

ASSOCIATION OF SOCIETIES FOR GROWING AUSTRALIAN PLANTSTHE AUSTRALIAN DAISY STUDY GROUP NEWSLETTER NO.33

Dear Members,

Deadlines for the newsletter come around too frequently at this time of the year.

My seed sowing has been proceeding over summer, but most seed was sown in late March. Old seed was tossed onto a communal pot. Germination rates were modest, however, there were some surprises. Helipterum anthemoides, collected from the central Gippsland Highlands in February 1988, gave excellent germination rates over 9-16 days. Brachyscome latisquamea, collected 8/88, sown 10/12/91 and covered with blue metal chips, also germinated over 9-16 days. This same species when sown 17/3/90 eventually germinated in November to December 1991, so never give up!

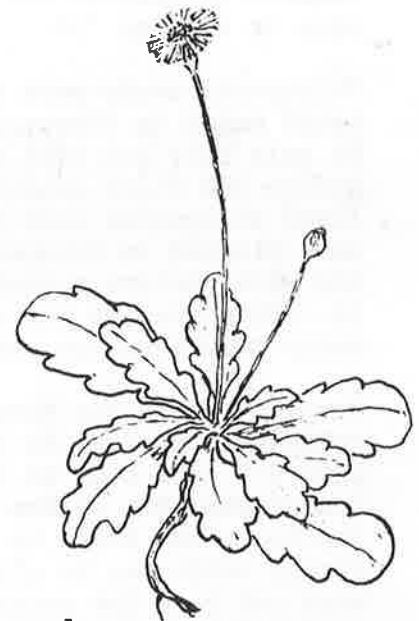
The AD SG put on a display at the SGAP Wildflower Show on April 4th/5th at the Herbarium and adjoining Astronomer's Residence. Maureen Schaumann's artistic abilities were well to the fore with a beautiful exhibition of daisies that attracted many appreciative comments. Lovely pots of brachyscomes, helichrysums and other species were grown by Maureen, Beth, Jenny Judy and Bev and complemented the display. Our book sold well, and seed sales were brisk and will give a boost to our funds. Heartfelt thanks to Maureen and Judy who slaved long and hard over the ten hours needed to set up, and to Vic, Alf and John for the heavy lifting. Plant sales under the dense shade of trees was a less arduous task - the 'super sales people' enjoying talking daisies. Thanks to all who helped over this weekend. We couldn't manage without you.

Another Saturday meeting is nearly upon me. This is to give country and working members a chance to exchange opinions, plants, etc., and for us to hear how they propagate and grow daisies. I'm looking forward to meeting South Australian members at the Little Desert Lodge in July. A number of Victorian members are also coming along. It's not too late to plan to join us, so see p.32 for details.

The Seed Bank is low or out of some of the common daisy species. I don't require large amounts. Turn to p.33 for the list of species needed.

Bev Courtney has started collating results of the Brachyscome Project. Remember the seeds you had to sow? It's not too late to send in your report or to let us know how you are progressing. If you are willing to continue testing species for us please let me know.

Subs. are due on 30th. June. A red cross will remind you. If you intend to retire from the group I'd appreciate a note.



x 1

B.C.

Lagenifera stipitata

Regards,

*Erma*

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SPECIES OR FORMS NEW TO THE GROUP

Helichrysum adenophorum F. Muell. (Vic, SA)

Mallee Everlasting, Branched Everlasting

adenophorum = bearing glands

The acquisitive side of my otherwise virtuous nature has long been stirred by the thought of Helichrysum adenophorum. Unfortunately, no-one ever seemed to find it although many were urged to look. Finally some seed came to hand which had been collected in the Mildura area in October '90.

Thirty-six seeds were sown with high hopes and a blue metal mulch in February '91. The container was watered by rain only and kept me on tenterhooks for 3½ months before the first seedling raised its head. Six seedlings altogether made their way into the world; four were planted in October '91 into a 30cm pot of rich mix with zeolite spread over the surface and watered in. (This species was my favourite for the year and every consideration was afforded it.)

Despite misgivings these plants proved themselves relatively robust. At first the stems grew upright, with 4-5 pink buds at the ends of short, terminal branchlets, but as the buds enlarged the stems became top-heavy and bowed to a horizontal position. This floppy habit may be altered by pruning. Wherever stems were cut back for cutting material they branched and produced upright growth.

On January 4th. the first head opened and measured 3.5cm across. Later some of the heads increased to 4cm in diameter. The very pretty heads are composed of many white, acute-tipped bracts, different sizes, small ones in the centre, which gives them a multi-tiered effect. The centre opens pale creamy yellow and deepens to golden yellow as the heads develop. About 6 narrow green leaves with pink acuminate tips curve around the white outer bracts. As the heads develop further they elongate and the bracts separate slightly - the lower ones reflexing a little.

The leaves and stems are **very** glandular-hairy. Simply brushing past the pot released a strong aromatic scent. The stems became brown and woody near the base as the plants finished flowering. The leaves are sessile, 1-7cm long and 0.1-0.3cm broad, narrow lanceolate, with acute tips and margins rolled under. The base of the leaf is supposed to be somewhat stem-clasping, but this hardly applies to the leaves of my plants. At best they broaden slightly at the base. The upper surface bears stiff little glandular hairs, but the lower surface has a sparse web of woolly hairs over it.

The only drawback with this delightful pot was that it dried out very quickly and often caused a flutter of the heart when its pale, lax appearance was noted at the end of a long, hot day. Four plants in the pot were probably two too many, but their closeness made it easier to rub their heads together.

In its natural habitat H. adenophorum is said to flower from October to March. These plants flowered from early January to late March, at which time plump, shiny, dark brown seed could be discerned around the periphery of the head. It was interesting to see the bracts spring shut over the receptacle when the seed was removed. I could hardly tell whether I had collected seed or not.



