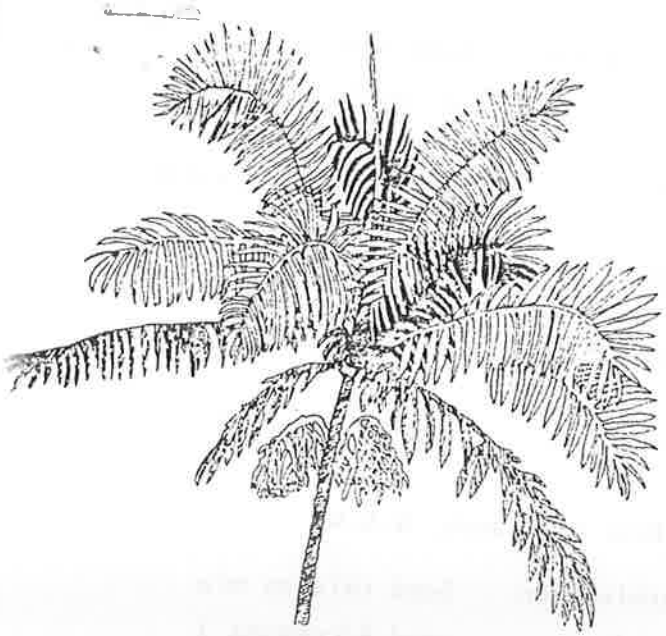

S.G.A.P.

RAINFOREST STUDY GROUP

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NEWSLETTER NO 3

MARCH, 1984

PROPAGATION REPORTS

Following is a propagation report from Queensland member Mrs Jan Sked.
"Seed raising methods - Method 1. - 3 parts (sometimes 2) sand to 1 part peatmoss in ice cream containers placed in full sun. Method 2 - Straight moistened peatmoss in clear plastic bags. Seed is placed in peatmoss in bag, sealed with a twist tie and tied onto clothes line under house. This method was most successful in the warmer months. I have found that fresh seed germinates very quickly. Old seed will take many weeks or months and, if too old, not at all."

INDIVIDUAL RESULTS:-

Species	germination period	planted	% germination	Seed raising mix
Barklya syringifolia	15 days	Mar	100%	3 parts sand + 1 peatmos
Barklya syringifolia	12 days	Sept	50%	peatmoss in plastic bag
Castanospermum australe	12 weeks	Sep	100%	3 sand/1 peatmoss
Commersonia fraseri	13 days	Mar	100%	3 sand/1 peatmoss
Cupaniopsis serrata	18 days	Nov	100%	peatmoss in plastic bag
Erythrina sp.	10 weeks	May	80%	2 sand/1 peatmoss
Eugenia hodgkinsoniae	4 weeks	Nov	100%	peatmoss in plastic bag
Eugenia rubiginosa	23 days	Feb	100%	" " " "
Eugenia wilsonii	18 weeks	Jan	40%	3 sand/1 peatmoss
Eustrephus latifolius	7 weeks	Sep	80%	peatmoss in plastic bag
Flindersia australis	13 days	Nov	90%	" " " "
Hicksbeachia pinnatifolia	4 weeks	Nov	100%	2 sand/1 peatmoss
Leea indica	6 weeks	Oct	90%	peatmoss in plastic bag
Millettia megasperma	12 weeks	Sep	50%	3 sand + 1 peatmoss
Millettia megasperma	7½ weeks	Mar	70%	peatmoss in plastic bag

Species	germination period	planted	% germination	Seed raising mix
Omalanthus populifolius	13 days	Jan	60%	3 sand/1 peatmoss
Omalanthus populifolius	5 days	Oct	100%	peatmoss in plastic bag
Pittosporum rhombifolium	8 weeks	Mar	75%	" " " "
Planchonella australis	20 days	Nov	100%	" " " "
Planchonella eerwah	30 days	Dec	100%	2 sand/1 peatmoss

Following is a propagation report from David Bray of Elands, N.S.W.

