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Australian Plants of Northern Queensland

Much has been written of the Australian flora but inadequate attention has been given to our tropical areas and the bonus to pleasant living that wild plants of that area can bring. There is an abundance of plant species ideal for a home setting and for horticulture generally. This issue has been prepared by readers in Atherton, Queensland.

The Rainforests As A Plant Treasure

The rainforest flora of Australia is an enormous untapped resource for plants for general horticulture. In their natural habitat most plants grow to great heights, depending on their situation in the forest, as a result of their competitive thrust for life-giving solar energy. Away from this survival situation many are graceful shrubs or trees with interesting foliage, fruit or flowers.

This issue is not just for people living in the tropics though it is hoped that they will be stirred to note and cultivate their own beautiful flora. Many northern plants have proved very adaptable and in many cases even hardy enough to be street trees in temperate climates. Most become beautiful specimen trees or shrubs. In more southern areas many rainforest plants have proven valuable as indoor plants, and for the "bonsai" grower.

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COVER PLATE

Syzygium cormiflorum

Photography by Tony Irvine

A tree of the rainforest. A query as to the suitability of this particular photograph for a cover for Australian Plants brought the following reply which carries a message that is best presented as a direct quote, Editor.

"To me it seems quite a good photograph for a cover, particularly as nothing quite like it has ever appeared on a cover of Australian Plants before. To many readers this habitat photograph would be a complete surprise. Technically there may be some that could take a more superb photograph but this photograph shows the tree just as it is in conditions not generally favouring good photography.

"Suitability as an illustration of the use of plants in a garden? I disagree with you. I am so often amazed, particularly with rainforest plants, how people cannot seem to translate a plant looking glorious in its natural habitat to the possibilities of it looking similarly as glorious (although never quite) in their gardens. It may be the reason why the plants growing in one's own area are the last to ever be considered for ornamental planting locally.

"*Syzygium cormiflorum* is a superb subject for a garden in tropical and sub-tropical regions (coastal), although in warm temperate areas the cormiflorous habit may perhaps become modified. Reasons for its suitability for gardens are:

1. It doesn't take up much room, particularly as it grows taller. Most trees have very narrow crowns, with the foliage extending only 2-3 metres either side of the trunk.
2. When grown in the open, it produces a small conical shaped tree which becomes covered with pink-purple new leaves at the time of main growth flushes. This more than compensates for the lack of flowers, which occur 8-12 years after planting.
3. As the plant grows taller, the foliage elevates, revealing the stem which is then ready to commence flowering and fruiting. The flowers are cream, often tinged with pink, becoming five cm in diameter, growing on the trunk, ripening to the fruit that are shown in the photograph.
4. In gardens one could expect the tree to grow 8-10 metres tall in an open situation and be pushed to 12 metres tall with close planting. It has a medium growth rate in Atherton reaching 4-6 metres in twelve years. The tree in the photograph would be around 100 years old.
5. The copious nectar produced in the flowers attracts honey eater birds.

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Wild Plants of North Queensland

From Roses to Clarence River *Baeckea*
to the Real North Queensland Plants

By Tony Irvine, C.S.I.R.O., Div. of
Forest Research, Atherton, Queensland, 4883.

As a group of people who have been settling Australia since 1788 we have been slow to recognise the quality of the local vegetation and what it has to offer. We ignored the local Aboriginal cultures and commenced growing roses, pine trees and apples. This ignorance continued in the settling of North Queensland; roses and pine trees were still grown but the apples failed. Possibly this failure and the relatively unhappy appearance of roses resulted in a shift in attitudes but the change was not to the local flora; it switched to "Poinci-frangi-randas" or "Cassia-poinci-panis".

Only over about the last thirty years has there been any widespread interest in growing Australian plants in our gardens. This interest developed in southern Australia with emphasis on the heathland garden as THE native garden. The native plant movement arrived in North Queensland within the last ten years and once again our conservatism prevailed. Instead of turning to the local flora we started growing southern natives such as the Clarence River *Baeckea* and south-west Australian species. Many of these plants fail or have relatively short lives in North Queensland.

Today very few North Queensland plants are grown in our gardens and few are available in local nurseries. This is surprising as our rainforest, mangrove, open forest and heathland communities collectively have more species than any other area in Australia.

An example of our ignorance with respect to our local flora is the lack of usage of *Dillenia alata* (Red Beech). This tree grows abundantly in many of the swamp depressions around Cairns. Red Beech has beautiful large glossy green leaves with winged petioles; new leaves are reddish-brown. The flowers are bright yellow and 6-9 cm. diameter lasting for one day but being replaced daily for one to two months. The open fruit reveals bright red valves contrasting with dense green. The trunk has an attractive papery copper-pink bark which changes to maroon during the year. If one wants to buy a *Dillenia* in a Cairns' nursery one will find only the Indian tree *Dillenia indica* (Elephant Apple) not the more attractive local *Dillenia*.

In this paper I shall concentrate only on showing how a native garden can be developed from rainforest species alone. From well over a thousand possibilities I have selected approximately 75 plants and arranged them in categories to help the home gardener. Characteristics of some of the plants are described on pages 227-232. The plants selected are very suitable for use in Mossman, Cairns, Innisfail, Ingham, Townsville and the Proserpine — Mackay region, as well as the northern half of the Atherton Tablelands. In cooler parts of the Atherton Tablelands, some species will have to be replaced with more cold tolerant species.

In North Queensland our gardens can have rainforest themes, open forest themes, heathland themes and mangrove themes or we can select a suite of species admixing all these themes. Standard cultivation techniques are readily applicable to rainforest plants, which do very well in acid soils. Except for monsoon vine forest species, the performance of Australian rainforest plants in alkaline soils is not well known.



Geissois biagiana △ — New or unusual leaves — ▽ *Neorites kevediana*





Pandanus gemmifer (above)

Photography by Tony Irvine

The striking contrast in shape against more conventional foliage, is highlighted in this garden setting. This hardy plant usually grows along edges of streams and lakes. It produces miniature plantlets along its stems (hence the name "Puppy Pandanus"), which drop into the water below and establish where they can find anchorage.

Geissois biagiana (top left) 'Northern Brush Mahogany' Photography Tony Irvine

Can flowers look more colourful than this? These new leaves clothe the whole tree for 1-3 months of the year on at least 2 occasions during the year in North Queensland.

Neorites kevediana (bottom left) 'Fishtail Oak'

Photography Tony Irvine

An excellent 'cut foliage' plant. It certainly provides all the beauty that any flower can provide. The new leaves are rusty red brown before turning glossy green. Flowers are white. In the open, it develops a thin, flat form similar to a Pencil pine in shape. See page 207 for a description of this plant with other Proteaceae.

UNUSUAL PLANT FORMS

The following categories indicate themes that can be developed in a rainforest garden and species suitable for the themes.

SCREEN PLANTS AND WINDBREAKS

In suburban areas, to prevent neighbour problems, trees along fences should not exceed 8 metres in height.

Acmena smithii var. *minor*, *Callistemon viminalis*, *Croton insularis*, *Glochidion harveyanum*, *Leptospermum woorenooran*, *Pittosporum venulosum*, *P. ferrugineum*, *Randia fitzalanii*, *Syzygium fibrosum*, *S. x erampelinum*, *S. oleosum*, *S. paniculatum*.

SHADE PLANTS

Acacia aulacocarpa, *A. hylonoma*, *A. melanoxylon*, *Beilschmiedia obtusifolia*, *Chionanthus ramiflorus*, *Cinnamomum oliveri*, *Cryptocarya hypospodia*, *Ficus crassipes*, *F. destruens*, *F. triradiata*, *Flindersia acuminata*, *Syzygium angophoroides*, *S. cormiflorum*, *S. sayeri*, *S. erythrocalyx*, *S. torte*, *S. tierneyanum*.

GREENERY

Tree ferns: *Cyathea cooperi*, *C. rebecca*, *C. robertsiana*, *C. woollsiana*.

Palms: *Archontophoenix* spp., *Hydriastele wendlandiana*, *Laccospadix australasica*, *Licuala ramsayi*, *Linospadix* spp., *Livistona* spp., *Ptychosperma* spp.

Banana: *Musa acuminata*.

Gingers: *Alpinia caerulea*, *Hornstedtia scottiana*, *Tapeinocheilos queenslandiae*.

Cycads: *Bowenia spectabilis*, *Lepidozamia hopei*.

Trees: *Acacia hylonoma*, *Podocarpus neriifolius*.

ATTRACTIVE FLOWERS

Acacia hylonoma, *Aceratium ferrugineum*, *Barringtonia acutangula*, *B. calyptata*, *Darlingia darlingiana*, *Dephlanchea tetraphylla*, *Dillenia alata*, *Freycinetia marginata*, *Lagerstroemia archeriana*, *Oreocallis wickhamii*, *Ormosia ormondii*, *Syzygium alliligneum*, *Xanthostemon chrysanthus*, *X. whitei*.

SHOWY FRUITS

Acmena hemilampra, *Archidendron lucyi*, *Ficus leptoclada*, *Harpullia rhytidocarpa*, *Synima cordieri*, *Syzygium alliligneum*, *S. fibrosum*, *S. paniculatum*, *Ternstroemia cherryi*.

SHRUBBERIES

Open areas

Alyxia ruscifolia, *Callicarpa longifolia*, *C. pedunculata*, *Callistemon viminalis*, *Clerodendrum floribundum*, *Eugenia reinwardtiana*, *Leea indica*, *Melastoma polyanthum*, *Ocotea sp.*, *Osbeckia* spp., *Pittosporum revolutum*.

Shady areas

All of the above plus: *Ardisia brevipedata*, *A. pachyrrhachis*, *Dichapetalum papuanum*, Ferns, *Gardenia meriken*, *Hodgkinsonia frutescens*, *Mitrephora froggattii*, Palms, *Phaleria clerodendron*, *P. octandra*, *Pittosporum rubiginosum* sub-species *wingii*, *Psychotria dallachyana*, *Randia hirta*, *Rapanea subsessilis*, *Sauropus macranthus*, *Syzygium erythroxum*, *S. wilsonii*.

COLOURFUL LEAVES

New leaves

Red: *Cryptocarya mackinnoniana*, *Waterhousea unipunctata*, Roly Poly Satin Ash, *Geissois biagiana*, *Ficus congesta*, *Ternstroemia cherryi*.

Pink: *Arytera divaricata*, *Waterhousea unipunctata*, Roly Poly Satin Ash, *Ficus crassipes*, *Syzygium wilsonii* s.sp., *cryptophlebium*.

Rusty Red-browns: *Barringtonia calyptata*, *Elattostachys* cf. *bidwillii*, *Metrosideros queenslandica*, *Neorites kevediana*, *Syzygium fibrosum*.

Maroon-browns: *Acmena hemilampra*.

Velvet brown: *Neolitsea dealbata*.

Shiny brown: *Terminalia sericocarpa*.

Apricot: *Pilidiostigma tropicum*.

Purple/Black: *Lindsayomyrtus brachyandrus*, *Syzygium cormiflorum*, *S. erythrocalyx*, *S. x erampelinum*.

Cream/Rose: *Maniltoa schefferi*.

Old leaves

Red: *Omalanthus populifolius*, *Terminalia aridicola*, *T. catappa*.

Orange: *Athertonia diversifolia*, *Croton insularis*.

Yellow: *Darlingia darlingiana*.

Undersurface leaves

Velvet brown: *Grevillea pinnatifida*, *Opisthiolepis heterophylla*.

Silver: *Croton insularis* plus above two.

White: *Neolitsea dealbata*.

BARK AND STEM PATTERNS

Smooth dappled barks

Austromyrtus bidwillii, *Lagerstroemia archeriana*, *Leptospermum longifolium*, *Tristaniopsis exiliflora*.

Papery barks

Dillenia alata, *Melaleuca leucadendron*, *Syzygium alliligneum*, *S. papyraceum*, *S. forte*.

UNUSUAL SHAPES

Unusual forms

Archidendron lucyi, *Delarbrea michieana*, *Neorites kevediana*, *Pandanus zea*, *P. gemmifer*, *P. monticola*, *P. solms-laubachii*, *Syzygium cormiflorum*, *S. erythrocalyx*.

Unusual leaf shapes

Aleurites moluccana, *Athertonia diversifolia*, *Cryptocarya mackinnoniana*, *Darlingia ferruginea*, *Decaspermum humile*, *Endospermum medullosum*, *Geissois biagiana*, *Podocarpus amarus*, *P. dispermus*, *P. neriifolius*, *Toeckima erythrocarpum*.

ANIMAL ATTRACTANTS

Barringtonia spp., *Callistemon* spp., *Decaspermum humile*, *Euodia* spp., *Ficus* spp., *Lauraceae* spp., *Proteaceae* spp., *Syzygium* spp.

AROMATIC LEAVES

Acronychia acidula, *Alpinia caerulea*, *Beilschmiedia obtusifolia*, *Cinnamomum oliveri*, *Eucalyptus torelliana*, *Melaleuca leucadendron*, *Syzygium sayeri*, *S. johnsonii*.

EDIBLE FRUITS

Acronychia acidula, *A. crassipetala*, *Antidesma bunius*, *A. erostre*, *Antirhea tenuiflora*, *Buchanania arborescens*, *Diploglottis diphylostegia*, *D. harpullioides*, *D. pedleyi*, *Elaeocarpus bancroftii*, *Eugenia reinwardtiana*, *Ficus copiosa*, *Planchonella brownlessiana*, *P. xerocarpa*, *Terminalia catappa*.



Freycinetia marginata △ — attractive flowers — ▽ *Darlingia darlingiana*





Caryota rumphiana (above) Unusual leaf shapes, greenery

Photography Tony Irvine

The 'Fishtail Palm' is a hardy palm which will tolerate quite dry conditions. It has a single stem and bipinnate leaves. It responds readily to regular watering and makes its appearance noticeable within 3-4 years after planting out at 60cm. tall.

