

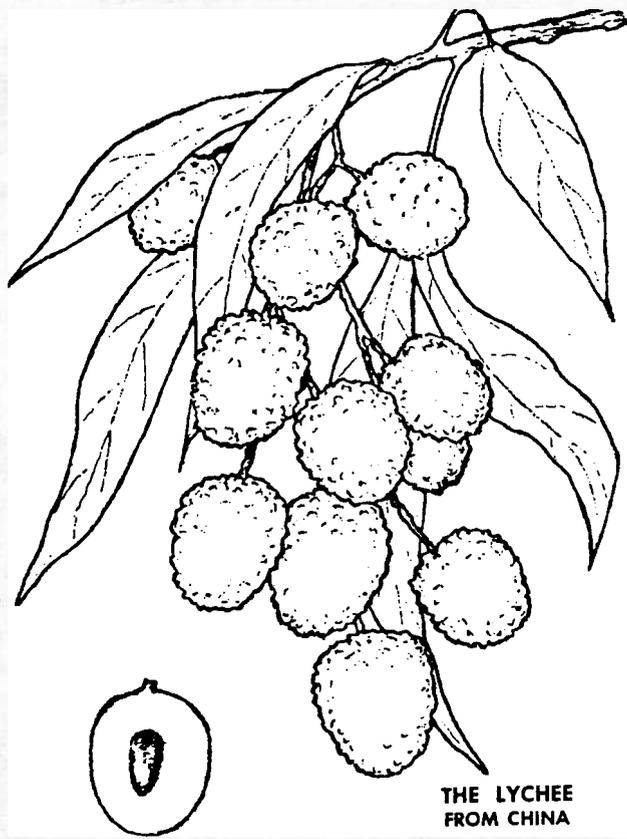
# Quandong

WEST AUSTRALIAN NUT AND TREE CROP ASSOCIATION

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THE LYCHEE  
FROM CHINA

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## MEETING DATES

General Meetings            4th May  
                                      3rd August  
                                      2nd November

Executive Meetings        21st June  
                                      20th September

NEXT MEETING        *May 4th*  
NATURALIST'S HALL 63 MERIWA ST. NEDLANDS

### GUEST SPEAKER

Bill Napier will give a talk on building earth and adobe storage sheds and simple cottages on remote properties.

### TREE AUCTION

The tree auction at the last general meeting was again successful and fun, however, the effects of the recession were reflected in the cautious bidding and resulting bargains.

<u>TREE</u>	<u>PRICE</u>
Gyinkgo	\$1.50
Honey Locust	\$2.00
Tung Nut	\$1.00
Texas Walnut	\$3.50
Sour Sop	\$2.00
Sugar Apple	\$2.50
Jack Fruit	\$2.50
Lychee	\$1.00
Loquarts	\$0.50
Ungrafted Avocado	\$1.00

# AVOCADO FLOWER TYPES

An avocado flower has a dual opening cycle: Stage 1, in which it functions as a female (stigma receptive to pollen); and Stage 2, the male stage (pollen is shed). Avocado varieties are classified into two behavior patterns, Type A and Type B, with respect to the timing of the dual opening flower cycle.

In Type A varieties, Stage 1 occurs in the morning and Stage 2 in the afternoon of the following day. In Type B varieties, Stage 1 occurs in the afternoon and Stage 2 in the morning of the following day. A-type cycle occurs over a 36-hour period and B-type in less than 20 hours.

To help avocado pollination, A-type and B-type trees are needed. The following is a table giving the comparative productive capacity of avocado varieties in three California regions and the flower type of each variety.

Scale:                   1 – Superior  
                               2 – Moderate  
                               3 – Inferior  
                               No Number – Productive Capacity Unknown

VARIETY	FLOWER TYPE	COAST	INTERMEDIATE	INLAND
Alboyce . . . . .	A	-	-	-
Anaheim . . . . .	A	1	2	2
Arturo . . . . .	B	-	-	-
Bacon . . . . .	B	2	2	2
Benik . . . . .	A	1	-	-
Carlsbad . . . . .	A	1	2	3
Clifton . . . . .	B	-	-	-
Collinson . . . . .	A	-	-	-
Decem . . . . .	A	-	-	-
Diamond . . . . .	A	-	-	-
Dickinson . . . . .	A	1	2	3
Duke . . . . .	A	3	1	1
Edranol . . . . .	B	3	1	1
Elsie . . . . .	B	2	1	2
Emerald . . . . .	A	-	-	-
Ettinger . . . . .	B	-	-	-
Fuerte . . . . .	B	3	2	2
Ganter . . . . .	B	3	2	1
Gehee . . . . .	A	-	-	-
Hass . . . . .	A	1	1	1
Irving . . . . .	B	2	1	3
Jaina . . . . .	A	1	1	1
Janboyce . . . . .	A	-	-	-
Jim . . . . .	B	-	-	-
Linda . . . . .	B	-	-	-
Lula . . . . .	A	-	-	-
Lyon . . . . .	B	-	-	-

