
NEWSLETTER

NUMBER 20.

FEBRUARY 1994.

323 Philp Ave.,
Frenchville.
Qld. 4701.
28/2/94.

Dear Members,

I've noted a somewhat medical/pharmaceutical flavour about this newsletter. I hope you don't mind the "ripple effect" of our primary interest in food plants, and, to add weight, "S.G.A.P. Hill" in the Kershaw Gardens is officially the "Thozet Useful Plant Area".

Our mail has brought us some "official" correspondence, which I'll mention here rather than in the letters section. The first is advance notice of the ASGAP 1995 Biennial Conference at the Ballarat University, Victoria, in September 1995. Study Groups have been invited to mount displays on Tuesday evening, 26 September, from approx. 8.00-10.30pm. Sales will also be permitted. At this stage I am planning to attend, but as Ballarat is even further away than Sydney, I won't be bringing any plant material with me. However, just as Dick and Fred were able to get together and do us proud in Sydney, perhaps we have some Victorian members who could do the same, particularly with such early notification. I look forward to hearing from you.

The second item is an exchange membership between our Study Group and the West Australian Nut and Tree Crop Association, which should be of mutual interest and benefit. (Our group is also financially advantaged due to the differing membership fees). WANATCA President David Noël has asked me to draw members' attention to the Australasian Conference on Tree and Nut Crops, to be held in Lismore, northern N.S.W., in mid-September 1995. This may be of particular interest to those of our members concerned with farming, agricultural research or the nursery trade. An "expression of interest" form has been included so you can photocopy or write a reply. Do we have any artistic/knowledgeable members (either singly or as a group) who could prepare a suitable poster(s) focusing on our Study Group and/or Australian food crops for display at the conference? As well, I have included a number of reprints from WANATCA's journal, "Quandong", featuring some of our

present and past members with overlapping interests. I'm sure we were all saddened by the sudden and unexpected death of Yve Wignall, who edited the 1993 ASGAP newsletters on behalf of Western Australia, and send our condolences to her family. I have included in this issue some material from notes she made at a public lecture presented by Professor John Considine at the University of Western Australia, and which she shared with us in ASGAP Newsletter 13.

During the Christmas-New Year period I had two new and interesting experiences. I attended the Maleny Folk Festival, and I spent a week on Coochiemudlo Island in Moreton Bay - more of which anon. It was also very pleasant to renew acquaintances with Garry Reed, who called in on his way between Brisbane and Collinsville. On his return trip, he left us with a selection of seedlings he'd germinated from the area, so it will be interesting to see how they fare here. Garry has set up a project to create a prototype of ecological urban living, and established The Finney Road Co-operative Housing and Ecological Land Use Facility. To quote from the pamphlet: "We are seeking committed individuals to share in the ongoing development of a suburban property set up to demonstrate ecologically sustainable principles. It is intended that the property be not merely a model, but a centre for contracting business, growing, harvesting, utilising and marketing plants - a viable business in itself." If you would like further information, contact Garry at P.O.Box 817, Indooroopilly, Q. 4068.

This month has also seen the ripening of a number of native fruits at the Kershaw Gardens, and the consequent excitement of tasting and experimenting with them. There have been heavy crops of *Capparis lucida* and *Microcitrus garrowayi*, and some fruits of *Eromocitrus glauca*, to compensate for the sparse *Syzygium* harvest in Rocky.

Special thanks to Neil Hoy for setting up the address label database which will spare me the usual writer's cramp.

Regards,

Lenore

Lenore Lindsay and Rocky S.G.A.P.

NEW MEMBERS:

Welcome to the following new members:-

Christine JONES: P.O.Box 131, Strathalbyn. S.A. 5255.
Frank JORDAN: P.O.Box 5170, West End. Q. 4101.

EDIBLE SPECIMENS TABLED AT MEETINGS:

26/11/93: *Canthium oleifolium*, *Capparis canescens*,

Coelospermum reticulatum, Crinum pedunculatum, Dioscorea transversa, Euroschinus falcata, Leptospermum petersonii, Myoporum debile, Nauclea orientalis, Scaevola "Purple Fanfare", Syzygium australe, S. luehmannii, and a collection of nectar bearing Callistemons, Eucalypts, Grevilleas and others.

28/1/94: Eupomatia laurina, Randia fitzalanii, and a mixed bunch of nectar flowers.

25/2/94: Acacia aulacocarpa, A. saligna, Alectryon connatus, Araucaria bidwillii, Canavalia maritima, Capparis lucida, Dianella sp.1 and 2, Eremocitrus glauca, Microcitrus garrowayi .

EXCURSIONS:

7/11/93: Rosslyn Head, saltpan and Des McLucas's garden: Acacia aulacocarpa, Acronychia imperforata, Alectryon connatus, Avicennia eucalyptifolia, A. marina, Banksia integrifolia, Canthium coprosmoides, Capparis sp., Carissa ovata, Cassytha filiformis, Cissus oblonga, Citriobatus spinescens, Clerodendron inerme, Coelospermum reticulatum, Cupaniopsis anacardioides, Cycas media, Cymbidium canaliculatum, Dianella sp., Diospyros ferrea, Euroschinus falcata, Exocarpus latifolius, Ficus macrophylla?, F. opposita, F. virens, Gahnia aspera, Hibiscus tiliaceus, Ipomea pes-caprae, Melaleuca dealbata, M. quinquenervia, Planchonia careya, Pleiogynium timorense, Pouteria sericea, Sarcocornia quinqueflora, Sesuvium portulacastrum, Xanthorrhoea johnsonii.

5/12/93: Christmas barbecue at the Kershaw Gardens:

6/2/94: Bob's Creek at Upper Ulam: Acacia aulacocarpa, A. bidwillii, A. podalyriifolia, A. salicina, Amyema sp., Capparis canescens, Cassytha filiformis, Citriobatus spinescens, Clerodendrum floribundum, Crinum pedunculatum, Cupaniopsis anacardioides, Cycas media, Cymbidium canaliculatum, Cyperus sp., Dianella caerulea, Emilia sonchifolia, Erythrina vespertilio, Eucalyptus citriodora, Eustrephus latifolius, Exocarpus latifolius, Ficus opposita, F. racemosa, Geitonoplesium cymosum, Grewia latifolia, Hibiscus heterophyllus, Livistonia decipiens, Lomandra longifolia, Melodorum leichhardtii Nauclea orientalis, Oxalis corniculata, Planchonia careya, Rubus parvifolius, Solanum nigrum, Syzygium australe, Wahlenbergia sp., Xanthorrhoea sp..

Aussie tucker on menu

SYDNEY — Guests at a hotel in Shanghai can experience a taste of Australia from today when the hotel's resident Australian chef prepares Aussie a la carte. On the menu at the Holiday Inn will be loin of Gippsland lamb baked in paperbark with bunya nut and bush mint puree, and jumbuck in a tucker bag with Quangdong chutney. For dessert, international travelers can have pavlova with sugar bark garnish or baked egg custard with brambleberries and toffee glaze. Pies and pavlovas are on the tucker list for the not-too-adventurous.

M.B. 21.5.92

Treat for Big Apple

ADELAIDE — New Yorkers were served yabbies, emu, and kangaroo in an introduction to bush tucker at one of the Big Apple's major hotels on Australia Day. Guests at the Trump Plaza tasted cuisine from chefs Andrew Fielke and Ronald Bodney, of Adelaide's Red Ochre Grill Cafe Restaurant.

