

L.J. Daniels,
 Research Station,
 P.O. Box 201,
BILOELA, Q 4715

Dear Members,

Well it is Newsletter time again. I still hear fairly regularly from some of the members who have been with the group for a number of years while quite a few new members have joined. On the otherhand I hear once or twice from a member and then no more. Those I have not heard from for two years or more have not paid their subscription during that period, I have dropped from the membership list. A new seed list is attached.

This year in Central Queensland has been very dry with little rain being recorded in the period from February to November. As well as severely affecting the grazing and agricultural industries, this prolonged period without any effective rainfall had some effect on the native flora and fauna. As expected grasses and small native plants died off but some larger shrubs also suffered from moisture stress and in some areas some of these died. Generally eucalypts appeared to suffer less than most other species, probably because of their deep root system. In some areas, Kangaroos reached plague proportions and these animals are doing considerable damage to the smaller native plants.

During August I spent a few days in the Carnarvon Gorge National Park. Although a very interesting area particularly for family groups, the Gorge area itself is not particularly rich in species of eucalypts. *E grandis* and *E. popinqua* are found along the creek. These species are normally only found in coastal and sub-coastal areas and the small occurrence of these species so far inland and well away from any other areas poses the question of why these isolated occurrences do occur. One probable answer is that when our climate was much wetter these species were much more widespread, but as the climate became hotter and drier they died out and were replaced by more drought and heat tolerant species except in the more favourable cooler and moister areas such as the protected Carnarvon Gorge.

Recently there has been increasing interest and concern over some species of eucalyptus that are considered to be endangered. There appears to be two main groups of species that are endangered.

(a) Those that have a very restricted natural occurrence and are confined to a certain area or areas which have a specific soil type and/or climatic conditions. Even before settlement of Australia by Europeans, these species were rather rare and could be considered to be endangered even without the interference of man.

(b) Those that had a more widespread distribution but which occur in areas that are being cleared for cultivation or urban development. These species are being endangered by man's activity.

There would be a few species that would come under both groups. While there are some species that most would regard as endangered there are others that there would be some differences of opinion regarding whether or not they are endangered. I would like you to send me a list of all species that you consider to be endangered when next you write to me. I have already received lists from some of the State Branches of S.G.A.P., but would like to get as many suggestions as possible and also would appreciate any ideas and comments on the subject.

An interesting observation that I have made while growing eucalypts from seed and planting them out, is that although there appears to be a few exceptions, those species which are not common or widespread in nature are generally much more difficult to rear and grow in cultivation while those that are common and widespread are much easier to grow. This occurs even when both the restricted specie and the common specie appears to have a similar climatic and/or soil type. This would suggest that in nature less common species may have much higher losses as seedlings and they may require much more specific conditions for successful establishment than the more common species.

Following is the completion of the description of species which are botanically related to the 'true' bloodwoods but which vary in appearance and some characteristics from them.

E torelliana CCB:A Cadaga. Page 40 of Forest trees of Australia - No. 49 of Blakely.

Cadaga has a limited natural habitat on the lower slopes of the eastern side of the Atherton tableland in Nth. Queensland inland from Cairns. It is found on sandy to heavier loams of volcanic origin but with good subsoil and surface drainage. Cadaga is usually found on the edges of tropical rainforest and at times growing within them.

Bark is sub-fibrous, scaly and tessellated on the lower part of the trunk. Above this the bark decorticates leaving a smooth slaty-green surface. Adult leaves are slightly discoloured, ovate and 7 to 12 by 2 to 3 cm. Fruit is ovoid to globular - urceolate and 1.5 to 2.0 cm. Although this is a tropical species it has found to be fairly adaptable to other east coast summer rainfall areas and is now widely grown as a park and a garden tree.