VARIETY	FLOWER TYPE	COAST	INTERMEDIATE	INLAND
MacArthur . . . . .	A	1	1	1
Marshelline . . . . .	B	-	-	-
Mayapan . . . . .	A	1	1	3
Mayo (Covocado) . . . . .	A	1	1	2
Mexicola . . . . .	A	1	1	1
Nabal . . . . .	B	-	-	-
Northrup . . . . .	B	2	1	1
Nowels . . . . .	A	3	1	3
Pinkerton . . . . .	A	-	-	-
Puebla . . . . .	A	1	1	2
Queen . . . . .	B	1	1	3
Regina . . . . .	B	-	-	-
Rincon . . . . .	A	1	1	2
Reed . . . . .	A	-	-	-
Ryan . . . . .	B	3	2	2
Santana . . . . .	B	-	-	-
Sharpless . . . . .	A	2	2	3
Spinks . . . . .	A	3	1	3
Stewart . . . . .	A	-	-	-
Topa Topa . . . . .	A	2	1	1
Wright . . . . .	B	-	-	-
Yama . . . . .	A	3		1
Zutano . . . . .	B	1	1	1
Persea skutchii . . . . .	B	-	-	-
Persea borbonia . . . . .	B	-	-	-
Persea flocossa . . . . .	A	-	-	-

Courtesy: Cooperative Extension, U.S. Department of Agriculture, University of California, County of San Diego.

# A Promising New Garcinia

Bob Smith

Several years ago, while on a trip in Central America looking for new or unusual fruits, my wife and I were introduced to an orange-colored fruit of the *Garcinia* species that resembled the mangosteen (*G. mangostana*), except for the color.

The fruits were 2"-2½" in diameter and, when the outer shell was cut around the middle, the top lifted off and the segments were readily lifted out like the mangosteen. Most of the segments had no seed and — like the shell — were orange in color with a very nice taste. We had just eaten many mangosteens so we were able to compare the taste and quality of both fruits. We found that the orange fruits, although different in taste, were (in our opinion) at least as good as the mangosteen, which is considered to be one of the best fruits in the world.

The tree was about 12 feet tall and 20-or-so feet in diameter with a nice rounded shape. The tree was full of the beautiful orange fruit and many ripe fruit had fallen covering the ground.

Although we knew the futility of trying to grow the mangosteen in Florida, as it doesn't grow too well even where the proper temperature and rainfall are present, we did send some seeds of the orange fruit home. Many tropical seeds are very short lived, so we made arrangements for the seeds that we gathered to be planted as soon as they were forwarded from the U.S.D.A. Plant Introduction Station in Miami. We prepared the pots before we left and included a name marker in each pack of seeds we sent home so it could be placed in the pot.

We had been traveling for 2½ months on this trip, so many of the seeds were up and growing when we returned. Fortunately, one seed survived the trip and delay in planting, and came up. I say "fortunately," as we have found that when you plant a pot of seeds, the usual result is either a full pot of plants or none. A full pot would have been nice. The one plant did grow quite well, but the next problem with a tree transported from the tropics is how it will survive in a new environment.

The tree continued to do well and in four years was about six feet tall. But our hopes for possible bloom and fruit the next year or so were shattered. Although the tree had survived several frosts, the winter of '79-'80 was a disaster: three consecutive freezing nights with temperatures as low as 27°F. The tree was frozen to the ground, along with large mangoes, cashew and many more. Some were killed completely. We didn't even want to look out in our grove at all of the brown trees.

