

Dear Members,

I am very happy to report that Daisy & Co. staged a successful exhibition of annuals and perennials at the recent Waverley S.G.A.P. Flower Show. Twenty-one (21) ft. of bench space was filled with fresh and dried daisies, hanging baskets and potted specimens. Plants most admired in hanging baskets were *Brachyscome angustifolia*, *multifida* (fine-leaf form) sp. aff. *melanocarpa*, *Helipterum anthemoides* and *Helichrysum baxteri*. Visitors to the Show were delighted to be able to purchase seed of the many varieties on display, resulting in \$47.50 worth of seed being sold.

I would like members not to misinterpret our motives in selling seed at Shows or at group meetings, as members always have first call on any seed that is donated to the Group. Seed purchased from W.A., and seed collected from our own gardens is sold mainly to bring more species into cultivation. Funds from this enable us to purchase a larger variety from W.A., and also assists us with the cost of seed envelopes, which are proving to be rather expensive. Seed of Rare and Endangered species is not sold at all but issued to interested members to propagate, and where successful, return resultant seed to seed bank. This will, hopefully, allow us to regenerate an area should it be required at any time.

The Group also had a bargain table at the Show to help raise funds for Gladys Holmes, Melaleuca Study Group Leader, who lost her home & belongings in a fire. My son Evan, aged 12, manned this table the whole week-end, and the sum of \$32.72 was raised towards this Appeal. Thank you to all members who donated plants etc. for sale, and a special thank you to Evan for a job, well done. A cheque for this amount was forwarded to Tasmanian Region from B/H. Study Group, and a letter of thanks has been received from Jeanette Closs, President of the Group.

#### NEW MEMBERS:

I wish to welcome the following new members to the Group:-

#### Ngairé Turner, P.O. Box 110, Monbulk.

Ngairé joined at our Flower Show where she and husband Merv. introduced their new *Anigosanthos* hybrids. Lets hope we will have the opportunity of purchasing these magnificent hybrids in the very near future.

#### John Philp, 4 Magna Court, Mt. Waverley, 3149.

John is a keen propagator and has recently opened his own Nursery. He has already started experimenting with seed, that we are finding hard to germinate, and an article on his success with leaf cuttings of basal rosette type plants is included in this Newsletter. John will, no doubt, keep us up to date with his many experiments in the future.

#### Esma & Alf Salkin, 38 Pinewood Drive, Mount Waverley, 3149.

Most members I am sure have heard of the Salkins. Alf being Foundation President of Waverley Group when it began in 1964. Alf is also well known for his research on *Banksias*, and for his plantings of *Dryandras*, *Hakeas* and *Banksias* in a sand dune area at Cranbourne Botanic Gardens annexe. His interest in preserving the flora of the Waverley area has resulted in the creation of a Study Group called FLOWA (Flowers of the Waverley Area). He has also produced an excellent Audio Visual Film on this subject. Esma is extremely knowledgeable about *Correas* and has also been researching the history of S.G.A.P. amongst many other interests (including daisies).

#### LEAF CUTTINGS OF BRACHYSCOME NIVALIS & BRACHYSCOME ULIGINOSA:

Following some success with leaf cuttings of rosetted *Stylidium* sp., I decided to try the same techniques with members of the Asteraceae.

Leaves were removed from the rosette of *B. nivalis* and *B. uliginosa* and set in 3:1 sand/peat moss. All leaves were dipped in and watered in with Ridomil. From the *Stylidium* sp. experience, it seems that the leaf should be pulled off the rosette and not cut as the maintenance of the non-chlorophyllous section of the petiole aids rooting. The trays were placed over bottom heat (27-30°C) with intermittent mist.

*Brachyscome nivalis* (Victorian) rooted in ten (10) days.

" " (Mt. LaPerouse Tas.) failed to root.

" *uliginosa* rooted in two (2) weeks but rot set in possibly due to

extreme weather conditions and all cuttings were lost. (The roots were very fine & brittle).

