

NEWSLETTER

NUMBER 51.

AUGUST 2006.

Belyando Crossing.
Qld.
15/8/2006

Dear Members and subscribers,

Those astute readers among you will have immediately noticed something different about the address above; this is because we have (temporarily) joined the Grey Nomads and are travelling north in our camper-trailer for a couple of weeks. Thus your "letter from the editor" will be more like a journal this time round.

We are currently camped beside the Belyando River, having driven from Clermont this afternoon. We left Rocky on Tuesday, traversing familiar ground as we'd spent the previous weekend camped at Blackdown Tableland National Park with members of Rocky SGAP, and turning off the Capricorn Highway at Emerald on to the Gregory Highway. We camped the night at Lake Theresa, after traversing cleared brigalow country with remnant vegetation and regrowth. Prominent were lots of *Acacia farnesiana* with its huge single orange-gold ball flowers (and edible green seeds), Beefwood (*Grevillea striata*) with large white flowers oozing nectar, and lots of prickly things, including *Citrus glauca*, *Capparis lasiantha* and others, *Carissa ovata* and *Citriobatus spinescens* (all with edible fruit in season).

Today we drove into Clermont, inspecting what's left of the old mining town of Copperfield on the way, and were able to fill in some rather large blank spaces in Col's family history, visiting the cemetery, the Shire office, and thence some folk who turned out to be long-lost relatives. We found Clermont a very pleasant, friendly country town. We then drove north on the Gregory Development Road, through more heavily wooded but similar country to the Belyando River. Tomorrow we will head north for Charters Towers.

19.8.06: Undara National Park: Well, we left the Belyando River and travelled north through more heavily vegetated country; mostly cleared and semi-cleared Brigalow at first, and then well grassed savannah woodland. Rockier, metaliferous country interspersed with grassy woodland brought us into the interesting historical town of Charters Towers. Much restored and thriving since our last visit many years ago, this is well worth the time spent exploring its many attractions, but after stops at the information centre and a servo, we pushed on to Undara, one of the key goals on this trip north.

We carry our own wood, and are quite well set up, so took a campsite for 3 nights (these remote places that provide facilities are not cheap). We booked the full day tour and were not disappointed. The focus of this tour is the Lava Tubes, and we were treated to a walk round the rim of Kalkani Crater, comprehensive information on the history, geography and geology of the area, visits to 5 different sections of lava tube, and extra bits and pieces on plants, Aboriginal history, etc. This was fascinating stuff!

As the lava tube has to collapse in order for people to gain access, you always walk through semi-evergreen vine thicket to the entrance. This is where most of the food plants are found, and our guide said that the Aborigines were very careful about burning etc in order to protect these thickets for this reason. In fact, from high ground you can plot the course of the tube in the landscape by the darker colour of vegetation in the areas of collapse, where more water is available.



We saw Long Yam (*Dioscorea transversa*), easily recognised by its clusters of winged seed pods, a Sandpaper Fig with very furry green fruit, a Rock Fig of some sort with small orange fruit (ripe fruit with a brownish tinge quite palatable), Wombat Berry (*Eustrephus latifolius*), Bush Cherry (*Exocarpus latifolius*), Dog's Balls (*Grewia latifolius*) Native Grapes (*Cayratia sp* and *Cissus ssp*) and a white carpet of *Trachymene* flowers in the grass along the access track (see left).

The next day we decided on a sleep-in, a leisurely start, and a couple of self-guided walks. We did the Bush Walk, the Swamp Walk, and the Bluff Walk. It was a very rewarding day, as I saw 2 trees

I have long wanted to "eye-ball"; Nonda Plum (*Parinari nonda*) and Leichhardt's Bread Fruit or Bread Fruit of the Lynd (*Gardenia sp*). Both of these trees were bearing green fruit too. Unfortunately, both lots of fruits were too green for sampling. I wonder if I'd have thought the *Gardenia* fruit tasted like German rye bread, though it looked awfully like the common feral Guava around Rocky to me - large leaves a bit rougher and more blue-green, but similar, perhaps a little more ovoid, immature fruit.

Other food plants seen and not already mentioned included a small twiggy pink flowered Hibiscus (flowers, shoots), Cocky Apple *Planchonia careya*, (fruit), Bush Cherry, *Exocarpus latifolius*, (fruit), Kurrajongs and Bottle Trees, *Brachychiton sp* (seeds), Bush Almond, *Terminalia sp* (fruit, kernal) Batwing Coral Tree, *Erythrina vespertilio* (root), Geebung, *Persoonia falcata* in bud (fruit), *Acacia bidwillii* (root) and other wattles, Kapok, *Cochlospermum gillivraei* (root), *Pandanus spiralis* (fruit, kernals, leaf ends) and a number of Grevilleas and Melaleucas in flower (nectar), including the vivid orange *Grevillea pteridifolia*, cream *Grevillea glauca* with its interesting Bushman's Clothes Pegs seed pods and green blossomed *Melaleuca nervosa*. The medicinal Quinine (*Petalostigma pubescens*) is widespread. All together a most interesting couple of days!