Freycinetia marginata (top left) 'Giant Climbing Pandanus'

Photography Tony Irvine

A climbing member of the Pandanus family, which does best in frost free areas of north Queensland. It prefers semi-shade initially and regular watering in dry periods. The pink leafy bracts subtending the flower can be up to 80 cm long.

Darlingia darlingiana (bottom left) 'Brown Silky Oak'

Photography Tony Irvine

A fast growing tree with a thin form, which readily grows in the open. The large white flower spikes conspicuously cover the tree during September-October in North Queensland. Flowering occurs 2-3 years after planting. Old leaves turn yellow.

SWAMP-PLANTS FOR SOIL DRAINAGE

Acmena hemilampra, *Dillenia alata*, *Ganophyllum falcatum*, *Laccospadix australasica*, *Linospadix microcarya*, *L. minor*, *Melaleuca leucadendron*, *Melastoma polyanthum*, *Octanthera* sp., *Osbeckia* spp., *Ptychosperma elegans*, *P. macarthurii*, *Pandanus gemmifer*, *P. monticola*, *P. solms-laubachii*, *Randia fitzalanii*, *R. sessilis*, *Syzygium angophoroides*, *S. rubiginosum*, *S. tierneyanum*.

ROCKERIES

Open situations

Asplenium spp., *Boea hygroskopica*, *Clerodendron floribundum*, *Dianella* spp., *Drynaria rigidula*, *Lycopodium cernuum*, *Melastoma polyantha*, *Nephrolepis biserrata*, *N. hirsutula*, *Octanthera* sp., Orchids, *Platynerium* sp., *Psychotria dallachyana*, *Rhodomyrtus trineura*.

Shady situations

All the above plants plus: *Ardisia brevipedata*, *Blechnum cartilagineum*, *B. patersonii*, *Dianella* spp., *Romnada grallata*, *Polia macrophylla*, *Psychotria dallachyana*, *P. loniceroides*, *P. nematopoda*, *Randia racemosa*, *Selaginella longipinna*.

INDOOR PLANTS

Annonaceae, *Dichapetalum papuanum*, *Ficus* spp., *Hodgkinsonia frutescens*, Orchids, Palms, *Phaleria octandra*, *Podocarpus* spp., *Randia* spp. and many more.

Landscaping

The "Real North Queensland Stuff" in Action by Tony Irvine

How a suburban block can be planted with "Real North Queensland Stuff" is illustrated on the block plan. The plants all occur in rainforest communities and the choice of plants is restricted to those mentioned in the "Roses to Clarence River Baeckea to the Real North Queensland Stuff", article, although there are hundreds of others that could be used.

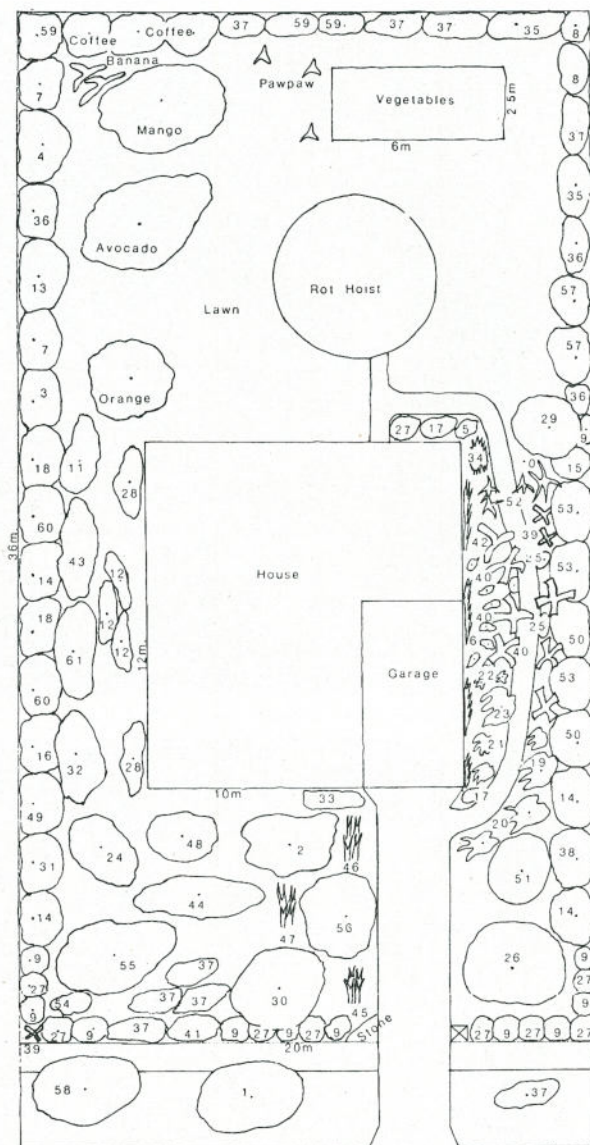
The size of the block selected is 36 metres long x 20 metres wide, i.e. 720 sq. metres in area. This is smaller than the general run of urban blocks, which tend to be around 800 sq. metres in area. The house is a 12 square home including the garage or carport. The block is arbitrarily aligned on a N-S axis, bearing in mind, that in much of eastern North Queensland, the prevailing winds for two-thirds of the year are south easterlies. Another factor kept in mind, is to provide as much sunlight as possible around the rotary hoist clothes line and the vegetable garden and yet still maintain privacy with selected screen plants. The size of the outlines of the plants have been drawn in scale to the size of their expected spread.

There are 61 species of plants on the diagram. This does not include the many shade loving plants that could be included as underplantings in the greenery represented on the eastern side of the house. Neither does it include rockery plants, that could be developed along the entrance or against walls of the house, nor does it include vines that could be used on trellises over the driveway, pathways and on larger trees. Moreover, there are numerous epiphytes such as orchids, ferns, hoyas and ant plants, that could be included on the branches and stems of the trees and ferns shown.

Landscaping A Suburban Home As A Rainforest

The 123 more conspicuous plant forms are made up of: Distinct Trees — 16; Commercial Fruit Trees — 3; Smaller Trees and Screen Plants — 50; Shrubs or Small Hedge Plants — 21; Palms — 8; Tree Ferns — 10; *Pandanus* — 3; *Lepidozamia* — 3; Bananas, Native — 1; Commercial — 3; Pawpaws — 3; Coffee — 3.

1. *Acacia hylonoma*
2. *Aceratium ferrugineum*
3. *Acmena smithii* var. *minor*
4. *Acronychia crassipetala*
5. *Alocasia macrorrhiza*
6. *Alpinia caerulea*, *A. modesta*, *A. antarctica*
7. *Antidesma buniis*
8. *Antidesma erostre*
9. *Alyxia ruscifolia*
10. *Archontophoenix alexandrae*
11. *Ayrtia divaricata*
12. *Austromyrtus bidwillii*
13. *Buchanania arborescens*
14. *Callistemon viminalis*
15. *Callicarpa pedunculata*
16. *Clerodendron floribundum*
17. *Crinum pedunculatum*
18. *Croton insularis*
19. *Cyathea celebica*
20. *Cyathea cooperi*
21. *Cyathea rebecca*
22. *Cyathea robertsiana*
23. *Cyathea woollsiana*
24. *Darlingia ferruginea*
25. *Delarbrea michieana*
26. *Dillenia alata*
27. *Eugenia reinwardtiana*
28. *Ficus congesta*
29. *Ficus copiosa*
30. *Geissois biagiana*
31. *Glochidion harveyanum*
32. *Grevillea pinnatifida*
33. *Harpullia rhyticarpa*
34. *Laccospadix australasica*
35. *Lagerstroemia archeriana*
36. *Leea indica*
37. *Leptospermum longifolium*
38. *Leptospermum woorenooran*
39. *Lepidozamia hopei*
40. *Licuala ramsayi*
41. *Melastoma polyanthum*



42. *Musa acuminata* ssp. *banksii*
43. *Neolitsea dealbata*
44. *Neorites kevediana*
45. *Pandanus conicus*
46. *Pandanus gemmifer*
47. *Pandanus zea*
48. *Ptilidiostigma tropicum*

49. *Pittosporum ferrugineum*
50. *Pittosporum venulosum*
51. *Podocarpus neriifolius*
52. *Ptychosperma elegans*
53. *Randia fitzalanii*
54. *Sauropus macranthus*
55. *Syzygium alliiigneum*

56. *Syzygium cormiflorum*
57. *Syzygium fibrosum*
58. *Syzygium forte*
59. *Syzygium oleosum*
60. *Syzygium paniculatum*
61. *Waterhousea unipunctata*



Syzygium fibrosum △ — Showy Fruits —

▽ *Harpullia rhyticarpa*





Commersonia bartramia (above) Attractive flowers. Photography Tony Irvine

A hardy fast growing small tree which dazzles with numerous small white flowers in late October to December in North Queensland. It is a pioneer species and readily grows in the open. It is commonly known as 'Brown Kurrajong'.

Syzygium fibrosum (top left) 'Fibrous Satin ash' Photography Tony Irvine

A very attractive dense shrub or small tree with a considerable degree of drought tolerance. Flowers are apricot or cream, occurring in conspicuous pom-pom like clusters, followed by bright red to bronze new leaves. Mature fruit clothe the plant in brilliant red clusters between November and February.

Harpullia rhyticarpa (bottom left) Photography Tony Irvine

Fruits can also be as attractive as flowers and particularly so in this small understorey shrub, which grows 2.5 metres tall. It will grow in the open but does far better in semi-shade. Flowers are relatively conspicuous, cream.

The species selected are suitable for gardens in all eastern coastal North Queensland towns from Mackay northwards to Innisfail, Cairns, Mossman and Cooktown. They would probably all do well, as far south as Nambour. Further south, some modification in the species used may be needed, although I really feel that in South Queensland/Northern N.S.W., the emphasis should be on S. Qld/N. N.S.W. plants, with perhaps an experimental area for N. Qld and other area plants. The selection of plants is also suitable for the northern part of the Atherton Tablelands from Atherton northwards to Mareeba.

Many of the species could also be used in western drier towns towards the Gulf of Carpentaria, such as Georgetown, Croydon, Normanton and Burketown. It should be kept in mind, in the drier towns such as Bowen, Townsville, Mareeba and Georgetown, where rainforest species are usually confined to waterways or monsoon vine thickets, that considerable mulch should be utilised to conserve moisture and that during the first 2-3 years, water demands will be quite high until the plants are well and truly established. Before planting a rainforest theme in these towns, consideration should be given to seasonal water restrictions, water costs and water conservation. One way of cutting these costs and water usage is by devoting a smaller area of the garden to rainforest plants or a rainforest effect. The best approach by far in the drier towns is to select plants that grow in the Monsoon Vine Thickets and the Semi-deciduous Mesophyll Vine Forests.

In dry upland towns such as Charters Towers, which can experience relatively severe frosts in the winter, the choice of rain forest plants is likely to be restricted more to members of the Monsoon Vine Thicket communities. Many upland rainforest plants from moist mountain regions have some degree of frost resistance, but often have the disadvantage of being drought sensitive, even when they have developed some size. *Livistona* species are by far the best palms for the greenery section in these areas.

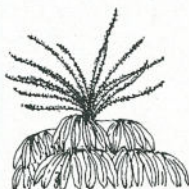
In cooler, wet upland North Queensland towns, which can also experience severe winter frosts, substitution of some of the species on the block plan with more cold tolerant species, will be necessary. Plants such *Dillenia alata*, *Leea indica*, *Licuala ramsayi*, *Musa acuminata*, *Syzygium alliiiligneum*, *S. fibrosum*, *S. fortis*, *S. tierneyanum*, may not do too well in such areas. Substitutes which occur in upland rainforest communities are *Bleasdalea bleasdalei*, *Oreocallis wickhamii*, *Placospermum coriaceum*, *Stenocarpus sinuatus* (all Proteaceae), *Brachychiton australis*, *B. acerifolium* (Sterculiaceae) and *Livistona* palms.

Looking at the Block plan, the plants in the nature strip, have been selected for their ability to stand up to and filter the prevailing wind which will probably also be modified by surrounding residential homes. They have also been spaced so that the home owner has some visual clearance to see road traffic and pedestrians when backing a car out. Other alternatives to the two trees in the nature strip, are *Acacia polystachya*, *Deplanchea tetraphylla*, *Melaleuca leucadendron*, *Syzygium tierneyanum* and *Xanthostemon chrysanthus*. If overhead powerlines are a consideration, then smaller plants such as *Callistemon viminalis*, *Croton insularis*, *Leptospermum longifolium*, *L. woorenooran* and *Syzygium paniculatum* are more suitable. Plants with thinner forms have been selected as screen plants around the vegetable garden, to enable more light to filter through. One or two coconuts could be added to the commercial fruit section in coastal towns and inland towns such as Mareeba, where coconuts set fruit. The greenery area is likely to benefit more from frequent light mist watering regime, but an occasional or strategic heavy watering, taking into account local weather conditions, will consolidate the effect of mist watering.

Often when I present the talk "From Roses to Clarence River Baeckea to the Real North Queensland Stuff" and have the material all laid out around the room, many people are so impressed with the fabulous nature of the plants, that they forget the theme of the talk and immediately want to grow them.

The theme of the talk and this article is predominantly North Queensland plants for North Queensland gardens. Many Nth. Qld. nurserymen and horticulturalists are very ignorant about the beauty of the rainforest plants all around them. Many of them do a disservice to the native plant movement in the North, by continuing to sell predominantly southern and western Australian plants, resulting in many disappointed customers, within a few months or within 2-3 years.

Here, I have emphasised a rainforest theme, but one does not have to have a rainforest theme in one's garden, in order to grow rainforest plants. Many of them can be readily grown as individual ornamental plants in various parts of one's garden, keeping in mind the features of the plants as mentioned in "Roses to Clarence River Baeckea to the Real North Queensland Stuff".



Creating a Rainforest

by Garry Sankowsky, Tolga and
Mike Schaul, Mareeba, Queensland.

