

Hello Everyone,

I am sorry there has been such a long delay since the last newsletter. Late last year Tom and I travelled to England for the wedding of our only son and stayed a few weeks longer having a quick look at Scotland, France and Italy. Tom came back extremely well, but for nearly five months I have had what felt like severe jet lag and have been quite unable to function properly. In spite of my illness, I am very glad we went and we even found a few hakeas! Last year Pauline Tully had written praising the Edinburgh Botanical Gardens and the large Temperate House containing a large number of Australian plants, so we made a point of calling there. It was a bitterly cold, still day and on entering the house we smelt blossom and found a tall *Acacia baileyana* just breaking into bloom. The Australian plants from every state were growing well, among them the only hakea, *H. stenophylla*. This species comes from the arid white sand areas of the northern province of W.A., a strange choice for the only hakea representative!

Our visit to Kew Gardens was more fruitful respecting hakeas but the whole of the Australian house is in the process of renewal and seems to be taking a fair time to do. In Edinburgh, the house was built so that you could walk through three linking houses, either at ground level or on the first floor, very convenient when a tall tree had all its flowers 10 m. from the ground. Kew, on the other hand is a tall building which needs much of the large, overgrown material taken out and this apparently is their intention because many hakeas were in pots waiting to be planted out. The species there were: *H. laurina* (weeping form), *leucoptera* (grey leaves), *victoria*, *sericea*, *francisiana*, *ambigua*, *crassifolia*, *cristata*, *oleifolia*, *eriantha*, *baxteri*, *bucculenta*. Two of the plants were wrongly named and the man responsible said he had had doubts and was glad of the suggestions. It quite made my day!

We found two plants each of *H. pycnantha* and *H. sericea* in a broken down glasshouse at Nantes Botanic Gardens in Brittany, France, but no Australian plants in the gardens. Since our return, I have heard that in the Kew Gardens Annexe, south of London there are hakeas growing in the open ground.

Overall, experiencing Europe in winter with sunsets at 3.30pm in some parts, snow, leafless forests, high density housing and the high value put on farming land, was very helpful in understanding the attitude of early settlers here towards our plants, and their heartache. Australia seems a different world.

W.A. HERBARIUM

I wrote enquiring about *Hakeas tamminensis*, *crassinervia* and *florida*.

1. *H. tamminensis* occurs in the South Western Province of Avon, in the Tammin area, and as the description is in Latin I will only quote the part in English. "Affinity with *H. circumalata* Meissn., from which it differs principally in the densely hirsute pedicels and the cristate, deeply and broadly sulcate fruit."

H. circumalata is a terete leafed species with mauve/pink scented flowers in winter.

2. *H. crassinervia* and *H. petiolaris* are two species described by Meisner in *Lehm. Pl. Preiss.* 1. The former, according to specimens in our herbarium, appears to have shorter (to 5cm) leaves (which are pungent-pointed) than *H. petiolaris* (to 10 cm). The fruit of the latter are also larger and more rotund than those of *H. crassinervia*.

(Note: The seed listed by W.A.W.S. Eastern Hills Branch in their catalogue as *H. petiolaris* - low form, is just that. They have had the plants checked out and they are not *H. crassinervia*).

3. *H. varia* var *florida* is now referred to as *H. florida*. This species is

found along the south coast. The species is variable and the leaf size can vary quite considerably. It is possible that the plant you saw at Mount Barker is this species. It is therefore quite conceivable that the *H. florida* grown in N.S.W. is just a variant.

I had seen *H. florida* at Burrendong Arboretum, the leaf being small and toothed, the specimen I had guessed was *H. florida* at Mt. Barker had an oblong toothed leaf $1\frac{1}{2}$ " long.

NAMES - OLD and NEW

I receive many enquiries about the current names of hakeas. In the current Nindethana Seed List, three are incorrectly mentioned.

