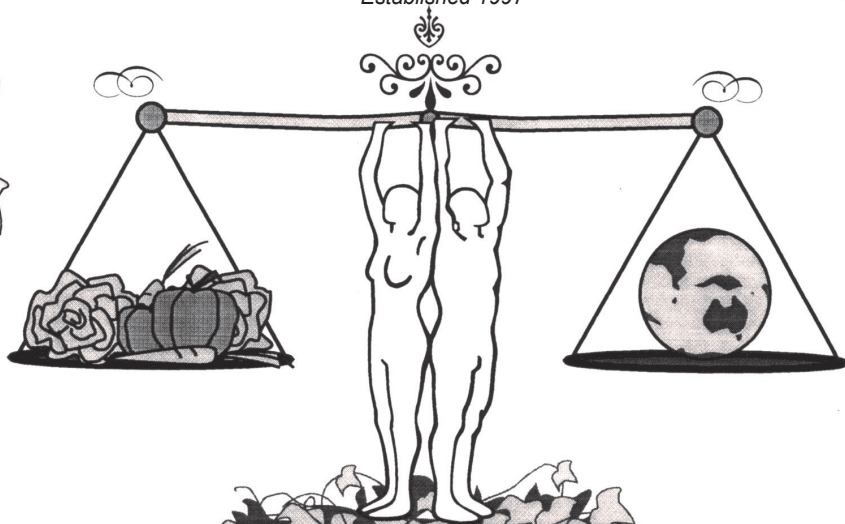


GOLD COAST ORGANIC GROWERS Inc.

Established 1997



NEWSLETTER

Volume 18 January 2015 Issue 1
GARDENING IN SUMMER

- | | | | |
|-----|------------------------------------------------|-------|-----------------------------------------------------------------------------------------------|
| Pg2 | <i>Club Information</i> | 10-11 | <i>Sewing Machine Covers, Val Sier's Sculpture, Common Herbs & their Benefits (Part1)</i> |
| 3 | <i>Notice Board, Whar's On,</i> | 12-13 | <i>Plant a Bee Attractant</i> |
| 4-5 | <i>President's Message, Q&A - November</i> | 14-15 | <i>Fruit Trees, Vegetables, Herbs, Summer Leafy Greens</i> |
| 6-7 | <i>Dolph Cooke - Biochar</i> | | |
| 8-9 | <i>Getting to Know - Amy Lukens</i> | | |

OUR NEXT MEETING: Thursday 19 February

Notice Board

1. **To promote organic sustainable food raising for home gardens and farms.**
2. **To foster research into improved methods of organic farming and gardening.**
3. **To provide information and support to all those interested in the various aspects of organic growing.**

Meetings Held:

3rd Thursday of the Month

The Meeting Place, Cnr Guineas Creek Rd and Coolgardie St, Elanora.

Doors open: 7:00 pm. **Begin at 7:30 pm**

Entry is \$1 members, \$3 visitors.

(No meeting in December)

Annual Membership Fees:

Single: \$20. Family: \$30.

To renew or start memberships please transfer funds directly into our bank account, send cheques (payable to GCOG) to Diane Kelly, or just pay at the door.

Name: Gold Coast Organic Growers

Bank: Suncorp

BSB: 484-799

Account: 0014-21651

Seed Bank:

Packets are \$2.00 each.

Members' Market Corner:

Please bring plants, books and produce you wish to sell or trade.

Raffle Table:

This relies on the kind generosity of members to donate items on the night. Tickets - \$1 each or 3 for \$2.

Library:

Books 50c, Videos, DVDs \$2, Soil Test Kit \$2. Available to members for 1 month.

Advertising: (Note 11 issues/year)

1/4 page: \$10 an issue, or \$100 per year

1/2 page: \$20 an issue or \$200 per year

full page: \$30 an issue or \$300 per year

2014 Committee

President	Maria Roberson (07) 5598 6609
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Seed Assistant	Heather Ryan 5534 4047
Supper Co-ordinator	Paul Roberson (07) 5598 6609

Newsletter:

Contributions and ideas welcome. Send in a photo of what's going on in your patch. Email Angela at w.a.anderson@bigpond.com or text a photo - 0439 488 166.

Thanks to Contributors:

Diane Kelly, Jill Barber, Maria Roberson, Karen Hart, Gordon Singh, Val Sier, Roger Petersen

Website:

www.goldcoastorganicgrowers.org.au/

Notice Board

Membership Renewals

NEW: You can now pay your membership fee directly into the GCOG bank account.

Name: Gold Coast Organic Growers
Bank: Suncorp
BSB: 484-799
Account: 0014-21651

Remember to put your Name and Membership Number in the comment field.

Note the number in brackets after your name is your membership number - you will need to quote this number in the comment field, if you pay via online banking.