Species	germination period	planted	% germination	Seed raising mix
Podocarpus elatus	4 months	Sep	?	sand 4/compost 1
Planchonella australis	37 days	Dec	50%	" "
Synoum glandulosum	32 days	Dec	95%	" "
Trochocarpa laurina	18 months	Jan	10%	" "
Psychotria loniceroides	33 days	Dec	?	" "
Glochidion ferdinandi	43 days	Jan	25%	" "
Hymenosporum flavum	36 days	Jan	-	" "
Notolaea longifolia	9 months	Feb	80%	" "
Callicoma serratifolia	8 months	Feb	20%	" "
Eustrephus latifolius	2 months	Feb	25%	" "
Caldcluvia paniculata	7 months	Feb	10%	" "
Syzygium paniculatum	45 days	Feb	90 %	" "
Morinda jasminoides	5 months	Mar	50%	" "
Dysoxylum fraseranum	6 months	Mar	50%	" "
Clerodendrum tomentosum	8 months	-	100%	" "
Syzygium moorei	8 months	Mar	40%	" "
Linospadix monostachyus	11 months	Mar	50%	" "
Elaeodendron australe	8 months	Mar	35%	" "
Elaeocarpus reticulatus	18 months	Mar	still germinating	" "

Next, with the reports we have a propagation report from Richard Riley of Grafton.-

Species	germination period	planted	% germination	Seed raising mix
Araucaria cunninghamii	22 days	Feb	80%	sand + soil
Araucaria bidwillii	7 months	Feb	50%	sand + soil
Schefflera actinophylla	6 months	Oct	95%	" "
Castanospermum australe	4 months	Aug	60%	" "

Finally we have a propagation report from David Thomas of Sydney:-

Species	germination period	planted	% germination	Seed raising mix
Abarema sapindoides	1 month	-	80%	2 parts river sand/ 1 part peat moss
Acacia melanoxylon	3 weeks	-	80%	" "
Acmena brachyandra	3 months	Oct	70%	" "
Acmena smithii	4 months	Jun	90%	" "
Alectryon subcinereus	2 months	Dec	1 only	" "
Alphitonia excelsa	1 month	Nov	40%	" "
Aphananthe philippinensis	1½ months	Mar	80%	" "
Araucaria bidwillii	3 months	Oct	20%	" "
Archontophoenix alexandrae	5 months	Aug	70%	" "
Archontophoenix cunninghamiana	8 months	May	90%	" "
Austromyrtus bidwillii	2 months	Dec	60%	" "
Backhousia myrtifolia	2 months	Feb	40%	" "
Castanospermum australe	1 month	-	95%	" "
Ceratopetalum apetalum	3 weeks	Jan	80%	" "
Chrysophyllum pruniferum	2 months	Dec	10%	" "
Cissus antarctica	3 months	Jun	20%	" "
Clerodendrum tomentosum	1 week	Feb	90%	" "
Cordyline fruticosa	1½ months	Apr	90%	" "
Cordyline stricta	2 months	-	70%	" "

Species	germination period	planting	% germination	Seed raising mix
Cryptpcarya glaucescens	3 months	-	80%	2 parts river sand/ 1 part peat moss
Cryptocarya laevigata var bowei	5 months	May	70%	" "
Cryptocarya rigida	3½ months	Mar	30%	" "
Diploglottis cunninghamii	1 month	Dec	70%	" "
Elaeocarpus kirtonii	4 months	Feb	5%	" "
Elaeocarpus reticulatus	4 months	Jun	5%	" "
Elattostachys nervosa	2½ months	July	70%	" "
Emmenosperma alphitonioides	2½ months	Nov	50%	" "
Endiandra pubens	6 months	May	10%	" "
Eustrephus latifolius	2 months	-	80%	" "
Flindersia australis	2 months	-	70%	" "
Flindersia xanthoxyla	3 months	Dec	70%	" "
Glochidion ferdinandi	2 months	Nov	90%	" "
Gymnostachys anceps	4 months	-	80%	" "
Hymenosporum flavum	2 months	-	80%	" "
Jagera pseudorhus	3 weeks	Dec	60%	" "
Linospadix monostachyus	12 months	-	60%	" "
Livistona australis	2 months	Dec	80%	" "
Macadamia integrifolia	2 months	-	80%	" "
Melia azederach var australasica	3 months	Jul	80%	" "
Musa banksii	3 months	Nov	40%	" "
Oreocallis wickhamii	1 month	-	70%	" "