E citriodora CCC:A Lemon Scented Gum. Page 44 of Forest Trees of Australia - No. 53 of Blakely

This moderate sized tree has a fairly restricted natural occurrence in the sub-coastal areas of Central and Nth Queensland. It is more common in the area between Mackay and Maryborough but does occur as far north as the Atherton Tableland inland from Cairns. Lemon scented gum occurs on dry ridges and undulating country. Although it is found on a number of soil types it is more common on poor gravelly soils of laterite origin with good drainage. It usually grows in open forest in association with other eucalypts. Bark is smooth on trunk and branches, white to faintly bluish with a powdery surface. It is shed in irregular patches giving the surface a dimpled appearance. Adult leaves are narrow lanceolate, light green, concolorous and 10 to 17 by 1.2 to 2.5 cm. Fruit is ovoid and 1.2 by 1.0 cm. Timber is brown grey, hard, strong and durable. Although a species of the warmer areas of tropical and sub-tropical Queensland, this species has been found to be very adaptable and is grown successfully as far south as southern Victoria. In cultivation it is a fast growing tree, but its crown is too sparse for it to be a good shade tree. Its leaves when crushed have a distinctive citrinelle (lemon scented) smell and by this it can be easily distinguished from other species of similar appearance.

E maculata CCC:B Spotted Gum. Page 44 of Forest Trees of Australia - No. 54 of Blakely.

This moderate to large tree is closely related to and is similar in appearance to *E. citriodora* but has a wider and more southerly distribution. It occurs in coastal and subcoastal areas from near Maryborough in Queensland to near the N.S.W. - Victoria border. It grows on a wide range of soils but usually on ridges and well drained slopes, but which are often moist. Bark is smooth, pink or bluish grey on trunk and branches, but is shed in patches which leave slight depressions on the surface. Adult leaves are narrow lanceolate to lanceolate, concolorous to slightly discoloured and 10 to 25 by 2.5 to 6.0 cm. Fruit is ovoid 1.2 to 2.0 by 1.0 to 1.2 cm. Timber is brown grey, strong and durable and is widely used in building construction. Although similar in appearance this tree can be easily distinguished from *E. citriodora* because its leaves are not lemon scented.

Following is the description of species which form a botanically related group which includes the Eastern Blue Gums, the Mahoganies and the Grey Gums. This group is composed of about 13 species which in 'A Classification of Eucalypts' by Pryor and Johnston are placed in the series Saligae of the subgenus *Symphomyrtus*.

The Eastern Blue Gums are generally large impressive forest trees which occur on the wetter coastal areas of N.S.W. and Queensland. Their timber is pink to red brown, moderate to high durability and strength and useful for many purposes. Rough persistent bark is confined to the base of the tree above which is smooth clear light silvery gum type bark. Leaves are discoloured while branches tend to be held at right angles to the trunk.

E deanei SECAA Round-leaved Gum. Page 58 of Forest Trees of Australia - 62 of Blakely.

Round-leaved Gum is a large forest tree of good form which grows in the Valleys on the eastern slopes of the Blue Mountains and further north on the eastern escarpment of the Northern Tablelands of N.S.W. and adjacent areas of Queensland. Its best development is on the bottoms and lower slopes of valleys where the fertile soil is moist but not waterlogged. Bark is smooth gum type except for a short stocking at the base of the trunk.

Adult leaves are lanceolate 8 to 10 by 1.5 to 2.5 cm and discolorous. Fruit is campanulate to urceolate and 0.5 by 0.4 cm. Although adult leaves are lanceolate, intermediate leaves are much broader and these may be common even on mature leaves mixed with adult leaves and this unusual feature helps in distinguishing it from other similar species.

E grandis SECAB Rose or Flooded Gum. Page 54 of Forest Trees of Australia - 59 of Blakely.

This is a tall tree of good form which grows in the coastal regions from Newcastle in N.S.W. to southern Queensland with small areas behind Mackay and Cairns and in the Carnarvon Gorge in Queensland. The latter area is well inland with a much lower rainfall than that of the main areas. It grows mainly on fertile, moist but well drained sites on the flats and lower slopes of deep valleys and can extend to the edge of rain forest. A short stocking of grey rough bark usually persists at the base of the tree but above this the bark decorticates leaving a smooth light greyish surface. Adult leaves are lanceolate, slightly wavy, discolorous and 10 to 20 by 2 to 4 cm. Fruit is pear shaped, rather thin and 0.7 to 0.6 cm. This specie is closely related and fairly similar in appearance to *E saligna* (Sydney Blue Gum) and differentiation in some areas can be difficult. Where their distribution overlaps, *E grandis* usually grows on the lower areas while *E saligna* extends to slopes and hill tops. Their fruit is also slightly different in shape while the timber of *E grandis* is softer and lighter in colour.