Helichrysum adenophorum

The fresh seed was sown in March '92, again with high hopes and a blue metal mulch, but this time the pot was hand watered at least twice a day. Seed began to germinate after 30 days.

Heads may be wired, but the centres retain an unattractive greyish look - even when wiring is delayed until the centres are well on the way to becoming yellow. I tried glycerining for three days before air-drying because this works with the closely related Helichrysum leucopsidum, but the result was unsatisfactory. Now I will leave the problem in the capable hands of our floral artist (Maureen Schaumann).

H.adenophorum is described as an annual in the Encyclopaedia of Australian Plants by Elliot and Jones. It may be so in the calcareous sands of the mallee or the barren ground of Kangaroo Island, but my plants are still looking fairly vigorous after ten months of life. If we are lucky it may prove to be perennial in cultivation.

Propagate from seed or from cuttings.

I like Helichrysum adenophorum very much and will try it in various parts of the garden in metropolitan Hawthorn and at coastal Fairhaven. Sun and well drained soil are probably the best conditions for it. I am very grateful to Gloria Thomlinson whose observant eyes spotted the seed in the first place, and to her generous nature for sharing it with me.

Helichrysum adenophorum var. waddelliae J.H.Willis (NSW,Vic)

Waddell Everlasting

Dr. Jim Willis collected a pale pink everlasting on Mt. Speculation at 1500 to 1600m in 1945. He wrote, "At first I mistook it for a tall, narrow-leaved condition of the ubiquitous H.leucopsidum which grew sparingly in the vicinity, but close scrutiny revealed much stronger affinities with H.adenophorum - a desert plant." He named the alpine form var. waddelliae after Miss Winifred Waddell, a keen pioneer in the preservation and cultivation of Australian plants. She had been the first to observe the plant on Mt. Speculation and had urged him to collect it.

The alpine variety differs in the following ways:-

1. The leaves are narrow right to the point of attachment to the stem, whereas H.adenophorum has half-clasping bases.
2. The leaves have dense white cottony hairs beneath, in contrast to H.adenophorum which usually has glandular hairs on both sides. My plants have webby hairs beneath, but they are not nearly as dense as the hairs on the lower surface of my var. waddelliae.
3. The variety waddelliae is described as a perennial with a creeping rhizome while H.adenophorum is held to be an annual. As explained above I hope the latter is a perennial too, but I don't know about it having a creeping rhizome yet. I'm too nervous to look.

I have grown var. waddelliae for some years in pots. Plants usually died in their second year of cultivation. Last year I left the dead-looking stems alone until the new growth was well advanced and the plants remained alive and even flowered, though not very heartily. Only once did I plant a clump in the garden, where it promptly died. In my opinion H.adenophorum has more garden potential, but this may just be wishful thinking.

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H.adenophorum  
var. waddelliae

Calocephalus platycephalus (F.Muell.) Benth.

(Qld, NSW, SA, WA, NT)

Billybuttons (in South Australia), Western Beauty-heads, Yellow-top

platycephalus = with broad heads

This nice little annual is quite hard to rear in Melbourne winters. It is common around Alice Springs where I saw it growing as an upright, rather sturdy herb to 40cm high. Relatively large, yellow heads were conspicuous at the tips of the branchlets. Here it has grown into a weaker, more dense plant with a lot of smaller heads.

Seed from the Olive Pink Flora Reserve in Alice Springs germinated well in 5-20 days. Many seedlings died before it had dawned on me that they didn't savour the cold, wet conditions. A piece of stiff, clear plastic was suspended over them and they were watered without wetting the foliage about every third day.

Two seedlings were finally put into a 25cm pot of a light potting mix with added perlite and zeolite. They stood up to the early spring heat well and began to flower in mid-November. When they stopped growing the plants measured 30cm x 30cm, and the habit was part upright, part straggly.

Small terminal creamy heads (about 6mm across) increase in size to 18cm and become bright yellow. As they develop the shape changes to an irregular one. The base of the head seems to fold over and around the stem, elongating the head. A bumpy pattern of circles emerges on the surface - probably delineating the partial heads.

The stems and leaves are pale green with a yellowish tinge. The stems branch and are covered with long, fine white hairs, sometimes tangled. Near the heads the stems become more hairy. Even with the naked eye little accumulations of tangled hair can be seen. At first I thought they were small woolly aphids, but they didn't jump when approached.

The leaves are 6-20mm x 1-2mm, lanceolate, sessile and partly stem-clasping.

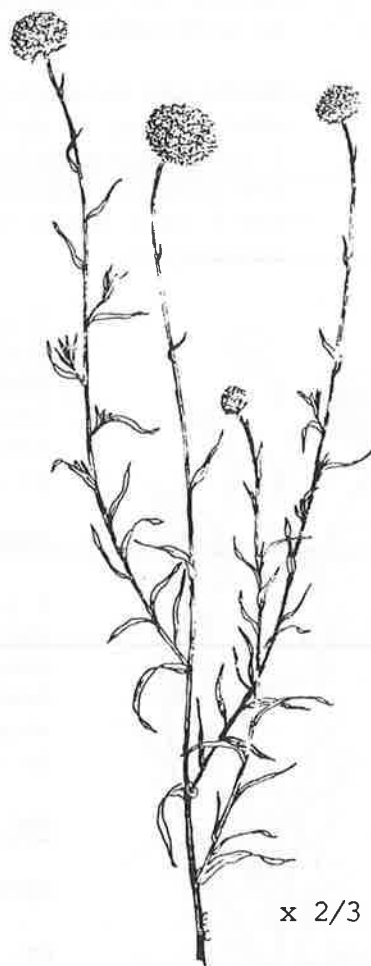
In mid-April the plants began to flag. Until then constant picking of the heads had kept them flowering. On April 16th both plants died.

