

ASSOCIATION OF SOCIETIES FOR GROWING AUSTRALIAN PLANTS

EUCALYPTUS STUDY GROUP NEWSLETTER NUMBER 15, July 1987

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Dear Members,

I have had several letters relating to the dwarf eucalypt project. Some members are looking for outstanding specimens of small eucalypts in their areas, and some have nominated particular species they would like to grow for the project. Lack of interested people in the tropics is preventing much development of production of small eucalypts for northern Australia.

In response to several requests, the print size in this newsletter is larger than last time. I hope this is an acceptable compromise.

Subscriptions for the 1987/88 financial year are now due. Please send in your \$4 promptly, as it makes my life a little easier. See Page 2.

A list of current ESG members is supplied in this newsletter. Members who have joined since March are listed below. Welcome.

### Eucalypt Identification Outing

By Connie Spencer, Alice Springs

Alice Springs nestles in the Macdonnell Ranges with Mt Gillen being a prominent feature. Entrance to the town is through Heavitree Gap. Just south of "The Gap", at the foot of the range, is the town dump, sewage ponds, Ilparpa Swamp and the commonage - not generally thought of as the most salubrious of areas but that's where SGAP invited friends and visitors to join them in an outing. What a surprise was in store for us!

Our president, Rod Horner, led us on a eucalypt identification tour.

We were all quite familiar with the River gum, Eucalyptus camaldulensis along the banks of "the Todd" and the very sick looking specimens in the river.

Next was the Coolibah, Eucalyptus microtheca, which is often mistaken for the Gum-coolibah, Eucalyptus intertexta and vice-versa. This was on low lying ground near a creek which flows into the Todd River. Rod pointed out how the bark is rougher, more fissured and darker in colour than the Gum-coolibah. I've noticed the habit and leaves of young specimens of each eucalypt to be quite different but not so much in mature trees. However the only safe way of distinguishing between the two is the mature fruit.

It is interesting to note that such a large tree has such tiny fruit as with the Ghost Gum and River Gum. Compare this to the small mallees like E.sessilis and E.pachyphylla which have much larger fruits.

From the low lying area we headed towards higher ground. Euc. socialis (Red mallee) was found in this area amongst scattered Cassias. E.socialis is a very common mallee in Central Australia growing on limestone outcrops. We proceeded to the base of the range where Acacia kempeana (Witchety bush) and Acacia aneura (Mulga) dominate. A few specimens of Canthium latifolium (Native currant) are on the lower slopes. The shape and colour of its leaves make it stand out as a green citrus-like shrub. As for the eucalypts, the first on the slopes was E.gamophylla (Blue mallee). This eucalypt is easily recognisable as it is the only local species that has opposite leaves joined together at the base. The blue mallee grows on sand plains and dunes as well as hillsides.

Eucalyptus gillenii (Mallee red gum) was so named because of where it was first collected on the southern slopes of Mt Gillen. The common name refers to its growth and colour of the timber. The rain had made quite a difference. Plenty of fresh new growth and it was setting seed.

As we climbed further up the slope we came across the Narrow-leaved Bloodwood, Eucalyptus eremaea. This bloodwood usually has a mallee form and is found on steep slopes and plateaux.

Looking back down the hillside we had just climbed, Eucalyptus papuana stood out here and there at the base of the hill - from a distance quite distinguishable with their white trunk and light green leaves. Also Eucalyptus terminalis (Bloodwood) could be seen amongst the ghost gums.

Just when we were about to descend to our vehicles and a cuppa, we spied a Pandorea doratoxylon (Spearwood) in full flower. This is a multi-stemmed shrub. Its cream flowers have brown-purple throat markings and this particular shrub was absolutely covered with flowers.

As usual, our two hour outing turned out to be more like four (par for the course) and we returned home to digest all that we had seen and heard.

### SUBSCRIPTIONS

Euc Study Group subscriptions for the 1987/88 financial year are now due. The rate this year is once again \$4. Please take note of your financial status as indicated below, and act accordingly.

Subscription now required - \$4

You are financial until July 88,  
no money required

### Members Letters

Tim Hayes from Goulburn (NSW) comments that, of the eucalypts that he has growing, E.scoparia seems to attract the greatest degree of insect attack. He writes "the leaf stalks of my larger specimen (about 5 metres high) have been affected by galls. Also sawfly larvae are only to be found on this species and not the others. However the tree's overall appearance remains excellent."

Trix Nickolls from Mt Gambier is experimenting with lopping her eucalypts. She has lopped an E.erythrocorys and two E.caesia because they were tall and spindly. This she did in early December. E.erythrocorys was cut back to ground level and has responded vigorously with a mass of shoots. In the last couple of months, a few shoots have assumed dominance. Trix says this "shrub" has everyone fooled, as the hairy oval-shaped leaves do not look like eucalypt leaves. One E.caesia was cut back 60cm above ground. Both are regenerating satisfactorily.

