

ASSOCIATION OF SOCIETIES FOR GROWING AUSTRALIAN PLANTS  
 EUCALYPTUS STUDY GROUP NEWSLETTER NO. 21. JULY 1989

Leader: A.R.Bean, P.O.Box 397, Nambour, Qld, 4560.

Dear Members,

Well it is that time of the year again. Subscriptions are due for the 1989/90 financial year. The rate for this year is again \$4. Please take note of your financial status as indicated later in the newsletter. Members from Qld, NSW and Canberra have reported a very wet autumn and a mild winter so far. There has been plenty of correspondence over the last few months, and I have received several contributions for the newsletter. A list of current financial members of the Eucalyptus Study Group appears at the end of this newsletter. The new members to join since March are:

#### A New Eucalypt from Victoria

A new species has been discovered near Glenrowan in north-eastern Victoria. It was recently named Eucalyptus cadens.

It is a member of the "Swamp Gum" group, and is related to such species as *E. aggregata*, *E. ovata* and *E. camphora*.

It is a spreading tree, 8-25 metres tall. Bark is mostly smooth, shedding in ribbons, but there is a stocking of rough bark at the base, extending 1-10 metres. New shoots and leaves are glaucous. Leaves are mostly pendulous, narrow-elliptic, up to 12cm long. Inflorescences are axillary, 7-flowered. Flowers white.

*E. cadens* is known from just one locality at the edge of the Warby Range, in a permanently moist area surrounding perennial springs. There are about 600 trees occupying a total area of about 5 hectares.

A very unusual feature of *E. cadens* is that many of the trees are leaning, or fallen and continuing to grow from existing shoots as well as producing new vertical stems from the old trunk. The specific name, *cadens*, is derived from a Latin verb meaning "to fall down".

Its potential as a cultivated tree is unknown. The ability to grow on swampy sites and the glaucous new growth are desirable characteristics which may see it brought into cultivation.

Eucalyptus in China

by Jeanette Closs, Tasmania

Editors Note: Jeanette is leader of the Dodonaea S.G. and she visited China just before the great turmoil. I begged her to report on the eucs and this is the result.

There are more Eucalyptus trees planted in China than Australia!! This is a bold statement, but after having spent four weeks in southern China from the 11th April, I honestly believe that it could be true. On most country roads, as you drive along, it is almost impossible to take a photo from the window of a bus. Eucalypts are planted alongside so many roads at intervals of two to twelve metres, making a lovely avenue, but are the bane of keen photographers.

Our tour was a horticultural one organized by Travman and led by Rodger Elliot, whom most of you will know as author of many publications on Australian Plants. We spent most of our time in the south-west province of Yunnan and Sichuan. Our tour started in Hong Kong and from there we "trained" to Guangzhou, which used to be known as Canton. Here we saw trees of Eucalyptus citriodora, E. microcorys and E. deglupta. In fact in the South China Botanical Gardens in Guangzhou there was an avenue of *E. citriodora*. From here we flew to Guilin in Guangxi province to do the incredible trip down the River Li. This trip is 83km long and this broad river flows between strange thumb-

shaped mountains of karst (limestone). In Guilin we saw *E.globulus* ssp *maidenii* for the first time. This species was commonly planted in many areas. An eleven hour bus trip took us through areas of great diversity to Kunming, the capital of Yunnan and here we saw what we believed was a hybrid of *E.viminalis* at the Yunnan Botanical Institute. There were many Eucalypts planted in this garden. On the way to Dali, further west, where we went to experience the Bai Minority people's Third Moon Fair, we saw *E.umbellata* and *E.robusta* planted along the roadsides and other eucalypts in the fields and around the villages. The roadside eucalypts sometimes look like straggly poplars, as they are much pruned. The foliage is used to extract the oils; and the branches (I assume) are used for fuel, so they are tall, slim and have small tufts or branchlets of leaves near the top. In this area we saw *Dodonaea viscosa* for the first time. On returning to Kunming, we then boarded a train for a 20 hour trip to Mt Emei. This train goes through 440 tunnels and over 600 bridges! It was a fantastic experience, and you can imagine how mountainous this area is. Again we saw eucalypts planted everywhere and they often got in the way of the photographers who were trying to record this wonderful scenery. Near the border of Yunnan and Sichuan we saw *E.citriodora* and many other species. Later on our trip we went to the very north of Sichuan, into an area only recently opened to Westerners; it was wonderful scenery, with snow-capped mountains, swift flowing rivers and conifer and deciduous forests. Here the Tibetan minority people predominate and even here we saw many eucalypts growing. The Han people constitute 95% of the 1.1 billion people in China and the balance is made up of the very colourful minority people. They do wonderful craft work and have many colourful festivals which helps to keep alive their cultural heritage. I hope that our identification of the eucalypts is correct. I was aided by Rodger and other Australian plant enthusiasts in the party to ascertain their identity.