<i>Hakea decurrens</i>	should be	SERICEA	<i>H. browni</i>	should be	BAXTERI
<i>H. pugioniformis</i>	" "	TERETIFOLIA	<i>H. flexilis</i>	" "	MUELLERIANA
<i>H. saligna</i>	" "	SALICIFOLIA	<i>H. tenuifolia</i>	" "	SERICEA

Others enquired about recently:

<i>H. pubescens</i>	" "	GIBBOSA
<i>H. glabella</i>	" "	PROSTRATA
<i>H. acicularis</i>	" "	SERICEA
<i>H. intermedia & divaricata</i>	should be	EYREANA
<i>H. ilicifolia</i>	should be	VARIA

MEMBERS' REPORTS

I am most appreciative of the support you have given the study group, in spite of my inability to get out a newsletter, and most of you report good results. I know that many of you travel during holidays etc. and I would like to bring to your attention Coleraine Points Native Plants Reserve in western Victoria. There are extensive plantings of eucalyptus, acacias, banksias, melaleucas and many others including a large number of hakeas and the area is well worth a visit. There are picnic facilities and toilets.

In Melbourne it has been very dry this year although not drought conditions, and no noticeable damage to hakeas but Pauline Tully of Nicholson in Gippsland wrote: "Since the spring (1983) the nursery has been attacked by leaf miner, and all the broad leafed hakeas were a mess. I had dozens of *H. petiolaris* with all their new leaves riddled with leaf miner and couldn't sell any. I have always meant to spray with Dipel, but when this sort of thing happens I never seem to have any in stock, and don't know if it will work anyway. Only twice in the 12 years in business here have we had leaf miner, and in each case it's been after a bad drought, with a good rain to follow.

Frank Pritchard, Lockhart NSW, is busy raising plants for Galore Hill Reserve and mentions in his last batch of seeds, among others *H. arborescens* is doing well. Some members have had trouble raising this species.

Jeff Barr of Balaklava S.A. reported losing *H. elliptica* and *H. cucullata* on a sand hill after a long dry spell followed by good rain, although he did not lose any of these species in his garden. *H. purpurea* was quite spectacular in its third year of flowering.

Last year Kaye Bartlett of Jervois S.A. went on a trip to Ayres Rock, Docker River, Giles, Warburton, Laverton, Kalgoorlie, Southern Cross, Mt. Day, back to Lake King, Norseman and back home across the Nullabor. The country was very dry around Coober Pedy but near the border things changed drastically to a red centre lush in vegetation. *Hakea suberea* was seen in full bloom all along the way from the S.A. N.T. border to Laverton W.A., and in some places weighed down with the weight of the flowers dripping in honey and honeyeaters. West of Warburton she spotted a hakea she had never seen before, growing only in a rather restricted area on the tops of stony hills. The herbarium identified it as *H. rhombalis*. The bushes grew to 2 m. at most, round and compact, long needle leaves and small clusters of deep red flowers. The fruits were woody, swollen and somewhat prickly, a hakea worth growing. Nearing Laverton was *H. preissii*, seed plentiful but nothing mature, but plenty on *H. minyma*. The country in the Mt. Day area was very low heath plains, white sand and heavily populated with small shrubs, among them *H. platysperma*, none higher than a metre and full of large

seed pods. This country should be a blaze of colour in a good year. Is anyone else growing *H. rhombalis*, or has had it in the past, we would like to know.

Keith Alcock has many hakeas doing well in his garden which is at Montrose in Melbourne. He makes the comment that they grow so well in fact that he gives them the worst clayey spots and they still thrive! I visited his garden and was delighted with his results. He has a specimen of *H. erinacea* which flowers over many weeks and is spectacular. I have always had reservations about the horticultural possibilities of this species, but Keith's was a beauty. He also had several colour forms of *H. scoparia*, the usual cream/mauve and two different pinks from north of Bullfinch W.A.

Allen Foster, Warners Bay N.S.W. has found in his first germination trials that success has come with constant moisture, so far his results have been very good. He also informs me that, as reported in the last newsletter, he did not intend using *Kunzea ambigua* for grafting purposes, that was a mental slip, something we all have from time to time!