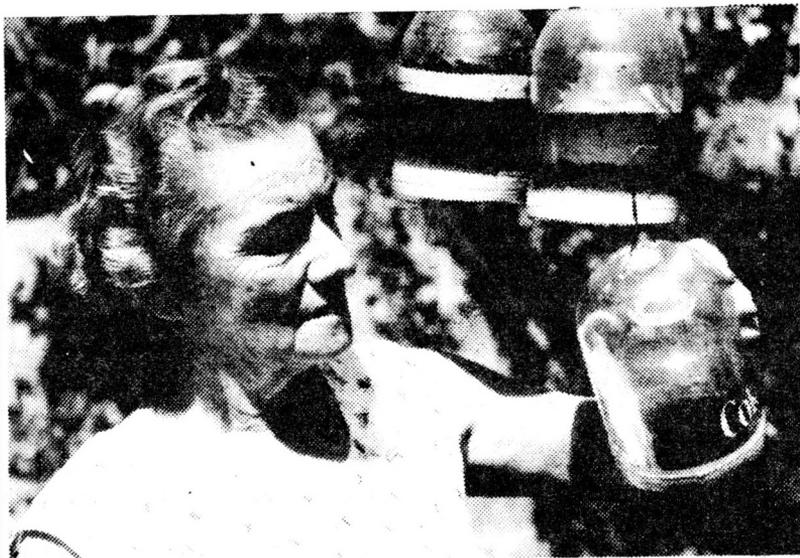
We were surprised to find on our return from a summer camping trip of 2½ months that many new shoots were coming up from the roots of the *Garcinia*. We decided to let the shoots grow in hopes of finding ways to propagate some of them. My wife cut some of the sprouts and placed them in the mist bed, and also tried air layers. I tried grafting on the Imbe (*G. livingstonei*), which was the only *Garcinia* that we had growing at the time. To our pleasant surprise and unlike the mangosteen, the cuttings in the mist as well as the air layers had both rooted. The graft formed a good union, but Imbe seemed to be too slow growing and eventually the graft died. We are now growing some *G. xanthochymus* seedlings that we will try as rootstock.

Thanks to Otis Warren Barrett, B.Sc., for the article "*The Genus Garcinia*" that appeared in the 1978 CRFG YEARBOOK; we have identified the tree as the Kadis (*G. barrettiana*), which was found in the Cotabato Valley of Mindanao. The description stated that the fleshy Pericarp was also edible. It never occurred to us to try it.

Although the tree hasn't fruited for us to date, we are very excited about the prospects of growing and fruiting this fine tree in the warmer parts of the U.S. We took two rooted cuttings to Puerto Rico this year — one will be in the mountains; the other at the low elevation of the U.S.D.A. Station at Mayaguez. They should do very well there. We hope to be able to report a fruiting soon.

# Chemical free fly killer

'Stirling Times', Tuesday March 22, 1983.



● Mrs Pemberton explains how the fly traps work.

An efficient and economical fly trap made from two-litre round plastic cool-drink bottles has been devised by an Organic Growers' Association member.

This trap has virtually wiped out the fruit fly problem at the member's Mt Helena orchard.

Blowflies can also be trapped by the thousand if different bait is used.

To make the trap —

- (1) Remove the black base of bottle.
- (2) Cut off screw top of bottle with hacksaw or knife.
- (3) Cut through bottle 1-2cms ( $\frac{1}{2}$ " ) below the point where tapered section becomes straight (start

with hacksaw and then use scissors).

(4) Take 30cm (12") of thin wire, fold in half and twist together making a forked piece at the end.

(5) Heat the points of wire over gas flame or similar and push through rounded base of bottle. Twist over inside to make a solid handle to hang the trap.

(6) Insert the neck end of bottle inside the bottom end leaving  $\frac{1}{2}$  cm ( $\frac{1}{4}$ " ) showing. Use the rounded end of the black base to ensure there are no wrinkles showing to spoil the seal.

(7) Seal around joint with insulating tape — preferably yellow as this attracts flies.

(8) Half fill with bait and hang in tree or suitable place.

To bait the bottles for fruit fly use yeast or Vegemite in water. A little sodium sulphide increases the lure.

A piece of meat dropped over the lip of the neck of bottle, into water, is an effective bait for blowflies.

Flies fly up and won't come down again so drown in liquid.

For further information on the trap or organic methods of growing plants — or if you can supply suitable containers — contact Mrs Pemberton on 387 1269 around 1pm or after 5pm.

# Avocado picking problems over?

Avocado growers — your picking problems may be over.