#### Seed extraction made easy

If you wish to collect and grow the seeds from an admired eucalypt in your area, the first step is to be able to actually get the seeds out of the gumnut. Eucalyptus buds and flowers normally occur on or near the outside of the canopy. These flowers subsequently grow into the fruits (or gumnuts), but by that time, the canopy of leaves has usually extended out for some distance. Hence, look for the fruits inside the leaf canopy. The fruits generally become ripe a few months after flowering, and they are often held on the tree for a year or so. In fact some species may hold their fruits for 4 or 5 years. While they are attached to the tree, most remain unopened. Eucalypt fruits dehisce by means of woody triangular valves, which when open, expose the seeds and chaff and allow it to be shed. The "lines of dehiscence" ie. the joins between the valves, are readily visible before the fruit has opened. If you cannot see 3-6 radial lines on the top of the gumnut, chances are it is not ripe. Once you have identified the ripe fruit, it is simply a matter of removing some from the tree, and leaving them in a tray or dish in the sun or in an open airy place, and in due course they will open. This process takes from 2 days to 3 weeks, depending on the size of the fruit and the prevailing weather conditions. The viable seeds are found at the bottom of the fruit, and are the last to emerge. If the fruits fail to open, it means they are not ripe. Merely wait a few weeks and try again!

Study group member Mr John Giles of Meningie West in South Australia has recently received the Murray Valley League's "Theo Charles Jones Treeplanters Award". John is a retired botanist and has spent much time travelling through outback Australia. His eucalypt plantation covers about 6 hectares and is probably the best private collection of eucalypts in South Australia. John is a great nephew of the famous explorer, William Ernest Giles.

#### Seed bank News

Rhoda Jeavons has sent extra seed of *Angophora hispida*. Thanks Rhoda. Tim Hayes has donated some *Edalrympleana* and *E. piperita* ssp *urcedaris*. Rod Horner of the Alice Springs SGAP has kindly donated a considerable quantity of *E.camaldulensis* var *obtusa*, collected from the Todd River. Also I now have extra seed of *E.citriodora* and *E.microneura*.

## Field trips with our leader by Betty Ballingall, Oakey, Qld

With Eucalyptus Study Group members spread Australia wide, so few of you would have had the privilege I have had of sharing field trips with our leader. First may I introduce him. If you think he is short, fat and middle-aged, you're quite wrong. Tony is a tall, lean wiry young fellow, a real "Bean pole". (I good naturedly tease him about not eating enough). His pleasant, quietly spoken ways, his keenness and extensive knowledge of eucalypts make a field trip with him most interesting and rewarding. Though eucalypts are his first love, he has a broad knowledge of other flora. When it comes to swinging a large nut on the end of a rope line his aim is accurate, bringing down specimens or fruit with effortless ease from tall gumtree branches.

On my first field trip with Tony we set out to traverse my particular field study areas to identify a few that were confusing me and to accurately record the others. We travelled from my home at Oakey along the Moonie Highway, Bollon Rd etc to Grey Range west of Quilpie and returned via Adavale, Tambo and Salvator Rosa N.P. near Springsure. From this 2000km trek we recorded approximately 30 species. The most interesting was a small white trunked eucalypt on the Grey Range which resembles both *E.papuana* and *E.tessellaris*. I have since found it on other ranges in the area so possibly a new species.

A shorter trip around the Toowoomba and Helidon hills area resulted in 23 Eucalyptus spp., indicating the richness of the eucalypt flora in this area. The most interesting find was trees of the mahogany *E.resinifera* previously only known from ranges closer to the coast.