E saligna SECAC Sydney Blue Gum. Page 56 of Forest Trees of Australia - 60 of Blakely.

Sydney Blue Gum is a large tree with straight trunk which grows in wet sclerophyll forest from the border ranges of Queensland to the south coast of N.S.W.. There is a very small occurrence on the Blackdown Tableland about 160 km west of Rockhampton in Central Queensland. Its best development is on good moist soils in the valleys and on the slopes of the coastal ranges. Bark is smooth throughout with a white to light bluish grey powdery surface or with a short stocking of rough bark at the base of the trunk with the smoother bark above. Adult leaves are lanceolate, discolorous and 10 to 20 by 0.5 to 0.6 cm. This specie is very similar to *E grandis* but usually grows on higher ground than that specie, while its timber is darker in colour, stronger and tougher.

The Mahoganies are a group botanically related to the Eastern Blue Gums but have persistent rough bark markedly discolorous leaves usually with a glossy dark upper surface. Like the Blue Gums they occur along the wetter coastal areas of Queensland and N.S.W. but some species in particular will grow on poorly drained sites.

E bothryoides SECAD Southern Mahogany. Page 60 of Forest Trees of Australia - 64 of Blakely.

The size and form of Southern Mahogany varies according to soil type and site. In the sheltered fertile lower valleys it is a large forest tree but on poorer sites it is reduced in size but usually still retains a dense crown. It grows in a narrow coastal strip from near Newcastle in N.S.W to Bairnsdale in Victoria. On poor coastal sites its bark is short fibred flaky-fibrous, brown and persistent on trunk and branches. On the larger forest trees on better and more sheltered sites the bark is finer in texture and grey rather than brown. Adult leaves are lanceolate, tapering to a long point, discolorous, moderately thick and 10 to 15 by 3 to 6 cm. Fruit is cylindrical, sessile and 1.0 by 0.8 cm. This specie usually has a well formed crown with rather distinctive discolorous leaves and persistent soft grey or brown bark.

E robusta SECAP Swamp Mahogany. Page 62 of Forest Trees of Australia - 67 of Blakely.

Swamp Mahogany is usually a tree of moderate height but relatively dense spreading crown. It occurs in a very narrow coastal strip from near Maryborough in Queensland to Bega on the south coast of N.S.W. It grows usually on heavy soils in swamps or on the edges of salt water estuaries and lagoons. It is seldom found far from the coast. Bark is a flaky sub-fibrous, thick, red brown and persistent to the smaller branches. Adult leaves are broadly lanceolate, discolorous and 10 to 20 by 4 to 7 cm. Fruit is cylindrical to vase shaped and 1.5 by 1.2 cm. This coastal specie has distinctive large leathery discolorous leaves with a dark green upper surface. It prefers wet sites on the edge of or near swamps and lagoons and will tolerate very wet conditions.

E pellita SECCA Large Fruited Red Mahogany. No. 146 of Forest Tree Series Leaflets - 73 of Blakely.

This Mahogany is a moderate sized tree which occurs in a belt along the East Coast. There are two main areas of distribution. The first extends from near

Cape York south to about Ingham in Queensland and the more southerly from near Brisbane to the South Coast of N.S.W. Although it grows on a wide range of soil types, it prefers moist sites on flats, in valleys or on gentle slopes.

Bark is short fibred fissured, firm but not hard, thick brownish and persistent on trunk and branches. Adult leaves are lanceolate to falcate, discolorous and 10 to 15 by 2 to 2.5 cm. Fruit is relatively large, hemispherical to obconic and 1.2 by 1.5 cm. with strong exerted valves. This coastal species has a heavy branched crown usually on a straight trunk. It can generally be distinguished from other similar species by its large buds and fruit.

E notabilis SECCB Blue Mountains Mahogany. No. 27 of Forest Tree Series leaflets 72 of Blakely.

Blue Mountains Mahogany is not a widespread species and occurs as scattered trees in small groups. Its main area of occurrence is in the Blue Mountains, but there are small areas on the eastern edge of the N.S.W. tablelands as far north as the Queensland border. It usually grows on shallow, well drained soils on hilly or tableland areas. Bark is fibrous, rough red-brown and persistent on trunk and branches. Adult leaves are lanceolate to falcate, discolorous with dark green upper surface and 10 to 15 by 1.7 to 2.5 cm. Fruit is hemispherical and 0.7 by 0.7 cm. This Mahogany occurs further inland and on higher sites than most other species of the group and for this reason and the fact that its leaves have a very dark upper surface makes it fairly easy to identify.