This species dries well, as do all the Calocephalus species grown so far. The heads which have developed enough for picking are on stems 10-15cm long. At this stage the heads are 12-13mm across.

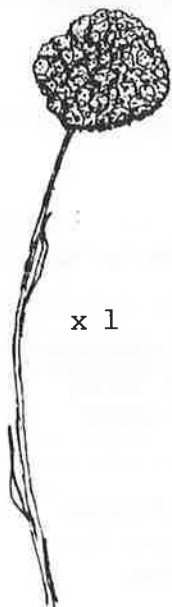
Some larger stems with a number of heads were picked for drying (as we do with C.sonderi), but they were not a success. This was probably because there were only one or two good solid heads and the rest were immature.

Perhaps we will be able to make C.platycephalus more robust with continuing cultivation, but at present it wouldn't stand a chance in Melbourne gardens. It probably needs sun, good drainage, root protection and trialling in warmer climes.

by Judy Barker.



Calocephalus platycephalus



x 1

On earlier visits to Kosciusko National Park I had believed Brachyscome stolonifera to be a very rare plant. In fact on two occasions I had only found one plant. It is easy to understand why this brachyscome has been overlooked or missed. It normally stands from 2 to 5cm high, grows in shallow pools, blooms early in summer and sends up a single flowering stem from each tuft. In addition it shares its wet habitat with short reedy and grassy species as well as the vegetatively similar B. obovata and B. tadgellii.

The following description of this brachyscome is due to the combined efforts of thirteen Daisy members and friends, a plastic ruler for measuring under water, wet feet and knees whilst peering with a x10 lens, and our 'scribes' who jotted down the information. What a joy to have a drying room to prepare clothing and footwear for the next day's botanising!

Brachyscome stolonifera has a small basal tuft of leaves, 2cm in diameter, often submerged in water. Four leafy stolons usually radiate from this tuft. The basal leaves, 2cm long and 0.1-0.2cm wide, are entire, linear and obtuse at the tip. The erect reddish scape has a single bract 0.5cm long. The terminal flower-head of white or pink rays (16-25) is 1-2cm wide, but in good situations can be up to 3.5cm wide. The involucrel bracts are reddish and torn at the tips. The reddish brown fruit, about 2 x 1mm, has a thickened body with a narrow crenate or tuberculate margin that bears glandular hairs distally. The pappus is silky white and easily seen without magnification.

Populations of 50-100 are common and the conservation status is 3RC, that is a species with a range of more than 100Km but occurring only in small populations; rare in Australia but not currently endangered or vulnerable, and protected in a reserve.

Because of the nature of this species little is known of its cultivation requirements. One suspects it germinates slowly from seed and, as it is stoloniferous, it would propagate readily by division. Its horticultural potential is limited.

**Similar Species:** B. obovata will be described in the next NL, but it is easily differentiated by its fruit which is larger, smooth, obovate and has a minute pappus.

B. tadgellii is observed more frequently growing with B. obovata than with B. stolonifera. It is a more vigorous stoloniferous plant than B. stolonifera, has a much longer flowering scape (7-10cm, rarely to 20cm long), and has one or more irregularly lobed basal leaves. Flowering stems and involucrel bracts have tiny glandular septate hairs and the fruit has a large wide wing. The pappus is also large and easily seen with the naked eye.



Specimens of B. stolonifera

by Esma Salkin.

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NAME CHANGES

(The following name changes are set out in Changes to Viclist re Anderberg (1991))

Helichrysum acuminatum = Bracteantha acuminata (DC.) A. Anderb. & Haegi, Opera Bot. 104:105 (1991).

\* Now Bracteantha subundulata see p.32.

Helichrysum bracteatum = Bracteantha bracteata (Vent.) A. Anderb. & Haegi,  
Opera Bot. 104:105 (1991).

Helichrysum viscosum = Bracteantha viscosa (Sieber ex DC.) A. Anderb. & Haegi,  
Opera Bot. 104:105 (1991).

(Note that under H. viscosum we have different author, i.e. "H. viscosum  
Sieber ex Spreng.")

Helichrysum apiculatum = Chrysocephalum apiculatum (Labill.) Steetz in Lehm.  
Pl. Preiss. 1: 474 (1845).

Helichrysum semipapposum = Chrysocephalum semipapposum (Labill.) Steetz in  
Lehm. Pl. Preiss. 1: 474 (1845).

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REPORT ON GERMINATION TRIALS (9/8/91)

by Lotte von Richter.

The first seed I obtained was sown in punnets in glasshouses at the Mt. Annan Botanic Gardens. Of the 50 species most had very low germination rates. Since then I have 'sown' seed in controlled temperature growth cabinets at the university. I have access to cabinets set at 5°, 10°, 15°, 20°, 25°, 30°, 35° and 40°C, all with fluorescent lights set for 12 hours light and 12 hours darkness. With this equipment it is fairly easy to determine the optimal temperature for any seed as well as the light requirements. The only limitation at the moment is the amount of seed I have, and therefore I have sown only 20 seeds at three temperatures. After three weeks I added a solution of a gibberellin to the remaining ungerminated seed. This is known to break dormancy in some seed.