The pair were in New York for two weeks, initiating Americans in indigenous cuisine such as warrigal spinach crust and native pepper leaf 'dampéf' with whipped eucalyptus butter.

Their visit included taking members of the New York media on a culinary expedition of Australian produce.

"The prospect of this doesn't daunt me at all," Mr Fielke said.

M.B. 8.2.94.

LETTERS TO THE EDITOR

113 Chapman Pde.,
Faulconbridge. 2776.
4 Jan '94.

Dear Lenore,

Thank you for persevering. The newsletter is devoured with enthusiasm, and I am keen to keep receiving it. More power to your arm - both in producing it and getting copy.

The articles are of great use in my teaching, and in encouraging landowners to consider native foods for horticultural use in my consultancy work.

Since 1991 we have bought a different house (thus the change of address). I am clearing a chicken run site (long abandoned) where I hope to grow a native fruits garden. Already I have Davidson's Plum and native limes. My daydream is to have a year-round supply of fresh fruits, and some for jams and conserves to serve to guests in our Bed and Breakfast. We have two areas to plant - one dryish, about 10m x 20m, and the chook pen site, about 10m x 8m, which is cooler and damper. At 450m altitude, with no frosts and Australia's mildest climate, we should be able to grow anything but arid - we have 1450mm rain each year, mostly January to July, with a dry Spring. Soil is clay over sandstone.

Any suggestions gratefully received.

All the best for another exciting year,

Regards,

Danny Wotherspoon.

(As I'm more familiar with the dry tropics, perhaps members with temperate climate experience might care to suggest some suitable and interesting plantings. Ed.)

P.O.Box 313,
Manly. N.S.W. 2095.
31/1/94.

Dear Lenore,

.....Bunya cones (*Araucaria bidwillii*) are falling down here at present so I've been availing myself of a few nuts. One tree here in Manly has about 15-20 large cones on it. Some of these have already fallen, but until the cones fall apart I won't be able to tell how many fertile nuts are contained therein. Another tree, growing on a street verge of all places, appeared to have only 12-15 seeds per cone. A group planting would presumably ensure better pollination.

I gave a short talk at uni on the Quandong and its potential as an arid-land food crop, or even backyard bush tucker tree. I planted three seedlings in my home town of Armidale last (1993) July. These were grown by a farmer called Bruce Maynard from out Narromine way. He sella the trees (with their accompanying lucerne host plant) via a nursery in Narromine run by Jan Smith. The nursery is Edgerton Nursery, McNamara's Lane, Narromine, 2821, phone 068 891 187. I think this is a very worthy enterprise and should be supported. The trees were good and healthy, about 60cm high, and cost \$20 each at the time.

I'm also trying to grow *Macadamia tetraphylla* in Armidale. These trees were also seedlings, bought from Mountain Greenery Nursery, P.O.Box 12, The Patch, 3792, phone 03 756 6420. 1993 prices were \$3.50 per 20cm tree and \$35 per 180cm tree.

Due to the fact that I am down here in Sydney doing the uni course (B.Sc.Urban Horticulture), I have not been able to give either the Quandongs or the Macadamias the attention they deserve. To date they are hanging in but I have high hopes for them. I intend to give you further reports on this in the future.

Rubus parvifolius fruited for the first time this summer, and are growing vigorously where enough water was applied. I tied some of them up to stakes to see if they respond positively to such attention. Other local bush tucker plants doing well include *Billardiera scandens* (one year to flower and fruit from germination), *Eustrephus latifolius* (no fruit yet due, I think, to lack of cross pollination), and *Dianella* sp.. I have eaten *Dianella* berries, usually spitting out the seeds, and as far as I know have not suffered any ill effects. I notice in "Gardens for Children" by Tigger Wise (Kangaroo Press, 1986) that *Dianella* gets a mention as a no-no to plant because, "it seems the fruits are poisonous. A child died in New Zealand after eating the fruit of this plant, and an experienced bushman, after eating one fruit only, was overcome with an overwhelming desire to swing to the left when walking." (P.90). This doesn't sound convincing, but obviously any further information on the toxicity or otherwise of these beautiful blue berries (I've got a white berried one in Armidale) would be of interest.

There is such a lot one could write about. Thanks for the newsletter. I have found it very good, and am looking forward to continuing our association. The field, as they say, lies open to intellect. It's a very interesting and exciting field, and one suspects it's going to take a lot of labour from a lot of people before its potential is more fully realised.

Yours sincerely,
Alex Mackenzie.

(I've eaten Dianella berries raw and in jam for years, and suffered no ill effects that I'm aware of. Again, I've no experience with cool climate varieties. Comments and additional info. appreciated. Ed.)

P.O.Box 131,
Strathalbyn. S.A. 5255.
December, 1993.

Dear Mrs. Lindsay,

I have recently become a member of S.G.A.P. (Murray Bridge group), and note in the November Journal the existence of an Australian Food Plants Study Group, which I am keen to know more about.

I have a particular interest in Aboriginal bush foods, and the usage of Australian native plants. This interest includes a wide range of plants and the usage of fruits, seeds, foliage, roots and tubers. I have undertaken post graduate study and research work in this area, and currently promote and market Australian native seeds.

I am interested to learn more about this study group, and to contribute in any way I can.

Yours sincerely,
Christine Jones.
B.A.(Lib.St.), Grad.Cert.Ab.St., B.Ed., Media Cert.
Co-owner/Director Australian Bush Products.

15 Patricia St.,
Karalee. 4306.
5/12/93.

Dear Lenore,

It is still very dry in Ipswich and I seem to spend most of my time watering. I have not planted anything else this year. My two Peanut Trees fruited for the first time. I found they tasted similar to green beans with a slight nutty flavour. My *Syzygium australe* had very little fruit on it, and most of that was eaten by grubs. They were dry and bitter, rejected even by the fig birds which will eat anything. The *Eupomatia laurina* has buds on it. It flowered last year but did not set fruit. I have several sandpaper figs, but I do not know which species. The figs are either hard and reddish or soft, green and oval, turning black when ripe. The first is dry and gritty, while the second tends to be slimy. I do not get to sample them very often as the fig birds eat them green. The Burdekin Plum is in flower for the third year, but I think it is a male tree.

I was in Rockhampton last September and spent an afternoon in

the Kershaw Gardens. It is beginning to look beautiful, but I was very disappointed to see a large group of children rampaging through, breaking off branches, trampling small plants and throwing food scraps and other rubbish into the water. I was wondering if it is permissible to collect seed from the gardens. I collect seed for the horticulture unit at the high school I work at and am always looking for unusual native plants. These are propagated as part of the student course and then sold at cost price. They are doing a unit on fruit trees next year and I am keen to obtain seed of some native fruit trees.

Yours faithfully,
Judith (Brass).

(Kevin Quinn is our contact person at the Gardens. Vandalism is a constant problem there, as in most public facilities these days. If anyone can help with surplus seed, please send direct to Judith. Thanks. Ed.)

SHORT EXTRACTS:

The Secretary of the New England Region of S.G.A.P. writes asking if we have sets of slides available for hire or loan (which we don't at this stage, but it would be great if we could get some members working on one - Study Group would pay cost of duplicating any suitable slides), and also if we have anyone available to speak to their group. They would be prepared to pay reasonable accommodation and fares. Do we have any takers, particularly in the vicinity of Armidale? Please let me know if you're willing/able.