Membership renewals

Overdue: Shelley Pryor (72), Gordon & Dorothy Singh (241), Geoffrey Williams (293), Denise Goodwin (335), Ashleigh Hart (355), Glenn & Joan Jones (266), Darrell & Marion Williams (310), Karen Hart (198), Celia Forrest (351), Penny Jameson (201)

January: Marion Symons (155), Peter & Patricia Edwards (163), Roger Griffiths (272), John Steytler (313), Julie Abraham (315), Daniel Bohata (359), Doris James (360)

February: Margaret Reichelt (111), Barry O'Rourke (185), Roger & Pauline Behrendorff (232), Barbara Morgan (246), Ken & Pat Jenyns (273), Judy McCracken (274), Jerry & Justy Rogers (275), Suzanne Blatcher (276), Tali Filip (277), Marino Canala (316), Anne-Marie Andrew (337), Andrew, Helen & Claudia Blum (344), Shem Pireh (361), Keith Rowell (362)

What's On

Gold Coast Permaculture Inc

Upcoming Workshops

31/01/2015 Smart Gardening with Water
14/02/2015 Intro to Organic Gardening
28/02/2015 Wonderful World of Herbs

WANTED: Land for Lease

Wanted: Land to Lease for Organic Research and development by TerraFirmaHaven utilising plants/trees from all over the world to explore and create a sustainable fruitful living environment which will enable people to survive whatever the future may bring. It needs to have decent access and preferably with a shed.

For more information contact Terrafirmahaven@gmail.com or phone 0280 909 310 – Neil McLaughlin

Check out Terrafirmahaven on Facebook- [facebook.com/terrafirma.haven](https://www.facebook.com/terrafirma.haven) and/or YouTube-Terra Firma Haven for more background info.



HERB FARM

Michael & Sandra Nanka
491 Springbrook Rd
MUDGEERABA. 4213

Opening times: Mondays, Tuesdays and the 3rd weekend of the month.

9 am – 4 pm

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www.herbcottage.com.au

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President's Message

Hello Everyone,

As each year passes, it is hoped, we become better gardeners and it is never just the successful parts that teach us; it is often the failures that we have the most to learn from. Every part of gardening offers us the opportunity to learn. Usually we figure what plant to plant in which season because, as enthusiastic beginner gardeners, we plant everything we can get our hands on, resulting in half the plants failing to thrive or even grow. After a couple of years, it becomes obvious that in our local region of South East Queensland, it's probably better to have a bit of a holiday from gardening over summer, because it's not the best time of year to have a successful veggie patch. Whilst, on the other hand, we observe how the other three seasons provide far better conditions for growing. Growing your own food does come with its fair share of challenges, but, when we and the garden gods get it right, it's worth every bit of the so called "learning" it took to get here.

As previously discussed, summer is not the best growing season for loads of different veggies; however, there are still a few that can cope, such as sweet corn, pumpkins, snake beans, sweet potatoes and a few other tropical food plants. Empty beds should be covered with mulch for protection and, where possible, grow a green manure crop; it will add vital nourishment when chopped up and incorporated into the top 10cm of the soil. I have been using purchased compost for mulch over the last few years, because I think it feeds the soil as well as protecting it from the elements. I think it's a good investment because it costs about the same as a lot of other less nutritious mulches.

Now is a good time to plan for autumn. You might need to move garden beds to provide more light as vegetables require a minimum of six hours of sunshine a day in winter. Most vegetables and fruit fail to thrive simply because they don't receive enough sunlight. I

don't know where the rumour about these plants needing shade started, but it is misleading and misguided ninety per cent of the time. While we are on the subject of misleading merchandise, I have seen at various hardware outlets small portable hot houses or grow houses, which are unnecessary in our warm climate, even in winter, as the soil is still warm enough for seeds to germinate. While you're at it, double check planting guides before you purchase seedlings: there are always punnets of plants for sale that are not suitable for the current season. For instance, I have seen corn and cucumber seedlings in winter and spinach and onion seedlings in summer, just to name a few, all of which do not grow at that particular time of year.

Next month is our AGM. The meeting will be run as usual, and a guest speaker has been booked. If you would like to be a part of it, please feel free to nominate yourself for a position. We always aim to keep the meeting fun and interesting and not bogged down with administrative duties. So come along, vote for your nominee, win a raffle prize, meet a friend and learn something new.

**Happy growing,
Maria**



The bees are enjoying our (Diane Kelly) white & purple "geisha girl" plants (*Duranta repens*)

Q & A - November 2014

By Karen Hart

Q. How do we deal with plants with lots of **aphids** – cut them off? Or how can we best get rid of them?

A. They can be composted as they would not likely survive the high temperature. A soapy water spray is effective as is just squishing them by hand.

Q. How long should **gall wasp cuttings** from a lime tree be solarised before disposal?

A. For at least 3 weeks; however, the gall itself needs to be cut through.

Q. Is there a way to prevent **gall wasp** attack?

A. Do not prune too much in winter or fertilise heavily in spring; otherwise, it creates too much new sappy growth. Fertilise 4 times a year instead. Prune galls out in September. Do not stress too much about pruning all the galls as it only becomes a problem when a large branch breaks and falls due to the weakness. Jill reduced the gall wasp on her trees by adding lots of composted chicken manure. Maria's lime tree 'exploded' due to chickens escaping and fertilising the tree. They needed to chainsaw the tree due to its size, but it has re-shooted and produces fruit as big as tennis balls!