Visualise if you can the beauty of the Australian rainforest. Tall trees with their protective canopies filtering the sunlight — vines, trunks and an endless variety of green. Feel the cool humid air scented with rich humus. Those people who have spent time in the rainforest already know the beauty, tranquillity, and rich diversity of life found there. Many of us have wished we could achieve a similar effect and have a rainforest in our garden. Unfortunately the reasons most people don't are many and varied; not enough space, not enough water, takes too long, trees grow too tall, can't get plants, and just don't know how to go about it. What we hope to do in this article is dispel some fears, refute some misconceptions and solve some problems.

There are a number of ways that a rainforest can be successfully created. In this article two methods will be discussed. The method used will depend on the situation, the resources available and the size of the area. Most people are reluctant to start a rainforest plot because they believe that lots of water is required. This is not the case, though if irrigation is applied growth will be more rapid.

The first method is the "slow" one and is more suitable for larger areas or where timber production is the main aim. Basically it consists of providing a cover of hardy fast growing species before the bulk of the rainforest species are planted.

The cover crop can consist of the following species — *Acacia aulacocarpa*, *A. hylonoma*, *A. mangium*, *A. melanoxylon*, *Alphitonia petriei*, *Aphananthe philippinensis*, *Eucalyptus grandis*, *E. torelliana*, *Aleurites moluccana*, *Lophos-temon confertus* (previously *Tristania conferta*).

The trees can be spaced at 5-7m centres and should be planted in the wet season so they will become established with a minimum of maintenance. It will take up to 10 years for the canopy to become closed and weed and grass growth to be reduced to the point where further species can be added.



Placospermum coriaceum (above and below)

Photography by G. Sankowsky



This method will produce much taller trees than the next one as the canopy will be at least 10 m high when the balance of the species are planted and they will have to push up to get to the light. The ideal plant size, to plant out, is one grown in a 125-150 mm container, this also applies to the next method. Large advanced plants should be avoided as their water requirements are too high while becoming established.

A transplant aid gaining acceptance in recent times is Terrasorb. It is a product produced from cereal and absorbs 600 times its own weight in water. The authors have not given it a complete test at this time but it is well worth considering. Cost per plant is from 3-5c.

The next method for "instant rainforest" is most suitable for small areas but can be used on any scale if sufficient resources are available.

One essential requirement for most rainforest plants is that their roots should be cool. Planting them in grass or weeds will achieve this, but the competition for nutrients and moisture will cause the trees to grow very slowly and many disappointments will result if this approach is used.

The size of the plot can be anything above 50 m². The plants should be spaced 2 m apart (3 m if it is a very fast growing species) so that the canopy will be closed after only a few years. On the windward side they can even be closer. If you have several hectares it is best to develop a small amount each year as the number of plants required for a 100 m x 30 m plot will be at least 700.

In a large area of a hectare or more, it is a good idea to develop it in strips of various curved shapes from 10 m to 20 m wide with areas of lawn 5 m to 10 m in between. This provides the maximum amount of "rainforest edge", having the following advantages: The best flowering and fruiting trees can be planted on the edge and so be seen more easily; birds and insects frequenting them are more readily observed. Anyone interested in butterflies should plant most of the butterfly food plants on the edge as many butterfly species do not penetrate far into the rainforest to lay their eggs. Because the plants on the edge flower and fruit better, this method produces the largest wildlife population.

Having decided on the shape and size of your first plot, the next step is to prepare the soil. For an "instant rainforest" the soil must be cultivated. Assuming you are not a farmer it should be possible to hire a rotary hoe. Look through the local papers for ads. In a large town it should be possible to hire a small cultivator from a machinery hire service and do a small block yourself. Should the soil be too rocky to hoe, it can be ripped with a grubber or a small bulldozer.

The soil must be hoed twice and immediately mulched. The ideal mulch is old hay. This can often be purchased very cheaply and is referred to simply as "mulching hay". In a sugar growing area bagasse can be obtained from a mill, usually for the cost of loading and cartage. This makes really good mulch, but one word of warning — a face mask should be worn when spreading it as the fibres are irritating to nose and eyes. Other suitable mulches are rice hulls, peanut shells or seaweed. Lawn clippings can also be used. Most people dump or burn them so it is usually possible to arrange to collect them from the neighbourhood.

Placospermum coriaceum

Photography by G. Sankowsky

A tree that stands up to exposure to sun and wind. This is one of the many Proteaceae of the north, described on pages 208-210. The leaves are a glossy pale green edged in pink when young and up to 60 cm long. The terminal spikes of flowers are unusual.

Hay should be spread 20-30 cm thick and bagasse and other finer mulches 15-20 cm. If the soil is mulched immediately after cultivating, weeds and grass should never be a problem.

The plants can be planted immediately following mulching. Simply part the mulch, scoop a hole, remove the plant from the container, put it in and press the soil firmly round the stem and the outer edge of the roots. The mulch should then be moved back against the trunk so that *ALL* the soil is covered. It is also useful to plant the tree about 20 mm deeper than it was in the container. This places the roots a bit deeper and the extra soil round the stem stabilizes the plant against the wind.

You may have read that mulch should not be placed up against the trunk. This certainly does not apply to rainforest plants. In the rainforest many small plants are almost buried in mulch and show no ill effect. If a small gap is left between the trunk and the mulch, weeds will spring up, competing with the plant and growth may be retarded by as much as 50%.

If it is not the wet season when planting, about half of the leaves should be removed. With large leaved plants, cut the leaves in half. This reduces the water requirements till the plant is established and also reduces the wind resistance.

In dry soil the plants should be "watered in" within 10-15 minutes of planting. In wet soil this can be left for a few hours. "Watering in" should consist of a good soaking with 12-15 lts per plant, even if the soil is wet as this brings the soil in complete contact with the roots. If planting is carried out during the dry season a few waterings may be required till good rain is received. Should watering be a problem the best approach is to prepare the soil and mulch just before the wet season then plant after the first good rain. During the first dry season a few plants may need water. Watch for dry stress to show. The initial mulch cover should last two years and should be topped up if necessary till the canopy is completely closed.

Under the mulch the soil will remain moist on the surface for up to two months after rain. Drying out takes place so slowly that the roots are able to adapt; unlike exposed soil where hot dry winds may lower the moisture level several centimetres in a matter of days, causing instant wilting of the plants.

No fertilizer should be applied at the time of planting, especially not in the hole. Fertilizer can be applied 3-4 weeks later and should then be placed about 15-30 cm out from the trunk. Tropic, or any other complete fertilizer with 10-15% nitrogen content can be used. For maximum growth it can be applied every two months, except June and July, at the recommended rate. Beware! High nitrogen fertilizers applied at double, or more, the correct rate can mean instant death to most plants. For rainforest plants, including Proteaceae, it is not necessary to select a low phosphorus fertilizer.

Anyone in a frost free area can plant almost any tree and a wide range of shrubs in the first planting. In a high wind situation certain species will have to wait till some protection has grown. The hardiest trees should be planted on the windward side and these include — Rutaceae, Sapindaceae, Proteaceae and most Myrtaceae. *Syzygium wilsonii* ssp. *cryptophlebia* is one of the few of this group that cannot stand wind.

When the canopy has closed, tracks can be marked out and numerous understorey plants added. Tracks should be well mulched so as to prevent compacting the soil.

One of the major problems in developing your rainforest garden is obtaining a wide variety of plants. Very few people have the expertise or

facilities to collect the seed and grow all the plants themselves so the only alternative is to buy at least some of them. The following are suggested:

Fast growing species that will stand full sun and wind when small:

Acacia aulacocarpa, *A. hylonoma*, *A. mangium*, *A. melanoxylon*, **Acronychia acidula*, *A. laevis*, *Albizzia lebeck*, *A. retusa*, *A. toona*, **Aleurites moluccana*, *Alphitonia* spp., *Alstonia* spp., *Arytera* spp., *Athertonia diversifolia*, *Brachychiton acerifolius*, *Buckinghamia celsissima*, *Carnarvonia araliifolia*, *Cassia queenslandica*, **Celtis paniculata*, *Cerbera floribunda*, *Clausena brevistyla*, *Clerodendrum cunninghamii*, *Commersonia bartramia*, *Croton insularis*, *Cupaniopsis anacardioides*, *Darlingia darlingiana*, *Diploglottis* spp., *Dysoxylum* spp., **Elaeocarpus angustifolius*, *Eucalyptus torelliana*, *Euodia elleryana*, *Evodiella muelleri*, *Ficus* spp. (Stranglers), *Flindersia* spp., *Gardenia ovularis*, **Geijera salicifolia*, **Glochidion harveyanum*, *Grevillea pinnatifida*, *Guioa lasioneura*, *Hymenosporum flavum*, *Lophostemon confertus* (formerly *Tristania conferta*), **Macaranga tanarius*, **Omalanthus populifolius*, *Pipturus argenteus*, *Pithecellobium pruinoseum*, *Planchonella macrocarpa*, *Pleiogynium timoriense*, *Polyscias australiana*, *P. elegans*, **P. murrayi*, **Scolopia braunii*, *Syzygium cormiflorum*, *S. fibrosum*, **S. tierneyanum*, *Toona australis*, *Xanthostemon chrysanthus*, *Zanthoxylum* spp.

*Very fast growing and hardy.

Some species for full sun and wind, not fast growing:

Acronychia chooreechillum, *Agathis* spp., *Alectryon* spp., *Antidesma* spp., *Aphananthe philippinensis*, *Araucaria* spp., *Blepharocarya involucrigeria*, *Breynia* spp., *Capparis* spp., *Davidsonia pruriens*, *Decaspermum humile*, *Drypetes* spp., *Halfordia* spp., *Harpullia pendula*, *Helicia* spp., *Hicksbeachia pinnatifolia*, *Homalium circumpinnatum*, *Jagera* spp., *Litsea reticulata*, *Mallotus philippensis*, *Melicope erythrococca*, *Mischocarpus* spp., *Musgravea heterophylla*, *Oreocallis wickhamii*, *Pithecellobium grandiflorum*, *Pittosporum venulosum*, *Podocarpus* spp., *Randia fitzalanii*, *Rauwenhoffia leichhardtii*, *Rhodamnia glauca*, *Sarcopteryx* spp., *Solanum viride*, *Stenocarpus* spp., most *Syzygium* spp., *Trema aspera*, *Tristania* spp.

Species for wind free areas or after some protection has grown:

Aceratium ferrugineum, *Acronychia aberrans*, *A. crassipetala*, *Aglaia ferruginea*, *Alphitonia whitei*, *Archidendron* spp., *Austromullera trinervia*, *Austromyrtus* spp., *Backhousia bancroftii*, *Balanops australiana*, *Barringtonia* spp., *Cardwellia sublimis*, *Cinnamomum* spp., *Daphnandra repandula*, *Darlingia ferruginea*, *Delarbrea michieana*, *Dendrocnide photinophylla*, *Dillenia alata*, *Doryphora aromatica*, *Drimys piperita*, *Elaeocarpus eumundi*, *E. largiflorens*, *Endiandra* spp., *Euodia xanthoxyloides*, *Eupomatia laurina*, *Fagraea gracilipes*, *Garcinia* spp., *Geissois biagiana*, *Gillbeea adenopetala*, *Hollandaea sayerana*, *Lindsayomyrtus brachyandrus*, *Litsea bindoniana*, *Neolitsea australiensis*, *Phaleria clerodendron*, *Tarenna dallachiana*, *Xylopiia maccraei*.

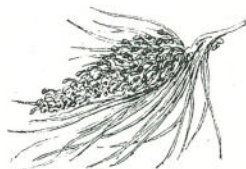
Some species to avoid in frost prone areas in the first planting:

Acacia mangium, *Alphitonia whitei*, *Barringtonia* spp., *Cananga odorata*, *Carallia brachiata*, *Cardwellia sublimis*, *Cassia queenslandica*, *Castanospermum australe*, *Dillenia alata*, *Ficus* spp., *Macaranga tanarius*, *Nauclea orientalis*, *Tarenna dallachiana*, *Terminalia catappa*. ■

Eucalypts

by Stan Kelly

Now completely revised in two volumes, each available from the editor for \$35.00, this very fine work has become a standard reference for the non-botanist. Stan Kelly has produced a fine water colour painting for each species, each reproduced as a full page colour plate. The associated descriptions are clear and easy to follow. An excellent reference for the beginner dazzled by the sheer number of species. The two volumes show 508 of them in colourful detail.



North Queensland Rainforest Proteaceae suitable for Cultivation

by Garry Sankowsky,
Tolga, North Queensland.

The Proteaceae family has been exploited in Australian gardens since settlement. However many of the most spectacular members of the family occur in the Rainforests of North Queensland and many of these are little known in cultivation. Most people still believe that rainforest trees are too large for suburban gardens and have visions of 30 m trees towering over their house as well as their neighbours'. How many 30 m Buckinghamias (ivory curl tree) do you see in your town? A number of rainforest trees have been in gardens for many years, such as Buckinghamia, Stenocarpus, Flame tree and Lilly pillies.

In a garden situation most species will reach no more than 30% of the height they attain in the rainforest. This is because they are in the sun from the beginning and do not have to push upwards to the canopy.

Apart from the attractive flowers of this group many of them have spectacular foliage which alone makes them worthwhile growing, flowers being an added bonus. All species listed are trees unless otherwise stated.

***Athertonia diversifolia* (Atherton oak)**

This species is now the floral emblem of the Atherton Shire. A very spectacular tree in all respects. Leaves are large, lobed and covered with rusty brown hairs. New growth is clothed in silky pink to red hairs. Flowers occur back from the ends of the branches on 30 cm long pendulous cream racemes. These are followed by large dark blue nuts. The nuts are very crisp and crunchy to eat and sweeter than a Macadamia.

***Austromuellera trinervia* (Mueller's silky oak)**

Found mainly in a small area on the eastern edge of the Atherton tableland and on Mt. Lewis this species is really worth growing. Leaves — large, compound with new growth covered in brown hairs. Flowers are a mass of 60 cm long cream racemes hanging from the older branches and followed by large woody seed pods.

***Bleasdalea bleasdalei* (Blush silky oak)**

Very few trees would have more striking new foliage than this species. Leaves are compound and from 40-60 cm long. The new growth is completely covered in silky pink hairs and appears as a spectacular flush several times a year. Flowers are rather small cream racemes. This species is well worth growing just for the foliage and as a small tree.

