

An idea for preserving tomatoes



Semi-dried tomatoes in olive oil

Choose small ripe tomatoes such as Principe Borghese or Tommy Toe. Slice in half, or thirds if the tomatoes are fairly large for the variety, and place on dehydrator trays (preferably with plastic gauze liner as well). Add sprigs of available fresh herbs e.g., basil, dill, thyme. Dry for about 4 hours at 55-58°C until 'leathery' rather than crisp. Place a clove of garlic into each jar in which you are going to store the dried tomatoes (small jars such as mustard or salsa jars or clean recycled dip containers are suitable). Then pack in the semi-dried tomatoes, crumbling in with them the dried herbs. Fill the jar with olive oil so that the tomatoes are completely covered. Refrigerate and let the flavours mingle before eating.

The Horticultural Society of Canberra Inc Autumn Show

This year the Autumn Show will be staged at the Lancaster Hall, Wesley Centre, National Circuit, Forrest on 6 and 7 March. This is an excellent opportunity to again demonstrate to the wider Canberra community that organic gardening techniques can produce the highest quality produce, so please consider entering some of your produce. A basic list of the vegetable and fruit categories for the Show is available from editor@cogs.asn.au. There are also many flower categories which you may wish to consider entering. For further information, including the rules of entry, please contact The Honorary Show Secretary, Mrs Linn Doyle, phone 6231 7755.

The **Simmie Bowl** plus \$5 will be awarded to the most successful exhibitor in vegetables at the Autumn Flower Show. Winner will hold the Trophy for one year.

Champion vegetable exhibit The Arthur Yates Perpetual Cup, for vegetables, ribbon & \$5.

Reserve Champion Ribbon & \$2.

75th Anniversary Special.

Category 214: Basket or box of mixed vegetables/herbs/fruit. Maximum size of container 500mm x 400mm. This will be judged on variety, quality and appearance. Prizes— 1^{st} : Toms Trash Paks Prize (\$30) plus the Len McInnes Medal. 2^{nd} : \$10. 3^{rd} : \$4.

Help wanted for Gardening for Life Program

Melrose Primary School is looking for a gardener to help with their Gardening for Life Program. Children aged 5 to 12 look after six gardens and four courtyards under the supervision of a volunteer gardener. For further information please contact Keith Colls on 62517729.





GM sweet potato trials fail in Africa despite high profile

- Trials to develop a virus resistant sweet potato through biotechnology have failed. US biotechnology, imported three years ago, has failed to improve Kenya's sweet potato. This has confirmed critics' fears that bio-engineered techniques tried elsewhere may not be replicated in Africa with similar results.

- One of the most hyped GM projects in the world has failed. It's a project that has generated thousands of column inches of PR without a scrap of convincing evidence to support it. Now that evidence is finally in: "the report indicates that during the trials nontransgenic crops used as control yielded much more tuber compared to the transgenics."

The initial genetic engineering work was done at the Monsanto laboratories, using virusresistant technologies. In a nine-year study, Monsanto had developed a coat protein responsible for virus resistance, and donated it to Kari, royalty free, to use in its sweet potato improvement programme.

The Kari results corresponded with an earlier study released by the Third World Network Africa. The study, titled "Genetically Modified Crops and Sustainable Poverty Alleviation in Sub-Saharan Africa: An Assessment of Current Evidence", by Aaron deGrassi, of the Institute of Development Studies, University of Sussex, UK, had warned that the GM sweet potato introduced in Kenya did not address the crop's major problem - weevils. The study offered new evidence against claims of the miracle potential of genetically modified crops for dealing with famine and poverty in Africa. After examining the impact of three genetically modified crops, sweet potato, maize and Bt cotton, on poverty alleviation in Africa it concluded that biotechnology does not address the real causes of poverty and hunger in Africa.

Gene modification is a relatively new technique in Kenya. Other less high-tech biotech processes such as tissue culture have been widely commercialised in crops like bananas, macadamia nuts and strawberries. The transgenic sweet potato is not the only food crop improvement projects conducted between KARI and Monsanto. Other projects include insect-resistant cotton, and maize resistant to striga - a parasitic weed responsible for destroying up to half of yields in western and coastal parts of Kenya. KARI is the main institute of agricultural research and technology transfer, in charge of providing such appropriate technology aimed at boosting agricultural productivity and livestock production.