Q. Is it possible to get real **organic manure** as most horses are given a vermicide?

A. Compost all manures, but if not possible, leave them for at least 3 months or so. Hot composting works best – turn regularly. Manure is only a problem if used fresh – if it's put immediately on the soil, it will kill the soil life, and so destroys the ecosystem. A compost heap that's too big creates too much heat – you need to add more nitrogen (like, sawdust or shredded paper) and turn it. It should be no higher than 65C, i.e. it should not burn your hand.

Q. Is there a problem with burning **newspapers**: is it the inks?

A. 20-30 years ago, the ink was changed, so it should now be safe to use it.

Q. Diane brought in a **purple fleshed potato**, wondering what variety it was.

A. It is a Blue Congo – the colour is more for

novelty value.

Q. How do you treat **powdery mildew on cucumbers and zucchinis**?

A. A milk and water solution is best. Spray the very day before it gets too bad. Prevention is better than cure – keep cucumbers off the ground, and allow plenty of air circulation. Cut off lower mouldy leaves.

Q. What causes a misshapen **zucchini**? – it tapers off at the end.

A. The problem is usually an insect – thrip gets into the flower. A member suggested growing gourds as eaten young they taste the same and give a better crop.

Q. Which is better - **black or cocozelle zucchini**?

A. A good idea is to plant one of each as some seasons one will grow better than the other. Check the soil pH – it needs to be around 6.8 – add lime if it's low.

Q. **Savoy cabbages** – a late crop was planted, and there are plenty of lower leaves, but they are not forming hearts?

A. In this dry weather, keep the watering up. They may benefit from a side dressing of a good all-round fertiliser. The leaves can be used to make sauerkraut.

Q. **March flies**, also called **horse flies or spring flies**, are very bad this year.

A. They are attracted to blue, so it's best to avoid wearing this colour.

Q. **Fejoa – pineapple guavas** – is it best to get grafted ones? How long do they take to flower?

A. Two are needed for pollination. They also require netting as fruit fly is a problem.

Q. Where can I obtain **mushroom compost**?

A. It can have a high salt content. It is best not to use it if the soil has a pH level above 7. Prices vary considerably: \$70 a cubic metre from Mudgeeraba; \$45 from Miami, and the Beaudesert price is \$35. Gold Coast Permaculture club has mushroom compost for sale. It is not advisable to use for 'wicking boxes' (as demonstrated by Ramon) as the pH is too high.

Dolph Cooke
All About Biochar
 By Jill Barber

Dolph was a refreshingly down to earth presenter at our November meeting, and we were both informed and entertained by his presentation. Dolph is essentially an educator, as indicated by his United Nations Millennium Award for service to the planet through education that he won in 2012, and his aim is to educate as many people as he can as to the value and use of biochar. Part of that is leading people to making their own, and, though he did have bags of it for people to buy that night, his video and explanation showed us precisely and simply how to make our own.

The Biochar Project exists on Dolph's 3000 acre farm at Kunghur, south west of Uki in NSW. When he lights the fire in the 44 gallon drum to make biochar, there is not much smoke at all, just fierce heat, which is maintained by adding more burnable material for twelve hours. The biochar product is then hoed out and doused with water. It is **different from charcoal** in that it is crushed into smaller particles and combined with soil; it is thermodynamically treated carbon that's left behind. Anything that was once living can be biochared.

We were all most interested in the **benefits** of biochar, and these seem to be many. For a start, it can hold twenty times its own weight in water! So, it's greatly assists the soil to be drought tolerant. It is also biologically compatible and attracts life; microbes are happy to have a home in it: they are protected from predators in their mini-city, which lasts for thousands of years. It attracts other elements, too – not only liquids, but also solids and gases. Soaked in liquid fertiliser, it then becomes a slow release agent. It alkalises soil for good pH balance, so it can increase crop production. Being inert, it can enrich plants with whatever they need and is fed to them, or it can be added dry to a swamp, and it then soaks up toxins, cleaning it up. It has electromagnetic properties: it is an electrical conductor and an electrical insulator. Simply put,

biochar is to life as the base metal is to alchemy. So, it is very versatile. Check out the Biochar Project website for more: www.biocharproject.org

According to Dolph, man can do two things better than nature: biochar (as opposed to a bushfire, which just reduces the bush to ash) and regenerative companion planting. To **make your own**, try with a milo tin – empty it out, then fill it with organic matter, put the lid on, with a little hole to allow the water vapour to escape, and throw it into a drum filled with a big fire, of 500 – 600 degrees, for eight to ten hours.

A very interesting question arose in regards to possible **Council restrictions** on such lengthy and intensely hot burning to make biochar in one's backyard. Apparently you can get permission online. According to the 1923 Enemy of the State Act, anyone can make it in their backyard; there is no law stopping you. Of course, in a total fire ban area it would be irresponsible, and if the fire got off your land, you'd be culpable. Also, some scientists claimed that Dolph was polluting the environment with an open fire, and they conducted extensive tests during the process of him making the biochar, which resulted in no ill effects to the environment, in fact. To prevent smoke pollution, three things are needed: heat, oxygen and fuel, so the heat needs to be brought up quickly, such as with dry leaves.