Trevor Mein, 26 Jessie St., Northcote, Vic. 3070, is trying to source *Terminalia ferdinandiana*, *Morinda citrifolia*, and *Adansonia gregorii*. Please contact Trevor if you can help.

Jack Thompson hopes some day to be able to help develop Australian native plants into crops. He feels the *Garcinia* spp. are a particularly attractive group, though *Echinochloa turnerana* may be the best bet in the long run.

New member Frank Jordan has managed to include some native fruits in his garden, and would like to find out a bit more about others. He has a few of the "bush tucker type" books, but is disappointed that they have little information about growing the plants in a backyard situation. Some of his favourites that have fruited are Zig-zag Vine, Sandpaper Fig, Native Mulberry (*Pipturis*), and Dysentery Bush (*Grewia*). He is still waiting for the Lollygobble Vine (*Salacia*) and Finger Lime to fruit.

BUSH TUCKER, HEALING PLANTS AND SEAFOODS

The traditional Aboriginal way of life is shown in this interesting and informative program. Aborigines demonstrate how they make use of an

abundance of natural foods supplied by the land, for example, the techniques used for cooking fish, yams and other tubers. The use of plants by Aborigines for medicinal purposes is also covered.

30 mins Produced by The Koori Heritage Trust

Order

Video Education Australasia
111A Mitchell Street Bendigo Victoria
Australia 3550
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\$75



Arid Bush Tucker (Part III)

What is edible?

by David Phelps, QDPI, Longreach

One thing which I have not mentioned in my articles is the danger of poisoning from plants. Whilst I would encourage everyone to have a go at tasting bush tucker, it is essential to remember that most native plants are inedible. Many are poisonous if taken in large doses.

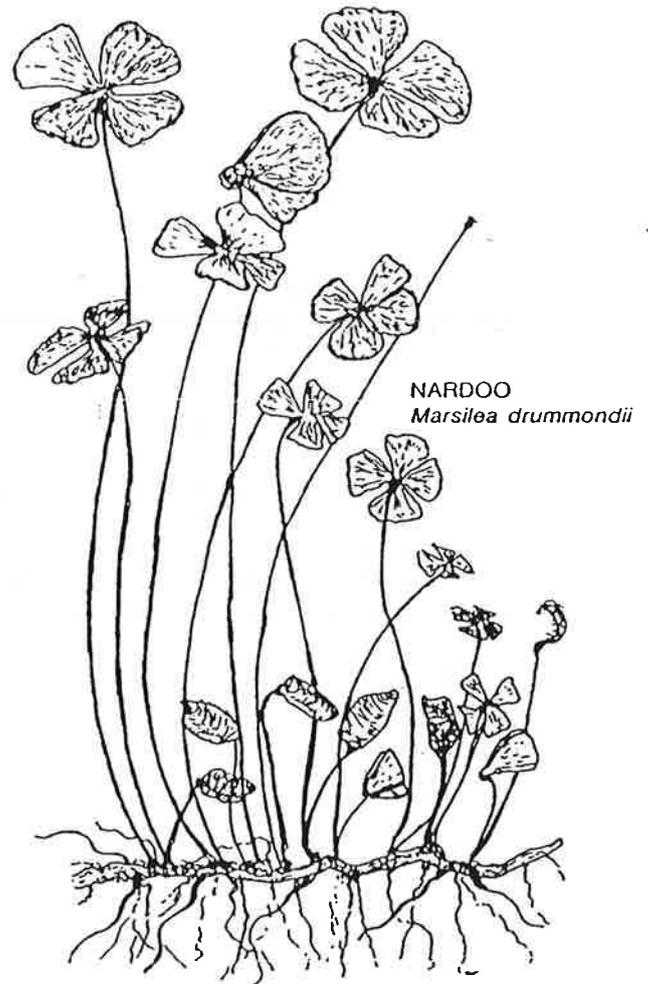
There are a series of "tests" used by most naturalists when tasting unknown plants. These might be of special interest to parents with children who insist on tasting everything and anything! The tests are:

- (i) Rub some of the juice from the portion of the plant to be eaten on your wrist, just behind the palm of the hand. The skin there is quite sensitive and should show if there is any allergic reaction within a few hours.
- (ii) If no reaction is noted, rub some on your lips. Again, wait a few hours. Examples of a reaction may be redness, slight swelling, itching, warming or stinging.
- (iii) If your lips are unaffected, taste a small amount. If the fruit, leaf or bulb you are tasting is extremely bitter or acrid, then don't push your luck! Some fruit (e.g. wild orange, ulcardo melon) are not tasty until fully ripe, so it can be worthwhile to try again in a few weeks. Also, some plants (e.g. pigweed) taste different according to soil type and seasonal conditions.

In the arid regions it is the native legumes (beans and peas) that are the most dangerous. In the tropics, cycads, the finger cherry and many lilies are poisonous. Eucalypt sap is also toxic.

Some of the safe plants are: Burdekin plum; mistletoe (fruit) wattles (normally roasted

seed); pigweed (leaf); grass seed (e.g. star grass seed was used to make flour by the Aborigines); ulcardo melon; ruby saltbush (fruit); common saltbush (leaf); wild orange; nipan; sandalwood; quandong; emu apple (all fruit) and bauhinia sap (raw or as a sweet earthy drink). The desert lime fruit is meant to be especially refreshing, and bush bananas and the native pear are supposedly very tasty vegetables. I am yet to try the last three, but am keen to do so. If anyone has these plants on their property, I'd be interested to know.



The safest way to avoid poisoning from plants (when tasting fruit, seeds, nuts, leaves, sap, bulbs or flowers) is to have them identified. This can be done through most QDPI offices, or an extremely useful guide is Tim Low's "Wild Food Plants of Australia" (Angus and Robertson) which retails at \$24.95.

Happy tasting!

COMMERCIAL USE OF BURSARIA SPINOSA

Reg Smith Ph.D.
Phytex Australia Pty. Ltd.

The genus *Bursaria* is native to Australia, occurring throughout all states. The most common species is *Bursaria spinosa* (Blackthorn) which is found mainly in NSW, Victoria, South Australia and Tasmania. It was first described in Curtis' Botanical Magazine 1815 after a sample was taken back to Britain in 1793 on one of the returning early fleets.

Commercial Use.

The presence of the chemical *aesculin* in the leaves of the plant was first reported by Professor Rennie in 1890, confirming it to be the same substance found in the bark of the European Horse Chestnut tree.

Apart from some brief reference to the use of timber from the shrub for limited furniture manufacture, little practical use was recorded for the plant prior to the onset of World War II. At that time, supplies of raw material drugs were cut off from their European sources, thereby forcing Australia to look at its own natural resources for possible supplies.

Aesculin had been shown to strongly absorb ultra-violet light and so could be incorporated into sunscreen preparations necessary to protect from sunburn Allied aircrews flying at high altitudes. Its use as a sunscreen nowadays has been replaced by cheaper synthetics. However, it is effective in the treatment of blood vessel disorders, such as haemorrhoids, and also finds use in bacteriological investigations as a reagent in testing for *Streptococcus faecalis*.