21.8.06: Mt Surprise: We have had an incredibly interesting few days! We left Undara on Saturday morning heading for Cobbold Gorge, south of

Forsayth. We had not originally planned to visit here, but had heard such glowing reports along the road that we decided to make the detour. We were not sorry! A rough gravel road brought us to a peaceful, comfortable campsite, and we booked on the half-day tour the next day - unusual in that it starts at 10am, finishes at 2.30pm and includes lunch.

It was the best experience! Apart from the cruise on the narrow sandstone gorge, caused primarily by faulting rather than erosion, which is secondary, in a thin, silent electric boat which allows close-ups of fresh-water crocodiles and any other wildlife around - tortoises, sooty grunter, a Nankeen Night Heron etc - you get a really good account of early history, geology, wildlife, and THE PLANTS. For anyone interested in tropical Bush Foods, as I am, this was wonderful.

We visited John Corbett's grave (he was speared by Aborigines about 130 years ago) and drove cross country to the top of the sandstone area. A short climb up through the sandstone brought us above the gorge and we able to look down at crocodiles and fish in one of the wider pools below. The climb passed the remnants of an old prospector's wet season camp - a level timber platform built under a deep sandstone overhang - dry, sheltered and above flood height, and not re-discovered till 1930.

Our guide, Bob Manktelow, is a most affable man, and happy to share his vast knowledge. Once he knew I was interested in the plants, he made sure he pointed out the most interesting ones, and provided all sorts of information about them.

He set me straight on Leichhardt's Breadfruit for a start! The plant labelled that at Undara, which had looked so like common Guava, is called Breadfruit, or Common Breadfruit, and is *Gardenia edulis*.



Gardenia edulis

showed the edible rind - I ate it and found it quite palatable - mealy texture and a slightly tangy flavour. I also ate about half the rind of one of the partly ripe fruits, and found it quite pleasant, and suffered no ill-effects. I would certainly have no problem eating a handful of the fruit as far as taste goes.

Leichhardt's Breadfruit is *Gardenia vilhelmii*, quite a different looking and much smaller tree. This looks superficially like shiny-leaved Quinine Berry, and the fruit is of similar size. Bob said it was eaten when the fruit had ripened and begun to dry to about the size of a hazelnut. The rind was then eaten and the spherical seed ball discarded. Most of the fruit on the trees was not ripe, and he said it would cause diarrhoea at that stage. He found an almost ripe fruit and



Gardenia vilhelmii

We saw lots of other food plants too, most with either flowers or unripe fruit: Kunker or Konkerberry, *Carissa lanceolata*

(fruit), *Capparis sp* (fruit), Native Grape, *Cayratia trifolia* (fruit, root), Lolly Bush, *Clerodendrum floribundum* (root), Tree Orchid, *Cymbidium canaliculatum* (stems, leaf bases), Figs, *Ficus opposita*, *F.platypoda*, *F.racemosa*, *F.virens* (fruit, leaf shoots), Bush Banana, *Marsdenia australis* (fruit, flowers), Tennis Ball Tree, *Siphonodon pendulus* (fruit), *Pouteria sericea* (fruit), Maloga Bean, *Vigna lanceolata* (root, green pod), and Nonda Plum, Cocky Apple, Bush Cherry, Dogs Balls, and other plants also seen at Undara. Many of these plants also have medicinal uses, and many, many other medicinal plants were also pointed out, including a *Kunzea* whose crushed leaves smelt exactly like Dettol. Unfortunately, I can't remember all the interesting plants - there were so many.

From Cobbold Gorge we returned to Forsayth, then turned east to Einasleigh. We had a break at Copperfield Gorge, an erosion gorge through which Copperfield Creek flows on the edge of town. Then we drove north on a rough and corrugated connecting track to link up with the Gulf Road and continue east to Mt Surprise.

22.8.06: Atherton: Pushing on east towards the Atherton Tableland we passed through Forty Mile Scrub National Park, and stopped at a picnic area for morning tea. We enjoyed our cuppa in a shelter under the canopy of a huge Burdekin Plum tree and then went on a short walk through the semi-evergreen vine forest. There was good interpretive signage, and lots of interesting plants, including Python Trees (*Austromyrtus bidwillii*), Tuckeroo (*Cupaniopsis anacardioides*), Native Currant (*Carissa ovata*), a couple of *Cissus sp*, some Figs, Bottle Trees (*Brachychiton sp*), and far too many I didn't know. One of these was a vine with long arching canes and slender elongated panicles of red berries.

