NEWSLETTER NO. 34 - JULY 1981

P.O. Box 1148 LEGANA...TAS. 7251

Dear Members,

I have come to the conclusion that Acacias on the whole are very hardy and do not mind winter in Tasmania. We have about 25 species either in full flower, just starting or finishing flowering. The one that really stands out at present and has for the last month or more is a very bright flowered <u>A. neriifolia</u>. Of course, <u>A. bailey</u>-ana is prominent everywhere in Tasmania.

Several new members have joined our group since April and I would like to welcome them.

Mrs. Mary Borella, R.M.B. 1510, Ararat, Vic. 3377
Mr. Ivan Tiley, "Buln Gherin" R.M.B. 454, Beaufort, Vic. 3373
Several others have rejoined and we are pleased to welcome them back.

I have typed up a new members' list, deleting the names of those who have not paid their subscriptions from last year. The number of members now stands at 66, 7 of whom are passive. Please note these new addresses:

Mrs. Mary McEvoy, R.M.B. 428, Murdanna, Sorell, Tas. 7172 Neil Marriott, P.O. Box 107, Stawell, Vic. 3380 Russell Cumming, C/- Seltrust Mining Corp., P.O. Box 7, Leonora, WA 6438

I would like to acknowledge receipt of the exchange newsletters from the Victorian S.G.A.P., Hakea and Melaleuca newsletters and seed lists from the W.A.Wildflower Society, and their Eastern Hills Branch, as well as Vaughans Wildflower Seeds list.

A new list including new stock bought from commercial sources is attached. All new seed is indicated by an *.

MEMBERS' NOTES:

Bob Jones of West Fymble has written asking for advice on growing desert Acacias from seed, e.g. A. kempeana which died from damping off despite the use of Zineb. He goes on to describe a programme which he has undertaken in the School Environment area and in his home garden; "Our School Environment Area at Strathfield South High was started 4 years ago and its aim was to plant native plants according to habitat groupings rather than taxonomic groups so that students could study adaptations of plants and animals, i.e. simulated environments were created from desert to rainforest and swamp to sand dunes, etc. Students dug their own ponds (one 2 m deep) and we installed a water pump to create a flowing creek. This was enabled by a very deep heavy clay soil from weathered Wianamatta Shale. Many Acacias were planted but we had mixed success due to poor drainage in the soil, however Acacia elata, A. longifolia, A. saligna and A. mela-

noxylon did very well in these conditions (very rapid growth), while A. podalyriifolia, A. cultriformis, A. baileyana and A. spectabilis all died. However, when we created mounds and ridges (well drained) of the clay, these latter species did extremely well and took off rapidly (even when transplanted). When a sand dune was made (sand over a clay ridge) A. sophorae was planted and grew extremely well. Also some A. pendula were planted on a sloping site and have done alright (whereas the rest of the area is flat). An A. falcata (a local species on Wianamatta Shale) seeded naturally and grew with extreme rapidity (flowering in its first season). Rapidity of growth of some species obviously depends heavily on good drainage - even their survival - in a clay soil. This drainage can be provided even using clay itself as long as mounds or ridges or slopes are formed to allow water to escape. A. floribunda did not grow well either - why ?"

Neil Marriott has moved out to his new "bush block" and joins in the praise of A. denticulosa. He says that "since planting this as a small seedling last October it has grown steadily (without a drop of water) to 60 cm x 1m with the most amazing foliage". He goes on - "I have found that coarse washed river sand 10-15 cm deep is the best mulch for me and I use it on all my garden beds. It may be a little expensive but has excellent attributes - it does not pack down and set hard - it never rots or blows away - it keeps subsoil cool and moist - it does not increase effects of frost - it allows for rapid water penetration - normally free of weed seeds, and any weeds that do germinate on it are easily pulled out." - Food for thought, I think.

Max McDowall has reported that seed supplied by the seed bank as A. mooreana could well be A. littorea. He lists these differences:

branchlets prominently ribbed (but ribs not yellow as A. mooreana)
 stipules deciduous and prominent (persistent and triangular -mooreana)
 phyllodes mostly trapeziform (as for variant D of A. littorea and even s-sided polygonal with 3 glands on the 3 apices) adaxial margin 20-350 from stem (figure for A.littorea shows angles 20 while A. mooreana shows angles of 00)

Could any member growing what is thought to be A. mooreana please forward me a small pressed flowering spike with phyllodes ? Max has asked if members could provide information on the variations in size and habit of shrubs and trees in their areas from which seed is collected. He also suggests that where subspecies or varieties are known that these names be included when seed is forwarded.

Pat Shanahan writes to tell us that "3 years ago you could not see an acacia in this city (Rockhampton) but thanks to the efforts of this nursery (a local one with which he has a "barter" arrangement) they are now very popular. The city is being transformed, my own

activities - that is bringing the Acacias in from the bush - will continue."