LEAF CUTTINGS OF BRACHYSCOME NIVALIS & BRACHYSCOME ULIGINOSA CONT'D.

At the first sign of roots, *Brachyscome nivalis* was potted into a propagating tube in a mixture of aged pine bark, brown coal, coarse river sand and scoria, and to date has failed to show signs of further growth (nor demise).

One would expect, as with the *Styloidium* sp. that juvenile leaves would push out of the mix at some time. There seems to be some relationship between leaf integrity and rooting as both *B. nivalis* and *Styloidium* sp. have quite thick and cutinized leaves.

I would be grateful for any further cutting material, as the elevated humidity and heat in the greenhouse encourages fungal problems, which means loss rates are high, and material is not that readily available.

John Philp.

PLANT FOR THE MONTH OF NOVEMBER:

*Helipterum anthemoides*  
"Chamomile Sunray"

*Helipterum anthemoides* occurs in Victoria, Queensland, N.S.W., Tasmania and the A.C.T., where it is widespread in montane grasslands and subalpine areas, with a rare alpine appearance.

The following description applies to a form of *H. anthemoides* first obtained from Ken Gillanders' Nursery in Tasmania. It differs from the more usual form found in the wild, and at one stage the Study Group was distressed by a nasty rumour that it was really an exotic called *Helipterum frigidum*. A dried specimen and a potted plant were rushed to Dr. Jim Willis who had been consulted twice before on its identity, once by Ken Gillanders and once by S.G.A.P. in Tasmania, who referred to it as the "Grampians Daisy". The following is quoted from his very prompt reply:-

- . "I'm just as puzzled as ever, have never seen this plant growing in the wild (I doubt if it originated in the Grampians), and have no idea as to its place of origin. It always keys out in the various floras as *Helipterum anthemoides*, but looks startlingly dissimilar from the typical form of that plant - especially in its lower stature and broad, downy leaves. Perhaps it is an undescribed botanical subspecies of *H. anthemoides* warranting recognition? After all, in his monograph on *Helipterum albicans*, Paul Wilson (1960) recognized two (2) subspecies, four (4) varieties and three (3) forms. As *H. anthemoides* is equally widespread, it would be surprising if it remained morphologically constant over such a wide area of varying climatic and soil conditions. Until this group is thoroughly investigated by some competent taxonomist, there would be no harm in referring to the so-called (but inept) "Grampians Daisy" by a cultivar name - e.g. *Helipterum* "Downy Gem", "Radiance", "Elegance", "Paper-cups" or what you will. There is certainly no "*Helipterum frigidum*" and the Corsican *Helichrysum frigidum* is a very different plant with woolly-white closely overlapping leaves that tend to be arranged in ranks of four (as in many close-leaved *Crassula* species)."

This communication was a great relief as my plants have been a delight for many months.

This form of *H. anthemoides* is a bushy little shrublet, which makes a very attractive addition to the garden, either planted singly or in drifts. Its habit is dense and rounded, and the soft, grey-green leaves give good foliage contrast. It is a perennial growing to 25 to 30 cm. x 50 to 80 cm., but it is easily pruned to shape. In April/May the wine-red buds appear like tiny berries. The buds swell until July when suddenly they burst open to snow-white daisies, the papery rays being backed with red.

Botanical Description:

The grey-green leaves are alternate, sessile, 20 - 25 mm. x 3 - 4 mm., linear-lanceolate with acute tips, and smell of chamomile when crushed. The leaves decrease in size up the stem until just below the flower head they become tiny with membranous tips. Under a monocular the surfaces are covered with small dots, and both margins and surfaces bear small glandular hairs.

This form has stems 20 - 30 cm. long, bearing small lateral branchlets about 5 - 10 cm. long, each with a terminal, single flower head.

The flower heads are 17-25 cm. in diameter. The involucre is hemispherical. The outer bracts are straw coloured, very short, broad and transparent, and sometimes have a brown central stripe. The next line of bracts are red and more opaque. The ligulate rays are white, ovate, concave, pleated, and have a short, broad claw. The receptacle is convex.