Sóurce: The Daily Nation, Kenya, Online, Thursday January 29, 2004 By Gatonye Gathura

Non-GM canola adapted to manage drought stress

- WA's canola production zone had the potential to expand with the release of the new Canola Breeders WA (CBWA) variety, Trilogy, which was adapted to drought-stressed environments, the Grains Research and Development Corporation (GRDC) said. It said canola was a high-value crop with demonstrated benefits to the rotation, but had been limited by dry conditions and blackleg disease. The GRDC had earmarked \$300,000 over two years to support the compilation of new management packages to help growers negotiate traditional production constraints. The GRDC supports CBWA via the WA-based Export Grains Centre, which is a shareholder in CBWA.

Source: The Farmshed, 30 January 2004 Full article can be found here: http://www.non-gm-farmers.com/ news_details.asp?ID=1018

Austrian supermarkets ban GM

- Austria's major supermarket chains were cited as saying they intend to ban gene-altered food products from their shelves, according to an announcement on Thursday.

- They had received assurances from Austria's biggest supermarket chain, Billa/Merkur, and two other major chains, Spar and Zielpunkt. Between them, the firms accounted for 80 per cent of supermarket sales in Austria.

- Greenpeace said it also had guarantees from major food producers including Unilever, Nestle, Kraft-Jacobs-Suchard and Masterfood that they would sell no gene-altered foods in Austria.

Envrionmental organizations Greenpeace and Global 2000 were cited as saying the ban would go into force at the latest with introduction of new E.U. mandatory labelling rules for genealtered foods on April 18. Global 2000 spokesman Jens Karg said he assumed the

GE News continued ...



remaining supermarkets represented in Austria would follow the example and also ban the products. "Gene food has no business on the shelves because the safety of such products cannot be guaranteed", he said. *Source: Agnet, 30 January 2004*

Where supermarkets stand on GM food

The Co-op, Britain's biggest farmer, has pledged not to grow GM crops, has banned selling GM food under its own brand products, and will not invest customers' money in GM technology. With The Co-op's decision to refuse to grow GM crops on its 85,000 acres of land, the pressure is growing on supermarkets to clarify their position on GM foods. BBC News Online asked some of the biggest chains in the country what their policies were.

Safeway removed GM soya and maize ingredients from its own brand products in 1999. Customers have the choice in certain products to buy non-GM fed alternatives - organic meats, non-GM fed chicken, organic milk and eggs. It does not intend to "interfere" with the arrangements that branded manufacturers have regarding the sourcing of ingredients for their products. Safeway's aim is to eventually offer customers all animal derived products from non-GM fed sources.

Sainsbury's said that in response to "overwhelming customer concern and demand for non-GM foods" it was the first major supermarket to eliminate GM ingredients from all its own-brand products. All Sainsbury's ownbrand products are labelled to inform customers that they are GM-free.

Waitrose does not sell under the Waitrose label any products which contain or are derived from genetically modified crops. This includes any oils or additives.

Tesco, the UK's biggest supermarket chain, says it already has non-GM feed for poultry and fish, and its organic meat range is from animals fed entirely on non-GM feed.

Asda says its position on GM has not changed since 1998 when it announced its intention to remove GM protein and protein derivatives from all ASDA own-label products. This was completed by October 1999. During the changeover period, the company labelled all products which contained GM ingredients or derivatives. ASDA says it continues to "listen closely to our customers on this issue".

Morrisons has also removed GM ingredients from all of its own-label products. Source: BBC News Online

GM Maize for UK

It is reported that the UK has edged closer to approving the cultivation of GM maize, its first modified crop. The UK has not yet decided whether to make farmers who grow GM produce liable for "genetic pollution" spreading to non-GM farms and rendering their produce unsaleable.

Source: New Scientist, 24 January

GM Salmon

According to a report commissioned by the US Department of Agriculture, the method that US company Aqua Bounty plans to use to sterilise its GM'd salmon has 'important' weaknesses and might not prevent escaped salmon from sea cages affecting wild populations. It suggests that the fast-growing GM fish should be raised only on inland farms. The report also suggests that only non-food crops should be used to grow drugs or vaccines. Many companies are already working with food crops. In fact, the main conclusion of the report by the US National Research Council is that none of the biological methods proposed to prevent GM organisms escaping, multiplying in the wild or breeding with related species is foolproof. Source: New Scientist, January 2004.