For some of the seed sent by AD SG I obtained the following results:

SPECIES	15°C	20°C	25°C	30°C	Effect of GA <sub>3</sub> *	Approx. Time
<u>Brachyscome stuartii</u>		11/20	14/20	3/20	NO	14 days
<u>Helichrysum ambiguum</u>		17/20	14/20	13/20	NO	22 days
<u>Helipterum molle</u>		18/20	16/20	2/20	YES	35 days
<u>Helipterum diffusum</u> (yellow)		4/20	0	0	NO	24 days
<u>Helipterum stuartianum</u>		7/20	7/20	5/20	NO	8 days
<u>Minuria integerrima</u>	11/20	17/20	11/20		NO	31 days
<u>Minuria denticulata</u>	1/20	1/20	0		NO	32 days
<u>Minuria cunninghamii</u>	17/20	15/20	14/20		NO	20 days (15°, 20°) 31 days (25°)

\*GA<sub>3</sub> = gibberellin solution.

From these results and others I have obtained so far it not possible to generalise about optimal temperatures for any particular genus - it is definitely species specific.

Any germinated seeds were transferred from the glass petri dishes to punnets at Mt. Annan to be grown on to flowering. I am now waiting for some wonderful plants that the horticultural industry will consider suitable as bedding plants!

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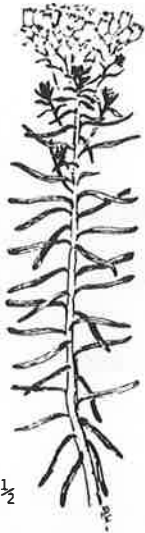
ENCOUNTERS WITH HELICHRYSUM COSTATIFRUCTUM

by Bob Magnus.

Not long after we moved onto our block here in southern Tasmania ten years ago we were visited by a friend, a botanist actually, who worked at the Herbarium in Sydney. I can remember her saying: "You know that's a type of Helichrysum."

Little more did I think about H. costatifructum up on our hill for quite a few years, apart from gathering some dead twigs - it makes great kindling - or in late summer when it spreads so much seed that it is formidable sneeze material. Neither sheep nor goats ate it so, at the expense of more palatable herbage, it spread to an area of 1½ hectares or so.

Always on the lookout for potential 'fillers' for our small cut flower business we started using it occasionally in the immature bud form. Then, as we realised its potential, we used it more and more, and over a longer period. Now it has become a useful part of our industry from the time flower buds first appear until full flowering, when the creamy-green florets start to go dingy brown. This year we found it very ornamental to cut the heads where the seed has actually been shed revealing the small, dried calyces. I have also tried the glycerine/drying method (NL30, p.23) and the results look quite good.



x ½

H. costatifructum

Helichrysum costatifructum grows strongly in our very heavy dolerite based clay soils that support a mixture of peppermints (Eucalyptus pulchella) and Blue Gum (E. globulus). The environment is quite harsh; very open and windy and often extremely dry in late summer - then cold in winter, with at least one heavy snow fall that lies for a few days each year.

As we have it in such abundance I haven't tried propagation. However, it pops up everywhere from seed which appears to germinate on bare ground at any time of the year when there is sufficient moisture.

In my population there is quite a variation of colour from palest cream through cream to an almost pale green, and also a variation in stem length from stumpy to an ideal 30cm.

Helichrysum costatifructum is hardly the plant to take the horticultural world by storm, but for our purposes it looks great in a bunch with Kangaroo Paws, helichrysums and grasses. It combines well with exotics too.

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ADDENDUM No.1 to Helichrysum costatifructum

by Julie Strudwick.

(7/6/91) I obtained a plant from Laurie Baglin in March 1990 and planted it on an easterly slope where it gets some sun most of the day though, being among other shrubs, it would be in dappled shade part of the time. It was rather a spindly plant, about 40cm high and just one slender shoot, but it was leafy almost to ground level. As I am on top of a ridge it goes without saying that everything planted at my place is well drained (unless I artificially arrange otherwise).

The plant grew to about 1 metre last year and produced one small head of flowers. It would probably have benefited from pinching back, but I didn't do it. It wasn't planted till May/June, after our autumn break in mid-May, so it had little chance to make healthy root growth before being subjected to the sudden onslaught of summer in October.

It has had no more than three (and I think only two) waterings since October, but has survived. However, the comment in the Encyclopaedia of Australian Plants, Vol. 5, about not **thriving** if subject to long, dry periods does apply. I was pleased to see, when I went down to look at it after reading the NL, that it is responding to two recent light falls of rain and is shooting prolifically. There is a ring of about eight shoots some 20-25cm above ground level and another bunch from under the old flower head. I did what I probably should have done originally and cut it back to the lower group of shoots, and have put the top lot in as cuttings. I also gathered a tiny bit of seed when it was ripe and have pricked out one seedling, and two more are breaking the surface.

ADDENDUM No.2 to Helichrysum costatifructum

by Esma Salkin.

(24/7/91) I have had one in a pot since 3/89 (seed planted 2/88). Seed germinated well, a number surviving well in pots until I culled them. Another plant from the same batch was planted at the base of Eucalyptus viridis. It competes for moisture with three other shrubs planted out at the same time, Helichrysum thyrsoideum, Ixodia achillaeoides and a prostanthera, all thriving well with new shoots along old wood. This bed would be very dry in summer which might account for the untidy appearance at the base of the stems where the leaves dry off.

It looks like a plant for that problem spot near eucalypts. In its natural habitat it is probably as dense as the colony on the roadside where it is a good weed species.

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Brachyscome multifida Seedlings.

by Beth Armstrong.

As part of my Brachyscome Project last year I planted seeds from B.multifida Breakoday form. The seeds were collected in Judy's garden.

Twelve seedlings grew and were planted out in November and December '91 -- some in large pots and some in the garden.

I will divide the plants into two groups:-

GROUP A -- flowering well for the last 3-4 months (January to April).