GROWING RAINFOREST PLANTS FROM CUTTINGS by Graham Quint.

To date I have tried several rainforest species from cuttings and the majority have not proved difficult to grow in this manner. I do use a misting system and the cuttings frame is in full sun so I would be interested in hearing whether the following species can be grown as easily without misting.

The two local species of Davidsonia are rainforest trees with excellent potential for cultivation as food producers. One, Davidson's Plum grows to 12 metres and has large ornamental leaves.
The Smooth Davidsonia is an unnamed, rare tree with smaller, hairless leaves. It is restricted to a few locations on the North Coast. It is known to grow only from cuttings, for the seeds are mysteriously sterile.
These Davidsonias bear prolific quantities of plum size purple fruit with crimson edible flesh. They can be used for jams, pies, jellies and juices and are also said to make an excellent wine.
Whenever I go bush I eagerly seek the tangy, sometimes aromatic fruit of the Lillypillies (Acmena and Syzygium species), a welcome change from cultivated foods
These plants belong to the same botanical family as the better-known Eucalypts.
The common Lillypilly (Acmena smithii) is a tree which grows in coastal forests from Gippsland (Vic) to Cape York (QLD).
As with many other native plants, there is a great variation in the quality of its fruit.
The Brush Cherry (Syzygium paniculatum), a native of the Big Scrub, usually is said to have the highest quality fruit of this group, with a distinctive flavour all of its own.
The Blue Lillypilly (S. coolminianum) and the Riberry (S. luehmannii) also produce exceptional fruit.
Fruits from the Lillypillies can be eaten raw, in jams and jellies.
Their closest relatives in Indonesia and South America are some of the staple fruits for the people of these countries.
The Bauple Nut (Hicksbeachia pinnatifolia) is closely related to the Macadamia, whose foliage it resembles, but with larger leaves and more striking appearance. It too has a fine quality nut.
The tree's ornamental value and small size (6 m high) make it an ideal tree for the back yard.
The Native Tamarind (Diploglottis australis) is a distinctive rainforest tree, its canopy crowned with large coarse leaves.
Its fruit is very sour-tasting when eaten raw, but excellent as a fruit drink when diluted with water and sweetened to taste.
The Native Tamarind is a member of the Sapindaceae botanical family making it closely related to the highly regarded Litchi, Rambutan and Longan of South-east Asia.
The Lacebark Kurrajong (Brachychiton discolor) and the Flame Tree (B. acerifolium are two local trees commonly grown as ornamentals. Their seeds are edible and can be eaten raw or roasted and ground as a substitute for coffee.
The Plum Pine (Podocarpus elatus) has been described as having the best of the indigenous fruits.
The tree is elegant and renowned for its fine quality timber. Its fruit can be eaten raw, and provides a tasty difference in a fruit salad. The fruit's mucilaginous nature also lends it well to jellies.
Like the Plum Pine, the Black Apple fruit (Planchonella australis) needs to be eaten when thoroughly ripe.
The fruit are large, almost black, plum like up to 5cm long, sometimes found in considerable quantities on the rainforest floor. When soft and ripe I find their flavour like a cross between guava and custard apple. With a little variety selection, this could easily become an excellent dessert fruit.
The huge cones of the Bunya Pine (Araucaria bidwillii) contain large seeds about 5 cm long. These are said to be very tasty noiled or roasted, and were considered a delicacy by the Aborigines.
Other trees, shrubs and vines of the rainforest have edible fruits, tubers, seeds and leaves, but they are too numerous to mention in the space of this article