Clermont inventor, Mr Colin Bridges, has developed a hand held pole picker suitable for picking avocados and other fruit including mangos

Made from a small pair of secateurs, a pole, a net tube and a few other devices, the picker is the result of many years of trial and error

The picker, which can be adjusted to any height, is operated by a cord connected to the secateurs

A long net tube is attached under the secateurs to catch the detached fruit and deliver it gently to the ground

Mr Bridges made his first picker using a woven string

bag on a spring operated wire loop to pick a friend's mangos five years ago

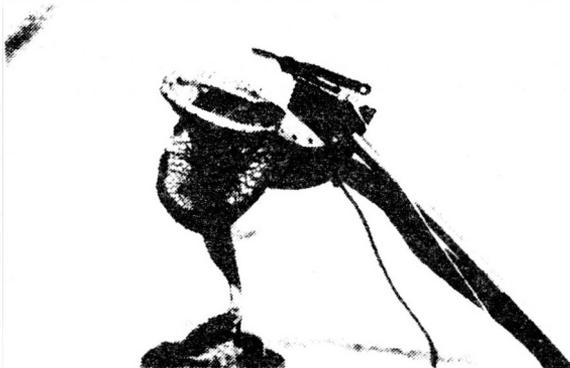
Modifications were made after the first picking trial and after negotiations with the DPI and avocado growers.

The approximate cost of the avocado picker is \$40.

Manufacturing of the unit has been simplified so that the unit can be purchased as separate pieces.

K. W. Engineering are manufacturing the avocado picker heads on order.

Any interested grower should contact the company on (071) 45 9549 or write to K. W. Engineering, Old Bowling Green Road, Palmwoods, Qld. 4555.



*Invented by Mr Colin Bridges of Clermont, this pole picker may solve some of growers' problems when picking avocados and other fruits.*

Thursday, January 27, 1983

QUEENSLAND FRUIT AND VEGETABLE NEWS

MEMBER'S CORNER

No. 7, Paris Way,  
KARRINYUP. 6018.

9th March, 1983.

W.A. Nut & Fruit  
Growers,  
P.O. Box 27,  
SUBIACO.

Dear Sir,

In August last year, I planted an Avocado Tree which I purchased at a nursery, but find many of the leaves turn brown and then fall off. I have also planted an Avocado pip near the first tree and is almost as tall and lush as the first one, but this too has brown leaves (not all of them). I do fertilize the trees every two months according to the nurseryman.

Maybe you could let me know why this is happening. We do have hessian around the tree and the opening faces East. We would greatly appreciate any information you could give us.

Thanking you in anticipation.

Yours faithfully,

E.A. CARTER



Jarrah Road,  
South Perth 6151  
Department of Agriculture - Western Australia

Mrs E.A. Carter  
7 Paris Way  
KARRINYUP 6018

Your Ref  
Our Ref 1044/77  
Enquiries Mr Hawson  
Date March 22 1983  
RMCM

Dear Mrs Carter

Your letter of March 9, 1983 to the W.A. Nut and Tree Crop Association has been passed to this Department for a reply.

The symptoms described on your avocado trees suggests that "salt" is doing the damage. Avocados are very susceptible to sodium and chloride and symptoms may be readily recognised on the leaves. Browning of the leaf edges leading to complete breakdown is due generally to chloride. If this is responsible it could be coming from the fertiliser being applied around the plant either at too high a rate or not enough irrigation water to maintain a good soil moisture balance. Irrigation water falling regularly on the leaves will result also in the build-up of salt in this plant.

The difference in growth between the nursery plant and the seedling could be due to the restricted root system of the potted plant.

Where the growing point is affected then a disease such as jarrah die back, Phytophthora cinnamomi requires investigation.

You may like to ring me and discuss further.

Yours sincerely

  
(M. V. Hawson)  
SENIOR HORTICULTURAL ADVISER

Mr D. Noel  
West Australian Nut & Tree  
Crop Association  
P.O. Box 27  
SUBIACO 6008

For your information.

*David*  
*Your note of 16/3/83 refers.*  
*Mike Noel*

Dear David Noel,

I do believe we could make arrangements at least for 1983 to exchange publications with the West Australian Nut and Tree Crop Association. If the board agrees we can make the arrangements more permanent. How do I go about making the arrangements?