The achenes are obovoid, 3 - 4 mm. x 1 mm., and densely silky-hairy. The pappus is 4 mm. long, composed of about 16 white bristles, not connected at the base, quite thick and plumose, and not more tufted at the tip.

The more usual form encountered generally has simple, unbranched stems, no purple markings on the outer bracts, smaller flowers, and shorter, narrower leaves. Ken Gillanders says it is much more difficult to get into cultivation.

#### Cultivation Notes:

Helipterum anthemoides enjoys a well-enriched soil with good drainage. It prefers sun, will grow in semi-shade and does not like wet feet. Flowers are produced in profusion from July to October, and often into November and December, if the plant is young and has started to flower later. In early November my largest plant was producing masses of seed which was collected. It looked very untidy, so I took the hedge clippers to it. Even when pruned hard it remained pleasing as the new growth had already started. It was then watered and fed with blood and bone.

It is easy to propagate from cuttings, rough cuttings in situ being very successful in April. It is said to germinate readily from seed, but we have yet to test this. In Newsletter No.3, Maureen records poor germination from seed of the alpine Tasmanian form.

It is an excellent cut flower and dries very well, though I find it hard to wire. In September it suffered the depredations of a tiny grub, but otherwise seems to have no problems. It is one of my favourites.

Although Helipterum anthemoides is well known in cultivation in Tasmania, it is relatively unknown here in Victoria. It is already in great demand whenever it is displayed, and is certain to be very popular when it is freely available from Nurseries.

Judy Barker

#### SUBSCRIPTIONS - \$2.00 PER YEAR.

Receipt is acknowledged of the following subscriptions for 1982:-

Judy Barker	Frank & Faye Feltham	Allan Foster
Joy Cook	Geoff Broadhead	Prissy Martin
Joy Greig	John Philp	S.G.A.P. Geelong Group
Beryl Birch	Geoff Broadhead	Alf & Esma Salkin
Ngair Turner	Bob Mylius	Maureen Schaumann

WOULD UNFINANCIAL MEMBERS PLEASE NOTE THAT THIS WILL BE YOUR LAST NEWSLETTER UNLESS YOUR 1982 SUBSCRIPTION IS RECEIVED.

Exchange of Newsletters with:-

Harry Infield (Callistemon Study Group)
Marion Simmons (Acacia Study Group)
Hazel Blackney (Hakea Study Group)
Peter Olde (Grevillea Study Group)
S.G.A.P. (Vic.) Region
S.G.A.P. (S.A.) "
S.G.A.P. (Qld.) "

I would like to thank these Groups for agreeing to an exchange of Newsletters. Often interstate Newsletters help us obtain seed not available locally, therefore, we would appreciate receiving more.

Germination Study on Helipterum splendidum.

Initial Report.

Many environmental factors affect the timing of a seed's germination<sup>1</sup>. This study was aimed at finding a pretreatment method which would be effective in increasing the percentage germination of *Helipterum splendidum* which is generally considered to have a poor germination success rate.

The study involved two individual growers using their individual propagating techniques on samples from the same batch of seed of *Helipterum splendidum*, and using *H. roseum* (also from the same batch) as a control experiment in each case. *H. roseum* having a fairly good germination success rate would thus disclose methods which had a detrimental effect on the seed.

METHOD.

Grower A. The medium used was 1:1 sand and sterilised potting soil. The tests were carried out in plastic margarine containers filled with medium to 1.5cm below the rim. The seeds were spread onto the surface and pressed into the medium, and covered with a thin layer of fine washed river sand, and watered in.

Each container was stood in a mixture of maxi-crop, formula 20 and Ridomil solution and left in a sunny position in the garden, facing North.

100 seeds were used in each test, and the germinated seeds counted approx. every 7 days over a period of 8 weeks from early July. There was no germination of either species until the containers were put under sheets of glass, then seedlings were seen within two days.