Not all biochars are created equal, though. Several factors affect the **qualities** of them:

- Feedstock Lignin (the hard woody part) vs cellulose content (the sugary, easily digestible part)
- Burning Method: Fast vs Slow
- Burning temperature
- What carbon content you start out with
- Mixtures of biomass
- Pyrolysis system, eg. Retort vs Gassifier vs Tfd (categories of biochar units)

What Gets Released? The vast majority of **gases released** in pyrolysis are:

- water vapor = H₂O

- Carbon dioxide = CO₂

These two don't burn, and are the product of complete combustion of either the wood or the wood gases coming off the heated wood. The water vapor cools to form moist white smoke that rapidly disappears as it mixes with ambient air (short, lazy plume that just stops).

- Carbon monoxide = CO
- Methane = CH₄
- Hydrogen = H₂

These show up a lot in the literature, but only CO is prevalent and only when there is a lot of charcoal being burned. That is why it says "burn outside", and watch out for "carbon monoxide" (ie. don't make biochar inside) on the side of every bag of charcoal.

What forms the **smoke** and what actually has the **fuel value** (wood does not burn; it's the gases inside the wood that do, and they have the energy value) is a group of small organic compounds that are either gases or liquids depending on the temperature. When the gases cool, they condense and form "clouds", which we call "smoke". They are:

- Acetic acid = CH₃COOH or C₂H₄O₂
- Methanol = CH₃OH = CH₄O

- Those are the two major ones. There are lesser levels of:
- Formaldehyde = HCHO = CH₂O
- Acetaldehyde = CH₃CHO = C₂H₄O
- Acetone = CH₃COCH₃ = C₃H₆O

Then there are hundreds of **individual compounds** present, at very low but smellable levels. When they condense, they form tars and that is what you see when you get a bottle of brown condensate that smells like barbecue or worse. They also make the smoke more yellow than the water vapor smoke. None of these are harmful, but don't breathe them excessively - they are smoke, and breathing smoke is bad - and never drink them (because of the methanol - it is poisonous).

Is all this pollution? No, says Dolph, this is not pollution for without CO₂ and other gases the trees would not be able to survive. We live in symbiosis with the trees and other sentient beings, and we all have our jobs to do.

The following diagram on **How to Prepare Biochar** for your garden, is on the larger, 30 litre bags Dolph sells:

Continued on Page 14

To achieve the best results from your BioChar, it should be inoculated with an organic agent before application:

How to ACTIVATE YOUR BIOCHAR
In 4 easy steps

1 Empty BioChar into a bucket

2 Cover with water & add inoculant:

- * Compost tea
- * Worm castings
- * Sea-Sol
- * Aged animal manure
- * Urine

*As a general rule of thumb use 100g of inoculant per 1 kilogram of BioChar

3 Soak for 12- 24 hours

4 Scatter the BioChar evenly through your garden and cover with mulch

coverage **1kg / M²**

Maximum coverage required is 1kg per square meter

Did you know? BioChar is carbon-neutral, reduces fertilizer requirements and is good for the environment!

Some benefits of BioChar in your garden - to find out more visit biocharproject.org

- Increased water capture and retention
- Increased crop yield
- Alkalis soil for good pH balance
- Provides a home for beneficial microbes

**Getting To Know
Amy Lukens
By Diane Kelly**

As it is currently mango season, I would like to start this month's interview with something I learnt yesterday when I met up with Amy Lukens at her home in the Currumbin Valley.

Many of us know the "correct" way to eat a mango – you cut down each side as close to the seed as possible, cut the flesh into cubes whilst still on the skin, and then turn the delicious piece inside out – and enjoy! However – here is an alternative method that Amy showed me, and one that didn't end up with juice over the bench top, my hands and my tee-shirt! Cut the mango down each side as above. Then, with a regular size glass, scoop the flesh out. It remains in one piece, and the juice is also caught in the glass – and the entire neat snack can be eaten with a spoon – preferably with ice cream or yoghurt added!



The mangoes tasted wonderful, no matter which way we ate them!

But that wasn't all that I enjoyed yesterday. Amy introduced me to her ten-acre property in the hills high above the Currumbin Valley; I was offered a very pleasant herb tea to have with our apricot cake; and I learnt how someone who grew up in an area which had either snow, or temperatures at which snow could fall during four months of the year, is now enjoying the sub-tropical climate of the Gold Coast.

Amy grew up in Philadelphia, which is in north

-eastern USA, and approximately fifty miles from the Atlantic Ocean. Philadelphia is capital of Pennsylvania, and is the fifth most populous city in the United States. So it was quite a change for Amy to come to Australia, but she assures me that she enjoys the warm climate and the topography of the Currumbin Valley.