Jack Hallberg from Perth has grown many plants of E.synandra over the last six years. This is a small mallee species; a dwarf eucalypt if you like. Jack is attracted to E.synandra for several reasons. The flowers start off white, but darken with age to pink or pale red. More than one flowering per year is possible. It responds to extra water and fertiliser. Plants are relatively pest free. However seed viability appears to be low.

Bela Bard-Brucker from Melbourne, has 2 hectares of land at Lara, where he has planted many eucalypts. This area was formerly a treeless basaltic plain, and Bela comments on the advantages of deep ripping and ploughing this type of soil. He says that a neighbour (who has deep-ripped) has trees which are double the height in half the time, compared to his trees which are just planted in a big hole. Bela intends to have his land ploughed up this year.

Drip Irrigation and Limestone by Kaye Bartlett,  
Jervois, S.A.

Tree planting on our dairy farm started not long after we married 25 years ago. By 1969 my garden area was planted to capacity and my interest in growing plants was increasing after two trips to far-flung parts of Australia. Consequently, our plantation area was extended to a much larger area, to cope with the many plants grown from seed collected.

Soon I found that watering was becoming a major task, taking up most of my spare time, so we had to find an alternative to hand watering. A roll of 13mm polythene pipe was bought and snaked around the many small plants, as planting in lines is something I would rather not do if possible. A hole was put in the pipe with a sharp nail where each plant was located. This was our first irrigation system. Each section was connected to the hose in turn and the water allowed to run for an hour or so.

The shortcomings of this system soon became apparent; the trees closest to the tap received most water while those at the end of the line got much less. But the sandy soil doesn't hold water, and we left it running long enough for the end trees to receive enough water. We used this method until we started planting along fence lines, when we found that with greater lengths of pipe that the water wasn't reaching end trees. So we installed drippers (delivering 4 litres per hour) into the holes, and this problem was solved.

When planting new trees we like to plant at the end of February or the beginning of March while the soil is still warm, giving new plants a chance to get their root system into our soil before the cold weather sets in. It can be very hot at this time of year and I have to put the drips on every week for around 4 hours until our rains come. From then on they are watered only when needed. The following summer they are watered every fortnight with a four hour cycle and from then on only when needed.

As our water costs are very high, a lot of our plantings are left to fend for themselves after the first summer. These plantings are watered by hand when really needed in the first summer and it may be only four or five times. Trees planted in these areas are trees from dry areas. Species from Kalgoorlie and adjacent goldfield areas have proved ideal for such plantings. Most also tolerate our alkaline soils. Our soils are variable. Our home is situated on a sandy loam of neutral pH, but this is the exception as most of the property is a loam over sheet limestone. Some areas beneath the loam is a limestone marl which has particles of clay in it.

We have found eucalypts very adaptable and very few cannot be grown on limy soils. When planting one of our tree lines we came across an area of limestone marl and thought at the time we may have trouble getting these to grow, but the opposite proved to be true as the trees in this area have grown the fastest. Eucalypts in this area are *E. burdettiana*, *Torwood*, *occidentalis*, *intertexta*, *calycogona*, *diptera*, *rudis*, *nutans*, *stoatei* and *macrandra*.

This list following is of a few which do very well on our alkaline soils: *platypus*, *gillii*, *erythrocorys*, *diversifolia*, *megacornuta*, *cornuta*, *astringens*, *spathulata*, *steadmanii*, *eremophila*, *cladocalyx*, *gardneri*, *grossa*, *stricklandii*, *salubris*, *torquata*, *fasciculosa*, *baueriana*, *argophloia*, *forrestiana*, *leucoxylon*. . . . . The list can go on with trees like *globulus* growing well (will not make a 30m tree, but is a most attractive small tree) *E. citriodora* - also slow growing, but not showing any signs of yellowing and it is growing in an area of sheet lime where we had to get the post hole borer to get through in places. Perhaps I should list a few which I know don't like limestone. Even this will be hard as I have been putting most in areas that I feel would most suit them. My *E. macrocarpa* is doing well, but is in neutral soil. *E. rhodantha* I have tried a number of times without luck; it will hang on but won't grow. *E. websteriana* is growing but not my idea of a good specimen. It is in the sand so is not the lime that is really the cause. *E. crucis* is another I have tried without luck. *E. caesia* is doing well on

the sand but doesn't like alkaline soil. *E.ficifolia* is another which is doing well on sand but would not recommend planting it for alkaline areas, even though there are some exceptions in this district where they are growing in limestone marl. This is what makes it hard to say if the limestone is the reason some don't grow or the restriction of root systems in some areas.