We stopped for lunch at Innot Hot Springs (and almost scalded my feet in the creek) and before long the vegetation changed abruptly and we were into wet rainforest and climbing.

After Atherton we meandered north on the tableland towards Mareeba.

25.8.06: Mt Carbine: This is as far north as we are going this trip we've decided. Tomorrow we'll turn south. We are currently camped in the old Wolfram mining village, now a caravan/accommodation park, with houses, cabins, units, school camp facilities and powered campsites.

This afternoon the owner took anyone interested on a 2 hour nature/history ramble through the area. He doesn't know much about plants, but is keen on wildlife and local history, so it was very interesting. Less than 20 metres from our campsite is a bower of a Great Bower Bird. Surprisingly, most of the decorations are red - some bits of blue, and green and clear glass, but a lot of red, including a red plastic comb and a red biro.

On the summit of the lookout on the walk were a number of *Capparis sp*, *Exocarpus latifolius* with unripe fruit, *Planchonia careya*, 2 types of *Ficus* and, I think, *Carissa*. There was also Gidee-Gidee (*Abrus precatorius*) with its striking red and black seeds, and sinister reputation.

We retraced our route south through Atherton and then cut across to the coast on the Palmerston Highway through Millaa Millaa (named for the scrambling *Elaeagnus triflora* and its delicious edible fruit) to Innisfail, stopping for lunch at the Goolagan Creek picnic area at the foot of the range. This is the area that bore the full brunt of the cyclone earlier this year, and the damage and devastation was still very obvious. The trees had been broken off well above the ground, and had begun to recover to the extent that small bunches of new foliage had begun to appear along the stripped trunks, and small seedlings could be seen emerging amongst the debris that littered the ground. Nevertheless, it will take years to recover, but it is part of the natural cycle of things.

Another interesting lunch stop on the way home was at Sandy Corner, north of Ayr. We sat under some enormous trees, on the site of the first shop in the district. The *Ficus racemosa* was at least 20 feet in diameter, and the Lollybush (*Clerodendrum floribundum*) was the largest I have ever seen - more than 25 feet high I estimate. There was also a Black Bean (*Castanospermum australe*).

12.11.06: Well, my good intentions went where good intentions often end up, and life got in the way, but I'd been puzzling over the confusion between the "Breadfruits", and once back home I consulted my trusty copy of Cribb & Cribb's *Wild Food in Australia* for further clarification. They cite Leichhardt's Bread-tree as *Gardenia edulis*, but the description in Leichhardt's journal entry of 1845 is definitely NOT this plant, but it DOES match *Gardenia vilhelmii* perfectly! So....*Gardenia vilhelmii* it is.

I needed a new hair conditioner, and the one my hairdresser recommended sounds almost good enough to eat. Among other things, it contains extracts of Quandong, Kakadu Plum, Desert Lime and Wattle Seed!

Rocky, like so many other places, is desperately in need of decent rain. We've had a few light falls of "weed rain" but nothing substantial, and all is dry and parched.

My *Backhousia citriodora* is flowering, but not with its usual exuberance, though the *Syzygium australe* flowered well and is setting fruit. The Native Raspberries (*Rubus probus*) got so confused by the crazy weather that they gave up, and not only stopped fruiting, but died right back, and have put up few new shoots. I'm sure we're all hoping for rain for Christmas, and better weather next year.

So on that note, I'll close by wishing you all the compliments of the Season.

Regards,

Lenore Lindsay and Rockhampton SGAP.

E-mail: lenorelindsay@hotmail.com

EDIBLE SPECIMENS TABLED AT MEETINGS:

26/5/06: *Acacia decora* (edible gum), *Clerodendrum floribundum* (root), *Dioscorea bulbifera* (root), red *Melaleuca viridiflora* (nectar, medicinal leaves, bark to wrap food), *Sterculia quadrifida* (seeds).

23/6/06: red *Melaleuca viridiflora* (nectar, medicinal leaves, bark to wrap food).

28/7/06: *Acacia holosericea* (seeds), *A.podalyriifolia* (flowers), *Cassia brewsteri* var *tomentella* (edible gum from seeds), *Grevillea banksii* and various *Grevillea* cultivars, *Callistemon polandii* (nectar), *Sterculia quadrifida* (seeds).

25/8/06: *Acacia podalyriifolia* (flowers), *Bridelia leichhardtii*, *Elaeagnus triflora*, *Myoporum montanum* (fruit), *Cassia brewsteri* var *tomentella* (edible gum from seeds), *Sterculia quadrifida* (seeds), *Geijera paniculata* (medicinal).