Before moving to the Valley, Amy had been living in Melbourne. On a trip to the Coast back in 2001, she noticed a "House For Sale" sign along Tomewin Mountain Road, and ultimately purchased the property. Amy tells the story of how the beautiful stained glass window in the front wall of the house helped convince her that this was her new home – but I am sure that the coastal views, the cool breezes, the enviable verandah and the well-established fruit trees helped her make that decision.

As I mentioned, Amy's property is ten acres – it is situated on a very long drive-way which divides the block into two. To the west is bushland, with tall tallowwood trees, and views across the Currumbin Valley. The house is situated at the highest point of the block and it has views over the Valley to the east, which provide a glimpse of the ocean at Currumbin, beautiful moon-rises, and mist-shrouded hills when it rains. The verandah on the eastern side extends the full length of the house, and it is here that Amy grows many herbs and plants that she uses to create green smoothies, herbal teas, and salads. It also has a small nook where Amy has a table and comfortable chairs, and where she enjoys sitting and reading, or just enjoying the view.

The theme of herbs and edible greens continues on in the area down below the house and verandah. There are numerous avocado trees there – wertz, hass and sharwil – and plenty of mango trees with fruit gradually ripening. There are also lemon, lime, orange and fig trees. But making a carpet under many of these are the herbs that are currently Amy's main interest.



Herbs at the ready – they catch the morning sun, and are growing well.

There are “holy” basil plants that smelt beautiful, and are a bee attractant, and yarrow, perilla, mudwort, fennel and many others. Mixed in with them are a grape vine, a pepina melon vine (with its first fruit on it, about which Amy is quite excited), pineapple plants, turmeric and ginger, plus young guava and lychee trees. The herb patch is Amy’s favourite area of her garden.

I asked Amy what she does to improve the soil in the garden, which is primarily red clay. Layers of cardboard, with any grass or weeds that are collected, are placed to gradually rot down. This both inhibits weed-growth, and creates mulch – and is aided by the scratching and spreading done by the infamous brush turkeys. Around the side of the house are two large compost bins, into which “everything goes”, so they also produce material to nourish the soil. Beside these are two large water tanks for domestic use and for the garden – with an estimated rainfall of 60 inches a year, not having access to town water isn’t a problem.

I was surprised when Amy mentioned that she had not seen many snakes in the years that she has lived in her house – one black snake, a carpet snake, a small green tree snake, and a “bandi bandi” snake are about all she has come across. (The bandi bandi snake is worth Googling – the black and white markings are quite dramatic, and explain how it got its name.) Other wild life that comes to

the block includes black cockatoos, kookaburras, lorikeets, kangaroos, possums, and – just once – a koala. Amy mentioned that, growing up in the States, she used to enjoy skiing, sledding, skating and camping – in fact anything that meant she could be out in the world of nature. So it is no wonder she is enjoying living in her current home.



The view to the east – with glimpses of the ocean, and some magnificent gum trees.

One of Amy’s goals is to be totally self-sufficient with the food that she hopes to produce from her garden – she has been able to observe the improvement in her health and general well-being as she has focused on what she eats and drinks – and especially gives credit to her “green smoothies”!

I asked Amy what her advice to other gardeners would be – and her answer was obviously something she practices herself – “always keep learning”. In the future she wants to grow more herbs, and improve the quality of fruit from her orchard, and also learn more effective seed saving from the plants she has growing.

It was a bit sad to leave the tranquillity of Amy’s house and surrounds. But I did enjoy stopping on the way down the long drive-way, because among the mango trees that bordered the neighbours property was a number of kangaroos enjoying the new green grass. So I now have a photo to remind me of visiting Amy’s home, and the peaceful and productive land that surrounds it.

**Chrysanthemums
& Sewing Machines Covers
From Gordon & Dorothy Singh**

The purpose of these photos, apart from showing off our chrysanthemums, is to draw attention to what we have used to grow them in. These plastic containers are the covers of discarded sewing machines. Our main concern in not drawing attention to this a few years ago, was the durability of these domestic products when exposed to the elements. At this time we are pleased to show how we have utilised this product not to be scrapped for recycling or melting down, but as a trial for above-ground garden use. After two years in the lower position we decided to move them up to where you will see them now forming part of the new above-ground tanks garden area. We have been encouraged by their durability enough to suggest that if anyone is interested in a similar venture we have dozens more machine cases to scrap and anyone would be welcome to them. Please ph. 5597 0088 if interested.

Incidentally, even the bases can be utilised as seedling beds.

**Recycled Sculpture by Val Sier
in Gardening Australia**

After my friends pulled their fence down, they helped my roll up the barbed wire to create this **recycled** sculpture. When I was a flower designer many years ago, we used to make things like this.



Common Herbs & Their Benefits

Part 1

By Jill Barber

The following is a list of common herbs, etc, and their benefits, that I put together for my personal use, from my Organic Growers' club speakers' information, supplemented from different internet sites, so it's not definitive, and there's bound to be more. I've printed it off, and put it up prominently to remind me whenever I wonder what I'm eating xxx for, or what I need to take in order to yyy. You might like to use it, too.

Alfalfa - anti-arthritis and antidiabetic activity, for treatment of dyspepsia, and as an anti-asthmatic.