A letter from Inez Armitage made several interesting observations. She feels that A. lanuginosa is one Acacia "which should be more widely grown. It is an excellent horticultural subject with good woolly foliage, flowers almost orange-yellow and a very attractive arching habit." (There is seed in the Seed Bank). She goes on "Another general observation I make is that plants which in nature have a restricted habitat are usually difficult to acclimatize in cultivation. A. uncifera is one I place in this category, to say nothing of A. purpureapetala and A. dunnii (tried many times). Others tried which did not get beyond the pot stage (and remember this is at Kempsey, N.S.) - A. curvata, harpophylla, hemignosta, jucunda, longiphyllodinea, pellita, peuce, redolens (which grew quite well in Duffys Forest)."

Any comments? We have both A. redolens and A. jucunda growing well here.

Referring to pruning A. denticulosa, Inez says that she had two plants in pots which were both about 1m plus, each with a single stem, one looking better than the other with two very small shoots from the two lowest phyllodes. She pruned this plant and practically every bud from every node shot and the two existing shoots made spectacular growth. The other plant had no shoots and she discovered that it was diseased below ground level and nearly dead. Ern Currie's A. denticulosa was pruned and it shot away dramatically and is now full of renewed vim and vigour. It looks as though this one will stand reasonable pruning.

On the subject of pruning generally Inez goes on - "I have found that all species will take tip pruning and many will take quite severe pruning later in life <u>provided</u> they are good, strong and healthy at the time of pruning. They should be pruned after flowering and well watered for a few weeks thereafter. What is fatal is to cut back a plant because it has gone straggly or because it seems to have lost its vigour."

Inez has kindly made some enquiries for me regarding the extraction of essential oils from <u>Acacia</u>. This comment comes from the Senior Research Scientist, Biological & Chemical Research Institute at Rydalmere, N.S.W., with his permission to publish in the Newsletter. "There are at present only two species of <u>Acacia</u> used for the commercial extraction of their fragrant flower oils. They are <u>A. farnesiana</u> and A. <u>dealbata</u>.

The extraction process is relatively complicated. The flowers are extracted several times with specially purified benzene or light petroleum. The filtered extract is then distilled to recover the solvent. The waxy distillation residue, called "concrete" is

redissolved in boiling 90% ethanol, the solution chilled to about -5° to -15°C in order to precipitate fats and waxes, filtered once again and evaporated to dryness. The residue is the so-called 'absolute', i.e. the pure flower oil.

The whole process is extremely expensive, the reasons being :

harvesting of flowers is manual

b.

all solvents used are highly inflammable and sometimes toxic. expensive factory equipment is required to recover solvents as

completely as possible.
yields of 'absolute' are very low, of the order of 1 to 3 kg per

tonne of flowers.

We have produced, on a laboratory scale, some excellent A. dealbata 'absolute', but owing to the very high costs of labour and factory equipment, no local firm has shown much interest in establishing this particular type of industry."

NEW BOOKS:

For those interested in Tasmanian flora I must mention the Launceston Field Naturalsts' book, "GUIDE TO FLOWERS AND PLANTS OF TASMANIA; published by Reeds. This comprises 300 plants described and illustrated with a page of colour plates opposite each page of description. \$23.95

By the Australian Systematic Botany Society -"FLORA OF CENTRAL AUSTRALIA", publ. by Reeds. Acacias should be well represented; there are 1200 line drawings \$35.00

"ACACIAS OF AUSTRALIA" published by Nelson; 150 acacias from all states described and illustrated with line drawings and 54 colour plates \$30.00; available at the end of August. I have seen an advance copy and am pleased with it.

Bill Owen thoughtfully forwarded me several copies of Central Highlands Group newsletter for which I thank him. Each paper had an Acacia reference. The first for May featured as Flower of the Month' - Acacia iteaphylla - written by Ross Priddle. He pointed out how hardy and ornamental it is for temperate conditions, that it flowered in late April, through May - it has just finished flowering here. Ross points out that there are several forms, upright, weeping and in between. Look carefully before you buy, if you don't take pot luck and grow your own.

The July newsletter reported on Acacia talk that Ross gave their group outlining the wide variety of Acacias available from prostrate forms to species of 40 m, although he did concentrate on those species under 2 m to prostrate. He has over 80 species growing in his own garden and recommends the following for Ballarat and similar areas -

Ground covers - prostrate to 60 cm. - A. aculeatissima, cometes, pilosa, amblygona "prostrate", merrallii, browniana, sclerophylla var. teretiuscula.

Up to 1.5 m - A. acinacea, aspera, amblygona, brownii (now A. ulicifolia var. brownei), continua, gunnii, drummondii, mitchellii, flexifolia, pulchella, glaucoptera, spinescens, lanigera, montana, wilhelmiana, lineata, loxophylla.

Rare and/or unusual acacias (Specialist Nursery) - A. alata 0.7-2.5m, plicata 1-1.5m, biflora 0.5-0.75 m, restiacea 0.6-1m, ericifolia - 1m, luteola 0.5 - 1m.

Please note that seed for many of these is in our seed bank, also that many of the species listed would be suited to tub growing.