My latest trip with our leader is the most interesting of all, for we set out to check Tony's most new and exciting discovery, a small attractive mallee. Probably South and Western Australian members are wondering what is so exciting about a mallee, but this form is rare in Queensland; consequently it is surprising this tree has remained undiscovered for so long. Though Tony in his quiet, unassuming way says little, he is without doubt delighted with this, his best find. A true reward for his work and dedication, and I am pleased I was able to share his pleasure. Needless to say I have already planted seed as it will be an interesting and attractive addition to the garden. I will leave the description to Tony himself.

Ed.note: Thanks Betty. Your bribe money will be in the post tomorrow. About the mallee; maybe next time. No room this edition.

## Members Letters

Keren Lynch (Busselton,WA) and her husband have been planting trees, mostly eucalypts, for some years now. Keren writes "Our house is disappearing behind a wall of many varieties of eucalypts (very attractive when flowering), and we have been approached by three of our immediate neighbours (farmers) for advice on windbreaks etc." They have ordered thousands of trees on Keren's advice, and Keren is justly proud of their progress towards revegetating the district.

John Giles (Meningie,SA) reports that he has four Queensland eucalypts in flower at present [April]: *E.cambageana*, *E.similis*, *E.whitei* and *E.staigeriana*. "A seedling of *E.gilbertensis* approximately 20 months old in a 150mm pot is now in bud" John said.

Kevin Penny from Stratford, Vic. writes that the warm and humid autumn weather has suited his gums. He finds *E.pryoriana* to be a very useful fast growing tree, being more adaptable and drought tolerant than *E.viminalis* in his area. Kevin has planted about ten plants of *E.kitsoniana* for the dwarf Eucalypt project.

## SUBSCRIPTIONS

Eucalyptus Study Group subscriptions for the 1989/90 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 is required (\$4)

You are financial until July 1990,  
no money required

Growing Trees for Farms, Parks and Roadsides

by Julianne Venning

This recently published book is perhaps the ultimate in rural tree planting guides. I have seen many books devoted to this subject, but none has come up to this standard. It is subtitled "A Revegetation manual for Australia" and this is just what it is. It comprises 126 pages, with Chapters on Planning, Selecting Species, Collecting Seed, Preparing the Site, Natural Regeneration, Direct Seeding, Planting Seedlings, and Maintenance. The book is well researched and referenced, and although much of the information is based on South Australian experiences, the principles can be applied (in most cases) Australia-wide.

The numerous colour and black-and-white photographs are very effective in illustrating the various points; e.g. several types of tree guards or fencing methods are photographed.

I would recommend this book to all potential tree growers in non-urban areas.

The Mallee-Boxes and their Allies by Kevin Rule (cont.)

E.lansdowneana Crimson Mallee-Box and Port Lincoln Mallee

There are two subspecies within E.lansdowneana, both of which are South Australian and of limited distribution. The species is native to the barren Gawler Range which forms the natural northern boundary of the Eyre Peninsula. The subspecies albopurpurea is coastal and grows naturally in the Port Lincoln area and on Kangaroo Island. The subspecies are easily distinguished from each other. The species features relatively large buds and fruits, crimson flowers and long, coarse, lustrous, dark green adult leaves; while the ssp albopurpurea has smaller buds, fruits and adult leaves and flowers ranging from white to mauve in colour. There are important differences in habit with the former being a small, slender-stemmed mallee with sparse foliage, and the latter ranging from a shrub to a small tree with dense foliage. Both subspecies can be distinguished from related taxa by having stalkless buds and fruits and having coloured filaments. Both subspecies are suitable for garden cultivation and have been used in Melbourne and Adelaide, but the species is most spectacular and should be considered for the Dwarf Eucalypt project. Some observers have suggested that the morphological differences between the two are wide enough to warrant segregation into separate species. Perhaps a future study will resolve this dilemma?

E.porosa Black Mallee-Box

E.porosa is a rough-barked species which ranges from South Australia's Eyre Peninsula to north-western Victoria and adjacent areas of NSW. It favours light calcareous soils but is adaptable to heavier and wetter soils. Its common name is derived from the colour of its rough dark grey bark which extends to upper branches. As well as having distinctive bark, its bright green adult leaves permit easy identification. Sometimes a mallee but more often an untidy, spreading small tree, it has not been favoured for cultivation. As with some other mallee-boxes, this species is variable. In the Coonalpyn-Meningie area of S.A. specimens show a reduction in the typical rough bark and appear to converge with mallee forms of E.leucoxylon which grow in the same area.