My desk is loaded with letters and I cannot find the letter requesting we check on getting seed of the Australian MAMMOHPAN. It seems they had read an article in some magazine, perhaps it was the Mother Earth magazine. One of these days I may find out who sent the article and I will get back to you. Thanks for checking.

Just got a shipment in of the Japanese Horn Faced Bees. They live and have their young in tiny bamboo straws. They don't produce honey but they are excellent pollinizers. They prefer to work fruit blossoms, they say that in the time it takes honey bees to pollinize 5 blossoms they will pollinize 30 or 40 blossoms. I am testing them for the Government.

I plan to get started on dwarf cherries both genetic dwarfs and dwarfing rootstocks. I received some of the dwarf Russian Vladimir Cherrywood and I am trying to get some dwarf Mahdeh and Montmorency crosses. There are also some new German crosses that are very dwarfing. The Iranians have a wild cherry stock that they use commercially for dwarfing. I wish I could locate a source of seed. I wonder how you find the cherry industry in Australia? Do you have any difficulty in importing plant material from England?

There will be a cultural exchange between fruit growers in this country and China and a few NAFEX people are expected to go on the Chine trip. I hope we can exchange plant material. The tour starts April 14th.

Sincerely,

ROBERT KURLE

Having a very mild winter with only a few inches of snow on the ground right now.

## PROPOSED CONSTITUTION

Here is a draft of our proposed constitution, prepared by Mr. & Mrs. Aitken. If any member wishes to make comment on any section they should contact any member of the Executive Committee or write to the Secretary.

### CONSTITUTION OF WEST AUSTRALIAN NUT & TREE CROP ASSOCIATION (Incorporated)

#### 1. NAME OF ASSOCIATION

The Association will be named the West Australian Nut & Tree Crop Association (Incorporated)

#### 2. OBJECTS

- (a) To promote the advancement and improve the culture and production of nut & tree crops.

#### 3. ELECTION OF OFFICERS

All officers shall be elected for one year only, but, shall be eligible for re-election.

#### 4. OFFICE BEARERS

At each Annual General Meeting the members shall elect \_\_\_\_\_ members to the committee and the committee will elect from their number -

- (a) President
- (b) Vice President
- (c) Secretary/Treasurer

The committee shall have the power to fill any vacancy that occurs in the committee.

The committee is empowered to pay the Secretary/Treasurer an honorarium.

Retiring officers and other members shall be eligible for re-election.

#### 5. ALTERATION TO THE CONSTITUTION

Notice in writing of any proposed alteration to the Constitution shall be given to the Secretary/Treasurer at least 14 days before the Annual General Meeting. Such notice to be signed by at least four (4) members and must be approved by a two thirds majority of members present at the Annual General Meeting.

## 6. MEMBERSHIP

- (a) Any person interested in the purposes of this association may, upon application, be elected to membership.
- (b) The annual membership fee shall be \$                      payable at the time application for membership is made, and thereafter shall become due on January 1 of each year. Upon election the new member shall be entitled to all publications of the Association for the calendar year in which he is elected.
- (c) No person shall be enrolled as a member of this Association until his dues have been paid.
- (d) Only members in good standing, whose dues have been paid, shall be entitled to vote in elections or meetings of the Association, and only such shall be eligible to hold office.

## 7. CANCELLATION OF MEMBERSHIP

- (a) The membership of any member may be terminated for cause by a two-thirds vote of the committee, the accused having been given opportunity for a hearing before action is taken.

## 8. QUORUM

At committee meetings seven members shall form a quorum.

At general meetings of functions twenty members shall form a quorum. If within fifteen minutes from the time appointed for a meeting, a quorum is not present, the meeting shall be abandoned until a time and place agreed to by the committee.

## 9. NON PROFIT MAKING.

The income and property of the Association whencesoever derived shall be applied solely towards the promotion of its objects as set forth in this constitution and no portion thereof shall be paid or transferred directly or indirectly by way of dividends, bonus or otherwise howsoever to its members provided that nothing herein shall prevent the payment in good faith or remuneration to any officer or servant of the Association for services actually rendered to the Association.

## 10. AUDITS

An Auditor will be employed to carry out an audit of the books of account and vouchers on a yearly basis. The committee shall give to the Auditor at all reasonable times, full access to the Association's books and vouchers and afford him every facility for the purpose of making a true audit of the ~~FIN~~ Association's financial affairs.