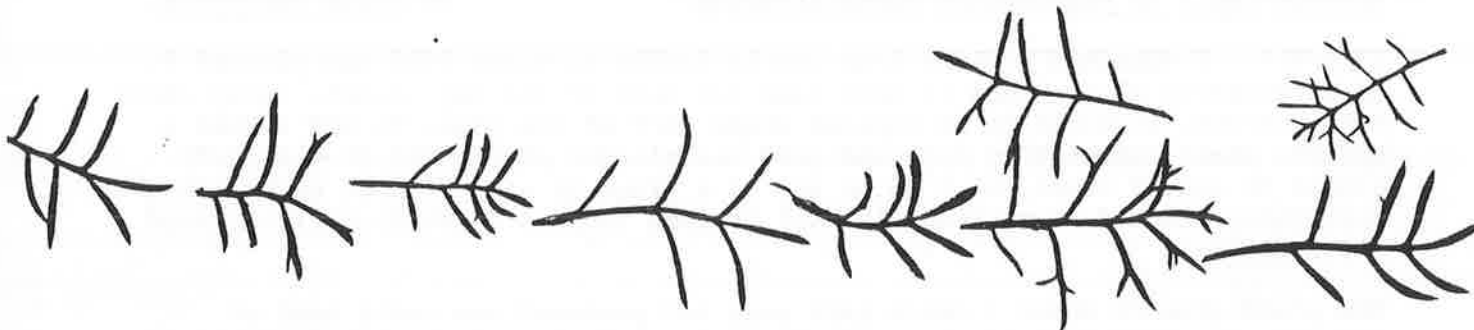
GROUP B -- plants are just about to flower.

GROUP A

A group of 8 plants, none of which look like Breakoday. In my garden the Breakoday form is a small clump, 18cm tall, with small vivid flowers, 1.5cm in diameter, and with small leaves about 2cm long.



One plant has similar colour flowers (not quite), the others are paler and one is pinkish. Some flower-heads are much bigger and range from 1.5 to 2.5cm. The leaves vary greatly as illustrated below.



These plants are apparently forms of B.multifida -- the male parent being one of the many different forms growing in Judy's garden.

GROUP B

The other 4 plants are small compact clumps, 6-7cm tall, and are starting to flower in April. The leaves are somewhat similar to each other.



What was the other parent (or parents)? Coming from Judy's garden the possibilities are endless. I would like to suggest not B.segmentosa because of its size,



and not B.angustifolia because it has been flowering for months and is about to finish.

Any suggestions ?

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SUGGESTIONS

by Judy Barker.

GROUP A - perhaps B.multifida var. multifida (Mt. Kaputar) ? The garden abounds with this variety and its seedlings.

GROUP B - certainly not B.segmentosa which has been banished some time ago. I have two plants similar to Beth's, one of which has just died. In my innocence I had thought they were simply chance cushion forms of var. dilatata. Now I'm looking at the offender accusingly and wondering what price B.tadgellii or B.stuartii ?

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EXTRACTS FROM REPORTS OF AUST. DAISIES IN THE U.K.

by Jeff Irons.

(7/91) Seed set this year has been poor, but I shall have a small amount of what may be hybrid Craspedia seed - hybrids between Salkin's Cradle Valley strain of C.glauca and C. sp. (Dargo High Plains), grey leaf, 18cm long and 1cm broad.

The Celmisia sp. (collected at Falls Creek by Barbara Buchanan) are monopodial. Celmisias always puzzle me. Some plants will grow well, while others only a few centimetres away collapse. Do they succumb to attack by unseen aphids, or to root weevils or nematodes ? Vine weevil is a pest here, but I don't think I have it. I do have carrot root fly, and this spring I lost all my Oreomyrrhis from them - at least I assume that was the cause.

(Monopodial branching is defined by the Penguin Dictionary of Botany as follows: "A type of growth exhibited by many plants in which secondary shoots or branches arise behind the growing point but remain subsidiary to the main stem, which continues to grow indefinitely. The largest secondary shoots are furthest from the apex of the main stem and the size of the shoots decreases regularly towards the top of the plant. This results in the pyramidal form of growth typical of many conifers, e.g. the spruce (Picea). The secondary shoots also tend to show the same pattern of branching along their length." ...Ed.)

(9/3/92) The reason I wanted to write was to tell you about the Helipterum albicans ssp. albicans seed that Alf sent. You may recall the little raised scree bed that I have between the house and the lawn. The seedlings are in that, right at the outer edge. Even though last summer was a drought one - the worst in my seventeen years here - the plants were not watered. They flowered from August right up to Christmas. The stock is a giant one, much bigger than those I grew some years ago from Ken Gillanders' seed. The plants are tall, up to 15" (38cm), and the flowers larger. Winter here was in some ways more severe than last year, though temperatures were not so low. Night minima were only - 5°C at lowest, but we had two extended spells with maxima of 0°C, so the ground froze. The above helipterum was unaffected and is now shooting again.

Unfortunately the Helipterum albicans ssp. alpinum that you saw here appears to have reached the end of its life. It has collapsed over winter and now has just one shoot on it. It is only about eight years old too, perhaps a bit more, though no more than ten years. Luckily I have a nice three year old plant in ordinary soil to carry on with.

The form purpureo-album seed (collected in Orange) germinated in three days in September, no doubt because of the high ambient temperatures. I lost the seedlings, they dried out, so I shall sow again in late April.

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OLEARIA SP. AFF. LANUGINOSA

by Bev Courtney.

In the last Newsletter I wrote about Olearia lanuginosa, the Woolly Daisy-bush, so it seemed natural to follow up with a closely related species, Olearia sp. aff. lanuginosa. (sp. aff. = species with an affinity to.)

A low-growing, spreading shrub, it was discovered only a couple of years ago growing on coastal sand dunes on the Mornington Peninsula in Victoria.