Aesculin was manufactured in Australia until the late 1940s, when the D.H.A. Company decided to withdraw from natural product manufacturing as demand was met once again from European sources.

Phytex Australia commenced limited production of *Aesculin* in 1981 from natural stands of *Bursaria spinosa* growing around the outer Sydney metropolitan area. Regrettably, farmers had come to regard the shrub as a

nuisance, due principally to its abundance of thorns and had attempted to eliminate it to all but the perimeters of paddocks. This made it difficult to harvest, other than by hand or brushcutter. Mechanical methods were developed for use wherever suitable stands could be found.

Bursaria has a major advantage over its European rival as a source of *Aesculin* in that, even when cut off at ground level, the plant coppices vigorously by virtue of its extremely well developed root system. Regrowth rates of up to 60cm in 4 months have been obtained following mechanical harvesting. In the Horse Chestnut, *Aesculin* occurs in the bark, which must be removed for processing, thereby killing the naturally slow growing tree.

Harvesting & Drying.

Aesculin occurs almost entirely in the leaves of *B.spinosa*. None is found in the bark and very little in the stem material.

Collection of foliage can be accomplished using manual/brushcutter methods, or fully mechanically by means of a tractor-propelled forage harvester. Harvesting by each method has produced comparable yields. However, leaf loss is generally lower using the brushcutter method, and raw product is less contaminated by extraneous materials, such as grass. Foliage cut by brushcutter has to be fed through a mulching device to reduce bulk, whereas cutting and mulching is accomplished in one action by the fully mechanised method, thereby saving time.

The cut material is taken to a shed for drying, which can be accomplished by forced hot-air draught or simply by air-drying, provided climatic conditions are suitable. The crisp-dry leaf is easily removed from stem material by tumbling and then passed over vibrating screen to separate pure leaf product, which is then hammer-milled and bagged.

(Cont'd. P.10.)

Persian Lilac for Neem-type crop protection

Products from the Neem Tree have gained increasing publicity in recent times for their great ability to protect crops and stored foods from insect attack, while at the same time being safe and natural products apparently harmless to mammals, birds, fish, and even beneficial insects like bees.

While these uses, and other uses in medicine and in land restoration and revegetation appear well established, Neem is unfortunately not suited to colder climates with much frost or with long cold periods below about 9°C. However neem has a relative, Persian Lilac (*Melia azedarach*), which grows in much colder areas such as in southern Australia, and has been rumoured to have similar properties. Persian Lilac is actually native to Australia, as well as south and southeast Asia, and has many names, including Cape Lilac and White Cedar. The following extract, from *Natural Crop Protection in the Tropics*, by Gaby Stoll, is the first documented study which has come to light on insect-protection properties of Persian Lilac.

PERSIAN LILAC - *Melia azedarach* Fam. Meliaceae

1. General

This tree is closely related to neem. It is a native of the Indian Himalayas, but today is widely distributed throughout the tropics and subtropics. As an ornamental tree it is often used for shade in gardens and for avenues (64).

The dried leaves and twigs have been used for centuries to protect cloth, books and leather (13). The seeds possess insecticidal properties as well.

Effective Range

Contact- and stomach poison.

Insecticidal, repellent, antifeedant, growth inhibiting, effective against ticks (52, 145).

Target Insects

- Army worms - Spodoptera spp. (52)
- Asian corn borer - *Ostrinia furnacalis* (52)
- Brown rice plant hopper - *Nilaparvata lugens* (52)
- Cabbage aphid - *Brevicoryne brassicae* (52)
- Citrus red mite - *Panonychus citri* (139)
- Corn ear worm - *Heliothis zea* (52)
- Grain weevils - general (52)
- Green rice leaf hopper - *Nephotettix virescens* (52)
- Imported cabbage worm - *Pieris rapae* (52)
- Large cabbage worm - *Pieris brassicae* (52)
- Migratory grasshopper - *Locusta migratoria* (52)
- Peach aphid - *Myzus persicae* (52)
- Rice gall midge - *Orseolia oryzae* (139)
- Persian Lilac proved not effective against*
- Lesser grain borer - *Rhizopertha dominica*

Remarks

• There are few reports about the use of persian lilac under farm conditions, but some scientific results are given here in the hope that they can be adopted to field conditions. Because this tree is widely distributed it could

make a worthwhile contribution to natural crop protection methods both in field and store.

- Most of the information about persian lilac is related to storage protection, whereas it can also be usefully employed against pests in the field.

- The germination power of stored wheat which has been treated with persian lilac has not been affected (150).

- The insecticidal and repellent substances present in persian lilac are easily soluble in alcohol, but hardly at all in water (13).

2. Methods of Use

In a trial, ripe seeds were shade dried and finely pulverised in a mortar, then passed through a fine meshed sieve. The resultant powder was thoroughly mixed with undamaged wheat at the rate of 0.5 %, 1.0 % and 2.0 % by weight. In the same way a powder was made from dried leaves and also mixed with undamaged wheat, but at the rates of 1.0 %, 4.0 % and 8.0 %. To 100 gm of each of the treated samples 20 grain weevils were introduced.

The effect of persian lilac preparation on wheat in store was examined with regard to:

1. Undamaged seed (Table 1).
2. Population development of the weevils (Table 2).

COMMERCIAL USE OF BURSARIA SPINOSA (continued).

the bark and very little in the stem material.

Collection of foliage can be accomplished using manual/brushcutter methods, or fully mechanically by means of a tractor-propelled forage harvester. Harvesting by each method has produced comparable yields. How-
(cont'd p.13)

Table 1: Average damage of wheat by the grain weevil *Sitotroga cerealella* when treated with seed and leaf powder of persian lilac.

Treatment	Average damage after (days)			
	45	90	135	
Seed powder	0.0	8.99	49.99	99.59
per 100 parts	0.5	0.22	8.45	57.75
wheat	1.0	0.09	0.31	0.44
	2.0	0.00	0.04	0.13
leaf powder	0.0	9.40	57.65	98.19
per 100 parts	0.5	0.48	11.49	83.31
wheat	4.0	0.08	0.22	0.45
	8.0	0.00	0.00	0.04

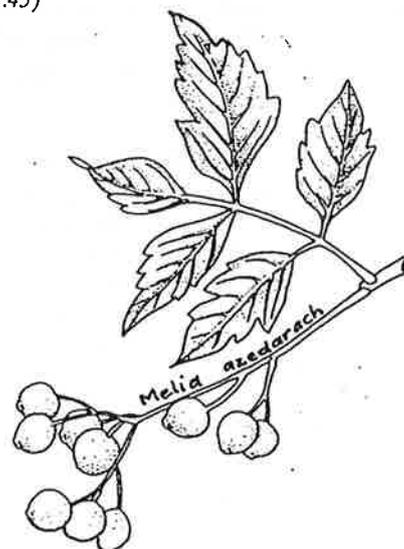
Thus treatment with 1-2% seed powder or 4-8% leaf powder gave good protection for 135 days.

Table 2: Average numbers of grain weevils (*Sitotroga cerealella*) developing from the original 20 in wheat treated with seed and leaf powder of persian lilac.