- High in vitamin K
- useful in the treatment of kidney, bladder, and prostate disorders.
- might reduce cholesterol levels.

Aloe vera - Vitamins A, B, 1, 2, 3, 6, potassium....and lots of micro minerals.

- A cure-all for pain relief generally, such as for sunburn, abrasions, cuts, and as an antibiotic. Just a little can revitalise the system
- Cleansing and toning of the bowel
- When the pulp is blended with lemon juice, it helps to break down mucous.

Apple cider vinegar - Alkalinity

- Take apple cider vinegar every day: Small, regular amounts seem to work best – 2 tpsps added to a few tpsps of water, then swirled around in the mouth [before swallowing] to activate the salivary glands.
- the “super-ness” of apple cider vinegar - from its high concentration of *acetic acid*, which improves the body's absorption of important minerals from the foods we consume.
- high mineral content (Minerals are the foundation of health and wellbeing)
- may help to lower *glucose levels*
- can suppress appetite - acetic acid, which helps to reduce the *glycemic index* of foods, slowing the rate at which sugars are released into the bloodstream and lessening

appetite

- over an 8-week period can significantly reduce harmful blood lipids that contribute to high *cholesterol* and triglyceride levels
- 1/2 cup of vegetable oil with 1/2 cup apple cider vinegar: a *furniture polish* that will clean and treat wooden furniture and surfaces, and remove *water stains*
- improves digestion, particularly for reflux, bloating and indigestion - use it either to make a salad dressing or take 1 tsp with water before each meal.
- Tones (1 part vinegar to 2 parts water, and left on overnight to fade age spots and acne), clarifies and clears the skin - can ingest as a tonic
- wart-zapping powers: each night before bed, soak a cotton ball in apple cider vinegar, apply to wart and keep in place with a sticking plaster. Leave on all night – 24 hours a day if possible – for a week, changing dressing each evening. Wart may swell and throb, then start to turn black within the first two days, and disappear completely after a week or two.
- gently cleans and disinfects household surfaces: 1 part vinegar to 2 parts water, plus a few drops of tea tree oil for its antibacterial qualities.
- The “uglier” the apple cider vinegar the better. You want it brown and murky – the clear and pretty stuff has been through more filtration processes, and this removes the powerful essence of the vinegar, called the “mother” – the brown strands that rest at the bottom of the bottle.

Barley Green - used in the treatment of skin, liver, *blood*, and GI disorders.

- The juice of barley grass contains beta carotene, vitamins B1, B2, B6, B12, pantothenic acid, and folic acid.
- Minerals present include potassium, calcium, iron, phosphorus, and magnesium.
- Other constituents are chlorophyll, amino acids, protein, fiber, and enzymes.
- Barley grass extracts protect human tissue cells against carcinogens.
- *Cholesterol*-lowering effects

Continued pg 12

Basil - may be useful in treating arthritis and inflammatory bowel diseases.

- can help prevent the harmful effects of aging
- rich in vitamin A, vitamin K, vitamin C, magnesium, iron, potassium and calcium.

Borage – a good companion to strawberries, tomatoes and citrus, and it helps most plants.

- It means “To be merry”,
- grows to 90cm, with lovely, tiny, blue flowers.
- It’s an annual, but self-planting babies grow up all around the mother for continuing growth.
- It can be used in salads

Calendula - Heals *wounds*

Chamomile - Encourage *digestion*

Cinnamon - Regulate the blood *sugar*

Comfrey - Treat *bruises*, sprains, gout and broken *bones!* A poultice can be made of the leaves to put on bruises, and it’s *cancer* fighting.

Dandelion – Diuretic;

- *liver* tonic - high in potassium
- a tincture can be made by covering it with apple cider vinegar and leaving it for two weeks.

Echinacea - Stimulate *immune* system

Fennel - Encourage *digestion* - stimulate secretion of *digestive* and gastric juices,

- relief from anemia, *flatulence*, colic, diarrhea, respiratory disorders, menstrual disorders,
- reducing inflammation of the *stomach and intestines*,
- helps to maintain healthy levels of *cholesterol* - can stimulate the elimination of damaging LDL cholesterol
- to reduce symptoms of non-ulcer *dyspepsia*
- facilitating proper *absorption of nutrients*
- can eliminate *constipation* and thereby protect the body from a wide range of intestinal troubles from it.
- Fennel seed extract has been found to be

preventative of various *breast cancer* and *liver cancer* strains.

- a very rich source of potassium - reducing *blood pressure*; (in bulbs and seeds) an electrolyte - can help increase *brain function* and cognitive abilities
- - a vasodilator - more *oxygen* reaches the brain and neural activity
- - protect eyes from premature aging and macular degeneration
- has *antiacidic* (basic) properties - extensively used in antacid preparations.
- chew fennel seeds after meals - to facilitate digestion and to *eliminate bad breath*.
- in mouth fresheners, toothpastes, desserts, antacids and in various *culinary* applications.
- used as an ingredient of focal point of many *appetizers*.