Grower B. The medium used was 3:1 sand and peat moss. The tests were carried out in small plastic seedling punnets filled with medium. The seeds were spread on the surface and pressed into the medium, and covered with a fine layer of sand. The punnets were watered with a solution of Ridomil and stood on an icecream lid tray of water, in an unheated greenhouse in a well lit position. (except for one control test which was placed in a sunny position in the garden where it would receive rainwater.)

50 seeds were used in each test, and these were carefully chosen 'plump' specimens. The germinated seeds were counted daily over 40 days from mid July. The maximum and minimum daily temperatures in the green house were also recorded. All tests were conducted simultaneously to reduce error due to varying environmental conditions. As rain occurred on only seven of the 40 days of the experiment, the test under garden conditions was hand watered occasionally with tap water.

Each sample of seed was examined under a microscope (30x) after each pretreatment.

OBSERVATIONS.

Grower A. Counting of the seedlings was found to be difficult and could have been inaccurate due to the large number in a small area, and over the eight weeks of the experiment seeds were continuing to germinate while others died. This was particularly true of *H. roseum*.

Seedlings of *H. roseum* were smaller and weaker after exposure to Infra-red radiation for 12 mins, and after watering with 5% 'White King'

Grower B. No discernable physical differences were noted in the seed after any of the 'dry' treatments (see table), but in each of the 'wet' treatments a clear gelatinous substance adhered to both species of seed.

In tests 12 and 14 (see table) all seeds of both species floated and did not appear to become wetted although the seeds were stirred at intervals.

In tests 13 and 16 (see table) all seeds sank to the bottom of the containers.

Seedlings of *H. roseum* appeared within 8 days and continued to appear for a further 13 days, whilst *H. splendidum* appeared within 8 days and continued to appear for a further 16 days after which time no increase was noted. The minimum daily temperature during the 24 days of germination varied from 1°C to 9°C, and the maximum varied from 8°C to 22°C.

Seedlings of *H. roseum* and *H. splendidum* which had been exposed to heat treatments (either wet or dry) were generally smaller and weaker than other seedlings.

RESULTS.

Pretreatment	Percentage Germination			
	Grower A.		Grower B.	
	H. roseum	splendidum	H. roseum	splendidum
1. Control (no treatment)	69	4	86 84	6 10 (g/house rain)
2. Microwave - 30 secs.	78	5	90	8
3. " 60 secs	90	5	82	8
4. " 120 secs			82	8
5. 70 - 80°C - 1 hour			80	12
6. " 2 hours			88	4
7. 100 - 110°C - 1 hour			12	0
8. " 2 hours			0	0
9. 130°C - 1 minute	83	7		
10. " 2 minutes	85	4		
11. " 3 minutes	71	4		
12. Soaking in cold water 24 hrs.			88	4
13. Soaking dil. detergent solution 24 hrs.			82	18
14. Soaking dil Hydrogen peroxide 24 hrs.			92	10
15. Soaking 2% Pot. nitrate solution 28 hrs.	52	8		
16. Addition of boiling water & soak 24 hrs.			0	0
17. Watering with 'White King' solution on 2 consec. days	78	5		
18. Infrared exposure - 3 mins.	86	6		
19. " " 6 mins	69	4		
20. " " 12 mins	78	8		

CONCLUSIONS.

From these results it would appear that none of the pretreatment methods tried had a significant influence on the germination of H. splendidum, with the possible exception of treatment 13. which should be further investigated.

It would seem that the actual viability of the seed should be tested on replicate samples as it seems likely that the results between each test vary according to the viability of the seeds chosen for each sample.

If the addition of a few drops of wetting agent to the water causes penetration of the fibrous seed coat, then possibly the removal of the mucilaginous layer<sup>2</sup> followed by further soaking would promote germination. On the other hand the presence of the mucilaginous layer does not appear to inhibit the germination of

Temperatures of more than 100°C for periods of more than a few minutes are obviously detrimental to the seed, probably by causing denaturation of the embryo protein.

Heat, microwave and infrared treatments had no significant effect on germination.

REFERENCES.