11. COMMON SEAL

The seal of the Association shall be affixed on the authority of a resolution of the committee in the presence of those persons described in paragraph 4 hereof. The President shall have custody of the seal.

12. DISSOLUTION

The Association may be dissolved or wound up by a resolution of any general or extraordinary general meeting called for such purpose. In the event of a motion for dissolution being carried, the assets of the Association shall be distributed to the University of Western Australia for horticultural research or as determined by a Judge of the Supreme Court of Western Australia.

SPREADING CHESTNUT  
HAS NOW MOVED IN WITH  
SQUIRREL NUTKIN

403 Hay St Subiaco Ph. 3818656

Best range of nuts & fruit trees in W.A.

The Caryetum is now well organised. The Subiaco City Council have acknowledged the nominal rent of \$1.

Mr. Judd has agreed to purchase \$100., worth of trees for the Caryetum on behalf of the members for 1983. Later members will be asked to help plant them.

NOTE FOR "QUANDONG"

The WANATCA membership files already hold many distinguished names, and the files continue to be enriched with the names of new members prominent in our area. We are especially pleased to note the recent addition of Dr. Edwin A. Menninger, Author of the book "Edible Nuts Of The World", and of Len Hobson of South Africa, a pioneer in nut introductions in that country.

David Noel

Professional member's plaques are now available for \$5.00 plus \$1.00 postage. Here is a reproduction.



**West Australian  
Nut & Tree Crop Association**



**ACCREDITED  
PROFESSIONAL  
MEMBER**

## The LYCHEE — *Litchi chinensis* Sonn.

The Lychee is the most striking and perhaps the most esteemed of all the fruits of south China. In southern Florida the tree has proved quite adaptable to the climatic conditions. On the light sandy soils, deficient in minerals, the tree requires good care in the matter of soil correctives, the addition of compost to the planting holes and mulching, and the use of high-organic and mineral-rich fertilizers. Where supplied with good organic fertilizers the tree has fruited well and matured fruits of excellent quality.

The plants are tender when young and the roots are very intolerant of unsuitable conditions. Young trees should be protected from cold and drying winds either by some structure or by planting some protective cover crops around the small plant. The tree gains hardiness as it grows older and can withstand several degrees of frost without injury; most damage to the foliage is caused by cold winds, especially so when the flush of new growth has tender undeveloped leaves. Wind protection is very necessary for the lychee grove.

The tree is a handsome evergreen, being quite uniform in growth with a dense round top. The leaves are compound, forming from four to seven leaflets, each about three inches in length, glossy dark green above and greyish-green on the underside. The bark is greyish-brown and rough. There are many recognized varieties in China where each district has its own favorites. Until recently little progress has been made in southern Florida, in the development of new varieties. The Brewster variety has been the outstanding favorite while others have been under observation in test plantings. Among the new ones the Bengal and the Peerless varieties are mentioned as showing promise. In China selected strains have always been propagated by marcottage. In recent years methods of budding and grafting have been worked out in southern Florida and this, with the advent of hardy root-stocks, may make commercial orchardizing more successful.

The fruits are borne in open panicles that droop as the fruits increase in size and weight. When ripe they look like clusters of strawberries hanging from the ends of the twigs, making a very attractive appearance against the green background of foliage. The fruits are round, about an inch and a half in diameter, with a rough brittle shell, easily opened by the finger nails, from which pops the firm, whitish, gelatinous pulp in which is embedded an oval brown seed. The pulp is sweet, mildly acid, and of an agreeable flavor. The dried fruits, and also fruits canned in syrup, are exported from China and are known throughout world markets. The ripe fruit freezes well and can thus be transported to markets with the qualities of fresh fruit. The ripe fruit soon loses its attractive coloring and does not keep more than a few days in good edible condition without refrigeration.

The following analyses, in percentages, (27) show:— Water 17.90; protein 2.90; carbohydrates 77.50; fat 0.20; Calories per kilo of fruit pulp—3234. Total sugars have been quoted as high as 15.30 per cent.

Further analyses from Hawaii (6) show the lychee fruit to have an ascorbic acid value of 64 mg. per 100 grams of fruit pulp.

Florida grown fruit (2) contains:— Thiamine 00; riboflavin .050 mg; niacin .74 mg. per 100 grams of fruit pulp.