Malcolm Holmes of Ethelton, S.A. has great difficulty with proteaceae species but keeps trying. He planted seeds of *H. verrucosa* and *francisiana* in 2" tubes with other seeds of acacia, kennedia etc. and watered them moderately with the aid of a moisture tester, not too wet, not too dry. In the following April, about 4 months later, with the weather cooling down there were heavy rains and all the tubes were saturated and - up they came! He suggests that in S.A. it may be advisable not to plant hakea seed until Feb-March and not to water until nearly dried out. He also mentions that a 30 year old *H. laurina* was cut down in a nearby street and it measured two feet across the stump, height 3 metres.

Beverley O'Keeffe is a new member from Springsure Q, which is 40 miles south of Emerald and about 200 miles west of Rockhampton. She has fertile scrub soil with a sandy, clay, loam composition over a shaley clay subsoil. It is 7 - 8.4 alkaline, and the bore water is alkaline with lots of minerals that upset some plants. The long drought made some watering essential, but the sparse rain obviously improved the plants. Have any members suggestions for hakea species that can take these conditions, proteaceae usually do not survive well. *H. lorea* and *H. fraseri* are in the district and she has tried *H. purpurea* unsuccessfully.

I recently met some Tasmanians who told me that there is a beautiful form of *H. epiglottis* in the less known mountain valleys, and Dick Burns of Penguin, T, says there is a form that has long terete leaves and large fruit down the west coast at Trial Harbour. He has not seen it in flower, but the bush, about 2.5 m, looks a lot more attractive than normal.

In a letter from Tom Story, Pt. Lincoln S.A. he comments on how difficult it is to get the fruit off some of the hakeas (he has a very extensive garden), he used bolt cutters to get the *platysperma* seed, gloves with *H. rugosa* and was still undecided about how to tackle *H. corymbosa*! He also says Pauline Tully may be interested to know that *H. francisiana*, which is indigenous to the West Coast S.A., grows near Cowel in practically pure sand hills which are completely neutral.

Ed. Kendall is inclined to think that *H. bucculenta* and *H. platysperma* do not like his heavy clay soil at Wagga Wagga, but drainage may be more important as they grow in heavy soils elsewhere.

Last year Mary McEvoy asked me to identify the fruit of the supposed Peach Hakea. This proved to be *H. platysperma* and had been sold along with banksia cones at the Hobart Salamanca Market. Since then I have heard the name used several times in the craft world where dried seed-boxes are used for decoration.

Norm McCarthy in Toowoomba lost several hakeas when it rained heavily after the prolonged drought. These conditions frequently lead to losses because either due to shortage of water or the size of the garden, it is impossible to keep a small amount of water consistently up to all plants.

Ian Thamm, of Two Wells, S.A., has found that fresh air, strong winds in fact, is a significant factor in the success of raising small hakeas. After a disastrous period of flooding etc. he moved his plants under a eucalypt and they flourished, in spite of winds blowing at a great rate of knots.

I have received a report about an old hakea tree in a paddock on Yorke Peninsula. It had large fluffy bunches of yellow flowers and prickly foliage. Has anyone any knowledge of this species? I understand a few are growing from seed.

SEED WANTED

Several of you are concerned with plantings in arboretums, reserves and the Melbourne Botanic Gardens Annexe at Cranbourne that Alf Salkin and friends are concerned with, and would like to try to grow all species rather than the horticulturally superior ones. Therefore if anyone has seed to spare of the following species, I would be very glad to receive it:

Ambigua, auriculata, bakerana, baxteri, candolleana, ceratophylla, chordophylla, circumalata, constablei, cucullata, cunninghamii, eyreana, ednieana, elliptica, falcata, ferruginea, flabellifolia, florida, florulenta, gilbertii, grammatophylla, hookeriana, ivoryi, invaginata, kippistiana, lasiantha, lehmanniana, linearis, loranthifolia, macrocarpa, megalosperma, meisneriana, microcarpa, morrisoniana, myrtoides, obtusa, oleifolia, preissii, propinqua, pulvinifera, recurva, rhombalis, rubriflora, strumosa, subsulcata, tamminensis, tephrosperma, trineura, vittata.