Chemical use on GM crops

The most comprehensive study yet made of chemical use on GM crops draws on US government data collected since commercialisation of the crops began. When first introduced most of the crops needed up to 25% less chemicals for the first three years, but afterwards significantly more. In 2001 5% more herbicides and insecticides were sprayed compared with crops only of non-GM varieties; in 2002 7.9% more and in 2003 the estimated rise was 11.5% In total, 33m kg more agrochemicals were sprayed in the US during 2001-2003 because of GM crops. *Source: Guardian Weekly, January 2004*

GE News items were compiled by Bridget Farrer

Preserving your Summer Garden Produce

Here are some ideas for preserving your summer produce for later, delectable, consumption. Firstly, Margaret Colls' recipe for drying, then marinating zucchini, eggplant or green beans—all delicious! Secondly, my way of making basil or basil/parsley pesto (great for pizzas). Thirdly, some methods I use to dehydrate and store figs and plums—I can vouch for the methods but cannot advise you on how to ward off family predators from the tasty results intended for long term storage!

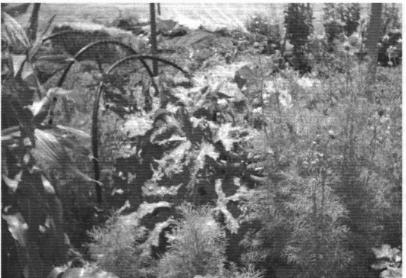


Photo: Zucchini growing with corn and cosmos at Cook community garden.

Marinated Zucchini, Eggplant or Green Beans

By Margaret Colls

2 kg zucchini (approx 7 x 25cm zucchini – 20-25cm are best) 70g salt 3 cups water 3 cups white vinegar ½ teaspoon dried oregano or mint 1 small clove garlic Olive oil

Cut zucchini into approx 5cm slices. Mix in salt, cover and stand overnight. Strain and squeeze out all liquid. Put in pan and cover with vinegar and water, adding more of each if necessary, and bring gently to the boil. Boil 3-4 minutes.

Strain and put on a towel on a tray in the sun for several hours until dry and leathery but not crisp. Alternatively, use a dryer (e.g. Vacola – this quantity uses 6 trays) at 58°C for about 2 ³/₄ hours, checking after 2 hours.

Put into a bowl with the oregano or mint, garlic and some olive oil. Pack tightly into jars and cover with olive oil. (This quantity packed into 2 x 375g salsa jars.) Make sure the zucchini are always under the surface of the oil and they will keep in the pantry for up to a year.

Use in antipasto, salads, pasta sauces, on pizza, in sandwiches or as a vegetable.

For **eggplant** or **green beans:** Slice the eggplant thinly as for zucchini and halve or - quarter the slices, cut beans into 4-5cm lengths.

Basil Pesto

Approx. 4 cups fresh basil, washed and dried 4-6 cloves of garlic 1/4 cup pine nuts 1/2 cup extra virgin olive oil salt and pepper to taste

Put all the ingredients into a blender and blend until finely combined. Pour into a glass or plastic air tight container and refrigerate, allowing a few hours for flavours to mingle. Use as a base for pizzas or as an accompaniment to antipastpo type foods smoked salmon, olives, cheese and salad.

You can substitute all or part of the basil with parsley.

..... and Dehydrating Fruit

Plum Fruit Leather

The first of our three plum trees is bursting with juicy plums this season. The pickings start in January with our yellow fleshed plums and progress through blood plums and salad plums over the next 6 to 8 weeks. We eat plums fresh and stewed, freeze some of the stewed fruit for later and give loads away to neighbours. However I've discovered that dehydrating is an easy and efficient way to avoid wastage through overkill and that an especially effective preserving method is to make plum fruit 'leathers'. I have lots of plums so it's easy to fill six dehydrator trays at a time-better than just the two solid trays I had initially because then I was limited to making two fruit leathers at a time and dehydrating sliced fruit or vegetables on other standard trays to make a more economical use of the dehydrator.