E resinifera SECCC Red Mahogany. Page 64 of Forest Trees of Australia. - 69 of Blakely.

Red Mahogany is a moderate sized tree which grows in coastal and sub-coastal areas from about Maryborough in Queensland south to Newcastle in N.S.W. It usually grows on light but moderately fertile and moist soils on low slopes in sheltered valleys and on flats. It is usually found as scattered trees in forest areas and is able to withstand more shade than most eucalypts.

Bark is red brown, rough, tending to be stringy and persistent on trunk and branches. Adult leaves are lanceolate, thick, markedly discolorous and 10 to 17 by 2.0 to 2.5 cm. Fruit is ovoid to hemispheric 0.5 to 0.7 cm with very acute exerted valves. This coastal species has a well branched relatively dense compact crown and a straight trunk. The upper surface of its leaves are glossy dark green while its fruit is smaller than that of *E pellita*, a related species which grows in the same localities.

The Grey Gums are a small group botanically related to the Mahoganies and Eastern Blue Gums but with some quite different characteristics, the main one of which is the bark type. Due to type variation with the species, different botanists have divided the group into more species than others have. Some have made types sub-species, while other botanists have given them species status. Pryor and Johnston have divided them into three species *E propinqua*, *E major* and *E punctata* with the latter divided into four sub species. Other botanists have made *E major* a sub-specie of *E propinqua* while in some cases the sub-species of *E punctata* species status.

E propinqua SECEM A Grey Gum. Page 68 of Forest Trees of Australia - 75 of Blakely.

This Grey Gum is a forest tree of moderate size which grows in the east coastal areas from near Newcastle N.S.W. to near Maryborough in Queensland while there are small occurrences inland from Rockhampton including one as far inland as the Carnarvon Gorge. It is found on lowlands, low hills and undulating country usually on clay loams, but is also found on lighter loams. It grows in association with other eucalypts in sclerophyll forests. Bark is shed from the trunk and lower branches in large irregular patches leaving blotched pink to light grey areas which turn darker with age. On the smaller branches bark is light brown decorticating in strips. Adult leaves are lanceolate, concolorous and 10 to 12 by 1.5 to 2.0 cm. Fruit is hemispheric to conic 0.4 by 0.5 cm with short exerted valves. In appearance it is fairly similar to the closely related species, *E punctata* but generally the fruit of *E propinqua* is smaller while its distribution is further north than that of *E punctata*.

E major SECEB A Grey Gum. Page 68 of Forest Trees of Australia - 76 of Blakely.

This Grey Gum is sometimes listed as *E propinqua* sub-specie major. It is very similar in appearance to *E propinqua* but its leaves, buds and fruit are larger with the latter being more conic. It has a more limited area of distribution and is most common south and west of Brisbane.