Treatment	Average weevil population after (days)			
	45	90	135	
Seed powder	0.0	66.0	100.00	223.75
per 100 parts	0.5	0.0	22.00	45.50
wheat	1.0	0.0	0.25	2.00
	2.0	0.0	0.00	0.25
Leaf powder	0.0	80.75	111.25	296.50
per 100 parts	1.0	2.25	30.25	43.50
wheat	4.0	0.00	2.00	3.75
	8.0	0.00	0.00	0.00

Thus treatment with 1-2 % seed powder and 4-8 % leaf powder showed the lowest grain weevil population after 135 days. This agrees with the results of table 1, which indicates the lowest corn damage for the same treatments.

(The 188-page book from which this is an extract is available from Granny Smith's Bookshop at \$34.45)



AUSTRALIAN APHRODISIACS

By Rodney Barker

Keen readers of Issue No.3 of *Focus on Herbs* (page 4) will have noticed that there is a market for aphrodisiacs in Italy. A modest gleaning of the literature reveals that there are a few Australian native plants with reputations as aphrodisiacs. This may indicate some untapped commercial opportunities for native plant enthusiasts. Note that I have not tried any of the following, but I expect that experimentation would be fun, whether or not the substances deliver the goods.

In a more serious vein, some of these plants have poisonous parts, and considerable caution needs to be exercised in the correct identification and preparation of material.

W.B. Crow⁽³⁾ reminds us that aphrodisiacs are the most unreliable of medicines, and also a diet that maintains health will tend to maintain the sex instinct. With higher standards of nutrition, many aphrodisiacs of the past are found nowadays to be ineffective.

Climbing Hibiscus - *Abelmoschus moschatus* - Scrambling or trailing herb, with perennial rootstock. Above-ground parts die off during dry season. Overseas varieties have musk flavoured and scented seeds which are chewed or infused.⁽³⁾⁽⁷⁾ Their reputation is probably due to the sexual associations of the scent.

Fairy Paintbrush - *Archidendron grandiflorum* - Bushy ornamental tree with attractive perfumed flowers. Moderately frost tolerant and will grow in temperate areas (e.g. Melbourne). Needs well-drained, loamy soil and a sunny position. The inner bark is mixed with charcoal and applied to the front of the body - the smell is expected to excite the female in question.⁽²⁾ For full effect, body painting is also employed.

Candle Nut - *Aleurites moluccana* - Bushy tree with fragrant flowers and edible nuts (which may be poisonous raw) for sub-tropical and tropical areas. The roasted kernels are said to have an aphrodisiac effect.⁽⁵⁾

Pennywort - *Centella cordifolia* - A perennial creeping herb, widespread in damp ground. Stated to share (at least some of) the medicinal properties of the Indian pennywort (*Centella asiatica*).⁽²⁾ These may include tonic⁽⁵⁾ and aphrodisiac effects. Leaves are consumed as a tea to aid digestion, to reduce the effects of disease and aging, and to boost sexual vitality, especially when it is on the wane.⁽⁶⁾⁽⁷⁾



Archidendron grandiflorum

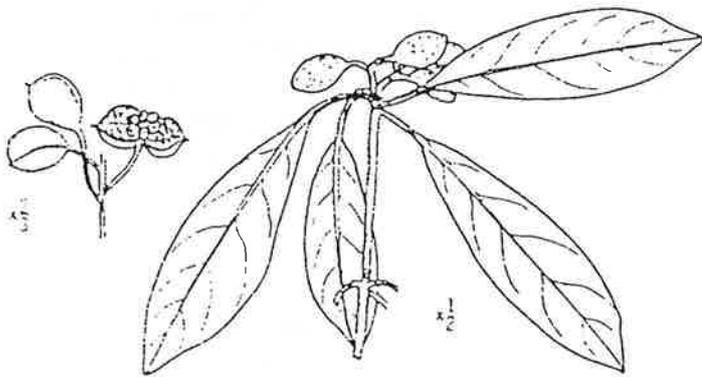
Denhamia obscura - Small to medium tree of tropical areas. The inner bark is used as per the Fairy Paintbrush above.⁽²⁾ However, as other uses of the bark include treatment of toothaches, prevention of milk flow, inducing sterility in women and poisoning fish⁽¹⁾, a little scepticism may be in order!

Tasselled Club-moss - *Lycopodium phlegmaria* - Hardy epiphytic plant reminiscent of a giant moss, which can be grown in temperate areas. Details of preparation were not recorded.

...continued page 9

Australian Aphrodisiacs (cont...)

Rusty Pittosporum - *Pittosporum venulosum* - Decorative and adaptable small tree with fragrant flowers, suited to tropical and sub-tropical areas. The scent of the bruised roots was employed by Queensland Aborigines to arouse females.⁽²⁾



Pittosporum venulosum

Psychotria fitzalanii - Used as per Fairy Paintbrush.⁽²⁾

Tylophora erecta - Small tropical shrub. Sap used by Aborigines to prepare a "love potion".⁽⁵⁾ At least the name sounds appropriate.

Scrub Nettle - *Urtica incisa* - Seeds of overseas species are reputedly aphrodisiac. Could also be used to "flog a dead horse" when all else fails - would certainly be stimulating! Nettles lose their stinging properties when dried, but the related Stinging Trees of northern Australian rainforests do not; unfortunately, the effect they produce is not one of excitement, but rather excruciating pain, so they cannot really be recommended.

A class of plants which are very common in Australia and were once highly regarded for their aphrodisiacal properties are orchids. Drinks were made from their dried, ground bulbs. The active principle may have been visual suggestion (their appearance suggests genitalia), or their carbohydrate (i.e. energy-giving) content. However, Selden⁽⁷⁾ admits that they no longer seem to work effectively.

There are a number of other native species which are reputed aphrodisiacs, some of which I have

omitted as they are difficult or impossible to cultivate. For more complete listings and details of plant identification and the preparation of the species listed above check the references in the bibliography given below. □

- (1) Brock, John *Top End Native Plants* (Self-published . Darwin . 1988)
- (2) Cribb, AB & JW *Wild Medicine in Australia* (Fontana . Sydney . 1981)
- (3) Crow, WB *The Occult Properties of Herbs* (Samuel Weiser . New York . 1969)
- (4) Jones, David *Ornamental Rainforest Plants in Australia* (Reed . NSW . 1986)
- (5) Lassak, EV & McCarthy, T *Australian Medicinal Plants* (Methuen . Sydney . 1983)
- (6) Leck, Sybil *Sybil Leck's Book of Herbs* (Cornerstone . New York . 1973)
- (7) Selden, Gary *Aphrodisia* (Dutton . New York . 1979)

Illustrations from: A.G. Floyd "Rainforest Trees of Mainland S.E. Australia" and Williams, Harder & McDonald "Trees and Shrubs in Rainforests of NSW & Southern Queensland" respectively.



"Bush Medicine: A Pharmacopoeia of Natural Remedies"

By Tim Low Cost \$45

I found Tim Low's latest contribution on Australian bush lore and beneficial native herbs a very good read. It is authoritative, entertaining and visually stimulating. It gives ample evidence of the author's extensive knowledge and experience in this field and, being well endowed with bush yarns, anecdotes and amusing stories, should certainly appeal to the general, book-buying public.

The author concentrates on recorded and deduced aboriginal and colonial usage of medicinal and therapeutic plants and to a lesser extent animals, and in doing so builds up a good record of past usage and future potential of the Australian bush in this regard.

...continued page 13.