22/9/06: *Acronychia laevis*, *Alectryon tomentosus*, *Austromyrtus bidwillii*, *Bridelia leichhardtii*, *Cyclophyllum oleifolium*, *Dianella* sp., *Eugenia reinwardtiana*, *Euroschinus falcata* (fruit), *Cassia brewsteri* var *tomentella* (edible gum from seeds), *Grevillea banksii*, *G.parallelata* (nectar), *Sterculia quadrifida* (seeds), *Castanospermum australe* (medical research), *Geijera paniculata* (medicinal).

27/10/06: *Brachychiton bidwillii* (seeds and root), *Cassia brewsteri* var *tomentella* (edible gum from seeds), *Castanospermum australe* (medical research), *Dendrobium discolor* (starch from pseudobulbs), *Erythrina vespertilio* (roots), *Grevillea banksii* (nectar), *Lomandra hystrix* (leaf bases), *Sterculia quadrifida* (seeds), *Syzygium wilsonii* (fruit).

EXCURSIONS:

7/5/06: "Kenrol" at Fairy Bower: *Bridelia leichhardtii*, *Carissa ovata* (fruit), *Clerodendrum floribundum* (root), *Cordia dichotoma*, *Dendrothoe glabrescens*, *Diospyros geminata*, *D.humilis*, *Exocarpus latifolius* (fruit), *Ficus racemosa* (fruit, shoots, medicinal sap), *Nauclea orientalis* (fruit), *Nymphaea* sp. (tubers, stems, seeds), *Siphonodom australis* (fruit), *Trophis scandens* (aril), *Zizyphus* sp.*(fruit).

4/6/06: Mt Etna: *Acronychia laevis*, *Alectryon connatus*, *A.diversifolius*, *A.tomentosus*, *Cupaniopsis anacardioides*, *Carissa ovata*, *Pipturis argenteus* (fruit).

2/7/06: Kershaw Gardens, North Rockhampton: The following is an extract from the Rocky Branch newsletter: We joined Gladstone SGAP members on a visit to the Kershaw Gardens. After meeting at the Charles St carpark and setting up a base in the nearby picnic shelter, we set off to check out Thozet's Walk and the bush food plants. We found *Eugenia reinwardtiana* (Beach Cherry), *Ficus racemosa* (Cluster Fig) and *Morinda citrifolia* (Cheese Fruit) ripe for tasting, and also sampled the new shoots of *Geitonoplesium cymosum* (Scrambling Lily) and the white arils of *Eustrephus latifolius* (Wombat Berry).

Aidia racemosa (Archer Cherry) was in bud, and *Ficus congesta* (Byfield Sandpaper Fig) and *Davidsonia pruriens* (Davidson's Plum) carried green fruit. Fruit of two wild limes lay on the ground under their parent trees: *Citrus australis* (Round Lime) and *Citrus garrowayii* (Mt White Lime). After morning tea we walked up through the northern rainforest and *Elaeocarpus grandis* (Blue Quandong) fruit rolled underfoot as we admired the many large trees overhead.

5,6/8/06: Blackdown Tableland: While there were many species in flower, few were food plants: *Acacia macradenia*, *A.podalyrifolia* (flowers), *A.oswaldii* (seed), *Banksia spinulosa* (nectar), *Dendrobium speciosum* (pseudobulbs), *Hardenbergia violacea* (leaves as a tea), and a variety of ferns.

3/9/06: Bouldercombe Gorge: *A.salicina* (seed), *Acronychia laevis*, *Aidia racemosa*, *Alectryon connatus*, *Bridelia leichhardtii* (fruit), *Carissa ovata*, *Capparis arborea*, *Cissus oblonga*, *Dianella caerulea* (fruit), *Dioscorea transversa*, *Erythrina vespertilio* (root), *Diospyros australis*, *D.geminata* (fruit), *Drypetes deplanchii*, *Euroschinus falcata*, *Exocarpus latifolius*, (fruit), *Eustrephus latifolius* (root, aril), *Ficus opposita*, *F.platypoda*, *F.virens* (fruit, shoots, medicinal sap), *Geitonoplesium cymosum* (shoots), *Gahnia aspera* (seeds), *Geodorum densiflorum* (tubers), *Hibiscus heterophyllus* (buds, flowers, shoots, roots), *Lantana camara** (fruit), *Lomandra longifolia* (leaf base, flowers), *Melodorum leichhardtii*, *Passiflora suberosa**, *Planchonia careya*, *Pleiogynium timorense* (fruit), *Psychotria daphnoides*, *Siphonodon australis*, *Sterculia quadrifida* (seed kernels), *Syzygium australe*, *Terminalia porphyrocarpa*, *Tetrastigma nitins*, (fruit), *Trophis scandens* (aril), *Zizyphus mauritiana* (fruit), *Geijera salicifolia* (medicinal), *Xanthorrhoea johnsonii* (leaf bases, growing shoot), *Macrozamia miquellii* (treated seeds).