Stems and leaves are covered with a white woolly tomentum, giving the plant a delightful silvery appearance. The leaves, to 5mm x 2mm, with slightly revolute margins, are crowded along the stems. The tomentum tends to be reduced on the upper surfaces.

The creamy-white flowers, up to 8mm in diameter, have only 5 or 6 rays and are clustered along the stems at the ends of short branchlets. They appear from late summer to early autumn.

O. sp. aff. lanuginosa seems to appreciate an open sunny position in the garden with good drainage. I have it growing alongside its namesake, O. lanuginosa, and while O. lanuginosa must take the prize for its beautiful, pink-tinged flowers, O. sp. aff. lanuginosa wins hands down for its delightful silvery foliage.

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GERMINATION OF BRACHYSCOME OBOVATA

by Esma Salkin.

Val McConchie (from Emerald, Victoria) reported that 30 seeds of B. obovata (collected 2/91) were sown in 9/91. Only 3 germinated and these failed to grow on. Fortunately the pot was not thrown out and many germinated after the heavy rains in mid-summer. Brian Dacy, a former member, also sowed the same species and his autumn sowing did not germinate until spring.

My experience with B. obovata has given similar results. I had trimmed a fruiting head from a root cutting (Baw Baw provenance collected 2/91) and sprinkled this seed on the surface of the cutting mix (sand/peat, 3:1). This pot was left in a closed propagating shed whilst I was overseas from April to June. It was watered with mist spray for 4 minutes once a day. The cuttings got a little attention on our return, but we were away again from September to October. This time the cuttings, etc., were watered for 4 minutes four times daily. Imagine my surprise when I noticed about 10 seedlings in the B. obovata pot on 20/11/91. The seed had taken seven months to germinate!

I sowed B. obovata seed (same provenance as above) in March 1991 on sand in my terrarium, but the "other gardener" decided the terrarium needed some landscaping. Despite the disturbance 3 seeds germinated in April. There have been no further germinations.

Twenty-five seeds (collected 10/3/91 from Snowy Mountains provenance) were sown on 22/3/91. Four germinated 28/8/91 and eight by 7/9/91. Germination 5 months, rate 32%. A further 25 seeds (from the same population) were sown 28/11/91. Germination 15-22 days, rate 36%.

This apparent anomaly can perhaps be explained. Seed was stored in an unheated house until June and then at 4°C. Immature fruits (from Snowy Mountains provenance collected 2/92) were sown a few days after collection in two pots. Germination was low, taking 9-20 and 12-22 days to germinate. These observations suggest that immature seed will germinate if it is not allowed to dry out and, despite the anomaly mentioned, stratification for mature seed is indicated. Stratification is sowing seed on moist paper and placing it in a sealed plastic bag in the lower section of the household frig., or wintering seed on the seed-raising mix in a constantly moist atmosphere, or storing seed in the frig. This would seem obvious as B. obovata grows in very wet situations and is covered with snow in winter. A more controlled testing of this species will be done this year.

DAISY STUDY GROUP TRIP

HUNTING THE BEE'S AT MT. KOSCIUSKO

DOWN THE TUBE AND UP THE CREEK FOR A WEEK

by Shirley Dixon

Arriving in dense fog and rain lasting from 12.30 pm on February 9th. to 5.00 pm on the 10th. Thirteen determined members and friends wanting to venture out to find the *Brachyscome*. The first day a jigsaw to the rescue for some; reading, crosswords and puzzles for others - due to the inclement weather.

Tuesday was a gentle introduction to the Mountain, a walk around Spencer's Creek and Guthega where we admired the *Craspedia* species, *celmisias*, *wahlenbergias* and *gentians*, but the Leader said, "*Brachyscome* we need to find". In that area we spotted *Brachyscome scapigera*, *B. tenuiscapa* var. *tenuiscapa*, *B. obovata*, *B. stolonifera* and *B. spathulata*. The afternoon - off to Guthega where *Helipterum anthemoides* was growing along the track and dotted down the hillside to the stream. The rain continued. Gloria and Beth trudged down to the creek hoping to find a *brachyscome*. Joy oh joy, *B. tadgellii*. Back to Esma to confirm the find.

The next day was cool, ideal for a hike to Blue Lake and Hedley Tarn. The Snowy River was too deep to cross. Undeterred, off with boots and socks and into the river. Four times we crossed the river in search of the *Brachyscome*. The Leader tripped and wet more than her feet despite the valiant efforts by Alf to save her. Esma's thoughts were only for the camera which she was able to keep high and dry. The Armstrongs returned another day for another look at the ecotype of *B. spathulata* or was it to paddle alone? The dedicated members slaved over the hot microscope while others headed for the stove. A slide night on the flora of New Zealand was compered by John Armstrong and Flora Anderson and prompted by Beth.

From Charlotte's Pass we hiked off to Ramshead while our more energetic friends went to Cootapatamba Lake (aboriginal for "where the eagles drink") just below the peak of Mt. Kosciusko. A long walk, Daisy Ladies. Bill and friends need to be the achene group. Bums up, heads down and hand lens out. What a day! We headed home, the rain following us. Back at the village we wondered at the weeds which are around the major tourist areas and roadsides.

The next day dawned with rain again but undaunted, off to the ski-tube and up to Blue Cow. We ventured out to the lookout, but here mist hid the flowers. On return to the station we indulged in hot chocolate - oh so sweet. During the return to Perisher we peered down the tunnel to investigate the construction. A game of musical chairs was played so everyone could see. On emerging from the tunnel - rain again - so it was decided we would visit a nursery growing the unique plants of the alpine and subalpine areas. At Dalgety we followed the signs to Dealbata Nursery, a long, narrow, winding trail where the owner grows plants mainly to revegetate the alpine area.

