

HAKEA STUDY GROUP

NEWSLETTER No 4.

6th February, 1981.

Hello Everyone,

Melbourne has just sweltered through the hottest summer for many years, and January had the largest number of hot nights for thirty years, events that have left me somewhat fearful of what February may have in store. However, it has been interesting to watch the effect on my hakea seedlings.

In the spring I planted 255 seeds of which 166 germinated, later this number was munched down by a slug or two but the real crunch came with the searing heat and northerly winds. Many of a group raised in a cold frame but later put with the majority in the greenhouse, just wilted and dried up which surprised me because the greenhouse atmosphere was very humid and during the day I could not bear to work in it. I still have three or four trying to survive with burnt top leaves, and 127 that look good. My most disappointing result was with *H. gilbertii*, I only had a few seeds and not one germinated, they may not have been mature enough. The three seedlings I had of *H. coriacea* perished in the heat too, but some very strange plants have survived. Most of my seed I had bought in W.A. and N.S.W. and the rest had been given. I also have tried to raise a few from each of the unidentified species that Kaye Bartlett and Helen Lubcke forwarded. It is already apparent that some are not true to name but I am keeping careful notes and may be proved wrong. Brian Lacy gave me two seeds, one of which survived, and each time I made notes it had changed the pattern of its leaves, they were long and lanceolate to begin and have had four changes altogether, finally appearing forked and widely divergent! Others indulge in no such nonsense and introduce their mature shape immediately, no wonder evolution is such a fascinating study.

Because of the heat I was afraid to pot on the seedlings and allowed them to become almost 3" high before doing so, and for the first time ever I have not lost one plant in the potting on stage. I had planted the seeds in 1" pots, one seed per pot, and those that had developed long roots outside the pot I pruned back to ½".

HAKEA ACULEATA (Proteaceae), a rare and endangered new species from W. A.
Extract from "Nuytsia," Vol. 2 No. 6.

Hakea aculeata is a shrub to 3 m with lignotuber and with several erect or ascending stems and is closely related to *H. ruscifolia*. Labill., having a similar habit, branching system, leaf form, inflorescence, perianth, fruit and indumentum. The dense branching system is characteristic of both species and is similar to that found in many species of *Dryandra*. The terminal inflorescence and the indumentum of spreading hairs are unusual in *Hakea*. The new species flowers in October whereas *H. ruscifolia* flowers in summer (December to March). In both species the flowers produce a strong honey-like scent.

Lignotubers are a survival device for some plants. A definition appearing in "The Language of Botany" C. Debenham, is as follows: of eucalypts and other myrtaceous plants, a conspicuous swelling at the base of the stem, at or below soil-level, bearing dormant buds. An adaptive feature of survival value, the development of the buds to suckers is stimulated by destruction or loss of top growth".

A good description of these occur in "Australian Plants" Vol. 8 page 18, and although Nuri Mass in this article is referring to eucalypts, lignotubers also occur in banksias, hakeas and other plants. As far as I know, no-one has made a list of those species of hakeas that develop them or maybe all are capable of developing them but do not except in special circumstances. One of my friends has reported his *H. petiolaris* having a very large lignotuber and this week Tom noticed that my *H. cristata* with a stem about ½" through has formed a lignotuber 3" across. Check your plants and you may find more than I have.

NEW MEMBERS

Ian Barlow Sladen Street, Birregurra, 3242, Victoria. Ian writes that he lives on 1¼ acres on the edge of the town of Birregurra, just north of the Otway Ranges. The soil is rather heavy, waterlogged in places in winter and baked hard in summer, 33 different species of hakea and so far has lost none from unknown causes. She has been growing natives for the last four years and during the summer divides her garden into four sections for watering purposes, and only plants that have been in less than **six** months got the most attention.

Alf. Salkin, 38 Pinewood Drive, Mt. Waverley 3149, Victoria. Alf. is very well known in Victoria because of his association with the Banksia Study Group and his many lectures on that genus. He has planted many banksias in the Royal Botanic Gardens Annexe at Cranbourne for study purposes and is now beginning to plant hakeas there too. The plants have to survive without watering as there is no water available and so far he has about 32 planted from the eastern states and is raising approximately 92 species from W.A.

Since the last newsletter, Tom and I have been to Brisbane on the trip came across several more hakeas. We were lucky to find *H. lorea* and *fraseri* in full bloom, and while standing under *H. lorea* we wondered at the number of racemes on the ground until we realised that two galahs were sitting among the cream flowers out of sight and were unconcernedly nipping them off and tossing them in the air. *H. lorea* is a slow growing rough barked tree to about 6 m. and very like *H. fraseri* in a superficial way. Seeing then both in flower, they are easily confused but *H. fraseri* is a very slender tree, also about 6 m. high, but tends to have two trunks and the foliage, long terete like *H. lorea*, appears to be more pendulous. I found *H. fraseri* flowering in a private garden in Ipswich and even the car seemed to share our shock of surprise. Unfortunately I was so excited I did not adjust my camera, properly and so the subject of my enthusiasm was not recorded!

One of the disappointments of the trip was to find that members in Brisbane find it very difficult to flower W.A. hakeas and even grow them. When home I reread Jan Sked's letter and I now compliment her for persisting in trying to grow them in the face of such odds. Her only total success has been a lovely *H. purpurea* which is native to that area. We called on Norm. McCarthy in Toowoomba to see his hakeas and the story was entirely different, he had excellent specimens and his *H. amplexicaulis* was the bushiest and most vigorous I have seen in cultivation. We then drove west to Brookvale Park which is extensively planted with Australian plants and in particular has a great number of hakeas. The whole area was in the grip of drought and nothing looked really well in the circumstances but it was worth noting that the many hakeas from W.A. and the eastern states were all holding on, while the deaths among the other genera were very marked and even the local banksias were dying.

On the way home we called at the Burrendong Arboretum once more and Peter and Hazel Althofer were very helpful with information and seeds for our Seed Bank. Peter showed us *H. obtusa* in flower but it did not look like the plant I know of that name. Peter's was fairly low growing and a mass of bloom, while the specimens I have seen have been upright shrubs, foliage a little similar to *H. laurina*, and the bright pink and white flowers occurring inside the shrub on old wood. Peter also showed us a *H. verrucosa* which had flowers occurring on the fruit!

We also called on Keith King who is manager of the Lismore City Garden Cemetery and saw the planting he has already carried out with native plants, including some of the tall shrubby hakeas. Keith was unaware of the number of low growing hakeas that occur and I find this is the usual reaction when hakeas are mentioned, most people only know the large ones. I hope to go back to Lismore next year and speak to the Lismore Group of S.G.A.P. on this subject.

SEED BANK

Please send a stamped addressed envelope with requests for seed. Please let me know if you particularly want to try species not listed and I will try to obtain seed for you. If you have excess seed of W.A. species or species not listed, I will be very glad to receive it.

H. arida, *baxteri*, *bucculenta*, *circumulata.*, *corymbosa*, *elliptica*, *epiglottis*, *ferruginea*, *gibbosa.*, *laurina*, *macreana*, *multilineata*, *nitida.*, *orthorrhyncha*, *petiolaris*, *platysperma*, *propinqua*, *prostrata*, *purpurea*, *sericea.*, *ulicina.*

Additions: *H. eriantha*. (Tree Hake?.) Vic. *H. leucoptera*. (Silver Needlewood) Vic.
H. florulenta, large shrub with white flowers Q.

QUESTIONNAIRE - please fill in and return to me. If you have already sent me a list of what you are growing, you may omit that section, just fill in the rest. I now have a microscope and hope its use will help me help you in 1981.