In Taillem Bend (which is built on the top of a limestone cliff), the Beautification Committee has planted eucalypts along streets that are really growing well. If they had followed recommendations they would have had a rather limited number of species. It is very difficult in areas if it is on sheet limestone as it must be penetrated. A few years ago we got permission to plant a few trees around a silo. We had to jackhammer through a 1 metre layer of limestone before reaching a marl. The holes were filled with a loam and trees planted:- *E.torquata*, which has been slow growing, due to excess rain water draining into the holes in which the trees grow. *E.leucoxydon* has proved the best grower. *E.camaldulensis* has taken a while to settle but is away now. *E.elata* didn't like it at all and soon died out; we replanted *E.platypus* which is doing well.

#### Seedbank News

Seedbank stocks have increased thanks to donations by Kevin Rule, Connie Spencer and the Points Reserve at Coleraine. New species now held in stock include:

*aff.socialis* (central Aust.), *eremaea*, *gillenii*, *lucens*, *trivalvis*, *carnei*, *coolabah* var *arida*, *intertexta* var *fruticosa*, *micranthera*, *loxophleba* ssp *gratiae*, *rigidula*, *siderophloia*, *microtheca*.

#### Lerps and Psyllids

Lerps and Psyllids (the terms are virtually synonymous) are small sap-sucking insects which are significant pests of eucalypts. They are found throughout Australia, although the species involved will be different for each climatic region.

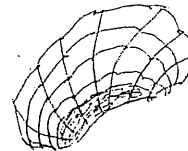
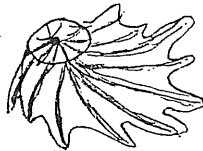
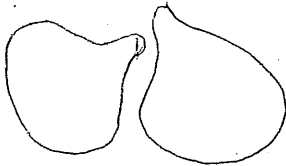
The adult insects are free flying, but the sap-sucking larva is immobile and builds a cover around itself. It is these juvenile stages (nymphs) which are of concern to eucalypt growers. Lerps cause discoloured dry patches on the leaves where they feed, probably from the injection of toxic saliva. These patches soon become brown, and affected leaves are shed prematurely and severe infestations may partially defoliate trees. Next time you see a tree which looks as though the leaves are all dying, take a closer look. If the leaves have numerous brown dead patches, with healthy green tissue elsewhere, it is very likely to be due to lerps. Look for the characteristic shells, which may still be attached to the leaves. Lerps are easily recognised by their scale-like coverings which protect them. The size and shape of the "shell" is distinctive for each species of lerp, and they are often of intricate design.

The manna found on the ground beneath peppermint forests is the accumulated scales of the sugar lerp. This is sweet and sugary and can be eaten or made into a drink. The most common species in W.A.

is one which has a yellowish translucent funnel-shaped covering up to 10mm long, enclosing the bright orange nymphal stage. The species most affected are E.rudis and E.wandoo. Eastern and northern eucalypts which are severely attacked include E.grandis, E.urophylla, E.robusta, E.botryoides, and E.camaldulensis.

Lerp infestations vary from year to year. In some seasons, huge areas of the species above may be attacked. However, lerps have many predators, including small birds, which eventually control lerp outbreaks when they occur. Physical control measures are rarely warranted, and impractical, but chemical control using trunk injections of dimethoate (a systemic insecticide) can be effective, if deemed absolutely necessary.

Examples  
of  
Lerps



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#### Growing eucalypts for their bark

Contributions for this series are invited. Many eucalypts have beautiful flowers or foliage, but many also have attractive bark, and some are worth growing for that feature alone. Anyone who has grown or is familiar with attractive-barked species, feel free to send in an article.

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#### The meaning of eucalypt names - Part 9

annulata - refers to the free annular disc of the capsule

L. annulatus (marked with rings, having a ring)

capitellata - refers to the sessile buds and fruits forming a head or cluster L. capitellatus (a little head)

decipiens - from the Latin decipiens (deceiving). Reference obscure; possibly refers to the difference between juv & ad foliage

fastigata - refers to the tallness of the species L. fastigatus  
(high, exalted)

incrassata - refers to the leaves L. incrassatus (thickened)

patens - presumably refers to the growth habit of the tree. L. patens  
(spreading, standing open, extending, accessible)

platypus - refers to the flattened peduncles Gk platy (wide, broad)  
and -pous (foot)

stenostoma - refers to the fruit orifice

Gk stenos (narrow) and stoma (mouth)

uncinata - refers to the tips of the adult leaves

L. uncinatus (barbed, hooked)