1/10/06: Prizewinning garden at Koongal: Nectar-bearing trees and shrubs such as Grevilleas, Callistemons and Banksias, as well as Wattles, Lillipillies and Dianellas.

5/11/06: "Belgamba" at Struck Oil: While this is an extremely diverse and very interesting area botanically, we actually didn't note many food plants along the route we took the day we visited, as the focus of the visit was to see those species unique to the area which just don't happen to be food plants: *A.salicina* (seed), *Acronychia laevis*, *Aidia racemosa*, *Alectryon connatus*, *Bridelia leichhardtii* (fruit), *Carissa ovata*, *Capparis arborea*, *Cissus oblonga* (fruit), *Corymbia intermedia*, *C.tesselaris*, *C.erythrophloia* (nectar), *Eucalyptus melanophloia*, *E.moluccana*, *E.tereticornis* (nectar), *Exocarpus latifolius*, (fruit), *Eustrephus latifolius* (root, aril), *Ficus opposita*, *F.platypoda*, *F.virens* (fruit, shoots, medicinal sap), *Geitonoplesium cymosum* (shoots), *Gahnia aspera* (seeds), *Geodorum densiflorum* (tubers) *Diospyros australis*, *D.fasciculosa* (fruit), *Pipturis argenteus*, *Pleiogynium timorense* (fruit), *Psychotria daphnoides*, *Melodorum leichhardtii*, *Passiflora suberosa**, (fruit), *Sterculia quadrifida* (seed kernels), *Syzygium australe* (fruit),

LETTERS TO THE EDITOR

Lawnton. Q. 4501.
July 2006.

.....I bought myself a food processor recently so I could process bunya nuts more successfully. Until now I have boiled the nuts, then put them through a mincer before storing them in the freezer. That way I have bunyas all year round.

I actually bought the processor to make Bunya Nut Cream. I had tried to make it in a blender, but this damaged the blender. The motor was not strong enough to cope with the glutinous nature of the cream. The food processor however, handles it beautifully, and the cream turns out very well. I also found that it was ideal for blending the cooked nuts into a much finer consistency than I can get by mincing them.

To make Bunya Nut Cream, process 250g of boiled bunya nuts to a fine consistency. Then add 250ml of hot water, a little at a time. Then add about 3 tablespoons of macadamia oil (or olive or canola oil - macadamia gives the best flavour) and a pinch of salt. Then add sweetening - either honey or sugar. If using sugar, flavour with vanilla or some other flavouring. I might try chocolate or rum or lemon one day.

So far I have only made sweet creams, but this method could probably produce a savoury sauce, by using hot stock instead of hot water.

I also found that minced cooked bunya nuts make a great porridge, and the addition of minced bunya nuts to Pumpkin Soup creates a gourmet food. My family just love it. One day I must try making soup from just bunya nuts and the usual soup ingredients like onion, celery, carrots, etc. I frequently use granulated bunya nuts for thickening in stews, casseroles, etc.

I now have three native limes - *Citrus australis* (Round Lime), *Citrus australasica* (Finger Lime) and *Citrus glauca* (Desert Lime). All are being grown in containers at present because of the water shortage. *C.australasica* and *C.glauca* are both grafted. *C.australis* is a seedling. None of them has fruited as yet. I have some very tiny *C.australis* seedlings coming up in my seed boxes, and my brother gave me some seed of *C.australasica* recently, which I have not yet planted.

Regards,
Jan Sked.

* Jan is both the Queensland Study Group Liaison Officer and the author of "Go Native" Wild Food Cookbook, published by Pine Rivers SGAP in 1985. This makes it one of pioneers in the genre. I have very fond memories of the magnificent food served by Pine Rivers SGAP

at a bushfood banquet which was part of the first ASGAP Conference I ever attended (Brisbane 1985 I think).

Carinya Haven Flowering Food
Roma. Q. 4455.
August 2006.

.....Thank you for Newsletter 50. This was a real gem for me, with references and articles on food plants that I am trying to grow.

The dry is quite trying with no real rain since last August, and future planting put on hold for the present.

Keep up the good work.

Yours faithfully,
John Aisthorpe.

PROPAGATION: SOME THOUGHTS.