Last day, Esma cracked the whip and we all gathered at the creek to seek out the *Brachyscome* and record relevant statistics - all this in the Spencers Creek area. On our return the botanists slaved over the microscopes and compiled the statistics. On the spur of the moment we decided to combine our food supplies and have a slap-up smorgasbord dinner which became a formal affair - four courses in the Lupine Room, enjoyed by all. Bill Owen, the cellarmaster (whom we had thought a man of few words), excelled himself by proposing a toast to the Leader and confirmed that he had caused the Salkin dunking through a direct line to the Almighty.

Sunday, clean up and disperse our separate ways. An informative and fun trip enjoyed by all.

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A full list of the flora encountered on the Kosciusko trip was compiled by the members and typed up by Shirley. It is available from Esma .

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POTTED PROFILE      PAT SHAW

**Present address:** 5 Fleetwood Street, Macgregor, Brisbane, Qld, 4109. Formerly at Goondiwindi (seventeen years), and before that at Caboolture (three years), and before that again at Goomeri (twenty-six years).

**SGAP - Qld membership:** Approximately twenty-six years.

**Offices held:** Helped to form SGAP Goondiwindi Group in 1969 and was first chairman. Moved to Brisbane late 1973 and held the following offices - Flower Despatcher, Minutes Secretary, Chairman of Southside Branch, Seed Curator, Treasurer, Councillor, Vice-President, Displays Officer, Publicity Officer. Current offices - Technical Officer and Contact Person via Telecom white pages, Member of the Displays Committee, Growers Subcommittee.

Pat initiated the sale of cut flowers at the 1984 Flower Show. This started with three buckets of flowers, but they now sell \$1,200.00 worth of flowers at the Show each year. In 1989 Pat initiated the Autumn Plant Sale.

Pat was honoured with Life Membership in 1989.

**ADSG membership:** July 1985.

**Reason for joining ADSG:** Pat says, "My interest in small plants, my desire to learn as much as I could about our lovely native daisies and my wish to create a colourful native garden. I greatly enjoy being a member of this very active study group."

**Interest in other genera:** All Australian plants, particularly daisies, grevilleas, scaevolias, hibbertias, ferns and other small plants. She is also interested in growing plants in containers.

**Other activities:** She does not have time for any other activities.

**Hobbies:** Visiting Australian gardens in Queensland and interstate, National Parks, Art Exhibitions, attending Study Group Meetings, field trips, good music, painting.

**Family:** Widow, three children (one son and two daughters) from first marriage, eleven grandchildren (seven grandsons and four grand-daughters aged 10-22 years).

**Favourite TV:** All nature programmes - documentaries, Quantum, Our World, World Around Us, Countrywide, etc..

**Favourite reading:** Study Group newsletters (ADSG, Grevillea, Goodeniaceae, Fern, etc.), Australian Plants, and all books on wildlife and plants.

**Principal growing methods:** Raising plants by seed or cuttings and can also graft.

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SHELL GRIT AGAIN

by Judy Barker.

**As mulch:** The potted B.tesquorum described in NL32, p.14 remained healthy but static from mid-January (when it was mulched with washed shell grit) to early April. Not one flower bud opened during that time, and not one shoot was put out. It may have been that our summer was too mild for it to prosper, but I'm also wondering whether there is some growth inhibitor in shell grit. Since early April branches seem to be dying back almost unobtrusively.

I also mulched B.paryula (Otways). It too has buds; they have not opened, but at least the plant has grown slightly. B.tatei received similar treatment and has deigned to open a few heads, but does not seem whole-hearted about it.

**As a germination aid:** A thin layer of washed shell grit was put on top of my usual seed mix in one pot. The control pot just contained seed mix. Both pots were sown with equal amounts of *B. tesquorum* seed collected from plants in a large pot in spring '90. The seed had been kept at 4°C since collection. The results are inconclusive.

	SHELL GRIT MULCH	CONTROL
DATE SOWN	15/2/92	15/2/92
DATE	GERMINATION	GERMINATION
25/2/92	0	2
27/2/92	0	3
1/3/92	0	8
3/3/92	1	9
5/3/92	4	9
9/3/92	1	9
15/3/92	0	9
20/4/92	6	7
4/5/92	11	10

All the seedlings in the shell grit pot are small. In the control pot there are seven large and three small seedlings.

**Tentative conclusions:** Perhaps the shell grit inhibited germination at first, and also inhibited growth once the seedlings appeared. Perhaps the falls of rain (18mm from 2nd to 4th March and 8.5mm on 13th March) leached out the inhibitor, thus allowing more seed to germinate. We also had very heavy rains in late April.

I'll keep watching the progress of both pots, but don't think I'll pursue the shell grit any further.

**POTASSIUM NITRATE SOAK**

Dr. Kerry Sharman, one of our new members, suggested that soaking seed for one or two days in a "weak" pot. nitrate solution might help to germinate seeds. Some exotic species, such as petunias, had been successfully germinated by this method. Sandy Salmon advised that 50 ppm (parts per million) would probably be deemed "weak" so I tried that bugbear, *Helipterum polygalifolium*. (100 seeds per test.)

SOURCE	Pot	Pot	Pot	Pot	Mildura	Mildura
STORAGE TEMP.	4°C	4°C	4°C	4°C	4°C	4°C
DATE COLLECTED	11/91	11/91	11/91	11/91	10/90	10/90
DATE SOWN	2/4/92	2/4/92	2/4/92	2/4/92	2/4/92	2/4/92
SOAKED 40 HOURS POT. NITRATE SOL.	Control no soak	1250ppm	100ppm	50ppm	Control no soak	50ppm
DATE	GERMINATION RESULTS					
5/4/92	0	0	0	0	0	3
6/4/92	0	0	0	0	1	2
10/4/92	0	0	0	0	3	2
14/4/92	0	0	0	0	5	3
26/4/92	0	0	0	0	5	3
4/5/92	0	0	1	0	5	2

Although I was terribly excited on 5/4/92 and exploded with the news at the Autumn Flower Show, I had to retract next day. I think these results indicate that pot. nitrate has no effect one way or the other on *H. polygalifolium*. Other results using *Helichrysum davenportii* and *H. lindleyi* seem to agree. It is possible that the effect of the pot. nitrate soak is species specific, so I will try a few more species before writing it off.