***Buckinghamia celsissima* (Ivory curl flower)**

Well known in cultivation and no further comment needed.

***Cardwellia sublimis* (Northern silky oak)**

The largest of the oak family and not suited for small gardens. Large compound leaves, very dark green on top and new growth with pink to purple silky hairs on underside of leaves. Slow to start but does well after a few years. Flowers — very spectacular in large terminal spikes, followed by huge woody seed pods. Widespread in the rainforest from Townsville to Mossman in both highland and lowland areas.

***Carnarvonia araliifolia* (Caledonian oak or Red silky oak)**

Beautiful tree with dark green unusual compound leaves. Foliage is usually fairly dense and when planted in the open it forms a cylindrical shape. Flowers are cream racemes. New growth covered in brownish hairs.

***Darlingia darlingiana* (Brown silky oak)**

When in the juvenile stage this tree has large lobed leaves — new shoots clothed in brown hairs. Flowers are cream, very spectacular and consist of large terminal spikes. This species is quite fast growing and hardy.

***Darlingia ferruginea* (Rose silky oak)**

This species has flowers similar to but even more showy than the previous species. Leaves are very attractive and in the juvenile stage are deeply lobed and up to 1 m long. They are always covered in rusty brown hairs. Fairly fast growing, but needs protection from strong wind while young.

***Grevillea hilliana* (Hill's silky oak)**

The two rainforest grevilleas both have attractive foliage. On this species the underside of the leaves are silvery white and deeply lobed when young. Flowers are not as noticeable as the next species.

***Grevillea pinnatifida* (Findlay's silky oak)**

Very fast growing hardy tree. When young the leaves are deeply lobed and when a height of 2 m or more is reached the underside turns to silky brown/gold. When dried they are very useful in flower arrangements. Flowers are creamy white in large spectacular terminal spikes.

Helicia australasica

Shrub to small tree — very hardy with dark green glossy serrated leaves. New growth is purple. Flowers rather widely spaced on small racemes — pale pink to purple. The number of racemes can be quite prolific.

Helicia lamingtoniana

Small tree with very rusty hairy serrated leaves. Flower buds also covered in rusty hairs. Flowers are small racemes of cream flowers followed by bright blue/purple fruit.

Helicia nortoniana

Similar to previous species except not as hairy and leaves usually longer and more deeply serrated. Both species are very attractive plants.

***Hicksbeachia pinnatifolia* (Ivory silky oak)**

This species has a disjunct distribution occurring also in Sthn. Qld. and Nthn. N.S.W. It is little known in cultivation. Leaves are large, stiff, serrated and deeply lobed. Flowers appear out of the trunk and old branches. They are long racemes of tightly clustered pink to purple flowers. Fruit are large, oval, bright orange to red and are edible. Growth is fairly slow but they stand up to full sun and moderate wind as small plants.

Hollandaea sayerana

This tree should be much more widely planted as it is a really beautiful addition to any garden. In an open situation it is a large shrub. Leaves are 20-40 cm, rather soft, light green and serrated. New growth is often purple with a fine covering of silky hairs. Striking 30-40 cm long pink racemes hang from the older branches, often close to the ground. It is best planted in semi-shade as the leaves suffer from wind burn. Hort. Guide, Set 5:31.

***Lomatia fraxinifolia* (Lomatia silky oak)**

Leaves are very glossy dark green and deeply lobed. Another species which is grown more for the foliage than flowers. The latter are small cream racemes. This and many of the other rainforest Proteaceae have potential as indoor plants. A fast growing plant.

***Musgravea heterophylla* (Briar silky oak)**

Spectacular large 1 m long deeply lobed leaves when young with silver underside which changes to brown. New growth has beautiful pink edging. Flowers are cream, in 5-10 cm terminal spikes. Fairly slow growing but will stand sun and wind as a small plant.

***Neorites kevediana* (Fish tail oak)**

Another species with very attractive foliage. New growth is covered in rusty pink hairs, older leaves are glossy green. The rather stiff compound leaves keep well when cut and are ideal in floral arrangements. The small cream flowers are found towards the ends of the branches amongst the leaves. See page 192 for a colour photograph of its unusual leaves.

***Opisthiolepis heterophylla* (Blush silky oak)**

Fairly fast growing tree and stands up well to sun and wind. Leaves are mostly lobed on younger plants — above they are glossy dark green, underneath — beautiful silky silver when young, changing to gold later on. Flowers are cream in small pendulous racemes, followed by 50 mm pods.

***Oreocallis wickhamii* (Pink silky oak)**

This species has recently been made the floral emblem of the Eacham Shire and so has had some attention focused on it on the Atherton Tableland. Brilliant red splashes can be seen throughout the rainforest of the Evelyn Tableland when this species is in flower. What makes this tree so spectacular is the bright red flowers, against glossy green leaves. It is hard to understand why this species is not as widely planted as the Flame tree. Sun and wind are no problem and it will grow in a wide range of conditions.

Placospermum coriaceum

At first glance this species looks like it would only grow in full shade, but in fact it stands up well to sun and wind. The leaves, like many Proteaceae, are most attractive when in the juvenile stage. Usually they are lobed, but sometimes not, up to 60 cm long, glossy pale green and edged in pink when young. Flowers are bright pink in terminal spikes.

***Stenocarpus sinuatus* (Wheel of fire)**

Extends to Northern N.S.W. and is widely in cultivation. Hort Guide 2/4.

***Stenocarpus* sp. RFK/3174. (C.S.I.R.O. rainforest key number)**

A tree with very unusual foliage, almost fern like. Leaflets are small and glossy. Flowers are cream. This species is found only on Mt. Lewis and is worth growing for its beautiful foliage. ■

Grevilleas of the Atherton Tablelands

by Peter & Ann Radke,
Walkamin, North Queensland.

*A guide to Locating and
Recognising them in the Field*

Everyone loves a *Grevillea*!

The Atherton Tablelands area of North Queensland is *Grevillea* Country!

The locals argue over the extent of the "true" Tablelands area, but provided one's definition of the Atherton Tablelands is flexible enough to stretch to Mareeba in the north and Irvinebank in the west, then 10 species of *Grevillea* can be found naturally occurring in the area.

Two of these species occur in the rainforests. They are *Grevillea pinnatifida* and *G. hilliiana*. Information about these two species can be found in the article on Rainforest Proteaceae.

The remaining eight species occur in open eucalypt forests. They range in form from very low shrubs to wispy open trees. Their striking flowers range in colour from white to orange to deep maroon. They are interesting for their diversity alone, but many of them have proved reliable and hardy subjects in gardens on the drier parts of the Tablelands.

This article is a guide to finding these grevilleas in the wild.

Grevillea glauca is a small tree, up to 6 m high, although often much smaller. Its slender trunk has hard, dark grey furrowed bark. It has a very attractive, well shaped form. However, in grassy woodland areas which are frequently burnt (e.g. in the more highly populated country around Mareeba) it can have a most unattractive, scraggly shape.

The leaves are elliptical (rather like a gum-tree leaf), and an attractive light grey (sometimes silvery) colour. New growth after rain is bronze.

The white flowers are borne in long cylindrical racemes which hang downwards from the branches. They are very similar to the flowers of the Macadamia nut tree. The plant flowers in profusion in June-July, but the flowers often pass unnoticed, partly because, being white, they do not contrast with the foliage and partly because, not being terminal, they are hidden amongst the branches. See Horticulture Guide Q 75/A7 for colour photograph.

The seed capsules are unmistakable. They are large, rounded, thick, woody, and very hard (about 5 cm in diameter). They only partly open and could, if one was hard-pressed be used as clothes pegs. Hence the common name "Bushman's Clothes Peg". Seed capsules litter the ground beneath a tree and being so hard may remain there undecomposed for a long time.

The plant is common along the roads leading out of Mareeba in all four directions. It is not restricted to a particular soil type. Although it is common in the grassy woodlands, it is usually more conspicuous on the gravelly ridges. (e.g. in the Emerald Creek area east of Mareeba). There is a similar gravelly area along the road from Ravenshoe to Mt. Garnet (between Walker Ck and Wild R.) where many good specimens can be easily found growing together with *Grevillea pteridiifolia*, *Persoonia falcata*, *Melaleuca nervosa*, *Petalostigma* and *Callitris*. It is also easy to recognise in the Irvinebank area.

Grevillea parallela is a slender small tree up to 10 m high, with a narrow upright form. It has long narrow leaves which tend to droop downwards. The upper side of the leaf is green; the underside is paler and often a very attractive bronze on the new growth. The leaves may be 30 cm long, but usually less than 5 mm wide. There are 3 parallel veins running lengthwise down the leaf, which are very distinct on the underside. Flowering is during winter and early spring. The white flowers are borne in racemes that are usually in bunches of 3. Horticultural Guide Q75/A10 has a good photograph.

The plant is widespread in grassy woodlands and on gravelly ridges. It is common in the Mareeba area: between Ravenshoe and Mt. Garnet; and between Herberton and Irvinebank. It is not restricted to a particular soil type.

Grevillea coriacea has only fairly recently been recognised as a separate species from *G. parallela* (see Vol. 8 P. 318). While similar in many respects, there are some obvious differences which make it fairly easy to distinguish. *G. coriacea* is also a slender upright tree with long narrow leaves. However, the leaves are shorter (± 20 cm) and wider (± 1 cm) than *G. parallela*.

The leaves are green on the upper surface, and a pale grey beneath. They are stiff and leathery (coriaceous) and tend to curl under along the margins. They tend to point upwards in an untidy sort of fashion so that the grey of the underside is the prominent colour seen. On the underside of the leaf there is only one distinct longitudinal vein.

The flowers are similar to those of *G. parallela*. Flowering is during winter, but usually earlier than *G. parallela*.

The plant is common on the poorer soils around Mareeba: to the east near Emerald Ck, to the north for some distance towards Mt. Molloy, and to the west towards Dimbulah and Chillagoe. It is *not* found to the south on the basalt grassy woodlands. It has a much more limited distribution than *G. parallela*.

Grevillea striata is a small to medium tree which is common in the drier parts of Australia. The foliage is a distinct silvery-grey.

The leathery strap-like leaves are 30 cm or more long and 1 cm or more wide. They are distinctly striated, having numerous parallel longitudinal veins. See Horticultural Guide Q78, Set 4, Sheet 20 for a good photograph.

The rough brown bark is corky and deeply furrowed. Cream flower spikes are produced in summer.

This *Grevillea* is easily distinguished from others by the striated leaves.

It is not common in the Tablelands area, but it can be found on the poorer soils between Mareeba and Mt. Molloy. In Queensland, it is generally associated with cattle country.

Grevillea mimosoides is a small tree, normally only 3 or 4 m high. It has a shape and form quite different to most grevilleas that Queensland gardeners are familiar with. It has an unusual spreading habit. The branches are thick but quite brittle, and the leaves are crowded at the ends.

The foliage is a distinct bright green which tends to stand out from the general muted grey-green colour of the grassy woodlands where it is found. The leaves are large and sickle-shaped — 20 cm or more long and up to 2 cm wide. Veins can be seen but they do not form any prominent striations.

The white flowers are produced in racemes which are grouped together on flower stalks up to 40 cm long. The flower stalks are terminal, and a plant in bloom is an unexpectedly delightful sight.

On the Tablelands the plant is found on basalt soils, usually amongst basalt rocks. It tends to occur in small stands and is not at all common. There is a small stand between the Barron R. and the "Jump-Up" at Walkamin. Good specimens which can be easily recognised are to be found on the Mt. Garnet — Greenvale Road (on the old lava flows between the Mt. Surprise turn-off and The Lynd Junction).

Grevillea glossadenia is a well shaped shrub, about 2 m high and up to 2 m across. It has elliptical to obovate leaves 5 to 10 cm long and 2 to 3 cm wide. The upper surface of the leaves is deep green, while the underside is silvery. On new growth the underside is a very attractive bronze.

The flowers are a reddish-orange colour, and unlike the other grevilleas of the area, are not borne in racemes. Rather, they are produced in small terminal clusters of about 6 to 8 flowers, although the number varies. The main flowering period is during winter, but some flowers can usually be found all through the year. See Horticultural Guide for a photograph.

The plant is found naturally only in the Irvinebank area. It can be easily seen in the low hills along the roadside between Herberton and Irvinebank near the mining areas. It is found in harsh, stony country, and given the conditions in which it grows, is surprisingly well shaped and attractive. This area is well known for its interesting and unusual plants, the most notable being the purple wattle *Acacia purpureapetala* — a most attractive prostrate plant which also flowers spasmodically for most of the year.

Grevillea dryandrii is a very small shrub which grows up to 50 cm high, although it is commonly much smaller. When not in flower it may be difficult to find amongst the grass. It has grey, finely divided leaves to 10 to 15 cm long. A plant with no flowers may be easily confused with a young *G. pteridiifolia* seedling. A plant may consist of only half a dozen leaves.

When in bloom, the plants are striking and unmistakable. Bright pink or maroon flowers are produced in long toothbrush spikes. These racemes are grouped together on long stalks. One plant may produce a number of flower stalks at once. Racemes are commonly 30 cm long, and flower stalks 50 cm or more. Another interesting and distinguishing feature of the plant is that the seed pods are very sticky.

The plant can easily be found on the poor gravelly hills in the Irvinebank, Watsonville, and Petford areas, and other places with similar soils. Occasionally a white flowering form may be found, although this is rare.

The other form of this species, found in North West Queensland, is a much bigger, more robust plant, which produces longer flower stalks. This "Cammoweal" form has proved very successful in gardens, even in the humidity of Cairns. The local "Herberton" form has resisted attempts at cultivation. See Horticultural Guide Q75/A5 and North Australian Plants.

Grevillea pteridiifolia is an open, wispy, small tree. It has silvery-grey finely divided leaves about 25 cm long. The bright orange flowers are borne in profusion in toothbrush spikes, mostly during winter, but flushes of bloom occur after rain. See Horticultural Guide Q75/A11 for photograph.