1984 FEES DUE Because of the long period since the last Newsletter, this edition has been enlarged and posted to all persons who joined the Study Group since its formation. All persons who received Newsletters 1 & 2 and who have not paid any subsequent fees are requested to forward $2 to cover 1984 fees. Those persons who have forwarded a second subscription or who have joined in the last 15 months will be financial till 31st December, 1984. (N.B. Please submit information for Newsletters. Only 6 of our 80 members have submitted detailed propagation reports and this makes continuing production of newsletters difficult.

CUTTINGS:-

Species	Period for Root Formation	Cutting Mix
Alstonia scholaris	2 months	50% sand 50% peatmoss
Rhodamnia rubescens	2 months	" "
Passiflora herbertiana	1 month	" "
Peperomia tetraphylla	2 months	" "
Ervatamia angustisepala	1 month	" "
Sterculia quadrifida	2 weeks	" "
Gmelina leichhardtii	1 month	" "

Cuttings were taken in the standard manner with a cut below the node and a narrow slice of bark removed to increase the effective rooting area. Rooting hormone powder used was "Seradix No 2" and the cuttings were placed in the miniature glass house with automatic misting.

Other species which have proved successful from cuttings are Tasmannia inspida, Calophyllum inophyllum and Pisonia umbellata.

Both the Pisonia and Calophyllum would be ideal indoor plants. The Calophyllum is a northern Australian littoral rainforest plant known as Beach Calophyllum or Alexandrian Laurel and has large dark green fairly stiff leaves with fine, close parallel venation. The cutting was taken from a plant which I had grown from seed sent into the rainforest stucy group seed bank.

PLANTS FOR ESTABLISHING A RAINFOREST BUFFER ZONE

There are a number of plants which grow both in rainforest and wet sclerophyl or even dry scelrophyl forest. Those plants which exist naturally in a combination of these different habitats would make ideal buffer zone plants to protect a planted or regenerating rainforest. They are the plants which are normally found on the edges of rainforests and include - Pittosporum undulatum (Sweet Pittosporum), Rapanea variabilis (Muttonwood), Elaeocarpus reticulatus (Blueberry Ash), Omalanthus populifolius (Bleeding Heart), Polyscias sambucifolius (Elderberry Panax), Backhousia myrtifolia (Grey Myrtle), Callicoma serratifolia (Black Wattle - usually near creek beds), Glochidion ferdinandi (Cheese Tree), Acmena smithii (Lilly Pilly), Syncarpia glomulifera (Turpentine) and Eucalyptus species such as Sydney Blue Gum (Eucalyptus saligna).

I have successfully grown Black Wattle, Cheese Tree, Turpentine and Lilly Pilly from seed. Sweet Pittosporum rarely needs planting as it seems to readily colonise suitable sites particularly in the Sydney Region. Blueberry Ash can be grown from cuttings especially the fresh new young shoots that arise after a large tree has been cut back.

RAINFOREST TREES AS STREET PLANTINGS

One of our members has suggested that we publish information on street plantings of various rainforest plants so I'll start the ball rolling with a few that I know and please write in if you know of other street plantings so that we can publish this information.

Chapel Road, Bankstown (Sydney) - Illawarra Flame Trees (Brachychiton acerifolius)

St. James Road, Sydney (opposite Hyde Park) - Native Teak (Flindersia australis

"Flavour in Native Fruits" (by Peter Hardwick for the Year of the Tree)

Our North Coast (N.S.W.) region is naturally endowed with a large number of native edible plant species. Other than the Macadamia, their potential as developed food plants generally has been unrecognised.

Even without the selection of cultivated varieties, many local plants produce foods with exceptional flavour. One could predict that the next generation of food plants will include more of our local trees.

The region's moist subtropical climate, geography and range of soil types have produced a variety of natural habitats, each containing its own unique flora adapted to specific environmental conditions.