**Fr. Fruits for Southern Florida (Sturrock). Available from Granny Smith's Bookshop at \$8.50**

*Nephelium lappaceum* L.  
Rambutan  
Sapindaceae

This native of Malaya is a large, handsome, spreading tree with compound leaves. Large clusters of edible, red or orange-yellow fruits are borne at the tips of the branches in the summer months. The ovoid fruits are about the size of a hen's egg, and have long, soft, fleshy spines covering the surface. The edible portion is the layer of white, melting, subacid pulp that surrounds the rather large seed. In some varieties the pulp is attached to the seed, in others it is free.

The rambutan is the most promising of several related fruits for the low, humid part of the American Tropics.

The Pulasan (*Nephelium mutabile* Blume) differs from the rambutan in that the leaves are gray on the under surface, and the fruits are larger and purple brown.

The Lychee (*Litchi chinensis* Sonn.), from southern China, is a smaller tree with glossy compound leaves. The red warty fruits are about 1.5 inches in diameter and contain a layer of translucent white pulp that has an agreeable, sweet-acid flavor. Existing seedling trees in the American Tropics have been notably slow to fruit. Perhaps when grafted plants of dependable bearing varieties are available, this fruit can be more thoroughly tested. It is somewhat subtropical in its climatic requirements and should be grown at the higher elevations in the Tropics.

Another fruit from China with considerable resemblance to the lychee is the Longan (*Euphoria longan* (Lour.) Steud.). It is more vigorous in growth than the lychee, has larger leaves and brownish, wooly twigs. The reddish fruit is 0.5 to 0.75 inch in diameter and has a thin layer of edible pulp surrounding the seed. The flavor is inferior to that of the lychee.

All these related species are easily propagated by seeds, air layers, or grafting. Since seedlings of most of them are slow to come into bearing, this method can be recommended only to obtain stocks for grafting. Air layers from proved clones are sure to produce satisfactory results.

*Artocarpus communis* Forst.  
Breadfruit (fig. 12)  
"Pana," "Panapén"  
Moraceae

The Breadfruit is one of the most handsome trees of the Tropics. It is thought to have originated in Malaysia and to have been carried to the South Pacific Islands by the Polynesian migrations. The seedless breadfruit is now grown to some extent in most tropical areas. It was brought to the West Indies in 1792 by a second expedition under Captain Bligh, whose disastrous first voyage in the *Bounty* created worldwide interest in the plant.

The 30- to 60-foot trees bear luxuriant, dark-green leaves 1 to 3 feet in length and usually divided into several deep-cut lobes. The minute flowers are clustered on separate stems in the axils of newly formed leaves. The club-shaped male inflorescence is 6 to 12 inches long and drops to the ground in a few days. The 2-inch globose green heads, which are the female inflorescences, develop into the seedless fruits. One to three fruits grow together at the tip of each branch. Many varieties are known but the distinguishing characters are not well defined. Wilder (77) described 31 varieties from Tahiti, some with a few seeds at times.

The mature fruit is roundish or ovoid, 5 to 8 inches long by 4 to 6 inches in diameter, and may weigh from 2 to 10 pounds. The yellowish-green rind is divided into a series of low projections that may bear short spines in some varieties. A large central core is surrounded by numerous abortive ovules. The edible portion is the white or yellowish pulp of slightly immature fruit, which is either boiled as a vegetable or roasted. When roasted it resembles bread in flavor. The carbohydrate value of breadfruit is high. It is a fair source of thiamine and vitamin C in the cooked state.

The tree grows rapidly and comes into bearing early. The main crop is produced from May to August in the West Indies with some fruiting throughout the year. Fruiting is more prolific in humid areas, but the trees will stand several months of drought each year. Propagation is by suckers from the roots, root cuttings, layering, or marcotts.

The Breadnut, or "Pana de Pepita," (fig. 13) is a prolific seed-bearing variety common in some areas of the Tropics. It closely resembles the seedless breadfruit except that the tree is a little more coarse in character. The rind of the fruit is covered with fleshy spines. Little edible pulp remains in most varieties, as it has been replaced by brownish seeds 1 inch or more in length and up to 1 inch in diameter. The seeds are edible after boiling or roasting and are said to resemble chestnuts. The seeds are a good source of calcium, phosphorus, and niacin.

The breadnut is easily propagated by seeds, which should not be allowed to dry out completely.