It is a very common plant in North Queensland. It is usually found on sandy soils which may contain a lot of stone. On the Tablelands it can be found in a wide arc from Emerald Ck. (East of Mareeba), west towards Dimbulah and Petford, and south through Irvinebank to Mt. Garnet. It is not found on the basalt soils south of Mareeba.

There are other forms of this plant in Northern Australia, including a prostrate form north of Cooktown. Some variation in leaf colour and size can be found, although the local Tablelands form is fairly uniform.

Species	Flower	Leaf	Form
<i>G. glauca</i>	White Long cylindrical spikes	Grey elliptical	Tree
<i>G. parallela</i>	White Cylindrical spikes	Grey-green Long, narrow	Slender tree
<i>G. coriacea</i>	White Cylindrical spikes	Grey-green leathery	Slender tree
<i>G. striata</i>	Cream Cylindrical spikes	Grey Strap-like	Tree
<i>G. mimosoides</i>	White Spikes on branching stalk	Green falcate	Bush to Small tree
<i>G. glossadenia</i>	Orange-red clusters of 6-8	Green elliptical	Bush
<i>G. dryandrii</i>	Pink Toothbrush spikes on branching stalks	Grey finely divided	Low Shrub
<i>G. pteridiifolia</i>	Orange Toothbrush spikes	Grey finely divided	Wispy small tree



Rainforests to Eucalypt Woodlands

And Some Plants In Between

by A. P. N. House, Atherton, Queensland.

Not all of north-eastern Queensland is covered in tropical rainforest — indeed much of the Atherton Tablelands and the surrounding ranges today support sclerophyll or open eucalypt woodland. This comes as a surprise to some visitors, as it did to me when I first came to the north, because surely if this is the wettest region in Australia we should find rainforest and more rainforest — but we don't. The reasons for this juxtaposition of two very different vegetation types are complex, but one factor has an over-riding impact — fire.

Before the arrival of aboriginal man in northern Australia fire probably played only a minor role in determining the distributions of plant communities. Without regular and persistent fire eucalypt dominated vegetation would not have been as widespread as it is today. Dry scrubs with *Araucaria* (Hoop Pine) and other conifers grew in its place, with true rainforest confined to the wettest regions such as mountain tops and river valleys. When aboriginal man began his rather limited use of fire in the north, the dry scrubs would have been most affected, as they were flammable but not fire tolerant, and this allowed for their replacement by eucalypt vegetation. By the time European man arrived the dry scrubs were almost extinct, and his introduction of a new and more intense fire regime sealed their fate. Where fires had been infrequent but often catastrophic, lit by aboriginal man or natural lightning strikes, the European settlers began to burn much more frequently, both to help clear forested land and to promote a grassy ground cover for their livestock. In this way they provided ideal conditions for the spread of eucalypts and restricted the development of fire sensitive rainforest.

However, somewhat ironically, this artificially high incidence of fire has helped protect rainforest by consistently depleting the dry grassy fuels in the adjacent eucalypt woodland so that each fire is so weak that it dies on reaching rainforest where the litter fuel is not cured by exposure to the sun. This prevents destruction of rainforest and its replacement by eucalypt woodland, and at the same time checks the expansion of rainforest into open woodland by killing fire sensitive rainforest seedlings that are continually establishing at the rainforest margin. Although seedlings of species of the open woodland cannot survive beneath a closed rainforest canopy, seeds are constantly crossing the margin and entering the soil where they lie dormant until favourable conditions for their growth arise.

Very frequent, regular fire therefore leads to very abrupt boundaries between rainforest and eucalypt woodland — often only two paces is required to move from one to the other — and a stable situation develops. Where fire frequency is variable the chances of change are greater. During long inter-fire periods rainforest expands and this may lead to a permanent change if the canopy can mature enough to shade out the grassy fuels before the next fire. However, a long inter-fire period also leads to a build up in flammable materials in the eucalypt woodland, and if the right conditions of dry weather and strong winds occur there may be destruction of mature rainforest.

Despite the hazards of the environment, rainforest margins are home for a wealth of plant species. I have space here to mention only a few that are characteristic of rainforest margins on granite at high altitudes.

On the rainforest side several members of the Proteaceae are common, notably *Cardwellia sublimis* (Northern Silky Oak), *Lomatia taxinifolia* (Black-leaved Silky Oak), *Darlingia darlingiana* (Brown Silky Oak), *Oreocallis wickhamii* (Satin Silky Oak), and *Opisthiolepis heterophylla* (Rose Silky Oak). Other prominent tree families include Lauraceae (*Litsea*, *Cryptocarpa*, *Endiandra*, *Neolitsea*), Rutaceae (*Flindersia*, *Acronychia*), and Araliaceae (*Polyscias*). Common vines draping the rainforest edge are *Cissus hypoglauca* and *C. penninervis* (Native Grapes), *Smilax australis* (Briar), *Piper* spp. (Pepper vines), *Melodinus australis* and *Palmeria scandens*. In the eucalypt woodland the dominant trees are naturally eucalypts — the stately *Eucalyptus grandis* (Rose Gum) and *E. intermedia* (Pink Bloodwood) are the common marginal species, found growing with *Syncarpia glomulifera* (Turpentine), *Banksia integrifolia* (White Banksia) and *Allocasuarina torulosa* (Forest Sheoak).

It is in the herb and shrub layers of the eucalypt woodland that we find some of the most attractive plants, some well known in cultivation, others not. *Gahnia aspera* — a smaller version of the large tussock-forming *G. sieberana*, this species has larger fruit and grows to about 1 m.

Pimelea linifolia — Rice Flower; a small woody perennial with umbels of white flowers which attract a range of butterflies.

Rhodomyrtus sericea — an attractive tall shrub with grey-green foliage and masses of white flowers during late spring and early summer.

Callicarpa pedunculata — this species has pink flowers and small dark mauve berries which contrast with the bright green foliage.

Bursaria spinosa — Mock Orange; a well known spiny shrub which has long panicles of fragrant white flowers in summer. A very hardy species.

Melastoma polyanthum — Blue Tongue; the large pink flowers are followed by edible fruit. This shrub will grow in a variety of drainage conditions. — See colour photograph on page 225.

Harpullia frutescens — this may form a small tree and requires fairly shady conditions. Both flowers and fruit are extremely attractive.

Acacia flavescens — this wattle will grow in quite harsh conditions. The lemon yellow inflorescences are borne in March-April.

Eupomatia laurina — Native Guava; this species forms a tree in the rainforest but will grow as a large shrub in open conditions. The large white flowers are heavily scented.

Hibbertia scandens — Golden Guinea Vine; a well known creeper with very beautiful yellow flowers, this species will grow in a variety of situations and may be used as a climber or as ground cover.

Kennedia rubicunda — Dusky Coral Pea; a slender vine with unusual dark red flowers. This species is a vigorous climber. ■

Native Plants Of Queensland

by Keith Williams

There are many books on wildflowers but most are of little value to people in northern areas of Australia. There are three exceptions and the above book by Keith Williams is excellent value. It is available by mail from Editor, Australian Plants, 860 Henry Lawson Drive, Picnic Point, N.S.W. 2213, for \$32.00 including postage.

The people of Queensland will appreciate the wide range of habitats in their large unique state with often an equally unique range of flowering plants in each. Keith Williams has divided the state up into 23 vegetative areas and the book presents a large full page colour plate showing in magnificent spectacle each of these areas. Each scenic photograph is followed by thirty colour plates with simple but adequate descriptions of the plants of the area. This adds up to 713 colour plates with 713 plant descriptions, most of those mentioned in this issue of Australian Plants.

The other two reference books both available from the Editor, Australian Plants are "North Australian Plants", confined to plants of the Top-end — Darwin area, and past issues of Australian Plants.



Gardening on the Atherton Tablelands with Dry-land Plants

(local, non-rainforest plants)

By Peter & Ann Radke,
Walkamin, North Queensland.

Why plant a *native* garden? The reason may be, perhaps, to capture the atmosphere of the Australian bush; or to play a role in the preservation of the Australian flora in the face of greater and greater development; or to attract wildlife close to the house.

Whatever the reason, it is inherently more logical to plant *local* native plants than to struggle to grow something from the other end of the continent.

Local plants will create an atmosphere in harmony with, rather than in contrast to, the surrounding bushland. Wildlife will feel "at home", as indeed they will be. And, if the local people don't preserve the local flora, who will?

Why is it that gardeners, in general, place so much value on a plant which comes from a long way away, while a plant which grows locally is somehow rated as "inferior"? This article is a guide to planting a North Queensland dry-land garden with North Queensland dry-land plants on the Atherton Tablelands. It is only a beginning. North Queensland (particularly Cape York Peninsula) is on the "frontier" — there are so many plants with obvious horticultural potential which have not even been described let alone grown in gardens.

Local rainforest plants are dealt with in detail in other articles in this issue. This article deals with "dry-land" (non-rainforest) plants only. All the plants described here can be found growing naturally somewhere between Innisfail in the South, Cooktown in the North, and Mt. Surprise in the West. They have all been grown successfully in gardens on the Atherton Tableland.

Before establishing a new garden or extending an old one, spend some time planning your garden. Consider such factors as aspect, drainage, type of soil and climate. Don't forget to consider the function that you intend the garden to perform. Perhaps you want a windbreak; or privacy; or lots of birds and butterflies; or simply a pleasant Australian setting.

Now you can start to select your plants, bearing in mind their height, spread, shape or form, flower colour, expected life span, speed of growth, and the conditions in which they grow best. Observe them in nature. Seek advice from your local S.G.A.P. branch.

Many of the plants described in the following pages occur naturally over a much wider area than that discussed in this article. For instance plants such as *Eucalyptus tereticornis*, *E. tessellaris*, *Melaleuca linariifolia*, *M. bracteata*, *Callistemon viminalis*, *Casuarina* spp., *Banksia integrifolia* and *Leptospermum flavescens* are widespread in Queensland.

With suitable adapting, this article could be used as a guide to establishing a "local garden" in most parts of Eastern Queensland; and with only minor changes could be used as far south as Mackay (with the exception of very high rainfall areas).

Because of the definite "dry" season experienced in the north, gardening with these plants is more successful if planted in shrubby areas rather than as individual specimens.

Gardens should be well dug up and well mulched. If poor drainage is a problem, beds should be raised (especially in wetter areas such as Atherton and Malanda).

If gardens are well mulched then fertilisers are not essential. Any fertiliser which is applied *must* be of a low phosphorous content.

During the "dry", gardens should be regularly watered.

There are a number of non-local native plants which have proved quite exceptional in dry-land gardens of the Atherton Tablelands. These could be the subject for future articles. Previous issues of Australian Plants are also a valuable reference. Contact your local SGAP group or your local specialist nurseryman.

TREES

Eucalyptus citriodora — "Lemon Scented Gum"

A fast growing, slender, attractive tree. The leaves have a beautiful lemon scent when crushed. The local form found in the Herberton-Irvinebank area is particularly attractive. The old bark, peels off each year in spring. During the year the smooth trunk changes colour from white to a rich bright pink.

Eucalyptus alba

A common tree in the eucalypt woodlands of North Queensland. It is easily recognised by its very large rounded leaves which may be up to 20 cm in diameter. The tree may be deciduous towards the end of a dry year before flowering, but this is unlikely in a garden situation. It is a showy and profuse flowerer (the flowers are white). Like *E. citriodora*, the old bark peels off each spring. The smooth trunk changes colour through the year from white to a striking salmon-pink. This is a very attractive tree, often overlooked because it is so common.

Eucalyptus papuana — "Ghost Gum"

This is the "Ghost Gum" of Albert Namatjira fame, widely regarded as a tree of central Australia only. It does occur naturally on the Atherton Tablelands (for instance, in the Walkamin area) where some good specimens can be found, growing in the typical form which we see so often in photographs of the inland. However, they are rarely recognised in the woodland situation, despite their drooping leaves and smooth white trunk. Young trees often have persistent bark for some distance up the trunk.

Eucalyptus tereticornis — "Blue Gum"

This is a fast-growing, hardy, stately tree which does well in garden situations. Its white flowers are small, but produced in profusion and loved by birds.

Eucalyptus torrelliana — "Cadagi"

A fast growing, shapely tree. In the open it has a spreading habit and is a useful shade tree. It occurs naturally on the edges of the rainforest and is common along the roadside around Kuranda where it is easily recognised by its smooth green trunk. Despite its restricted natural occurrence, it has proved very successful in dry situations, including gardens in Western Queensland, where it still grows fast provided it is watered regularly. The trees, particularly when young, seem to be susceptible to insect attack and may be completely defoliated, but they recover and seem to become resistant with age. It has attractive pink new foliage, and flowers profusely.

Eucalyptus tessellaris — "Moreton Bay Ash"

A hardy tree with a very attractive form. Its upper trunk and branches are smooth and white while the lower trunk has a "sock" of rough tessellated

persistent bark. The tree always has an attractive shape and the leaves are a particularly bright green. It is a very widespread tree, occurring naturally from the beach front to the arid inland. It is not common on the Atherton Tableland, but it can be seen along the Kennedy Highway between Mareeba and Atherton near Rocky Creek. It is not fast growing in cultivation.

Eucalyptus miniata

An attractive, open tree with an unusual pale, flaky, papery bark on the trunk, and smooth branches. It is a highly desirable tree for gardens because it bears large, bright orange flowers and very large, decorative seed capsules. It occurs in small stands dotted here and there through the North. (For instance, there is a stand south of Mutchilba, west of Mareeba). Despite this, it has proved difficult to grow in cultivation on the Atherton Tablelands, although it has been grown in Mareeba. It grows very successfully in Cairns where it has been used as an attractive street tree. Horticultural Guide 4/17.

Eucalyptus peltata — "Yellow Jacket"

This is an attractive tree for cultivation. It is well shaped and has an unusual flaky bark which is bright yellow when freshly exposed. It flowers profusely and the flowers, being borne in large sprays on the ends of the branches, are very showy.

