Society for Growing Australian Plants (Europe)

Newsletter No.2

March 1989

Dear Members

The past winter has been reported as being the least cold for 120 years. Mild it may have been, but the temperatures experienced have still been below those experienced in a typical Hobart winter. To get winters similar to those of a mild part of the British Isles such as Exeter one has to look at a place such as Oatlands. It is in central Tasmania, and is 1400ft. above sea level. Such comparisons show why there are so few Australian plants which can be considered reliably hardy in northern Europe.

However even Australia gets unusual years. The past summer is a record there, In parts of New South Wales October was the driest on record, and in the Blue Mountains there were 28 rain days in January - that means a lot of rain. Perhaps even more notable was the April week end in 1960 when Hobart received 19 inches of rain, its normal annual average is about 25 inches. Another year in the 1960's the summer was so cold that deciduous trees began to shed their leaves in February. Then the weather changed from being 10°F below normal to 10°F above normal. The spring flowers opened, tomatoes ripened and were being picked right up to June.

It is almost time to sow seeds again. Already there is germination in a pot of Banksia canei which was sown in July 1987, then placed outside. Last autumn's cuttings have been potted on, and cuttings have been taken of some Australian plants.

A list of Australian plants and their availability from nurseries is enclosed with this newsletter. It is hoped to computerize the information and to update it annually. If any member is prepared to help with this task, will they please contact Jeff Irons. Lists of Eucalypts and Acacias will be prepared separately, but in the meantime lists of both, giving the species which are considered likely to be reasonably hardy are available. If you want them please send two first class stamps to Jeff.

Society News

Although formed as an independent group, this society has made application to The Society for Growing Australian Plants for acceptance as either a Study Group or as the European Region. At its meeting on November 19th 1988 the National Council agreed that the more appropriate classification was that of a Study Group. Subject to clarification of the legal position it will be accepted formally as the parent body's European Study Group. In the meantime the SGAP(Europe) willreceive all of the information which is sent to groups.

Next meeting

The agenda for the next meeting is enclosed with this newsletter. In her talk Karen Wilson will be concentrating on the vegetation regions of the cooler parts of Australia, and her extensive knowledge will be available at question time.

The Society Chairman, Brian Halliwell, retires later this year. His horticultural activities will continue, but a consequence of retirement will be that Kew will no longer be available free of charge for meetings. It will be necessary to hire a room , possibly at Kew, possibly somewhere else. A knock-on effect will be that of subscriptions. The present subscription does little more than cover the cost of newsletters; it is nowhere near sufficient to cover the cost of renting a room for meetings, and a larger subscription will be necessary.

Other matters for discussion will be those of the aims of the Society and whether it should have a written constitution. Please will you consider these and any others which come to mind, and come ready to discuss them fully.

Newsletter Items

Features on the use of Australian plants in medicine and on their paleo-botany are among those planned for future newsletters, but a wide member input is essential for a full coverage. Even the newest newcomer may have noticed something which others have missed, and be able to contribute to our knowledge of Australian plants and their cultivation. So please don't be afraid to send in contributions, no matter how trivial or insignificant they may seem.