(This is a precis of a talk originally delivered by Robert More at the Northern Districts Horticultural Society a few years ago, which was printed in the SGAP Qld Bulletin of December 2003.)

As a child growing up in the country I had been interested in seeds and the resulting plants. I was encouraged to place seeds on damp cotton wool in a saucer and record how long it took for the seeds to germinate, how many germinated, etc. Another way was to place seeds between two layers of damp blotting paper and place in a bottle and watch the shoots and roots grow.

However, not all germinated, as all seeds do not germinate under the same conditions.

My Grandfather was a great bushman and his first lesson to me was to take a pad of Emu droppings and ask me to plant it. The result was that I grew over 20 species of plants. Needless to say he then asked me to try and identify the different species. He called it "regeneration".

A large majority of native plants will not grow unless the seeds pass through an animal or go through a bush fire. Some seeds need an abrasive treatment. This applies particularly to the Acacia group. Use two sheets of sandpaper and rub them and then plant.

Most of the plants that grew from the Emu droppings were edible natives suitable for human consumption. There are common names for them, eg. "Five Corners" - small green berries with a 5-spike calyx - lovely and sweet and could be kept in a pocket and eaten at any time. "Geebung" - about the size of a grape - green with a reddish blush. If squeezed, a sticky fruit was extruded, which you could chew or suck for ages. "Cherry Bing" - grows on a prickly bush (I think of the Epacris genus) - a bright cherry red half pea size sweetish astringent fruit which leaves the mouth feeling very clean. "Mistletoe" was another very tasty fruit, as well as the Prickly Pear

which we used to put on the coals until they bubbled and were then allowed to cool. They were a treat.

With banksia and similar plant types you can place a layer of grass on top of the seeds and burn. This technique can be applied to grass trees.

Fern Spore - most of the plants that grow from spores go through two cycles and two gender (male and female). Plant in moss which you then flood with water. In the correct conditions the two parts join and grow. Spores like cracks in rocks, limb junctions or rough bark on trees - anywhere moisture is retained.

I could go on and on but the main thing to remember is - look at your plant and the seed you wish to grow and try to duplicate the conditions. Do not try to grow arid plants in a soggy mix and vice versa.

Remember, sterilize all utensils and gear, otherwise you can spread disease throughout your plants.

Main Mix:

- 1 part peat
- 1 part perlite
- 1 part vermiculite

Additives:

Sand, humus, charcoal, decomposed orchid bark (for epiphytes), manures and sphagnum moss.

Report on the Gladstone Eco-Fest at Tondoon Gardens, 4th June 2006.

Three Rocky members attended, sold our books and helped out the Gladstone Branch. Their tent was a hive of activity, with a display of Bush Tucker by a local enthusiast, a large number of native trees and shrubs provided by SGAP members and Mt Larcom School nursery for sale, and the ever-popular "Crazy Critters" made from the seed pods of many plants, both native and exotic. The Friends of Tondoon occupied one side of the tent with members ever ready to give advice about Tondoon Gardens and native plants in general. They also had a large amount of native fruit jams and soap for sale and these proved very popular, especially as there was Davidson's Plum and Finger Lime jam, and Lemon Myrtle and Coconut cake for the tasting. The Tondoon kiosk had a small stall at the end of the tent, selling tea, coffee, damper and jam, which proved popular with everyone, especially those manning the stalls. The Gladstone group had an extensive display of brochures on weeds, fire ants and many other environmental subjects which created a lot of interest. The "Totally Wild" group and live Bilbies were a big draw-card. It seemed to us there were a lot more people interested in looking for local native plants and advice on planting them in water wise gardens. The big bad question, as usual, was "Where can I get them....?"

Ann McHugh.

AUSTRALIAN SANTALUM.

Santalum belongs to the family Santalaceae, which has over 30 genera and 400 species in tropical and temperate parts of the world. In Australia there are 10 genera, 4 of which are endemic. All Australian genera, except one, *Dendromyza* which is a stem parasite, are root parasites.

The best known of the Australian genera are probably those that bear edible fruits - *Santalum*, *Exocarpus* and *Leptomeria*. The *Santalums* are generally known as Sandalwoods or Quandongs.

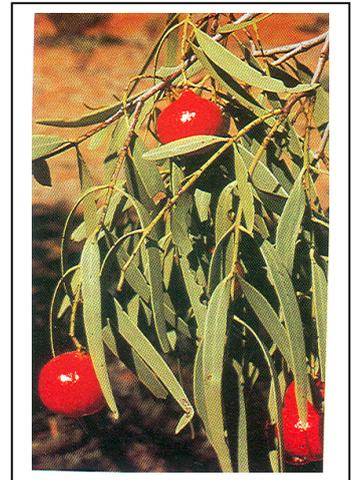
Of these, ***Santalum acuminatum*** (Quandong, Sweet Quandong, Native Peach) is the most famous food plant.