Method: Wash *plums* and remove stones and stems. Slice into a large bowl and blend with an electric blender. I add a *tablespoon of mixed spice* to about 2 kilos of plums. To thicken up the resulting liquid to



make a sauce consistency I add tinned unsweetened pie apple (have some large tins of this on hand in the plum season). Pour the mix onto solid trays that fit your dehydrator for this purpose-that have first been sprayed lightly with vegetable oil-and even up the spread with the back of a spoon. Dehydrating takes about 12 hours or more at 55-58°C-when ready there will be no stickiness on both sides of the round. You can't over dry. Slip the 'leather' off the tray, roll and store in plastic wrap or cut into strips and store in air tight plastic bags or containers. The result is slightly tart with an intensified plum taste, delicious for snacks. You can add honey to the mixture if you must (sugar crystallizes). Experiment to find the right consistency but the success range is large!

Dried figs

Our 25 year old fig tree has forgiven us for years of neglect and has responded to regular if moderate watering over the last couple of years, together with mulching with lucerne and feeding 'once in a while' with sheep manure and blood and bone. This has resulted in an increasingly large yield of figs and the first harvest this season started in mid January. Although our family members are almost as quick as the birds in spotting the ripening fruit, and therefore annoyingly quick in eating the fresh fruit, we have all discovered that dehydrated figs are absolutely delicious, the drying process appearing to heighten the flavour.

Method: Wash, dry and slice ripe figs. I slice into rounds, about five slices per fig depending on the size. Place on the standard trays of the



dehydrator and dry for approximately 10-12 hours at 55-58°C, longer if you only slice the fruit in half. The dried fruit must be leathery with no moisture beads when pulled apart. You can't

really over dry—it doesn't matter if the fruit goes past leathery to crisp: you can always marinade it in fruit juice or alcohol nearer to usage time.

Of course you can use this method to dry other produce such as apples, peaches, apricots, tomatoes, zucchini—adjusting the drying times to reach at least the leathery/ no moisture stage.

Happy experimenting!

Janet Popovic

See also page 23 for semi-dried tomatoes in olive oil.



Photos: Above — Fresh plums Left—Plum leathers, rolled, and chopped for serving.

Photos: Above—Fresh figs Right—Dried sliced figs, in dish and packaged.



Local Seed Networks 'Bearing Fruit'

The process of devolving into local seed networks (LSNs) is in full swing at The Seed Savers' Network. There are now over fifty local

seed networks from Perth to Byron Bay and Cains to Hobart. They take a variety of forms from organic grower groups to community gardeners to groups of neighbours and friends.

We have now produced the second edition of the Local Seed Network Manual which is a 100 page guide on how to run a local seed network. It is packed full of case



studies from existing LSNs which contain many fantastic ideas of how to coordinate a network. It also contains many other useful items such as example press releases, flyers to photocopy and use and ideas on how to keep records.

The Local Seed Network Manual was launched at our first course on coordinating a local seed network, run at the Seed Centre in Byron Bay in October 2003. The course was attended by 25 people and was really enjoyed by all. Topics

followed the outline of the Local Seed Network Manual and included how to form a network, drying and cleaning seeds, keeping records, seed

> storage and promotion. We hope to run a similar course just prior to our annual conference in 2004.

> The Seed Savers conference this year will be held in Exeter, near Bowral in NSW. It will be hosted by Permaculture Southern Highlands Seed Savers and will be a two day event on the last weekend of October. Keep an

eye out on the Seed Savers' website (www.seedsavers.net) or in our Autumn Newsletter for details of speakers and workshops. We would love to see you there.

Amy Glastonbury Seed Savers' Network (SSN), Byron Bay

Photo (thanks to SSN): Alan Morden (volunteer) and Amy Glastonbury (National Local Seed Network Coordinator) with tomatoes on their heads!

Seed Saving Reminder

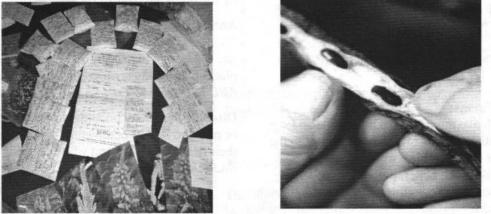
Many COGS members received packets of seeds from Jude Fanton at the COGS special meeting on seed saving last year.

Don't forget to

- plant out the seeds
- save some from the plants you grow
- make records of your success, on the envelopes supplied if possible (see p.29)
- send some seed back to the Seed Savers' Network, Byron Bay
- exchange some seeds with COGS gardeners.

The Seed Savers' Network Seventeenth Annual Conference 23-24 October 2004, Exeter NSW.