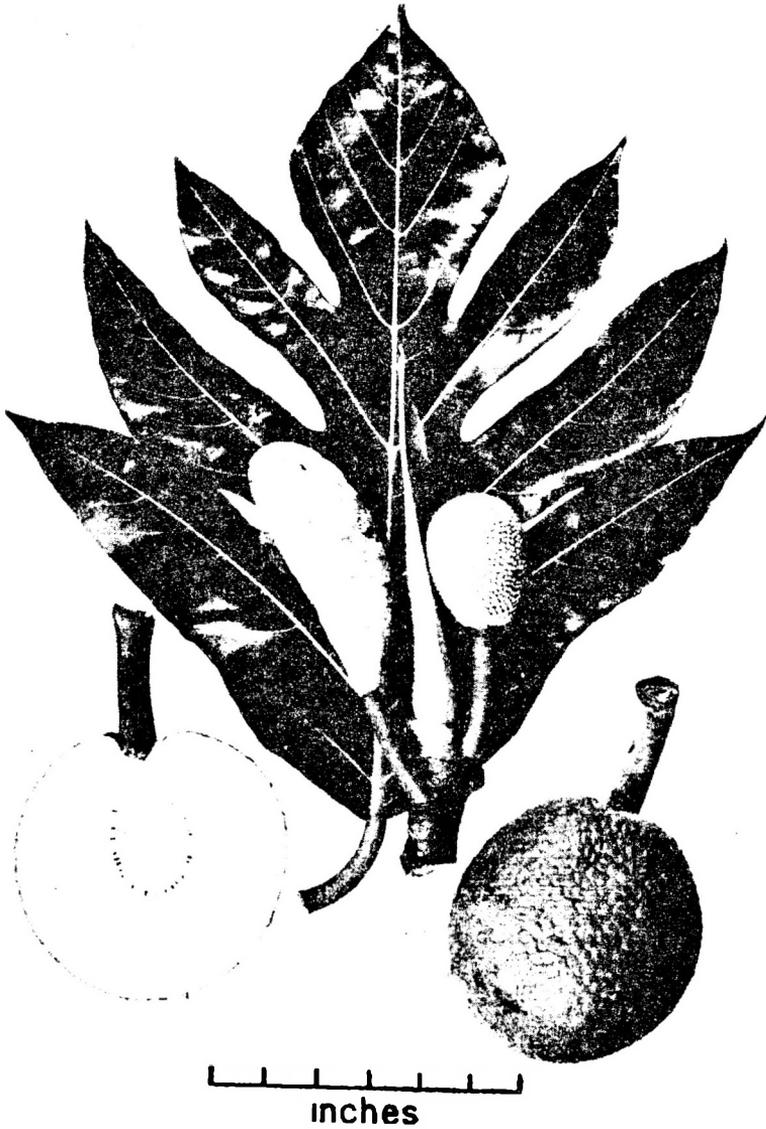


FIGURE 12.—The breadfruit, *Artocarpus communis*.

EXECUTIVE MEETING NOTES - Tuesday 22nd March, 1983.

The Black Walnut seed ordered from South America has not arrived and David Noel is contacting another source.

The Treasurer's Report was read and passed.

The Conference is coming together very well.

Mr. & Mrs. Aitken produced a constitution to be approved and discussed in detail when Members have had a chance to comment.

Field Trip

It has been suggested that other interested associations be invited to our Field Day's.

Library Facilities

This matter was discussed as to whether a member could be found who would run a library facility or whether it would be best to put books in a public library for general use. Members were asked to think about the project.

Caryetum

The last receipt from the Subiaco C.C. was passed over to Mr. Noel.

Mr. Judd has agreed to purchase \$100., worth of trees for the Caryetum on behalf of the members for 1983.

Later members will be asked to help plant them.

# **West Australian Nut & Tree Crop Association**

*Incorporating the West Australian Nutgrowing Society*

## **EXECUTIVE COMMITTEE**

PRESIDENT	David Noel	3802334
VICE-PRESIDENT	Wayne Geddes	3213200
SECRETARY/TREASURER	Lorna Budd	4585918
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QUANDONG EDITOR	Bill Napier	3260311
	<b>Warren Boucaut</b>	3905311
	Milan Mirkovich	<b>4202068</b>
	Nola Washer	4075888
	Alex Sas	3975628
	Reg Judd	2766844
	Mr & Mrs Aitken	2741469

### **Editor's Address**

**11 Canne Road,  
ARMADALE.**

**P.O. Box 169.**