ACOTANC-95

Australasian Conference On Tree And Nut Crops

Lismore, New South Wales, Australia

Mid-September 1995



First Announcement & Call For Papers

Expressions of interest in attending and/or presenting a paper or poster at the next Australasian Conference On Tree And Nut Crops are sought from all involved in useful perennial crops.

The Conference will embrace a wide range of topics and every sort of climatic and environmental growing conditions. Both established and potential new or

unexploited tree crops are covered.

The Conference will be held in Lismore, northern New South Wales, in the heart of Australia's principal subtropical fruit and nut production region.

Some limited assistance in attending may be available for certain contributors.

Please complete and return this form or a photocopy of it.

To: The Conference Secretary, ACOTANC-95, PO Box 91, Lismore Heights, NSW 2480, Australia (Phone: (066)-24 3211 • Fax: (066)-24 1007; International: +61 (66)-241007)
(This form can also be returned to the Acotanc Permanent Secretariat)

Your name, address, and phone/fax number (if applicable):

- Please send me further details of ACOTANC-95 as they become available.
- A total of people from this address hope to attend and tourism information is requested.
- I could offer a paper/poster on the topic of:
- I am associated with the following organization with interests in the area:
- I suggest that the people listed below or overleaf may be interested to receive copies of the Acotanc-95 Announcement and Call for Papers:

COMMERCIAL USE OF BURSARIA SPINOSA (continued).

ever, leaf loss is generally lower using the brushcutter method, and raw product is less contaminated by extraneous materials, such as grass. Foliage cut by brushcutter has to be fed through a mulching device to reduce bulk, whereas cutting and mulching is accomplished in one action by the fully mechanised method, thereby saving time.

The cut material is taken to a shed for drying, which can be accomplished by forced hot-air draught or simply by air-drying, provided climatic conditions are suitable. The crisp-dry leaf is easily removed from stem material by tumbling and then passed over vibrating screen to separate pure leaf product, which is then hammer-milled and bagged.

Propagation.

All harvesting investigations to date have been carried out on naturally occurring stands of *Bursaria*. The plant can be propagated from seed and, with slightly more difficulty, from cuttings. Little information on growth rates for cuttings or newly planted seedlings is yet available.

Ecological Value.

Bursaria has particular ecological value. Parasitic wasps feed on the nectar of the shrub when it flowers in late summer and then parasitise larvae of Christmas Beetles and other beetle forms. For this reason, *Bursaria* is important in lessening damage to Eucalypts by insect defoliators. Birds also use the shrubs for nests and food. It is suggested that harvesting be done on a two-year cycle to ensure there are always some shrubs available for annual flowering.

Book Review (cont...)

Subjects covered include Aboriginal thinking and traditions in relation to bush medicines, colonial usage of bush medicines and the effect of the colonists' European bias, herbal weeds, important plant groups, animal remedies, the treatment of internal and external ailments, drugs for pleasure, home remedies, commercial prospects, conservation and more. In some cases there is a degree of repetition which almost inevitably occurs where subjects overlap, but this in no way detracts from the presentation.

Each subject is covered in detail with analytical explanations of why certain of the bush medicines

worked and the author's own investigations into the topic. Tim includes a marvellous tale about *pituri*, a plant with high nicotine content which played an important role in Aboriginal life, essentially in central Australia.

Tim's writing style and his sense of humour made this a thoroughly enjoyable book to review. I would recommend it to anyone with even a vague wish to find out more about our natural heritage and about the cures and remedies available in the Australian bush.

(Published by Angus & Robertson, Unit 4, Eden Park, 31 Waterloo Road, North Ryde, NSW 2113, Australia)

THE BIG SCRUB BOTANIC GARDENS

During August 1988 the ACOTANC-88 Conference was held in Lismore, Northern NSW, with a focus on Australasian Horticulture for the World. The keynote speaker was Dr Bob Knight from the USDA in Miami.

In summing up, Dr Knight highlighted the dangers to our horticultural productivity, locally and globally, by the clearing of tropical and subtropical rainforests.

The global warming effects of this destruction are well documented, but just as serious is the loss of germplasms, particularly

the ACOTANC-88 Fund was formed and administered initially as a subcommittee of the Exotic Fruit Growers Association Ltd. This fund was constituted with the principle aim of establishing a tropical/sub-tropical fruit and nut gene repository in Australia using funds that resulted from ACOTANC-88's modest financial success.

ACOTANC is now incorporated and administers the fund to support the Botanic Gardens, as well as provide loans to organisations to conduct the triennial ACOTANCs.

A suitable site for the Botanic Gardens was sought with the conditions that it be accessible to the public, and remain secure from private ownership which might threaten its long term survival.

Summerland House With No Steps (SWHNS) (a member of the Wheel

Chair Association) was approached and have made available a considerable portion of land.

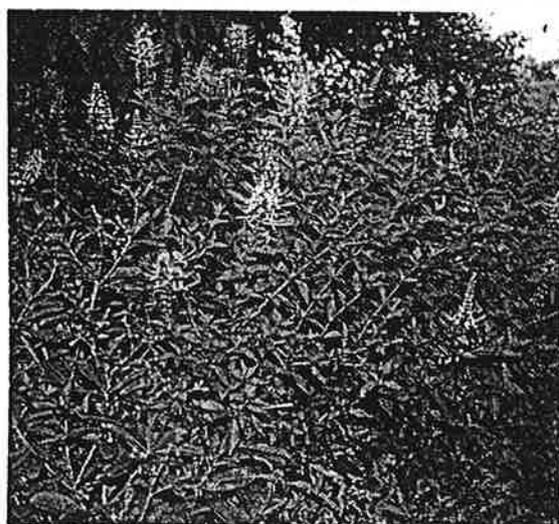
SWHNS see great tourist potential for the Gardens to complement the Tea Rooms and retail nursery already operating on the site. ACOTANC have proceeded with landscape designs and some preliminary site improvement, and have produced an establishment/operating budget.



Alstonville Tropical Fruit Research Station farm manager, John Dirou, ACOTANC chairman Bill Taylor, horticulturist Mike Delaney, and regional director of the House With No Steps, Rick Behrens, examine the fruits of their labour.

those related to our current commercial horticultural crops and our potential commercial crops. The loss of these species means loss of genetic material which may be useful for introducing disease resistance, tolerances to climate change and so on — these concepts are not new and are well recognised.

As a response to Dr Knight's comments,



□ Called Cat's Whiskers, this is a recommended medicinal kidney herb.

Orthosiphon aristatus leaves are strongly diuretic, and it is harvested and dried in Asia similarly to tea. In the garden it flowers in full shade.

Photo:
"The Morning Bulletin"
10.7.93.

Mr Brett Robinson from NSW Agriculture commenced a project entitled *Collection and Investigation of Australian Plants With Food Crop Potential (Bush Tucker)* with matching funding from the ACOTANC-88 Fund and the Horticultural Research & Development Corporation (HRDC) at NSW Agriculture's Alstonville Tropical Fruit Station.

Shortly afterwards Mr Robinson was transferred, so Mr Mike Delaney, who was employed as a casual assistant with the grant money, proceeded to relocate the Bush Tucker planting to SHWNS to be

incorporated in the Gardens. The grant has now concluded and Mr Delaney's efforts have resulted in the establishment of 36 different species, totalling 384 trees and shrubs. An area has been set aside for exotic species from overseas countries as well as an area to be established as a local native rainforest.