The species can be found on rocky hills with shallow gravelly soils in the Mt. Garnet and Irvinebank areas. It occurs in two forms:

subspecies *peltata* in which the juvenile form of the leaves persists even on mature trees. These leaves are grey, stiff, oval-shaped (rather like a shield) and arranged oppositely in pairs.

subspecies *leichhardtii* which forms long, narrow, green adult leaves.

Eucalyptus shirleyi — "Silver-leafed Ironbark"

This is an unusual small tree. It has large, thick grey waxy leaves which never assume a mature form. They are oval-shaped, stalkless, and arranged oppositely on the stem. The waxy coating on the leaves and branchlets gives the tree a silvery appearance. It occurs in poor, hilly country near Mt. Garnet.

It has a very sparse, scraggly, untidy shape and is not really suitable as a specimen tree. However, it can lend a special character to a garden and provides an interesting contrast when planted amongst other things. It flowers heavily, and is particularly attractive to birds. It should not be confused with the far more common *Eucalyptus melanophloia* which is similar in many respects, but with darker black bark, smaller grey leaves and a small, round seed capsule. *Eucalyptus shirleyi* has a squarish, ribbed seed capsule.

Brassaia actinophylla — "Umbrella Tree"

A hardy, widely cultivated tree which is often used as an indoor pot-plant. In the rainforests it commonly occurs as an epiphyte. However, in the eucalypt woodlands it is found as a small tree in shady gullies and springs.

Banksia integrifolia

A small tree occurring naturally in places such as Davies Creek National Park (near Mareeba) and in the Herberton Ranges. It is a decorative plant in the garden, bearing erect yellow bottlebrush-type flowers which attract nectar-feeding birds. The flowers make excellent vase or dried specimens. The plant is hardy and adapts well to cultivation. Horticultural Guide 2/23.

Casuarina spp. — "She-Oaks"

This group of plants makes excellent garden subjects. Their soft, fine, needle-like foliage lends a special character to a garden, and the leaf litter which falls profusely beneath the trees forms an excellent mulch and weed-inhibitor. They are easy to cultivate.

C. cunninghamiana is a large tree found along permanent water courses (e.g. the Barron River). It is fast growing in the garden, but needs regular watering to grow successfully. In cultivation it does not grow large.

Allocasuarina littoralis and *A. torulosa* are common in the eucalypt forests where they are small trees.

A. inophloia is a bushy small tree with an interesting shape, and unusual and very attractive bark. Its common name is "Thready-bark Oak" because the bark is thickly matted and stringy. It occurs naturally in the Irvinebank area on poor, dry ridge tops.

A. leuhmannii, found between Mareeba and Mt. Molloy, has an interesting stiff upright appearance. It is a small tree found on sandy soils in association with *Melaleuca minutifolia*.

Melaleuca leucadendron — "Weeping Paper-bark"

A large tree with attractive weeping foliage and white papery bark which can be peeled off in large strips. It is found along most watercourses in the North, even those which are dry for most of the year. The tree blooms profusely even when young, and becomes absolutely covered in white bottle-brush flowers which are very rich in nectar and which perfume the air for a considerable distance around.

The tree is easy to cultivate in the garden where it grows quite fast, given adequate water. It does not reach the massive heights seen in nature, but rather remains as a neat small to medium tree.

Melaleuca quinquinervia

An attractive small paper-barked tree. In nature it tends to be found in moist places, particularly in swamps, and so is a useful plant for poorly drained parts of a garden. Like *M. leucadendron*, it is a good garden subject, but it is smaller and its foliage does not weep. It is an excellent host plant for orchids.

Pleoigynium timoriense — "Burdekin Plum"

A dense, medium sized tree useful for throwing shade. It is very hardy, and has been grown successfully as a street tree in Western Queensland. It is an attractive ornamental tree which fruits profusely. The fruit resembles plums, and can be eaten when they are purple-black and fully ripe. It is widespread in North Qld., but not common on the Atherton Tablelands.

Hibiscus tiliaceus — "Cottonwood"

A large very spreading tree with a dense canopy. It is a salt-tolerant, coastal plant which has proved very hardy in the dry outback towns. It bears attractive yellow hibiscus flowers with deep maroon centres. It is an attractive ornamental tree, ideal for providing shade.

SHRUBS AND SMALL TREES

It is difficult to draw a line between large shrubs and small trees. Some of the plants included here as shrubs may reach the size and form of small trees, but usually in cultivation grow into large bushy shrubs.

Acacia decora

This wattle is a small bushy shrub with attractive grey foliage contrasting with maroon branchlets. It is a hardy shrub, widely distributed throughout Queensland, occurring in small pockets where the soil is hard and gravelly (for instance, it can be found in gravelly ranges on the road to Cooktown). In the garden it is a shapely shrub, bearing masses of yellow ball flowers.

Acacia flavescens

A large bushy shrub which is common on the Atherton Tablelands,

especially in the woodlands on the Kennedy Highway between Kuranda and Atherton. It has large phyllodes, and when in bloom is covered with masses of cream flowers.

Acacia holosericea

A striking bushy shrub with large, silvery-grey, furry phyllodes. The flowers, borne in spikes, are a bright yellow. The seed pods are distinctive and decorative. Once they have opened to release the seeds, they dry into a curled-up tangled mass which is retained on the bush for some time. This plant is common in North Queensland. Two places where it can be easily observed are along the Gillies Highway west of Gordonvale; and south of Mt. Garnet.

Acacia leptoloba

A tall bushy shrub with fairly large green phyllodes and extremely attractive purple new growth. It occurs in the Irvinebank area, and flowers profusely in summer.

Acacia leptostachya

This wattle is highly variable in form, ranging from a small shrub to a small tree. The form found in various locations on the Atherton Tablelands is a large bushy shrub, and makes an excellent screen plant. The form found in the Burra Range (west of Charters Towers) is a very attractive shrub of about 1 metre high. All forms are very shapely in open sunny situations, have attractive silvery-grey foliage, and flower profusely in winter.

Acacia simsii

A common understorey plant in northern woodlands. It is a shapely shrub which adapts well to cultivation in North Queensland gardens.

Banksia dentata

A banksia of Cape York Peninsula which extends south to about Cooktown. It is an open, large shrub to small tree. It has large serrated leaves and typical yellow banksia flowers. It adapts well to cultivation, and deserves to be grown more widely than it is. It is a plant of the open woodlands.

Banksia robur

A stiff, erect shrub which can be found on the edges of swamps in the heathlands near Cooktown. When grown with adequate water it is a most attractive plant, with large, stiff, serrated leaves which are dark green on the upper surface and a soft pale grey beneath. The typical banksia flower is an unusual olive green. When the flowers finish, they dry out and are retained on the plant for some time. Hort. Guide 2/25.

Photography Tony Irvine

Glochidion harveyanum (opposite, upper) 'Daphne Buttonwood'

A fast growing, small bushy tree which makes an excellent screen plant. Tiny inconspicuous yellow flowers, which appear several times during the year, may not be noticeable to the eye, but their daphne-like aroma can be noticed 50 metres away in the morning and evening.

Photography Tony Irvine

Archontophoenix sp. (opposite, lower) 'Walsh River Alexandra Palm'

This is one of several undescribed species in the *Archontophoenix alexandrae* complex. These palms are superficially similar to the botanist and non-botanist. The most distinctive vegetative feature of this species, is the rather stiff aspect of the leaflets. This feature is not easily detectable unless one can make immediate comparison with other species. Flowers are similar to *A. alexandrae*, but unlike *A. alexandrae* which produces fruit from late January to December this species fruits only between late December and March. This plant is 4 years old and stands 2.5 metres tall. It is likely to grow 8-12 metres tall in 8-12 years and live for many years.



Glochidion harveyanum △

▽ *Archontophoenix* sp.



Banksia spinulosa

An attractive thick bushy shrub with narrow serrated leaves. It bears large bright yellow banksia flowers in profusion. It is not a common plant in the north but occurs near Herberton, and on the Pyramid (a mountain of that shape near Gordonvale).

The 'Pyramid' form is particularly worthy of cultivation, since the large golden brushes are fringed with deep purple styles.

Baeckea camphorata

An attractive open shrub from the Laura-Cooktown area. It has small pale green leaves and bears masses of tiny white flowers. It grows very well in cultivation.

Bursaria incana

A slender large shrub to small tree which can tolerate hard conditions. In late summer it gets covered in masses of white flowers which are borne in dense terminal panicles and which are sweetly scented.

Callistemon viminalis

This is the weeping red bottlebrush common along the banks of streams throughout Queensland. It is a hardy, tried and trusted plant which responds well to regular watering. In northern gardens, it flowers on and off throughout the year with a massed effect in spring. The flowers are usually a brilliant red, and rich in nectar. The plant has been in cultivation for a long time, and many forms are available. One of the most successful forms is called "Captain Cook". It is a small compact bush growing only 1 metre high.

Callistemon polandii

A large shrub of open spreading habit, with larger leaves than most callistemons, and attractive pink new growth. It is found in damp situations in the heathland north of Cooktown, a form with very large leaves and flowers. A different form which may not be the same species but which is very common in the nursery trade, can be found growing on the slopes of the Pyramid near Gordonvale. It is well-proven in cultivation, where it grows into an attractive shrub, provided it has adequate water. It responds well to pruning after flowering.

Callistemon sp. "Tinaroo Falls"

A tall, erect, bushy shrub which has proved popular and successful in cultivation. As its name suggests, it occurs naturally near Tinaroo Dam.

Gastrobium grandiflorum

A well shaped small shrub with grey leaves and bright red pea flowers. It is a much-maligned plant because it is poisonous to cattle, but it has a lot of potential in horticulture.

It is quite common in drier areas of north Queensland, and can be seen in the Irvinebank area.

Hakea lorea

A most attractive, very slender small tree which has very narrow cylindrical leaves about 1 metre long. These long leaves hang downwards giving the tree a pendulous appearance. The nature of the leaves has led to the common name "Bootlace Tree". The white flowers are produced in large racemes, but since the plant is fairly slow growing, it is cultivated for its interesting foliage rather than its flowers. It is widely distributed throughout Queensland. On the Atherton Tablelands it is most commonly found on the edges of lava flows, and can be seen on the Kennedy Highway at the "Jump-Up" at Walkamin.

Hakea persiehana

A thick bush which is well shaped if given good conditions. The foliage is soft, grey and terete. The flowers are cream. The large woody seed capsules are retained on the bush for some time and are quite decorative.

It is a common understorey plant in the woodlands and excellent specimens can be found on the main road south of Mt. Molloy.

Leptospermum flavescens

A very variable shrub commonly known as Wild May. In Spring it is covered in white flowers. Before opening, the pink buds are very attractive. The shrub varies in height and size of the flower, but most forms are very worthy of cultivation. The plant is normally found growing along creek banks or in other moist places. A very popular form in cultivation is the low-growing, weeping "Pacific Beauty", which is worthy of a place in any garden. There are other good North Queensland forms, such as "Cardwell", available in nurseries.

Leptospermum brachyandrum

A shrub similar to *L. flavescens* but with larger leaves and less showy flowers. It has a very attractive smooth deciduous bark which gets a red-brown tinge. It can be found occurring naturally around Herberton and Ravenshoe. The Queensland form does not weep like the Northern Territory form, but it is an attractive, easily cultivated plant.

Leptospermum fabricea

An extremely attractive shrub from the heathlands of Cape York. It can be found almost as far south as Cooktown. It is a well shaped bush which gets covered in masses of large yellow flowers. It has adapted well to cultivation.

Leptospermum "Wooroonooran"

An attractive shrub found growing naturally on the top of Mt. Bellenden Ker in the mist zone where it becomes a sizeable tree. It has glossy green leaves and white flowers and has adapted well to cultivation, being particularly well suited to high altitude gardens.

Melastoma polyanthum

Commonly called Native Lasiandra because of its similarity to the exotic lasiandra. It is common in North Queensland, being found in wet or swampy situations, where it seems to flower all year round. It is an easily cultivated, attractive shrub with purple flowers.

Myrtella obtusa

A small compact shrub previously known as *Fenzlia obtusa*. It occurs naturally on the coast around Cairns, but has adapted remarkably well to cultivation on the Tablelands. It is a very showy shrub, producing masses of bright purple flowers.

Melaleuca bracteata

A shapely large shrub to small tree which is often found in creek beds in the north. It is a very variable species, but the form called "Revolution Green" has been particularly successful in cultivation. It flowers well, producing white bottlebrush flowers in Spring. Two other readily available forms have variegated foliage which makes an interesting contrast in the garden — "Golden Column" (tall) and "Golden Gem" (low spreading shrub).

Melaleuca linariifolia

A beautiful dense shrub with bright green leaves and white papery bark. It is found in creek beds throughout eastern Queensland. The common name

"Snow in Summer" is very apt since it produces masses of white flowers in Summer. It is very easily cultivated but it is important that it receives regular watering. It thrives in wet conditions.

It is a variable species. All forms are good. "Snowstorm" is a small compact form which is readily available in nurseries. The variety *tricostachya* has dark green leaves and bright maroon new tips throughout the year. It is not a common form, but may be found in Granite Creek at Mareeba.

Melaleuca minutifolia

An interesting shrub with very tiny leaves and white flowers. Good specimens can be seen along the road between Mareeba and Mt. Molloy.

Melaleuca nervosa

A tall paper-barked shrub with broad grey leaves. It produces bright green bottlebrush flowers in profusion and is very attractive to birds. In north Queensland, the flowers are only green. (A burgundy form may be found in the Prairie-Torrens Creek-Aramac area further south.)

It is common on the drier parts of the Tablelands. It is often confused with *Melaleuca viridiflora*.

Melaleuca viridiflora

A tall paper-barked shrub to small tree with broad grey leaves. It is very similar to *Melaleuca nervosa*. However, the leaves are larger, thicker and more leathery, and the plant has a stiffer appearance.

The bottlebrush flowers may be found in all shades from deep maroon to pink to salmon to green. Shades of red are the most common. (All flowers on the one tree are the same colour.) Hort. Guide 2/8.