COGS members will have a good opportunity to participate in The Seed Savers' Network Seventeenth Annual Conference this year. This event will be hosted by The Permaculture Southern Highlands Seed Savers and will be held in Exeter, 23-24 October. It is possible that a three day course for Local Seed Network Coordinators will take place in conjunction with the Conference and that COGS will be invited to provide practical support for the course. Please note the dates in your diaries and be ready to assist!



Left: Seed Saving record-keeping, including air and moisture impermeable resealable foil seed packets with provision to record key details. These are available through SSN Byron Bay. Right: Snakebean seeds in pod.



Photos supplied by Jude Fanton, SSN.

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Worm Farms:

Always leave the tap of the plastic worm farm open, with a container underneath to catch the excellent liquid manure which will be generated. Even better, put a strainer in the lowest point of the bottom of the farm and catch the liquid from that. The latter technique avoids the formation of a worm drowning puddle in the bottom of the farm. Dilute the liquid before applying - 9:1 was suggested, but this may be amended if most of the liquid is obtained as run off from rain or watering. A Neil Davidson tip received via Martin Butterfield—thanks!



Comfrey

Harvest comfrey leaves regularly and use to mulch vegetables, especially tomatoes and cabbages. When watered this provides a liquid feed of potash, phosphates and other nutrients. Also use comfrey leaves soaked in a bucket of water together with other leaves of bitter herbs as a liquid fertilizer/foliar spray. *From Gardening without Chemicals, Here's Health Guide, UK*.

Cucumbers:

After the first leader produces six leaves pinch out the growing point. Do the same for the next leaders that grow from the joint between a leaf and the main leader. Spread the new leaders that have been pinched back so cucumbers grow evenly from all sides. Add fresh compost to cucumbers while growing. *From Gardening without Chemicals, Here's Health Guide, UK*

Yarrow:

It is claimed that yarrow is good for fertilizing soil deficient in copper. Yarrow is also useful added to the compost heap to aid the composting process. *From Companion Planting in Australia, Brenda Little.*

Couch grass:

The application of dolomite to soil infested with couch grass may discourage the couch because it will not like the change in pH level brought about by the dolomite. *Heard on ABC radio*.

Ants:

Mix 2 and 1/2 litres of water with Condy's Cystals, add 1/3 cup of lux flakes and pour around areas/ plants where ants are a problem. *Tom Wyatt via ABC Radio South East SA*.

Discourage ants by planting a patch of tansy, mint or pennyroyal. "If completely exasperated, spray their nest with garlic and white pepper." *ABC Radio Riverina NSW*.



Tomatoes:

Poor fruit set in tomatoes can be the result of very hot summer temperatures (long hot days over 30°C and nights above 20°C).

Pierced fruit (some occurrences in Cook community garden at least this summer) may be the result of green vegetable bugs—angular pale green insects (also sighted at Cook) - or are these sapsuckers? Daisy and carrot family plants provide flowering habitat for beneficial parasitic wasps. Otherwise pick off the bugs by hand; the fruit should still be edible.

Blossom end rot (large brown soft spot at base of fruit) occurs in maturing fruit when water is irregular but also where the soil is calcium deficient. To avoid this in the future add gypsum and organic matter to the soil before planting and mulch plants to reduce evaporation and maintain moisture levels.

Insect repellant reflective mulch:

University of California scientists have found that reflective mulches (polythene sheet covered with a thin layer of aluminum) used in pumpkin farming decreased the incidence of aphid-borne viruses by 75-85%. They suggest the technique could be applied at home or on the farm to crops such as squash, cucumbers, melons, corn, eggplant and tomatoes. The reflection of sunlight repels insects and the mulch also reduces water requirements and suppresses weeds. *From Uni of California Agriculture & Natural Resources internet page*.



Autumn Vegetable Planting Guide

Brassicas

Late plantings of Brassicas in March may be successful, but usually Summer plantings are more reliable. It is too late to grow from seed. Take care too with the varieties chosen eg it is too late to plant savoy cabbages, but the smaller ball-headed varieties should be successful

A Real

Peas

Sugar snap peas may be sown in early March for a Winter harvest, but the crop could be lost if there is an early severe frost affecting the blossom. Peas sown later in April-May will be ready for a Spring harvest.

Lettuces

Only plant Winter varieties of lettuces (cos, salad bowl, oakleaf, butterhead and mignonette varieties)

Leeks

Leek seedlings may be planted in early March for small leeks in Winter, although plantings are more reliably made in Summer.