E.petraea

*E.petraea* is a mallee-box from the Southern Cross area of Western Australia and has been described only recently. Originally it was thought to be a sister species of *E.lucasii* but subsequent scrutiny has shown affinities with *E.lansdowneana* and other eastern species. It is very restricted in its distribution, being confined to the bases of rocky outcrops in semi-arid country. Its features include a mallee habit with rough grey bark on the main stems. Adult leaves are broad-lanceolate, coarse and dark, glossy green. Fruits are moderately large for a mallee-box and hemispherical on relatively long pedicels. The species has been successfully cultivated in Melbourne and makes an excellent garden subject. Although not as attractive as *E.lansdowneana* ssp *lansdowneana*, this species has prospects for the Dwarf Eucalypt project.

E.argophloia Chinchilla White Gum

This is a species of south-east Qld of very restricted distribution near Chinchilla and is considered endangered. It is a tall slender tree with smooth white bark. It has been cultivated in Melbourne and one specimen grew to 5 metres in as many years, producing an erect slender subject with light-green, somewhat weeping foliage. Attempts should be made to protect or even replenish the depleted natural stands but also to cultivate to exploit its high quality timber. It is used for amenity plantings throughout the Darling Downs, but could well be used for this purpose over a much wider area of the continent.

Other species: *E.sparsa*, *E.ochrophloia*, *E.thozetiana* and *E.lucasii*

## Individual Members:

Mrs Helga Alcock PO Box 516 Mackay Qld 4740  
 Mr Eric Anderson PO Box 6014 Rockhampton Mail Centre 4702  
 Mr Rod Anderson 4/J A Beckett Court Watson ACT 2602  
 RA & SY Backhouse Mt Samson Rd Closeburn Qld 4520  
 Mr Ralph Bailey 26 Jenkinson St Indooroopilly Qld 4068  
 Betty Ballingall 3 Ajuga Ct MSF 212 Oakey Qld 4401  
 Bela Bard-Brucker 17 Woodville Park Dr. Hoppers Crossing Vic 3030  
 Mrs Kaye Bartlett "Winpara" Jervois S.A. 5259  
 Mr Graham Bennett PO Box 1914 Cairns Qld 4870  
 Mr Norm Bone PO Box 121 Anglesea Vic 3230  
 Mrs Marj Bowyer 5 Cyma St Warrnambool Vic 3280  
 Mrs Chris Brown 58 King St Yarra Glen Vic 3775  
 Mr Bill Butler "Kurrali" Wellington Rd Parkes NSW 2870  
 Mrs Rosemary Butler "Gwynmary" Lot 1 Kanimbla Dr. Little Hartley NSW 2790  
 Mrs J Campbell 3 King St Holbrook NSW 2644  
 D.E. Cassidy 24 Colman Rd Sth Warrandyte Vic 3134  
 Mr Tom Chalkley 12 Harley St Bendigo Vic 3550  
 Mrs Irene Champion 20 Swift St Slade Point Qld 4740  
 Mr John Cleary PO Box 216 Casterton Vic 3311  
 Wendy Connolly "Chain-o-Holes Mitchell Qld 4465  
 Mr Tony Cox 47 Boundary St Tivoli Ipswich Qld 4305  
 Mrs Irene Cullen 39 Sunningdale Ave Rochedale Qld 4123  
 Barbara Daly 8 Bussell Crescent Cook ACT 2614  
 Mr L J Daniels PO Box 201 Biloela Qld 4715  
 Owen Davies 2 Harley St Bendigo Vic 3550  
 C.R. Dean Bena St Burcher via West Wyalong NSW 2671  
 Mr D. Delahoy RMB C131 Cavendish Vic 3408  
 Mrs Cherree Densley Princes Hwy Killarney Vic 3282  
 Rodger Elliot 377 Cambridge Rd Montrose Vic 3765  
 Mr Graeme Fletcher Box 7 Nichols Point Vic 3501  
 Janet Fountain PO Box 2552 Mount Isa Qld 4825  
 Mr Peter Francis 37 McKebery St Coleraine Vic 3315  
 Mr J A Giles Meningie West S.A. 5264  
 Mrs J Graham RMB 1305 Strathmerton Vic 3641  
 Mr Alan Gray "Lomatia Vale" PO Box 141 Kingston Tas 7150