1. Mullett Joan H. Australian Horticulture November 1981  
December 1981  
July 1982
2. Mullett (see above) refers to a mucilaginous layer which inhibits germination by preventing exchange of gases through the seed coat.
3. Mullett ( see above) suggests excision of the embryo as a method to be tried for improving germination of Australian Asteracea.

Joy Greig  
Judy Barker

November, 1982.

MT. BULLER FIELD TRIP  
JANUARY 28th - 31st.

Accommodation is at the Ski-Lib Alpine Club lodge on the corner of Goal Post and Stirling Rds., Mt. Buller. It is a very comfortable lodge with all facilities.

This will be an excellent opportunity for members and families to get to know each other whilst studying the 20 odd daisies which are found in the Alpine Reserve.

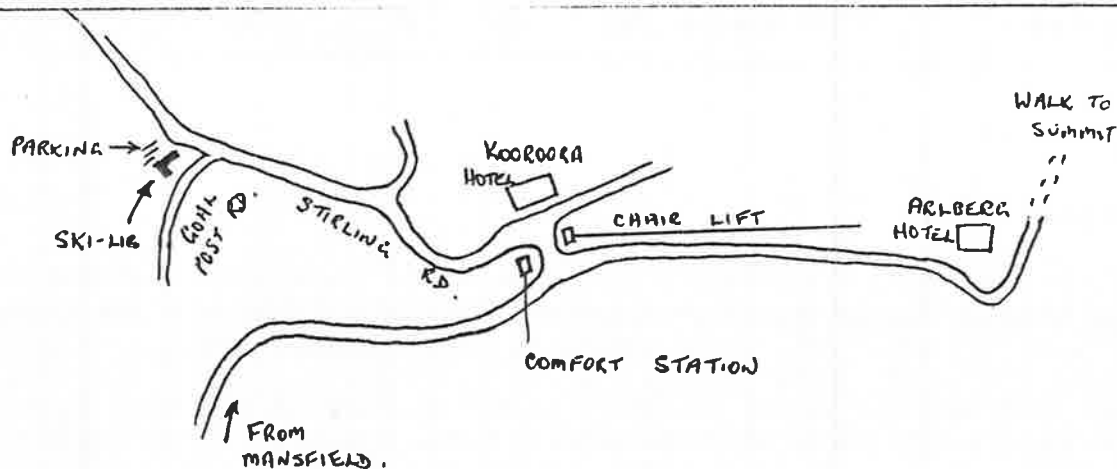
The cost is \$18 per person for the three nights (children ½ price).

Please book by phoning Joy Greig (232-5990) until 9th December or Maureen Schaumann (547-3670)

HOW TO GET THERE:

The best route from Melbourne is via Yarra Glen, Yea, and Mansfield, and takes 2½ to 3 hours. From Mansfield follow the road signs to Mt. Buller.

When you arrive at the village, turn left past the comfort station and proceed along Stirling Road (sign posted) until you reach Goal Post Road on your left. Your lodge, Ski-Lib is the first on the left after this corner. Drive into the parking area outside the lodge.



WHAT TO BRING:

You will need to bring your own bed linen, towels and personal toiletries, food and beverages. All other necessities are provided.

It is suggested that you should bring "portable" lunches if you intend to do some of the longer walks. Barbeques may not be permitted out of doors, but there is an indoor gas barbeque in the lodge.

Any books on identification of alpine plants would be helpful.

- Please Note:-
1. Fresh food supplies are not readily available on the mountain during summer.
  2. Pets are not permitted in the lodge, nor in the Alpine Reserve.