Onions

Early varieties can be sown in April to early May to be harvested from Spring to early Summer. Mid season varieties are often sown in late Autumn or early Winter and long keeping varieties in Winter or early Spring. The timing of mid or late season varieties is well worth experimenting with by making successive plantings to determine the best time for your specific locality.

Spring flowers

Remember that many Spring flowering plants are best planted in Autumn, so that they can establish before the Winter cold, and then start growing in the early warmth of Spring. Stocks, Pansies and Poppies can be planted as seedlings in March and early April. Others such as Virginia stock, Candytuft, Larkspur and Sweetpeas can be sown direct throughout Autumn.



Canberra Organic Growers Society Inc. Canberra Organic February 2004

Green manures

Autumn is the time to plant green manure crops so they can establish well before the frosts. Cut or dig in the green manure in Spring, at least 4-6 weeks prior to planting your Summer crops. Some benefits of green manure crops are:

- they provide valuable nutrients for successive crops;
- they provide organic matter for soil micro-organisms to breakdown;
- they provide soil cover in Winter;
- they help aerate the soil.

Crops suitable planting in Canberra are: Legumes:

> Broad Beans, Field Peas, Lupins, Sub Clover, Tic Peas, Vetch.

Non-Legumes

Barley, Oats, Rye

The legumes are very useful as they fix nitrogen in the soil whilst the non legumes provide bulk organic matter

Flowering crops need to be dug in before flowering, cereal crops before producing a head of grain.

Autumn V	egetable	Planting	Guide
	MAR	APR	MAY
Asian greens	ST	Т	
Brussels Sprouts	Т		
Broccoli	Т		
Broad Beans		S	S
Cabbage	Т		
Cauliflower	Т		ni- al-facin
Chicory	ST	Т	La Calibra
Chinese Cabbage	Т		
Corn Salad	ST	ST	
Endive	ST	Т	
Garlic		S	S
Kale	Т		
Kohlrabi	ST	Т	
Leeks	Т		
Lettuce	ST	ST	Т
Peas	S	S	S
Onions		S	S
Turnips	Т		

S = Seed Sowing T = Transplanting

NB 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 weather from one year to the next. The microclimate of your garden will also influence the times when you plant.

			Canberra Organic Quick Quiz
Ans	swer	s are	on page 31. Too easy? Send your own quiz and answers for possible publication to editor@cogs asn an
			More on seed saving:
1.			What does the acronym SSN stand for?
2.			Tossing seed in the air for cleaning is called what?
3.			(a) Generally, do tomatoes need to be isolated for true to variety seed saving?(b) Why?
4.			Generally, can seed be saved successfully from eggplant ready for eating? Why?

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Supper convenors	Marie Bahr, Mary F		
Librarians	Beby Bros, assisted	by Caroline Nimm	0
Web manager	Maren Child		maren.child@starbytes com au
Telephone contact	Elizabeth Palmer	6248 8004	
Inquiries about Organic Grow	ing	6248 8004	info@cogs.asn.au

COGS Committee Members & Helpers

To contact COGS

Email info@cogs.asn.au or visit our website at www.cogs.asn.au

COGS monthly meetings are held on the 4th Tuesday of each month (except December and January) at 7:30pm in Room 4 of the Griffin Centre in Civic

Visitors Welcome



Camberra Organite Growers Society Inc. INFORMATION

GENERAL INFORMATION

The Canberra Organic Growers Society is a nonprofit organisation started in 1977 with the aim of providing a forum for organic growers to exchange information and encourage the adoption of organic growing methods. COGS is an association without specific political or religious affiliation as a group. COGS has the following objectives – to:

- Foster the use of organic methods in home gardening, horticulture and agriculture
- · Foster organic agricultural knowledge
- Promote the production and consumption of certified organically grown foods and the adoption of recognised organic standards
- Demonstrate and encourage the use of organic growing techniques
- Provide a forum for the discussion of matters of interest to organic growers in the ACT and surrounding region
- Facilitate the exchange of information and ideas between members and with other organic growers
- Assist members in establishing their own organic growing areas
- Administer community gardens operated under organic agricultural principles for recreational, educational or rehabilitation purposes and for the self-supply of contaminant free produce.

ADMINISTRATION

COGS is run by a voluntary committee which is elected annually at the AGM in March. The committee meets monthly and all members are encouraged to consider participating in the work of the committee.