This species is widespread in semi-arid southern Australia, and occurs naturally on coastal dunes, gravel plains, granite outcrops and creek banks. It is not fussy about soil type or its host plant, which may be a perennial grass, a legume or a herb.

It forms a large shrub or small tree, which sometimes spreads by underground stolons, giving rise to groves or thickets. Leaves are long (up to 9cm), tough, and yellowish or grayish green. Flowers are tiny and yellowish, in large terminal clusters. Fruits are round, shiny red, and vary from 15 to 50mm in diameter. The single seed has a rough pitted shell, from which the flesh withdraws so that it rattles when ripe. The oily kernel is edible, though the flavour can vary from sweet to unpleasant. The seed was formerly used in Chinese Checker sets, as well as its continuing use in jewellery.

This is one of the few indigenous food plants that has been the subject of extensive research as an alternative food crop for drier regions. This began formally in 1973 with an experimental planting near Quorn in South Australia by the CSIRO. There is now an Australian Quandong Industry Association, from which an enormous amount of information is available.

Germination was an initial difficulty with fungal problems affecting seed viability. A number of methods have been trialled, including cracking the fresh nut and removing the kernel for planting. Germination can take up to 12 months. It seems a moist, well drained potting mix and a temperature of 15-20°C gives best results.

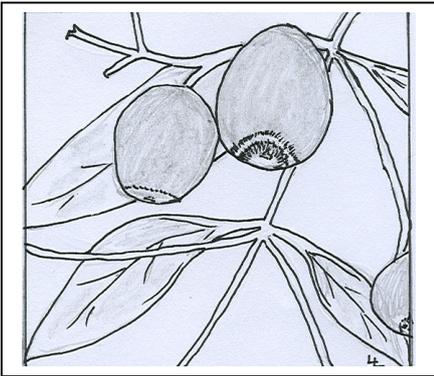


Santalum acuminatum

A host plant is essential in the same pot and must be introduced at an early stage. Early planting out is also necessary, as the tap root grows much faster than the shoot. Spring is regarded as the optimum time. Seedlings show genetic variation, and work has been done on selection of suitable cultivars, but current research is focussed on grafting good fruiting clones, making possible the establishment of large scale commercial plantations.

While Quandongs have a long history of being eaten fresh, either raw or cooked, the main commercial use is for jams, jellies, chutneys and pies. It is available from specialist shops and suppliers.

Santalum lanceolatum (Northern Sandalwood, Bush Plum, Sandalwood) is the most widespread species of the genus, but is more common in northern regions, where it is found mainly on sandy soils. It is also a large shrub or small tree, but the leaves are grayer and more pendulous than Quandong, and the fruit is smaller, with a prominent circular scar at the top. They are blue-black when ripe with sweetish flesh, and look a bit like gumnuts when green. Flowers are cream or pale greenish. Aborigines mashed and soaked the roots in water to make a liniment, and also used the ground seeds similarly.



Santalum lanceolatum

The aromatic timber has been exported in a very small way to Asia.

Santalum murrayum, the Bitter Quandong, is found in the arid lands in the south of the continent, from Western Australia to south-west Victoria. It grows on gravelly and sandy loams, dunes, open woodlands and shrublands.

It too forms a shrub or small tree, and its narrow, lanceolate leaves have a hooked tip. They are yellowish green, and up to 3.5cm long. Small yellow flowers are followed by globular, brownish red, bitter fruit.

Aborigines are reported to have eaten the large pitted seeds and root bark after roasting.

Australian Sandalwood, ***Santalum spicatum***, grows in wood and shrublands in southern West and South Australia. It is a large spreading shrub with grey green, blunt tipped leaves up to 7cm long. Clusters of small, red-green, scented flowers are followed by green to brown rounded fruit about 2cm in diameter.

The timber of this species yields the valuable sandalwood oil, and large areas of south west Australia were denuded of Sandalwood trees to supply the Asian export market. This was in spite of the product being said to be inferior to the Indian Sandalwood, ***Santalum album***.

Although its rotation time is much longer than the Indian variety, plantations are being established in West Australia to take advantage of this demand.

In spite of its common name, Indian Sandalwood is also found growing naturally in Australia, along the north coast of the Northern Territory. It grows in sandy shrublands behind mangroves and beside billabongs.

It is a dense shrub with glossy ovate leaves to 7cm long with obvious veining underneath. Its tiny red or greenish flowers are followed by small (about 7mm) black edible fruit.