Ginger - Used to aid *digestion*, ginger is believed to increase saliva and other digestive fluids, alleviating indigestion and associated problems such as *flatulence*.

- It is known to relieve *nausea*, motion sickness and morning sickness.
- believed to have anti-inflammatory qualities that may relieve swelling and pain.
- As a tea it is said to ease headaches and sore throats or assist if you have a cold or flu.
- Fresh ginger is used for asthma, coughs, colic, heart palpitations, swellings, dyspepsia, loss of appetite and rheumatism,
- the dried root is used to "strengthen" the stomach, inhibit vomiting and treat diarrhea.
- *arthritis*

Goldenseal - Reduce inflammation, for conditions such as respiratory, digestive and genito-urinary tract inflammation induced by allergy or infection

- herbal antibiotic and immune system enhancer.
- contains calcium, iron, manganese, vitamin A, vitamin C, vitamin E, B-complex, and other nutrients and minerals.

Continued in February Newsletter

**If You Do Nothing Else This Month ...
Plant A Bee Attractant
From Diane Kelly**

In our November newsletter, several of our Club members wrote about their experiences and enjoyment of keeping bees. Now, not all of us have the opportunity to have a bee hive – but we can all do something to contribute to the lives of our buzzy friends. So this month, let's all **add one thing to our garden that attracts bees.**

Firstly, why should we plant bee-attractants? We need bees in our gardens. It is estimated that bees pollinate up to 80% of all food crops in the USA, and around 65% in Australia. Bees can increase the yield of our garden crops by up to 60%.

Bees need a constant supply of nectar from plants to survive. Bees have two stomachs, one being a “nectar stomach”, which can hold up to 70mg of nectar (which is a combination of water and complex sugars that ultimately is turned into honey). To obtain that amount of nectar, a honeybee must visit between 100 and 1,500 flowers.

Secondly, what plants attract bees to gardens?

Lavenders – their long flowering periods and range of varieties make it possible to have lavender blossoms for most of the year.

Nasturtiums attract bees – and we can eat both the flowers and leaves as well!

Cat-mint attracts bees with its soft mauve blooms, and can make a delightful edge in your veggie garden.

Salvias – especially the blue-flowering varieties.

NasturNBasilis – both white and mauve flowering.

Thyme, when it flowers in late summer.

Sage, the culinary form of the ornamental salvias, does a good job as a bee attractant.

Rocket – allow a few plants to flower and go to seed.

And also try borage (commonly known as “The Bee Herb”), chives, garlic chives and coriander.

Thirdly, what else can we do to encourage bees into our gardens?

Have a supply of fresh water available for them – use a low, flat container (such as the top of a bird bath), and add a rock with its tip just out the water to increase bee accessibility.

Remove any wasp nests from your garden – wasps are known to kill and eat bees. Add plants to your garden that produce a variety of colours – although “bee-favourites” are apparently yellow, purple and blue.

Grow plants that have “open faced” flowers – these are easier for bees to collect nectar from than ones that are trumpet-shaped or have tiny clusters. (Examples are cosmos, sunflowers, gerberas, violets and daisies.)

See the picture on Page 4 of The bees enjoying our white & purple “geisha girl” plants (*Duranta repens*).

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Continued from pg 7 - Biochar

The 5 M's of Biochar enrichment

- **Moisten**
- **Micronise** (making the biochar smaller; Dolph uses a charcoal brickette maker to crush it)
- **Mineralise** (adding the minerals you would like to add slowly to your gardens eg. gypsum to breakdown clay)
- **Microbiological Inoculation**
- **Maturation** (by leaving the char in the environment it sucks in whatever is in the atmosphere, usually oxygen molecules, and this makes it infinitely more able to attract much more for it to carry, such as the 20 times its weight in substances)

Dolph mentioned that making biochar is good for carbon sequestering, and I checked his website for an explanation of this, as follows: "Burning trees and agricultural waste contributes a large amount of carbon dioxide (CO₂) to the atmosphere. The production and use of biochar breaks into the CO₂ cycle, releasing oxygen and drawing carbon from the atmosphere to hold it in the soil".

Finally, the question: can you **ingest** it? Yes! It can be put in food and drinks, it's an oxidising agent, gives the body lots of iodine, can neutralise radiation, and actually assists with digestion. [The last is from Jill's experience: activated charcoal can be purchased in capsules and really relieves stomach upsets, among other things, as it removes toxins]. Cancer can't live in an alkaline environment; it's a fungus, and creates an imbalance in the body which can be remedied through the use of such substances as biochar, not to mention oxygen, fresh greens and happiness, according to Dolph.

This was a great way to end the year of GCOG meeting! We had lots of laughs, and went away enriched with further knowledge of how to be better gardeners and better carers of the planet, many thanks to Dolph!

Continued on Page 15

FRUIT TREES

Custard Apples: Peak water needs. Apply organic fertiliser with sulphate of potash, 1 kg for mature trees and ½ kg for young trees.

Figs: Net trees to protect figs from birds. Fertilise with 1 kg organic fertiliser with sulphate of potash.

Low shill stone fruit: Moderate water needs.