MONTHLY MEETINGS

Meetings of members are held in Room 4 at the Griffin Centre, Civic, at 7.30 pm on the fourth Tuesday of the month (except in December and January). Each month there is a guest speaker. Recent meeting topics have included Backyard poultry keeping, Worms, Herbs and Seed Saving. At the meetings there is a produce and seed exchange table and a bookstall. COGS seeds and seedlings are also available for purchase. Members may also borrow two items from the COGS library. A light supper is available after the meeting.

Visitors are welcome.

QUARTERLY MAGAZINE

Canberra Organic, the quarterly publication of COGS, contains articles on organic growing, informs members of upcoming speakers and events, and includes planting and growing information specifically for the Canberra region. Members are encouraged to contribute articles.

COMMUNITY GARDENS

COGS currently operates 11 community gardens in the Canberra region. Gardens are located at Charnwood, Cook, Curtin (Cotter Garden), Dickson, Erindale, Holder, Kambah, Mitchell (Northside Garden), Oaks Estate, Queanbeyan and Theodore. Members may obtain plots to grow organic produce for home consumption. These gardens provide a wonderful opportunity for people to garden with other organic growers, to share their expertise and learn something new at the same time. Plot holders are required to pay an annual levy to cover the cost of water, insurance, tools and maintenance. The ACT Government has supported the establishment of these gardens through the ACT Office of Sport and Recreation and the Department of Urban Services Community Renewal program.

INTERNET

COGS maintains a web site devoted to organic growing at www.cogs.asn.au. The site contains the COGS information papers on organic growing, seasonal planting guides, certification information, a page for children and links to related organisations and information sources.

OTHER ACTIVITIES

From time to time COGS organises other activities for its members. For example, we participate in the World Environment Day fair and arrange information days at "COGS Backyard". Seminars and workshops are also conducted.

> CONTACT COGS PO Box 347 DICKSON ACT 2602 Phone: (02) 6248 8004 Email:info@cogs.asn.au Web: www.cogs.asn.au

COGS NOTICE BOARD

Speakers

Room 4, Griffin Centre, Civic, 7:30 pm

24 February Harvest night plus demonstration of food drying by Jeff Vivian of Nara Products.

23 March

Annual General Meeting plus Les Aldridge demonstrating organically certified soil conditioners and fertilisers.

27 April Bee-keeping (to be confirmed).

25 May Biodynamics with Lynette West.

> Annual General Meeting Canberra Organic Growers Society Inc. 2 March 2004

The Annual General Meeting of COGS will be held at 7:30 pm, 23 March 2004, in Room 4, Griffin Centre, Bunda Street, Canberra.

Please consider what contribution you can make to COGS this year as a Committee member or helper.

See the notice on page 11 of this issue.

Volunteer Gardeners Wanted

COGS frequently receives requests from worthy community projects for volunteer gardeners with some spare time to help. See pages 9, 13, 23. If you can help please contact Keith Colls 62517729

Phoenix Garden Group Contacts:

Chris Stamford ph 62884049

Lesley Pattinson ph 6288 0293

mmunA

2. nitrogen 3. water 4. rotation 5. COGS 8. legume 9. summer Down: 1. February Across: 3. worm 5. brassica 7. tomato

Junior Organic Solutions

Events

22 February Super Seeder Day-see page 8

23-26 February Dr Arden Andersen, Soil and Radionics 4 days, Inverell NSW. Further information: www.iqag.com.au

February The proposed Open Day at Charnwood Community Garden has been postponed until further notice.

6-7 March Autumn Show, The Horticultural Society of Canberra Inc. See page 23

27 March (or October, to be confirmed) Green Living Fair—see page 8

3 April CIT Autumn Plant Sale—see page 8

3-4 April Lanyon Garden Festival-see page 8

16 April BFA Organic Workshop, Sydney Further information: www.bfa.com.au

23-24 October Seed Savers' Conference, Exeter-see page 29 and www.seedsavers.net

Junior Organic

These are the full pictures that the vegetable cut-outs on page 19 are taken from:



ripe, and the flesh translucent (then its bitter). transfer pollen. 4. No, the fruit needs to be overcases the flowers are closed so bees do not tomato flowers are self pollinating and in most 1. Seed Savers' Network 2. winnowing 3. No,

Canberra Organic Quick Quiz Answers