abergiana	celastroides	ficifolia
abbreviata	cephalacarpa	flaxinoides
acaciformis	chopmaniana	flocktoniae
accedens	cinerea	foecunda
acmenioides	citriodora	foelscheana
aggregata	cladocalyx nana	formanii
alba	clavigera	forrestiana
albens	clelandii	fraseri
alpina	cloeziana	froggatii
amplifolia	coccifera	
amygdalina	collina	gardneri
anceps	comitae vallis	gillii
andrewsii	confertiflora	glaucenscens
angophoroides	consideriana	glacina
angulosa	confluens	globoidea
annulata	conica	globulus
apodaphylla	conglobata	globulus compacta
approximans	conglomerata	gomphocephala
aquilina	cordata	gongylocarpa
archeri	cornuta	goniantha
argillaceae	coronata	goniacalyx
argophloia	corrugata	gracilis
aromophloia	cosmophylla	grandifolia
astringens	crebra	grandis
	crenulata	griffithsii
badjensis	crucis	grossa
bakeri	cullenii	guilfoylei
baeuerlenii	cupularis	gunnii
baileyana	curtisii	haemastoma
balladoniensis	cylindriflora	haematoxylon
bancroftii	cypellocarpa	halli
banksii		hauseana
bauerana		hendersonii
baxteri		herbertiana
behriana		howittiana
beyeri		
bigalerita		incrassata
bladelyi		intermedia
blaxlandii		
blesseri		jacksonii
blomesii		jacobiana
bothryoides		jensenii
bosistoana		johnstonii
brachycalyx		jucunda
brachycorys		
brassiana		kessellii
brevifolia		kitsoniana
bridgesiana		kochii
brockwayii		kondinensis
brownii		kruseana
bupestium		kybeanensis
burdettiana		
burracoppinensis		laevopinea
		lane-polei
caesia		landowneana
calcicola		largiflorens
calignosa		latifolia
calophylla		lehmanii
calycogona		leptocarpa
camaldulensis		leptopoda
camaldulensis obtusa		leucophloia
cambageana		lesouffii
cameronii		leucoxylon
camfeldii		leucoxylon rosea
campanifructa		ligustrina
campanulata		lirata
campaspe		longicornis
camphora		longifolia
capitellata		
	ebbanoensis	
	elata	
	eremophila	
	erythrocoris	
	erythronema	
	eudesmoides	
	eugenioides	
	ewartiana	
	exserta	
	falcata	
	fasciculosa	
	fastigata	
	ferruginea	
	fibrosa	

loxophleba lucasii	perrinana	steadmanii
macarthurii	perfoliata	staigerana
macranda	phaeotricha	stellulata
macrocarpa	phoeniceus	stoatei
macrorhyncha	pileata	st. johnii
maidenii	pilligaensis	straiticalyx
mannifera	pilularis	stricklandii
mannifera praecox	pimpineana	stricta
marginata	piperita	sturgessiana
mckieana	planchoniana	tenuipes
megacarpa	platycorys	tenuiramis
megacornuta	platypus	tereticornis
melanophloia	polyanthemus	terminalis
melliodora	polycarpa	tessalaris
merrickiae	polytracta	tetragona
michaeliana	popalnea	tetraptera
microcarpa	porosa	tetradonta
microcorys	porrecta	thozetiana
microneura	preissiana	tindaliae
microtheca	propinqua	todtiana
miniata	pruinosa	torrelliana
moluccana	ptychocarpa	torquata
moorei	pterocarpa	trachyphloia
morrисii	pulverulenta	transcontinentalis
muellerana	pulchella	triflora
"muck river"	pumila	umbra
multicaulis	punctata	umbrawarrensis
	pyriformis	uncinata
	quadrangulata	urnigera
	racemosa	vernicaosa
neglecta	radiata	virinalis
nesophila	ravertiana	viridis
nicholii	redunca	wandoo
niphophila	regnata	watsoniana
nigra	resinifera	hysterana
nitens	rhodantha	whitei
nortonii	risdonii	woodwardii
notabilis	robertsonii	woollsiana
nova anglica	robusta	youmanii
nubila	rugosa	youngiana
nutans	rossii	
	rodwayii	<u>HYBRIDS</u>
oblonga	rubida	crebra x popalnea
obliqua	rudderi	calignosa x stellulata
obtusiflora	rudis	caignosa x mckeana
occidentalis	rummyeri	baxteri x alpina
ochrophloia	saligna	eugenioides x globoidea
odontocarpa	salmonophloia	exythronema x stricklandi
oleosa	salubris	laevopinea x macrorrhyncha
oldfieldii	sargentii	melanophloia x cambageana
oligantha	scoparia	orgadophila x melanophloia
orbifolia	schlerophylla	torquata x woodwardii
oreades	seana	robusta x tereticornis
orgadophila	sessilis	pauciflora x radiata
ovata	shirleyi	
oximitra	siderphloia	
	sideroxylon	
pachyloma	sideroxylon rosea	
pachycalyx	sieberi	
pachyphylla	signata	
panda illequens	similis	
paniculata	simmondsii	
parramattensis	smithii	
parvifolia	socialis	
patens	spathulata	
parellaris	sphaerocarpa	
pauciflora	squamosa	
peeneri	staeri	
pellita		
peltata		

LIMIT OF 15 (Fifteen) packets per order. Please include a 25¢ stamp or self addressed envelope with order. Name substitutes as some seed is in short supply.