Lychee: Peak water needs. This is a good time to "skirt" trees (skirt-trim all growth to 500mm above ground). Prune so 20% light can be seen through trees.

Mango: Apply organic fertiliser with sulphate of potash. Keep up water. Prune trees after harvest. **Pruning:** If it is a very large tree that needs to be pruned to a manageable size, the correct way is to cut back 1/3 of branches each year for three years. In the first year remove one of the largest branches, the following year remove another branch, and so on until the tree is of an acceptable shape and size. In this way you will have some fruit each year while at the same time reducing the size of the tree.

Passion-fruit: Keep up the water.

Pawpaw: Spray copper based spray or leaf microbes to prevent black spot.

Persimmon: Make sure trees are fully netted. Harvest time for early varieties.

Strawberries: Keep well-watered to form new runners for next year.

Bananas: Keep up water; bag fruit; and cut off bells.

Citrus: Fertilise tree with organic fertiliser containing sulphate of potash, 1 kg for large trees and ½ kg for smaller trees. Keep up sprays of pest oil for leaf miner.

*Queensland Planting Guide
- Brisbane Organic Growers*

VEGETABLES

JANUARY:

Asian Veg, *Artichoke*, Beans (French), Capsicum, Choko, Sweet corn, Cucumber, Eggplant, *Gourd*, Lettuces, Luffa, Marrow, Mustard Greens, Okra, *Peanut*, Pumpkin, Radish, Rhubarb, Rockmelon, Snake Beans, Spring Onions, Squash, *Sunflower*, Sweet Potato, Tomato, Watermelon, Zucchini.

FEBRUARY

Asian Veg, *Artichoke*, Beans (French), Capsicum, Carrots, Choko, Cucumber, Eggplant, *Gourd*, *Leeks*, Lettuces, Luffa, Marrow, Mustard Greens, *Okra*, *Peanut*, Pumpkin, Radish, Rhubarb, Snake Beans, Spring Onions, Squash, *Sunflower*, Sweet Potato, Tomato, Zucchini.

Continued from pg 14 - Biochar

Later addition from an **email conversation with Dolph** on my garden that you may find very helpful when using your biochar:

J: You mentioned last night using a 2l. bag on a couple of square metres, I thought. Is that the same as 1kg?

D: Dry or fresh biochar is about 2litres 2.5 litres to 1kg

So your yard calculation is very easy – weigh 1bag of biochar and convert it to kgs dry Then enrich it using the 5 m's and weigh it again - this is your wet weight.

J: That's confusing, using litres and grams...My garden beds are about 1m x 3m - how much should I use?

D: I would use 1kg for that entire area, but don't add the maximum dose all at once because you don't get to see any variables in this way. Put your observation skills to the test: create a control plot without biochar, and watch the difference, or put 1kg on half and leave the other half biochar free, and note it down to show others.

HERBS

JANUARY

Annual: Amaranth, Basil, Borage, Calendula, Dill, Herb Robert, Misome, Mizuna, Giant Red Mustard, Nasturtium, Italian Parsley, Rocket, Salad Mallow.

Perennials & Bi-Annuals – Catnip, Ceylon Spinach, Chicory, Chilli, Chives, Comfrey, Perennial Coriander, Echinacea, Fennel, Hyssop, Lavender, Lemon Balm, Licorice, Lovage, Marjoram, Mint, Mushroom Plant, Oregano, Parsley, Rosemary, Sage, Salad Burnet, Stevia, French Tarragon, Winter Tarragon, Thyme, Upland Cress, Watercress, Winter Savoury.

FEBRUARY

Annual: Amaranth, Basil, Dill, Herb Robert, Misome, Mizuna, Nasturtium, Italian parsley Rocket, Giant Red Mustard, Salad Mallow.

Perennials & Bi-Annuals: Catnip, Ceylon Spinach, Chicory, Chilli, Chives, Comfrey, Perennial Coriander, Echinacea, Fennel, Hyssop, Lavender, Lemon Balm, Licorice, Lovage, Marjoram, Mint, Mushroom Plant, Oregano, Parsley, Rosemary, Sage, Salad Burnet, Stevia, French Tarragon, Winter Tarragon, Thyme, Upland Cress, Watercress, Winter Savoury.

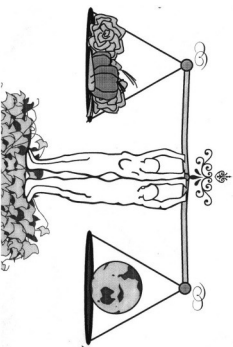
Summer Leafy Greens From Roger Petersen

You may also like to have a look at these useful plants for this time of year offered by Green Harvest

<http://greenharvest.com.au/Plants/SummerLeafyGreens.html>

If not claimed in 14 days, please return to:
GCOG, PO Box 210, Mudgeeraba Q 4213

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NEWSLETTER

Meetings held:
3rd Thursday of the Month

Meeting place:
Cnr Guineas Creek Road
& Coolgardie Street
Elanora, Gold Coast

Next meeting:
Thursday 19 February 2015