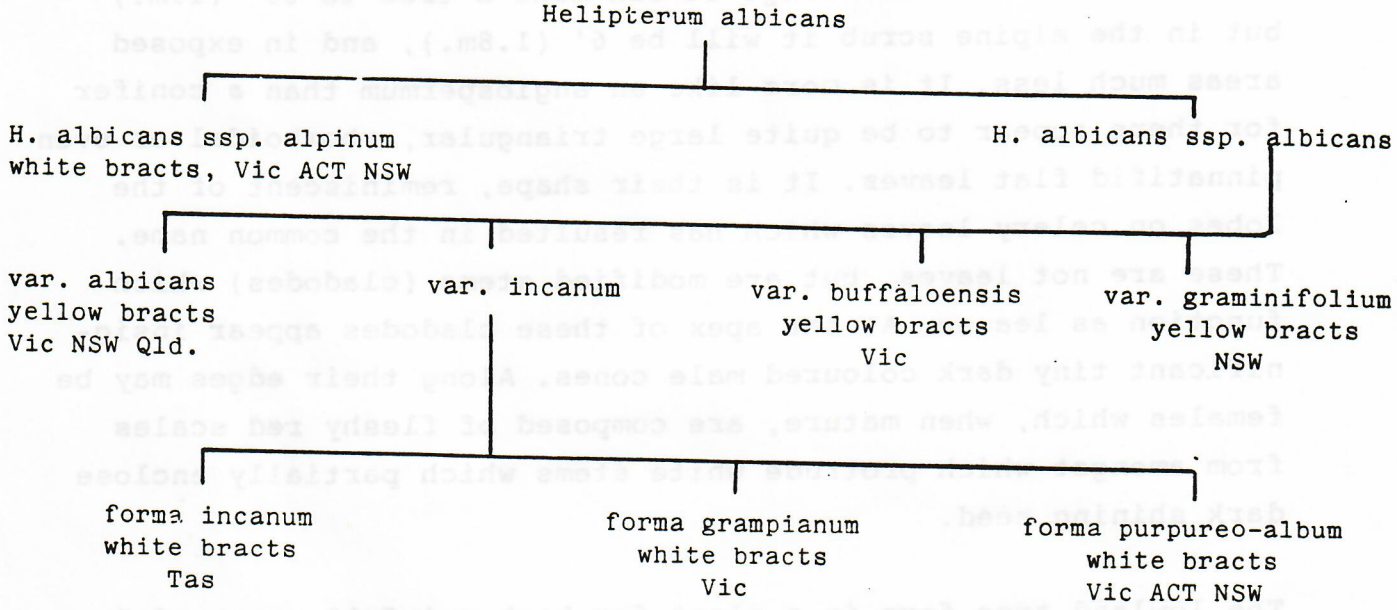
Celery Top Pine by Brian Halliwell

There are seven species in the genus Phyllocladus (Podocarpaceae) with one species each in the Philippines, Moluccas, Borneo and Tasmania, and three in New Zealand. P.aspleniifolius, not uncommon in Tasmania in rain forests, extends from sea level above the tree limit and into the alpine scrub. At the lower limits of its altitude range it can make a tree to 60' (19m.) but in the alpine scrub it will be 6' (1.8m.), and in exposed areas much less. It is more like an angiospermum than a conifer for there appear to be quite large triangular, rhomboidal or even pinnatifid flat leaves. It is their shape, reminiscent of the lobes on celery leaves which has resulted in the common name. These are not leaves, but are modified stems (cladodes) which function as leaves. At the apex of these cladodes appear insignificant tiny dark coloured male cones. Along their edges may be females which, when mature, are composed of fleshy red scales from amongst which protrude white stems which partially enclose dark shining seed.

The lowland tree form is a plant for high rainfall areas of Ireland, western Scotland, and south-west England, where winter frosts are not severe. The smallest mountain forms seem more tolerant of cold, and drier conditions. Although best in the water retentive soil of a peat garden, they are too large for such a restricted space. As an evergreen shrub celery top pine pine has proved satisfactory in a shaded place in woodland, in a moist, acid, organic soil. Imported seed should be sown in a well drained peaty compost in early spring. Patience must be exercised, for germination can be delayed and erratic. Attempts at propagation from cuttings are sometimes successful if taken in late summer and provided with bottom heat.

Helipterum albicans by Jeff Irons

British alpine nurseries frequently list two plants, Helipterum albicans alpinum and Helipterum albicans incanum. Very occasionally Helipterum albicans var. albicans is listed. The occurrence of these three names indicates that Helipterum albicans is not a singular species, but one which is divided into several parts. The chart below sets out the whole of the H. albicans group.



The most attractive of these is H.albicans ssp. alpinum. It is differentiated from ssp. albicans by the thick felted leaves. It is native to the Australian Alps and in suburban Victoria is regarded as a difficult plant which can be persuaded to survive only if grown in a peaty compost, with the pot stood in water. In Britain it is not so hard to please. Seed germinates well in any reasonably open compost, and in the north west plants do well in a gritty well drained soil. Some overhead protection is desirable in a mild, wet winter, but in cold winters no protection is necessary. By its third year a single plant will cover an area the size of a dessert plate. The wooly leaves are densely packed, each obovate leaf being about 2½ to 3" long (6 to 8 cm) and ¼ to ½" (6-10mm.) across. The white yellow centred flowers appear in June or July and are about 1½ to 2" (3-4 cm.) across. They are long lasting. Outside at Kew it can be short lived, but can be flowered as an annual.