SUBSCRIPTIONS FOR 1984 ARE DUE NOW \$3.00 per annum.

SEED BANK Please send a stamped addressed envelope with requests for seed.

Amplexicaulis - 1-2m cream fls.	macraeana - 3m, terete fol, white fls.
adnata - up to 3m, erect needle, white fls.	minyma - 1-2m, cream loose spike fls.
arida - 2-3m, terete fol., white fls.	multilineata - 3-7m, pink spike fls.
brooksiana - 2m. terete fol, " "	nitida - 2-7m toothed fol, white fls.
bucculenta - up to 4m, red/pink spike "	nodosa - 2m. terete fol, sm. yellow "
bucculenta - " narrow leaf form.	obliqua - up to 3m, terete fol. white "
cinerea - 2m, ashy fol. yellow fls.	orthorrhyncha - 1-2m, " long ", red "
conchifolia - 1m, rounded folded fol. "	petiolaris - up to 5m, mauve ball fls.
coriacea - 2-3m, pink spike fls.	" - low form to 2m, both silvery fol
corymbosa - 1-2.5m, prickly, yellow "	platysperma - 1-2m, terete fol. yell/w
costata - 1m, short rigid fol, white fls.	pandanicarpa - 4m, silky fol, cream fl.
crassifolia - 3m, long narrow fol, sm. "	plurinervia - tall shrub, white fls.
cristata - up to 2.5m, holly fol, cream "	prostrata - 1-2m <u>small</u> clasping fol.
cyclocarpa - 1-2m, pink/white fls.	purpurea - 1-2m divided fol. red fls.
dactyloides - 2m, 4" linear fol, white/pk "	pycnoneura - up to 3m, cream/mauve fls
elliptica - 3m. white fls, bronze/gn fol.	rostrata - 1-2m, terete fol, white fls
eriantha - 7m, tree, flat fol, white fls.	ruscifolia - 1-2m, sm. leaves, " "
erinaceae - up to 2m, cream fls, prickly fl.	rugosa - 1m, terete fol, white fls.
francisiana - to 5m, pink spike fls.	smilacifolia - 2m, sm. grey fol, " "
gibbosa - 1-2m, needle fol, white fls.	stenocarpa - 1m, narrow fol, white fls
incrassata - 1m, flat leaves, small "	suaveolens - 2-3m, div. fol, " "
laurina - up to 3m, pink fls. upright or	teretifolia - 2-3m. terete fol, " "
weeping form.	trifurcata - 2m, div. fol, " "
leucoptera - 3m. terete fol, cream fls.	ulicina - 2-3m, flat fol, white fls.
lissocarpha - low spreading, pink/white fl.	undulata - 1-3m, veined fol, cream fls
FRASERI - TREE LIKE SUBEREA	varia - tall form, white fls.

SEED FERTILITY

I have received many reports and it seems that if hakea seed is kept cool and dry it will remain fertile for up to 11 years, although we do not know if this applies to all species.

BIENNIAL SEMINAR

One very happy aspect of these occasions is meeting up with old friends and study group members in particular. Dick Burns from Tasmania was a new member this last time in Adelaide and enjoyed himself so much, he added to the pleasure of those around him. I loved seeing S.A. and HSG members again and our Study Group Convenor, Jo Walker. After the Seminar we had a few days in the Flinders Ranges at Wilpena. There were only two hakeas indigenous to the area, H. leucoptera and H. ednieana. H. ednieana looks as though it is covered in small white flowers, but on closer inspection they are the turned back halves of the seedboxes which silver with age.

Good health and good weather till next time,

HAZEL BLACKNEY

23 Devon Street, Eaglemont, 3084.