There are many large stands of this plant on the Tablelands. A good place to see it is in the low-lying flat areas north of Mareeba.

Melaleuca symphyocarpa

A small weeping tree from Cape York Peninsula. The yellow-orange ball flowers are formed on the old wood. It does well in cultivation.

Melaleuca aff. symphyocarpa

A variable species, ranging from a small shrub to a tall tree depending on its habitat. It is a plant of Eastern Cape York and is well suited to cultivation. The flowers are produced in large red balls on the ends of the branches.

Pandanus whitei

A local pandanus which is found in many parts of the Tablelands in damp spots. It can be found along creek banks and near springs and soaks.

It can be used to very good effect in a shrubbery area where its unusual form is an interesting contrast.

Some good stands of this plant can be seen between Mareeba and Kuranda.

Planchonia careya

A common understorey species in the woodlands of North Queensland. Commonly called the "Cocky Apple", it blooms at night. The white flowers bear long showy stamens. During the dry season (Winter-Spring) many leaves

Melastoma polyanthum (Top right)

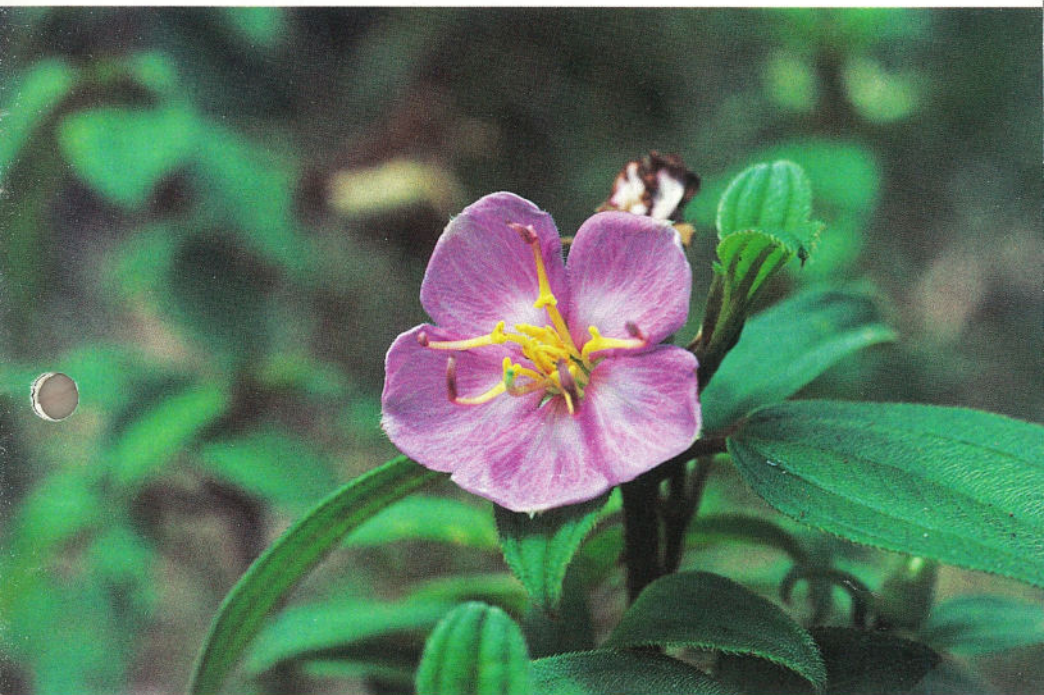
Photography by A. P. N. House

A shrub of the rainforest verges as described on page 215. The flowers are 5-7 cm across. A very hardy plant to one metre (although it will grow to 3 metres if allowed) that can be grown successfully in temperate climates also.

Rhodomyrtus sericea (Bottom right)

Photography by A. P. N. House

A tree of the rainforest that can be just a small spreading shrub when grown as a specimen plant.



Melastoma polyanthum △

▽ *Rhodomyrtus sericea*



develop red "autumn" tones. This plant is not common in gardens but deserves more attention.

VINES AND CREEPERS

Eustrephus latifolius — "Wombat Berry"

A very common rambling climber of the open woodlands. If it has no support to climb on, it falls back on itself forming a little clump. It is a small dainty plant with white flowers and attractive orange berries.

Hibbertia scandens

A vigorous climber which can be trained to form a thick ground cover if it has no support. It is a remarkable plant, being found to occur from sand dunes to rainforest. It has proved vigorous in cultivation, and is a very attractive plant with bright yellow flowers.

Hoya australis

A vine which is often found trailing over rocks. It has thick succulent leaves and a milky sap. It is widely cultivated, with showy white waxy flowers.

Pandorea pandorana

A vigorous vine which may entirely cover large trees. It makes a superb show when in flower. It is a very widespread plant throughout Queensland and the flowers show variation in colour. Basically the flowers are bell-shaped, white with pink markings. There are some good specimens in the "40-mile scrub" south of Mt. Garnet. It is well proven in cultivation.

Vitex ovata

A vigorous, layering ground cover found on the coastal dunes near Cairns. It has grey leaves and purple flowers. It grows well in cultivation on the Tablelands.

UNUSUAL FORMS

The earlier article in this issue describes many interesting plants forms. The following are a few of special interest.

Xanthorrhoea johnsonii — "Grass Tree"

A very slow-growing, but highly decorative plant which imparts a peculiarly Australian character to a garden.

Helichrysum bracteatum — "Everlasting Daisy"

A bright yellow paper daisy which does well under cultivation. It can be found in the hills between Herberton and Irvinebank.

Helichrysum newcastlianum

A white paper daisy which has particularly attractive pink buds. It is common in the hills around Herberton.

Livistona muelleri

A common fan palm of Cape York which extends south to the northern end of the Tableland. It can be found at the Koah turnoff on the Kennedy Highway between Mareeba and Kuranda. It is easy to grow. It is very attractive in the rosette stage, and the leaves form erect segments. ■

NORTH QUEENSLAND RAINFOREST PLANTS . . . DESCRIPTIONS

To assist potential gardeners, the North Queensland rainforest plants mentioned in prior articles as suitable for suburban tropical and semi-tropical gardens are listed here alphabetically with a brief description by Tony Irvine.

Acacia aulacocarpa, Brown Salwood or Brown Sally — Fam. Mimosaceae

Medium to fast growth, 7-14 m in height; flowers creamy yellow spikes; leaves grey-green.

Acacia hylonoma, Yarrabah Wattle — Fam. Mimosaceae

Fast growth, 6-10 m in height; very showy golden balls, main flowering in August plus one or two light flowerings; attractive glossy-green strap-like leaves.

Acacia polystachya, Many Spiked (i.e. flowers) Wattle — Fam. Mimosaceae

Medium to fast growth, 8-12 m in height; numerous flower spikes cream or yellow; dense green leaves; attractive bushy shady form in open.

Aceratium ferrugineum, Rusty Aceratium — Fam. Elaeocarpaceae

Slow to medium growth, 6-9 m in height; showy red flowers; attractive toothed green leaves with rusty hairs; Showy red fruits.

Acmena hemilampra, Blush Satin Ash — Fam. Myrtaceae

Medium to fast growth, 8 to 14 m in height; Flowers white, not showy but attract bees, butterflies, honeyeaters, moths and green tree frogs. New leaves maroon brown turning to brown; fruit white, edible and looking like snow on glossy green foliage.

Acronychia acidula, Lemon Aspen — Fam. Rutaceae

Medium to fast growth, 7-12 m in height; dark, glossy, green, aromatic leaves; flowers white, fragrant, attract bees, butterflies, etc. Fruit white, rectangular-shaped 15-20 mm long, aromatic. Taste relatively pleasant if eaten 1-2 days after picking; makes excellent jam, flavours black tea.

Acronychia crassipetala, Crater Aspen — Fam. Rutaceae

Medium to fast growth, 5-9 m in height; white flowers; smooth four-celled white fruit tastes best if eaten 1-2 days after picking; good for Marmalade, stewed fruit and in black tea.

Aleurites moluccana, Fam. Euphorbiaceae

Fast growth, 12-16 m tall; flowers white; white new leaves; leaves heart shaped and very large in young plants. Bees attracted to flowers; nuts edible but need treating as can cause vomiting and diarrhoea.

Alocasia macrorrhiza, Cunjevoi — Fam. Araceae

Fast growth, herb 1-2 m tall; large green leaves; lily-like flower with bright red poisonous, bitter fruit unlikely to be eaten without being spat out.

Alyxia ruscifolia, Star Alyxia or Prickly Alyxia — Fam. Apocynaceae

Medium growth rate, 1-2 m shrub; sweet scented white flowers; glossy green prickly leaves in whorls of 3-4; showy small orange fruit 5-8 mm long; likes open or shady conditions.

Antidesma bunius, Currantwood or Herbert River Cherry — Fam. Euphorb.

Slow to medium growth, 5-8 m in height, hardy; white to apricot/red coloured fruit, quite tasty, excellent stewed.

Athertonia diversifolia, Atherton Oak — Fam. Proteaceae

Medium growth rate, 8-12 m tall; conspicuous cream spikes to 30 cm long; showy lobed leaves becoming entire as tree ages, old leaves bright orange; fruit a flattened, edible, sweet nut with a dark blue skin.

Bowenia spectabilis, Bowenia — Fam. Zamiaceae.

Slow to medium growth, 1-3 m tall; glossy, dark green leaves; good indoor subject; greenish-white cones, white mature fruit, glossy brown new leaves; likes shade but will grow in open.

Buchanania arborescens, Buchanania Tree — Fam. Anacardiaceae

Medium growth rate, 6-8 m tall, hardy, mango-like leaves; very sweet small black fruit, fingernail size.

Callicarpa pedunculata, Purple Callicarpa — Fam. Verbenaceae

Medium to fast, 2-3 m, prunes well; small crowded purple flowers followed by glossy small purple fruit, deciduous for about 1 month.

Callistemon viminalis, Weeping or Creek Bottle Brush — Fam. Myrtaceae

Medium to fast growth, 5-9 m; bright red/pink bottlebrush flowers; new leaves pink/red often weeping; fruit brown-grey woody capsules.

Chionanthus ramiflorus, Native Olive — Fam. Oleaceae

Fast, 7-14 m, inconspicuous cream flowers, navy blue olive-like fruits attractive to pigeons.

Croton insularis, Silver Croton — Fam. Euphorbiaceae

Fast growth, 5-8 m, bushy, cream flowers attractive to bees; new leaves silver, mature leaves green above, silver below, old leaves orange; fruit inconspicuous green/grey capsules.

Cryptocarya mackinnoniana, Mackinnon's Walnut — Fam. Lauraceae

Slow to medium, 8-12 m, small white flowers; large elongated leaves, new leaves bright red; fruit blackish with white spots, has a nutmeg smell when cut; attracts pigeons.

Cyathea cooperi, Coopers Tree Fern — Fam. Cyatheaceae

Medium to fast, 5-12 m tall, stem usually 8-30 cm diam., likes open or shady conditions.

Cyathea woollsiana, Wooll's Tree Fern — Fam. Cyatheaceae

Slow to medium growth rate, 5-8 m tall, stem usually 8-25 cm diam. best in semi-shade.

Darlingia ferruginea, Rose Silky Oak — Fam. Proteaceae

Slow growth, 6-10 m, flowers cream, large rusty lobed leaves.

Decaspermum humile, Brown Myrtle — Fam. Myrtaceae

Medium to fast, 5-9 m tall, small whitish flowers; attractive small glossy green leaves, new leaves red-brown to pinkish; mature fruit black 8-10 mm diam. edible.

Delarbrea michieana, Delarbrea — Fam. Araliaceae

Slow to fast growth rate, 5-8 m, palm-like form with erect compound leaves; glossy bright blue fruit; semi-shade best.

Deplanchea tetraphylla, Four-leaved Deplanchea — Fam. Bignoniaceae

Medium to fast, 6-10 m, showy yellow flowers; conspicuous large leaves especially in younger stages, often arranged in threes, fours and fives around the stem.

Dichapetalum papuanum, Papuan Dichapetalum — Fam. Dichapetalaceae

Slow to medium growth rate, 1-2 m, small cream flowers; fruit a bright yellow capsule about 15 mm long opens to reveal seed surrounded by sweet edible bright orange flesh.

***Cardwellia sublimis* (Top right)**

Photography by Garry Sankowsky

The Northern Silky Oak is the largest of the oak family and not suited for many gardens. However it makes a beautiful specimen tree as described on page 208.

***Darlingia ferruginea* (Bottom right)**

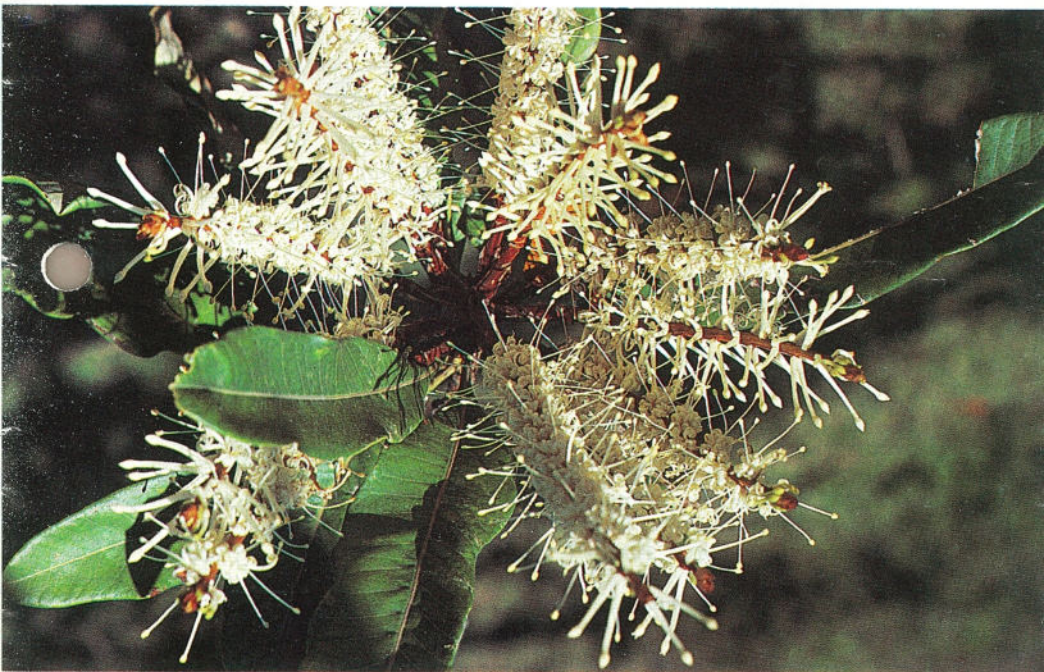
Photography by Garry Sankowsky

Often called the Rose Silky Oak, this beautiful tree is described on page 209. See the rear cover for a colour photograph of the tree in full flower.