SEED BANK:

Hereunder is a list of seed at present in our Seed Bank:-

- |                      |   |
|----------------------|---|
| <u>Bellida</u>       | graminea;   |
| <u>Brachycome</u>    | ciliaris var. brachyglossa, heterodonta, iberidifolia, uliginosa;   |
| <u>Celmisia</u>      | sp.;  |
| <u>Craspedia</u>     | Glauca, sp. from Mt. Buller;  |
| <u>Helichrysum</u>   | apiculatum, baxteri, bracteatum gold (small flowered form), white, lime, pink, orange colours, cassinianum, davenportii, dendroideum, lindleyii, obcordatum, obtusifolium, scorpioides, subulifolium; |
| <u>Helipterum</u>    | albicans ssp. albicans var. albicans, anthemoides, craspedioides, humboldtianum, manglesii, roseum, venustum;   |
| <u>Leptorhynchus</u> | sp.;  |
| <u>Microseris</u>    | scapigera;  |
| <u>Olearia</u>       | asterotricha, glutinosa, iodochroa, myrsinoides, phlogopappa mauve, dwarf white, tenuifolia, sp. Tas.;  |
| <u>Podolepis</u>     | robusta   |

Thank you to the following members for their donation of seed:-

Esma & Alf Salkin, Alan Willis, Beryl Birch, Bob Mylius, Judy Barker, Maureen Schaumann.

174 packets of seed have been issued to members over the last 12 months.

DONATIONS:

- |             |        |  |
|-------------|--------|--|
| Judy Barker | - \$30 | Judy propagated plants from our seed bank for the Flower Show and kindly donated sales back to the Group. A most generous gesture, thank you Judy. Slides and photos are also continually being donated by Judy. |
| Beryl Birch | - \$8  | Beryl asked at our Flower Show if we could put on a similar display for her church fete in November. This we enjoyed doing, and Beryl thanked us with this donation. Thank you Beryl for your kind thought.      |
| Max Cook    |        | Donation of slides. Thank you Max for your latest selection of slides, they are most welcome.  |

GROUP ACTIVITIES:

After listing proposed Group Activities in our last Newsletter, a few members have come forward and offered to participate in the following:-

Research Projects -

Joy Greig has taken over this project from Judy, and I am sure other members will volunteer to assist Joy when required.

Speaker or speakers for Group Meetings -

Judy has offered to begin next year. I believe Joy Cook did an excellent job speaking to Springvale Group last month, so hope this may encourage her to continue.

Rare & Endangered species -

I have made a start here and will report on same from time to time.



Growing Alpine daisies in suburbia -

Judy, Joy and I are growing some Alpine species successfully and hope to try many more. I think when other members see Judy's *Celmisia* in flower and my *Podolepis*, they too will be eager to try. They are beautiful.

Seed slide library -

Frank kindly came forward and accepted this project.

Experimenting with *Brachyscome* leaf cuttings -

John Philp is already experimenting with leaf cuttings. Are you?

Container plants -

Some of us are experimenting with plants suitable for containers. I would like members to report on some from time to time please. I am sure interstate members could participate in this one.

Photography -

Where would we be without Judy! Once again Judy is photographing everything in sight with excellent results. Max Cook is now armed with a new camera and will hopefully continue to help us in this field.

Landscaping with daisies -

Nobody has come forward with any articles as yet. Any interstate members interested?

Field trips -

We have planned our first week-end trip to Mt. Buller, Australia Day week-end, January 28th - 31st, 1983. See details this Newsletter.

Drawings -

Bob Mylius has offered his assistance and we are very grateful to him.

Articles on the history of daisies -

No takers as yet.

Floral Art - Yours truly. I have started some members on wiring, so am hoping they will progress to bigger and better things.

Please members have another look at these Group Activities and surprise me with an article for our next Newsletter, deadline date - early March.

I would like to thank everyone for their support and help over the past twelve months. A special thanks to Joy Greig, Judy and John for their excellent contributions to this Newsletter, and to other members who have done likewise during the year.

Hope you and your families have a very happy and joyous Christmas, and a New Year filled with propagating more and more daisies. Don't forget our trip to Mt. Buller in January, should be a lot of fun. Hope you will be able to join us.

*Maureen*

Maureen

All correspondence should be addressed to:- Mrs. Maureen Schaumann,  
88 Albany Drive,  
MULGRAVE. 3170

Requests for seed enclosing stamped self-addressed envelope to:- Mrs. Joy Cook,  
2 Lotus Crescent,  
MULGRAVE. 3170