ACOTANC Inc is seeking further individual, industry, and government funding to support this gene repository for endangered species and the Big Scrub Botanic Gardens.

For further information contact Bill Taylor or Merv Richens, PO Box 91, Lismore Heights, NSW 2480, Australia.

Shang's medicine garden an inspiration

By Geoff Wilson

Whenever Australian botanists talk about the outstanding herbal medicines used by aborigines, the idea of "farming" the native trees and shrubs concerned is often mooted.

But how about whole gardens of such native trees and shrubs — for research and teaching, and for use as a vital "gene pool" for inspired plant breeding?

Such gardens, or "mini farms", could be extrapolated in future into "medicine farms" of international consequence, to help develop important new pharmaceutical products for the "natural" treatment of mankind's ailments. For Australian farmers and the city-based business that feeds on their output the economic stakes could be fabulously high.

Well, like many good ideas, someone has started it — in the People's Republic of China. His name is Mr. Shang Shao-yao.

For me "The Chinese Medicine Garden" became symbolic of the great resiliency and resourcefulness of the Chinese people, and a monument to the thoughtfulness and wisdom of Mr. Shang.

It also represents an insight into how other countries, such as Australia, can begin to develop native tree and shrub pharmaceutical resources badly neglected in the last 100 years, as the world's medicine has focused too hard on man-made drugs.

He did, under great political and economic difficulty, what most academics around the world are still only discussing, or are still only beginning to plan in gene pools of native medicinal plants.

In Australia his story begs a question: How much time remains, after 200 years of European settlement, for aboriginal herbal medicine gardens and farms to be developed — when the treasure trove of knowledge in the minds of our aboriginal citizens is inexorably contracting every year. The answer is: Precious little!

Versatile eucalyptus a natural alternative

A bottle of eucalyptus oil can be found in most households and is well-known for its clean refreshing scent when used as an inhalation to clear a stuffy nose.

A natural disinfectant, this universal oil can be used for a myriad of other uses around the home — removing spots and stains, washing clothes and woollens, cleaning carpets and vinyl flooring, as a dog wash, or a natural, non-residual garden spray.

As a spot and stain remover eucalyptus oil will remove spots and stains from clothes, including perspiration marks, oil and soluble grease. It is ideal for work overalls, socks, soiled nappies and sportswear.

Simply add two teaspoons of oil to each wash load or the following eucalyptus wool mixture — mix four cups of pure soap flakes with two cups of methylated spirits and one tablespoon of eucalyptus oil. Store in an airtight bottle.

For hand washing use about one tablespoon of the mixture in a basin, and proportionately more in the washing machine. Dissolve the mixture in hot water, then add cold water to correct the temperature. It is also excellent for washing all your woollens and will provide protection against moths and silverfish, provided you do not rinse out the eucalyptus oil.

Stains can also be removed from

IT'S SO NATURAL
Alan Hayes



fabric by placing an absorbent cloth under the stained area, moistening another cloth with eucalyptus oil, and gently, yet firmly brushing towards the centre of the mark.

To remove stains and grease marks from carpet, add eucalyptus oil to a small spray atomiser and spray on to the affected area.

Wipe away with a clean absorbent cloth. And for a disinfectant floor cleaner add a teaspoon of the oil to the water when washing or mopping over vinyl or linoleum floors.

And for a safe, non-residual garden spray that is effective against carwigs, slugs, snails and slaters, mix one teaspoon of oil with 500ml of soapy water. Spray around the base of plants and seedlings and repeat as necessary. Only make up sufficient spray for immediate use and thoroughly wash out the sprayer.

When out-of-doors or working in the garden we are quite often plagued by mosquitoes. To protect yourself from this insect, simply dissolve 10 drops of eucalyptus oil in 30 mls of almond oil, or any other vegetable oil, and rub well on to exposed skin. Renew every two to four hours.

Eucalyptus oil also makes an effective dog wash that is reputed to

get rid of fleas. Just add a little oil to soapy washing water. Flies can also be kept at bay so that they don't bother your pet by mixing one teaspoon of oil with one cup of water and combing this through the animal's fur.

— "The Morning Bulletin"

(Countryman/ July 1, 1993)

Trials for oil plant

A pilot plant for eucalyptus oil production will be established in Merredin with funding from the Department of Commerce and Trade.

Four Merredin men have formed the Merredin Essential Oils Co, which they hope will prove the commercial viability of a distillation plant in or near Merredin.

The plant will be used to research the most appropriate species of eucalypt for oil production in local conditions.

A spokesman for the group, David Gebert, believes the long term viability of the project will depend on the level of support received from growers.

With farmers planting tens of thousands of trees in the region a year, Mr Gebert said his group hoped to identify the species which would supply the most and the best oil and then encourage farmers to use those species in their land care programs.

"It makes sense to think with all those trees being planted for land care, there could be a direct profit as well if they could be harvested" Mr Gebert said.

The grant received by the group represents about 40 per cent of the cost of the pilot plant.

— Judy Rutherford

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BOOK REVIEWS

by David Noël

The Feast of the Bunya. Cornelius Moynihan. Fortitude Press, Queensland, 1985. 104 pages, paperback. *\$9.95.

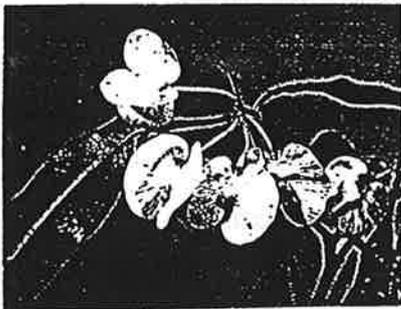
This is a most unusual book for a review in *Quandong*. It is a republication of an 'aboriginal ballad', a long story in verse, about the interaction of Australia's aboriginal peoples with the white settlers in the context of the Bunya Nut feasts and exploitation of the bunya pines of southern Queensland.

Written by Cornelius Moynihan in the late 1800s (this edition was originally published in 1901), the book has an extensive introduction and many notes in annotation which give a good picture of the sometimes dramatic and terrible events which occurred

in those days, such as the wholesale killing of aboriginal groups through the gift of poisoned food.

The book is also a useful source of aboriginal folk-lore, in which the bunya pines hold a unique place — the trees were stated to be the only objects for which individuals claimed personal 'possession' or rights of usage. The modern version has good colour photos of bunya trees, nuts, and other artefacts. An interesting book.

*Current price of copies from Granny Smith's Bookshop, PO Box 27, Subiaco WA 6008.



Dodonaea viscosa, used as a hop substitute in brewing by early colonists, furnished a root decoction used by Aborigines to treat cuts and open wounds. In Peru the leaves are chewed as a substitute for coca leaves.

AUSTRALIA TRANSPLANTED: AUSTRALIA'S HORTICULTURAL GENETIC RESOURCES. Some notes taken from a free public lecture presented by Professor John Considine at the University of Western Australia. Notes by Yve Wignall. .

Professor Considine vividly outlined with the aid of diagrams, slides and graphs the historic draining of our plant resources overseas during the last 200 years, and asked, "Who hasn't heard of the "Hawaiian Nut"?" Today 350 Australian plant species grow in the U.K., 200 in continental Europe and 800 are in cultivation in the U.S.A.