The valuable timber is its attraction, and research is underway near Kununurra which focuses on determining an appropriate host, which

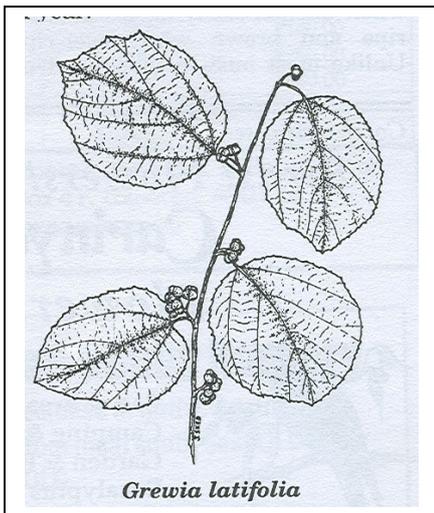
will not only allow the *Santalum* to reach maturity in optimum condition, but will itself have commercial value. This will open the way to the establishment of viable plantations.

Currently, a succession of 3 host plants is used: an *Alternanthera* sp, then an *Acacia* sp. or *Sesbania formosa*, and finally *Canthorium umbellatum*. Other species producing valuable timber are being trialled as the final host.

As the wood is currently worth around A\$20,000 a tonne, this research has definite commercial application.

Edible Grewias of the Townsville Region.

Grewias are in the family Tiliaceae, which is closely allied to the Family Malvaceae (*Hibiscus* etc). The flowers are bisexual, have radial symmetry and normally have 5 (rarely 4) petals and sepals. They occur in WA, NT, QLD, NSW, Asia (through to China) and Africa. Of the 8 species listed as occurring in the North Kennedy Pastoral District, I know of only 3 in the Townsville Region, 2 of which are known to be edible.



Grewia latifolia (Dogs Balls): This plant varies between a low shrub, 1 metre high, to a low spreading tree to 3.5 metres, with downward arching branches. The leaves are round to heart shaped (from the size of a 50 cent piece to an outstretched hand) with a deeply serrated margin. The flowers are borne along the branches and change from yellow to burnt orange as they mature.

These quickly give rise to succulent fruit; initially green, then red, reaching full maturity when black. The beautiful combination of these multicoloured fruit can give the plant a bejewelled appearance. The fruit are often bilobed, which is where the plant gets its unsavoury common name.

The fruits are edible and are at their best when half red, half black. They have quite a deserved reputation among local bushwalkers as Townsville's best bush tucker. I frequently hear it being compared to a slightly tart fruit salad.

Although they reach their greatest density on well-drained rocky slopes (such as the lower slopes of Mt Louisa), they seem to be adaptable to most soil types, and seeds germinate readily with flesh removed. Regarded by some as a weed, this is actually a beautiful plant well-adapted to Townsville conditions. They fruit in February to March, so drive down Banfield Drive and have a look.

Grewia retusifolia (Dogs Balls, Dysentery Plant, Turkey Bush, Emu Berry): Unlike *Grewia latifolia*, this plant is only a small herb to 50cm high. This twiggy plant has alternate leaves with serrated margins and a brilliant white underside. In February it can be seen flowering in local grassland. The flowers are white with 5 fairly

long petals. These will eventually form into distinctly bilobed fruit, green when unripe, shiny deep red when ripe and brown when over-ripe. Unlike most bush tucker, the fruit are dry and crunchy instead of succulent. When ripe, the fruit can be placed in the mouth and the crusty flesh removed and crushed between the teeth. Initially it is like chewing cardboard, but within seconds, there is a delightful rush of fruity flavour. If boiled, they apparently make a refreshing, nutritious drink.

This *Grewia* is sometimes called "Dysentery Plant" as the raw leaves can be chewed as a simple and not unpleasant cure for dysentery and diarrhoea.

Although not commonly grown, this plant can be quite attractive when grown in a controlled garden situation, and may be suitable for rockeries.

Greg Calvert (Reprinted from "The Native Gardener", Newsletter of SGAP Townsville Branch, November 2003.)

Davidson Plum Jam.

1. Collect the fruit and remove the skins and seeds (usually 2 per fruit). Put the fruit into a saucepan and add just enough water to be barely visible under the fruit pieces. Davidson Plums are juicy and do not need as much added water as do some other fruits.
2. Boil lightly for about 15 to 20 minutes.
3. Using a cup, measure how much boiled fruit there is, and then put it back into the saucepan together with an equal volume of raw sugar. Stir and add in the juice of one lemon.
4. Boil lightly for 20 to 25 minutes, depending how liquid the boiled mixture looks.
5. Bottle (and put on the lids) whilst mixture is still hot.

From SGAP Cairns Branch Newsletter 62.



Siphonodon pendulus