H. albicans ssp. albicans var. incanum forma incanum is found only in northern Tasmania. The leaves are wooly, but are narrow, only about1/10th inch (2mm.) wide, and are usually 2½ to 3" (6-8cm.) long. The bracts are white and the outer ones have purple tips. The flowers are about 1 to 1½" (2.5-3cm.) across and appear in succession throughout summer. The plant likes gritty well drained soil, and often dies after flowering. Like ssp. alpinum it is susceptible to overhead wet in mild winters.

H. albicans ssp. albicans var. albicans differs from the first two mentioned in having yellow flowers. The distribution is in a long belt from southern Victoria to southern Queensland, andthe the variety is very variable. The typical form has bright yellow bracts. Like incanum it is not a reliable perennial, and there is scope for experimentation with seed from different areas.

H. albicans ssp. albicans var. buffaloensis. Apparently confined to Mount Buffalo this variety grows to 16-18" (40-45cm.) high and flowering stems have leaves scattered along them. The outer bracts are a dark reddish brown and the intermediate ones are yellow. In north west Britain it demands acute drainage and cannot be flowered as an annual. Plants in the garden will die in a wet summer, as will unprotected pots outside, even with a gritty compost.

H. albicans ssp. albicans var. incanum f. purpureo-album.
At the present time f. purpureo album is not available in commerce. However it makes an excellent annual. Superficially similar to f. incanum but with wider leaves, it has intermediate bracts which in different plants vary from white to pale yellow, and outer bracts which are purple or brown. It is not hardy.

Conditions required by Australian plants

The conditions reqired for cultivation of Australian plants are, in general, similar to those needed for plants from other areas, but there are a few special points which should be borne in mind.

Root run: In their natural environment most plants grow close together and give mutual shade to the soil. At the same time they are often shallow rooted and some are intolerant of hoeing. It is desirable to simulate natural conditions by close planting or mulching.

Watering: Many Australian plants are eqipped to withstand dryness, and will not tolerate 'wet feet'. Watering should not be overdone. Hardy plants from the wetter parts of the continent are usually from hilly areas, and though demanding a moist soil they do not like the stagnant water associated with a high winter water table. Good drainage is required for all except bog plants.

Fertilizers: Most Australian soils are old and heavily leached. Many native plants like, and some demand soils low in phosphates. In particular Proteaceae have evolved systems for taking up and storing the phosphorus released from leaf litter. Problems of phytotoxicity with Proteaceae are worst with soils which lack clay, and are minimized when clay is present in an open structured soil. The safest rule is not to give phosphorus to plants in open ground, and to give a very low phosphate fertilizer to plants which are kept in pots. Phytotoxicity is very specific and it does seem that plants from wet areas are less susceptible than are plants from dry areas. Superphosphate should not be given to any Australian plant.

An unexpected deficiency sometimes encountered in plants which have been grown in very open mixtures is sulphur deficiency. Plants show an overall yellow colour, and lack vigour. Use of a sulphate containing fertilizer, or use of a soil based mix will eliminate or overcome the problem.

Although most Australian plants prefer soil with a pH around 6 the leaf tip death associated with calcium deficiency is sometimes encountered. Addition of gypsum cures the problem.

Australian plants often respond dramatically to fertilizer application, but it is important to use balanced fertilizers, prferably slow release ones. If plants are grown in pots, then the three month formulations of resin coated fertilizers are not recommeded. It is better to use the longer term ones.

Olearia persoonioides by Jeff Irons

In the late summer of 1987 I received seed of Olearia persoonioides, and by September had 14 healthy seedlings in a pot. Since germination had been so late I decided to keep the seedlings growing through the winter by placing them in a heated propagator under artificial light. All died. Luckily in the spring more seed germinated in the pot, which had been outside all winter. After transplanting at the first true leaf stage, the seedlings were distributed. Again all died, so the only plant left was one which had not been transplanted and was in the pot in which it had been sown. By the end of the summer it was a healthy plant with five true leaves. At the end of November it was transferred to a cold frame, with the lights partially raised, but quickly collapsed and died. Other seedlings and young plants died at the same time, and I believe that the cause was a fungal infection. Conditions in northern Europe are very different from those in Australia, but more and more I come to believe that Australian plants require plenty of ventilation in the cooler months, especially when at the seedling stage. Their need for air movement appears to be much greater than that of more familiar plants. Olearia pinifolia is another with this need, as are the Lomatias - polymorpha, silaifolia and tinctoria