Cardwellia sublimis △

▽ *Darlingia ferruginea*



- Dillenia alata*, Red Beech — Fam. Dilleniaceae
Medium growth rate, 6-10 m, bright yellow flowers 6-9 cm diam. lasting only one day but replaced daily for at least 1-2 months; glossy dark green large leaves; open fruit has conspicuous red valves; trunk a beautiful flaky, papery copper/pink becoming maroon with age.
- Diploglottis diphylostegia*, Queensland Tamarind — Fam. Sapindaceae
Medium growth rate, 8-13 m, small white flowers; showy small yellow soft skinned capsular fruit, 2-3 lobes, bright orange acid jelly flesh with strong tart taste, makes excellent fruit drinks.
- Elaeocarpus bancroftii*, Kuranda Quandong — Fam. Elaeocarpaceae
Medium growth rate, 12-16 m, showy white flowers; old leaves red; Fruit a green to dull blue fleshy structure containing a hard nut, good eating.
- Endospermum medullosum*, Endospermum — Fam. Euphorbiaceae
Medium to fast, 10-14 m, coastal lowland tree, huge round peltate leaves.
- Eugenia reinwardtiana*, Coastal Lily Pilly — Fam. Myrtaceae
Slow to medium growth, 1-2.5 m, white flowers close to stems, new leaves bronze red; fruit glossy red, edible, sweet, 1.8-2.0 cm diam.
- Ficus congesta*, Red leaved Fig — Fam. Moraceae
Medium to fast, 3-7 m tall, bright red/pink new leaves; fruit on trunk, main branches and roots; medium sweetness for eating; fruit attracts pigeons and Figbirds.
- Ficus copiosa*, Fig of Plenty or Plentiful Fig — Fam. Moraceae
Medium to fast growth, 6-9 m, sandpaper leaves; brown fruited varieties very sweet, white fruited forms tasteless.
- Ficus destruens*, Striking Fig — Fam. Moraceae
Medium to fast, 7-14 m tall, brilliant velvet rusty brown undersurface to symmetrical shaped green leaves, fruit small orange/yellow showy; a strangler often seen in the tops of rainforest trees, grows well on own roots.
- Flindersia acuminata*, Silver Silkwood or Putt's Pine — Fam. Flindersiaceae
Medium to fast, 7-14 m, flowers yellow, small but showy because crowded; fruit are long green spiky but not prickly capsules 10-13 cm long and conspicuous.
- Freycinetia marginata*, Giant Climbing Pandanus — Fam. Pandanaceae
Slow to medium growth rate, erect climber, large orange-pink flowering bracts 30-80 cm long; red fruit; semi-shade or shade.
- Geissois biagiana*, Northern Brush Mahogany — Fam. Cunoniaceae
Medium to fast growth rate, 8-14 m, cream flower spikes, brilliant large red new leaves consisting of three toothed leaflets, leaves arranged oppositely.
- Glochidion harveyanum*, Daphne Buttonwood — Fam. Euphorbiaceae
Medium to fast, 5-8 m., compact bushy form, leaves light green, flowers very small, yellow, strong Daphne-like smell; fruit mini-pumpkin shape, 10-12 mm diam., white or pink/red. Good screen plant.
- Harpullia rhyticarpa*, Fam. Sapindaceae
Medium growth rate, 2-5 m., narrow form; leaves shiny green, compound with winged rachis; flowers small, white, scented, clustered; fruit a capsule, bright yellow, 20 mm, diam., 2 lobed with bright red seed exposed, when capsule open. Will grow in open, but better in semi-shade.
- Hodgkinsonia frutescens*, Turkey Bush — Fam. Rubiaceae
Medium to fast, 1-2 m, white flowers, dark green leaves, bright red small fruit 5-6 mm long; probably a potential indoor plant as well as for shady shrubberies.

Laccospadix australasica, Mountain Mist Palm — Fam. Palmae (Arecaceae)

Slow to medium, 5-8 m in height, clumped or single stems; new leaves often coppery pink; flowers cream, inconspicuous; fruit bright glossy red on spikes coming out of leaves; semi-shade.

Lagerstroemia archeriana, Archers Crepe Myrtle — Fam. Lythraceae

Medium to fast, 5-8 m tall, showy purple flowers; stem with slightly papery cream/grey bark eventually developing a smooth guava-like stem; deciduous for about one month; fruit brownish grey capsules.

Leea indica, Leea — Fam. Leeaceae

Medium to fast, 1.5-3 m tall; striking large compound leaf; flowers cream; fruit maroon turning black; a wind-protected site best.

Lepidozamia hopei, Rainforest Cycad Tree — Fam. Zamiaceae.

Slow but glossy green leaves are attractive when only 60 cm-100 cm tall (2-4 yrs); 3-10 m tall; conspicuous orange/red fruit and striking terminal male cones; prefers shade but will grow in open.

Licuala ramsayi, Rusty Hessian Hair Fan Palm — Fam. Palmae (Arecaceae)

Very slow, 5-15 m tall; magnificent glossy green circular fronds with segments arranged like blades of a windmill; inconspicuous cream flowers; showy bright red fruit; superb in semi-shade, sheltered positions.

Lindsayomyrtus brachyandrus — Fam. Myrtaceae

Slow, 7-10 m tall; new leaves purple/black turning pink then cream then green, green leaves relatively large.

Melastoma polyanthum — Fam. Melastomataceae

Fast, shrub 1.5-3 m tall; large pink flowers 5-6 cm across; edible dark purple/black raspberry-like centres to fruit; open, semi-shade or shade positions. See colour photograph on page 225.

Musa acuminata, Maroon-stemmed Banana — Fam. Musaceae

Medium to fast, 3-5 m tall, clumped stems; delicate finger-sized bananas with many black seeds; leaves beautiful when wind-protected.

Nauclea orientalis, Cheesewood or Leichhardt Pine — Fam. Rubiaceae

Medium to fast, 8-14 m, interesting white flowers produced in a pompom-like structure; large ovate opposite leaves with conspicuous stipules, new leaves red-brown; fruit greyish warty structures about 5 cm long with many seeds; deciduous for 2-3 weeks.

Neorites kevediana, Fish Tail Oak — Fam. Proteaceae

Medium to fast growth, 8-14 m, striking thin flat form; conspicuous rusty red-brown new leaves, glossy green mature leaves of unusual shape; white flowers attract bees, honeyeaters, etc.

Pandanus conicus — Fam. Pandanaceae

Medium growth rate, 3-5 m. Narrow form, showy pink-red fruit.

Pandanus gemmifer, Puppy Pandanus — Fam. Pandanaceae

Medium growth rate, 3-7 m, hardy erect form.

Pandanus zea, Fam. Pandanaceae

Medium growth rate, 5-12 m, develops striking stilt roots; yellow orange fruit; edges of leaves not very prickly.

Phaleria octandra, Fam. Thymelaeaceae

Slow to medium, small shrub to 1.5 m; dark glossy leaves; white flowers and glossy red fruits.

Pilidiostigma tropicum, Apricot Myrtle — Fam. Myrtaceae

Medium growth rate, 5-8 m, faint apricot/cream flowers with pink stigma; apricot tones in new leaves; fruit black.

- Pittosporum venulosum*, Rusty Pittosporum — Fam. Pittosporaceae
Medium to fast growth, 5-10 m, white fragrant flowers; conspicuous velvet rusty brown new leaves; green/yellow fruit; bright red seed.
- Podocarpus neriiifolius*, Weeping Brown Pine — Fam. Podocarpaceae
Slow to medium growth, 7-12 m, glossy strap-like leaves which hang.
- Psychotria dallachyana* — Fam. Rubiaceae
Medium growth rate, 1-3 m tall, glossy dark green opposite leaves; small white flowers; fruit cream, 8 mm diam, edible.
- Omalanthus populifolius*, Bleeding Heart — Fam. Euphorbiaceae
Fast growth, 5-10 m tall, life span 3-15 years; bright red heart-shaped old leaves; flowers greenish; fruit greenish/dull purple capsules attractive to birds.
- Randia fitzalanii*, Orange or Brown Gardenia — Fam. Rubiaceae
Slow to fast, 5-8 m in height, glossy green large leaves; conspicuous white tubular flowers; large orange/yellow many-seeded fruit (apple-size).
- Sauropus macranthus*, Sauropus — Fam. Euphorbiaceae
Medium to fast, compact shrub 1-2.5 m tall, dark red, small male and female flowers; fruit bright red miniature-pumpkin-like capsule, 15 mm wide.
- Syzygium angophoroides*, Cardwell Bark-in-Wood — Fam. Myrtaceae
Medium to fast growth rate, 12-14 m, flowers cream, animal attractant; new leaves rusty red-brown/purple-red, mature leaves dark green; fruit small turning blue then finally black, 9-10 mm diam.; good shade tree; hardy in dry or swamp conditions.
- Syzygium erythrocalyx*, Red Bud Satin Ash — Fam. Myrtaceae
Medium growth rate, 6-10 m tall, pink/cream flowers on stem; large leaves clasping bases, new leaves purple-pink-red-cream; fruit on stem pink/red.
- Syzygium fibrosum*, Fibrous Satin Ash — Fam. Myrtaceae
Medium growth rate, 4-8 m tall, showy apricot/cream flowers; bronze/rusty brown-red new leaves; numerous glossy bright red fruit about 2 cm diam.; edible but very tart.
- Syzygium paniculatum*, Creek Cherry — Fam. Myrtaceae
Medium to fast, 5-10 m, cream flowers; red/brown new leaves; lipstick-pink edible fruit.
- Syzygium torte*, Flaky-barked Satin Ash — Fam. Myrtaceae
Medium growth rate, 8-12 m tall, white flowers attract bees, honeyeaters, butterflies, day-flying moths; new leaves reddish-brown/maroon; fruit pleasant to eat.
- Syzygium papyraceum*, Paper bark Satin Ash — Fam. Myrtaceae
Slow, 9-14 m tall, flowers attract bees, honeyeaters, etc., leaves bright glossy green, new leaves glossy olive-brown; fruit bright blue 2.0 cm diam. not nice to taste; stem a distinctive papery copper/brown.
- Syzygium alliligneum*, Onionwood — Fam. Myrtaceae
Slow to medium, 8-15 m tall, large showy white flowers 4-5 cm diam. bronze coloured new leaves; magnificent glossy red fruit 5-8 cm long x 4-5 cm wide, edible but tart; showy coppery-brown flaky bark.
- Syzygium tierneyanum*, Bamaga Satin Ash or Water Cherry — Fam. Myrtaceae
Medium growth rate, 10-15 metres, flowers cream behind foliage attract butterflies, bees, honeyeaters; new leaves red-brown/bronze; fruit white or red, edible.



Harpullia frutescens

Photography by A. P. N. House

***Terminalia catappa*, Sea Almond — Fam. Combretaceae**

Medium to fast, 7-12 m tall, showy conspicuous shaped leaves, old leaves bright red; fruit a corky fibrous nut with a blue skin and a thin sweet nut in centre 2.0 cm long x 4 mm wide approx., stones seem best weapon for opening; deciduous for 1-2 months.

***Terminalia sericocarpa*, Damson — Fam. Combretaceae**

Medium to fast, 9-14 m, small white flowers, showy glossy brown new leaves that appear en masse after a deciduous period of 2-6 weeks, old leaves turn yellow; fruit a small blue-skinned covered nut.

***Ternstroemia cherryi*, Cherry Beech — Fam. Theaceae**

Slow, 5-8 metres, compact bushy form; new leaves coppery, red, brown and cream tints; fruit bright orange/yellow 2-2.5 cm diam.

***Tristaniopsis exiliflora*, River Box or Stream Box — Fam. Myrtaceae**

Slow growth rate, variable size 3-12 m, small white flowers attract bees, butterflies and honeyeaters; stem smooth dappled grey/white and fawn/brown, bark tends to ribbon-peel, old leaves bright red; immature fruit small reddish capsules.

***Waterhousea unipunctata*, Roly Poly Satin Ash — Fam. Myrtaceae**

Slow to fast growth, 6-10 m tall, cream flowers attract bees, butterflies, honeyeaters, etc., showy pink/red new leaves prominent at least twice a year for 1-3 months. ■

Grow What Basic

Australian Plant Study Group

A companion to earlier books "Grow What Where" and "Grow What Wet", also available from the Editor, 860 Henry Lawson Drive, Picnic Point, NSW, 2213, for \$20.00 each, this latest book is for beginner, homegardener in our temperate area of Southern Australia. There is now such a wealth of Australian plants available that newcomers to growing natives find it difficult, even bewildering, to make a choice for their gardens. To help you with this choice, *Grow What Basic* describes and illustrates 200 reliable, versatile and readily available native plants.

You can find Australian plants thriving naturally anywhere from sandy desert to the deep, rich soils of moist fern gullies. Some will grow only in conditions similar to those of their own habitat, but many others are adaptable and will tolerate a wide range of climates, soil types, and conditions.

The plants selected as 'Basic' for this book are hardy. They tolerate many differing garden conditions and are usually long lived.

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Darlingia ferruginea

Photography by Garry Sankowsky

One of many magnificent plants of Northern Queensland. On page 229 there is a colour plate showing the flower heads in more detail. For advice in the cultivation of this Proteaceae refer to articles of this issue and its description on page 209.

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