Historically there have been some great horticultural transpositions eg. rubber, potatoes, kiwi fruit, radiata pine. Now *Chamelaucium uncinatum* (Geraldton Wax) is considered overseas to be an Israeli flower, and that country reaps the benefit. Eucalypts are exploited by Portugal, Brazil, China and Spain, and we import eucalyptus oil - an increasingly important solvent as others are banned. (C.A.L.M. is now conducting a trial planting of mallees for oil.) *Acacia* is considered to come from China and Africa, and we ship our skins overseas for tanning!

The geographical origins of the major food plant species of the world are: Asia 46, Europe 22, Africa 8, Americas 34, Australia 3. Aboriginal food plants came from 207 species. [I have no details as to how these figures were arrived at. Ed.] Aborigines used leaves and stems, roots, seeds and fruits, and their diet was nutritious and better balanced than is usually the case today.

There are 5 steps in horticulture: harvest, tend, select, cultivate, breed. With regard to Australian plants, Europeans haven't got past the "harvest" stage. It is estimated Aborigines had reached the "tend" stage. WE must promote the concept of Genetic Resources, the key considerations being to manage the commercialisation. Questions that need to be addressed include, "Is the product durable or perishable (royalties then needed), improved or unimproved, patented or unprotected?"

With one of W.A.'s *Conospermums* (Smokebush) showing promise in the treatment of AIDS, new focus must be given to our native flora and its protection in all ways, both physically and through patent. (E & O E)

TASTE TEST: *Microcitrus garrowayi*.

This tropical finger lime is a winner! The bush in the Kershaw Gardens is rounded and compact, with thorns and typical citrusy bright green glossy leaves. Fruit is dark green and elongated, about 6cm long. When it is cut, the pale green pulp sacs seem to expand and push out of their triangular compartments. The little cartwheel slices are delicious fresh and in drinks, and make tasty and decorative marmalade. The fruit can be juiced, and it made a pretty good Thai chicken dish one night.

MANNA NURSERY BREAKS NEW GROUND

Not a commercial plant supermarket, but rather a private research nursery.

That is how WANATCA member Oliver Carter might describe his innovative plant work carried out at his Toowoomba, Queensland nursery.

He specializes in everything to do with food plants, particularly those from the rich Australian rainforests which run down our east coast, but by no means limited to those.

Jujubes, native fig species, tubers such as Dioscorea and other yam species are some he is working with. But his keenest pursuit is the development of the mostly Australian genus of *Syzygium* — the lilly-pilly family of the Myrtaceae. Many of these are rainforest plants, although some, like the 'Cocky Apple' *Syzygium suborbicularis*, grow in more arid areas of WA's far north.

Oliver says, "My aim is to propagate (mainly by cuttings) a wide range of mainly native foodplants, some other rare native plants, and some other plants not generally available from other nurseries.

"I now have all Australian species of the genus *SYZYGIUM* except 2 of the named species, but have 3 unnamed species, and also have most of the Australian species of the allied genera. The intention is to have on hand for sale at least a few plants of all *Syzygium* species at all times".

There are around 80 or more species in this genus, so it has taken Oliver some years to build up his propagation collection. The two species he currently lacks are *Syzygium sayeri* and *S. amplum*. Any offers?

Oliver has also worked on propagation of selected Jujube varieties, and is keen to develop tissue culture methods. He mentions an edible-fruited Australian native species of jujube, *Zizyphus oenoplia*, which is native around the Gulf of Carpentaria, in both Queensland and the Northern Territory. (Another native species, *Z. quadrilocularis*, grows both in northern WA and in the NT).

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Not content with just collecting and propagating plants, he is also working on breeding and research. Oliver says "I am experimenting by doubling the chromosome count of many of our *Syzygium* species and other 'bush tucker' plants, from the usual 2N to 4N plants. There are some early and interesting results.

"I have also started some attempts at inter-species hybridizing of *Syzygium* species, but with little success so far".

There is perhaps nothing Australia needs more than a lot of people like Oliver Carter, working away to collect, propagate, research, and improve some of the thousands of native plant species with something to offer the world in the way of food, medicines, or environmental improvement.

A list of plants is available from Manna Nursery, 8 Vanity Street, Toowoomba, Qld 4350. Y

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[WA Horticulture June 1993]

Native plant foods: untapped resource

WA has an abundance of untapped resources in native fruits and vegetables, according to noted anthropologist Peter Bindon.

Mr Bindon is a great advocate of "promote Australia" and believes there is a world-wide export market hungry for Australian native plant foods.

As head of the anthropology department at the WA Museum he has many years experience of Aboriginal uses of native food plants.

He has finished the draft of a book on the subject and has been involved in the teaching of bush survival courses.

Mr Bindon believes successful ventures like the Bush Tucker Restaurant in Sydney are setting a good example but says the potential to expand on the concept is very big.

He said the most popular offering on the Bush Tucker Restaurant's menu was a jelly made from lilly pillies, or Chinese apples.

"The best thing is that we have the technology for genetic manipulation so we don't have to wait for fertilisation and

pollination when looking at a potential marketing crop," Mr Bindon said. "We have more native food resources than most countries yet aren't using them to their full potential."

He gave the example of France, where a native plum was used to produce the popular liquor, Prunelle.

Farmers, he said, had a major resource on their property, particularly on uncleared land. Native cherries and plums offered the best opportunity.

"The Australian macadamia nut was a native nut and just look how successful it has been on the international scene," said Mr Bindon.

He said it was important to remember that most common fruit and vegetables on the market were bred from native varieties.

— Valma Ozich



Peter Bindon with native Brown Plum Pine fruit



Featured species

This article is from the Sept. 1993 issue of "Going Potty", which is Greening Australia's school newsletter. What it doesn't say is that it's not just birds who eat the fruit. Paddy Delalande of Yeppoon reckons it's real good tucker! (But there's not much per fruit). On the Capricorn Coast it's often called the Green Ant Tree because it seems to be particularly favoured by these insects for nest sites. Green Ants have a variety of food uses, including being crushed and washed to make a lemony drink.

This month's featured species is the **tuckeroo tree** (*Cupaniopsis anacardioides*). It is a medium-sized tree, native to coastal Queensland. The tuckeroo is very useful as a shade tree, as it has a dense, dark green, rounded canopy. The dark grey trunks of old trees are sculptured and buttressed.

Although on fertile sites the tree grows to 20 metres, on most sites, it would probably grow to 10 metres after 30 years.

The species is hardy in most soils and exposed situations in frost-free coastal areas, and is excellent for avenue and seashore plantings, and shade around sporting fields and schools. When grown in groups, *Cupaniopsis anacardioides* offers good windbreak and visual screening potential.

The tree's fruit hangs in clusters of gold when ripe. The seeds are surrounded by orange/red flesh that fruit-eating birds find very attractive. As the tree is host to 11 butterfly species, including Felder's blue, hairy blue, six line blue, common oak blue, glistening blue, pencilled blue, dark ciliate blue, pale ciliate blue and fiery jewel, it is a useful addition to wildlife gardens in coastal areas. The tree can be easily adorned with creepers and epiphytes, such as orchids and staghorn ferns, when it gets old in the garden.

As a matter of interest, this species has been found to regenerate easily from bird droppings, and is therefore sometimes found further inland to its normal range.



Cupaniopsis anacardioides

Return: A.F.P.S.G.
323 PHILIP AVE.,
FRENCHVILLE.
Q. 4701.