Gloria Thomlinson sent me her germination results as a comparison. The climate is hotter in Shepparton than in Melbourne, and Gloria had stored her seed at room temperature. She achieved 15% germination from her 93 seeds (collected Mildura, 10/90) compared with my 5% (in the control) and 3% (in the 50 ppm soak).

Five seeds germinated when Gloria sowed the seed collected in '91 from her garden plants which she had grown last year from her 10/90 Mildura collection.

What does all this mean? Does the hotter climate have a bearing on the results? Are there more pollinators abroad in Shepparton and are they active at the right time? Is it better to keep arid zone seed at room temperature or even higher temperatures? We understand that John Colwill used to keep some of his seed just under the roof of a tin shed and his seed always yielded excellent germination results.

We have always believed that seed of species which has been harvested over a number of years becomes easier to germinate and to grow. T.A.Villiers in "Seed Dormancy", p.248 of Seed Biology edited by T.T.Kozlowski (1972) says, "... dormancy may last for long periods in many wild plants, but has been largely lost in cultivated forms owing to selection for strains showing less severe dormancy characteristics". This doesn't seem to be happening in the case of H.polygalifolium.

One answer could be that Gloria is a better propagator than I am - 10% better.

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#### NAME CHANGE STOP PRESS

The most recent volume of Muelleria, Vol 7, No.4, April 1992, contains an article by Paul G.Wilson, P.S.Short and A.E.Orchard entitled **Some Nomenclatural Changes in the Angianthinae and Cassiniinae (Asteraceae: Gnaphalieae)**. They note that "one of the names under Bracteantha published by Anderberg & Haegi is nomenclaturally superfluous.

Bracteantha subundulata (Schultz-Bip.) Paul G. Wilson, comb. nov.

BASIONYM: Gnaphalium subundulatum Schultz-Bip., Bot. Zeitung 3: 171 (1845), as nom. nov. - Helichrysum acuminatum DC., Prod. 6: 188 (1838), nom. illeg., non H.acuminatum (Link) Sweet, Hort. brit. 223 (1826); - Bracteantha acuminata A.Anderb. & L.Haegi, Opera Bot. 104: 105 (1991), nom. superfl."

There are a number of other new names listed in this article which will be included in future newsletters.

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#### STUDY GROUP NEWS

Helipterum anthemoides 'Paper Cascade'. Plant Growers Australia Pty. Ltd. (PGA) has been authorised to produce and sell the form of Helipterum anthemoides 'Paper Cascade' throughout Australia and the world. AD SG will benefit from royalties. Further details will be included in the next newsletter.

#### JULY 10th - 13th - MEETING WITH SOUTH AUSTRALIAN MEMBERS

Arriving on the afternoon of Friday, 10th and departing on the morning of Monday, 13th July.

Venue: Little Desert Lodge, Nhill - Goro ke road, 16 Km south of Nhill.

Accommodation: Caravan Park - powered sites \$9.50 per night.

Motel - single \$36.00, double \$44.00

Bunk - minimum limit, please enquire.

Meals available: Breakfast, light \$5.00; cooked \$8.00.

Evening, \$15.00.

Lunch, we supply our own cut lunch.

Bookings: Please ring direct, phone (053) 915 232 or (053) 911 714.

Activities: Depend on the weather. They will consist of daisy chatter, problems, propagation, cultivation, identification, collecting, botanising, Seed Bank, exchange of plants, displays, photos, garden visits, etc.

Refrigerator: There is a frig. available in the common room for guests.

Please let Esma know if you are coming (phone 03 802 6213). Expect cold weather - warm clothes and wet weather gear required.

OCTOBER TRIP: Expedition to the New England area, New South Wales.

Tentative Date: 10th - 17th October.

Itinerary: Not finalised.

Accommodation: Motel or caravan park.

Activities: Serious collecting, with brachyscomes a priority.

Tentative Base: Armidale.

Details: Contact Esma (phone above) or Judy (03 813 2916) between mid-July and 31st August.

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#### SEED REQUIRED FOR SEED BANK

Arnobium alatum.

Brachyscome aculeata, angustifolia forms, cardiocarpa, microcarpa, multifida forms, nova-anglica, procumbens, stuartii.

Calocephalus citreus, lacteus, platycephalus, sonderi.

Craspedia glauca.

Helichrysum apiculatum forms (now Chrysocephalum apiculatum), bracteatum pink and apricot forms (now Bracteantha bracteata), cuneifolium, elatum, obcordatum, thyrsoideum.

Helipterum albicans ssp. alpinum, ssp. albicans var. incanum, anthemoides, all forms.

Olearia seed when fresh.

Only small quantities are required as it's better to stock fresh seed.

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#### A BOTANIST IN THE ALPS

by Bill Owen.

Last November the Australian Daisy Study Group invited members and friends to spend a week in February at a lodge in the Perisher Valley near Mt. Kosciusko. The invitation was to all of our Group (SGAP Central Highlands), but I must be the only one who reads the AD SG newsletter, so I was the lucky thirteenth member of the party

- lucky because I travelled there with female versions of Jack Brabham as drivers, and survived,
- lucky because I saw a wonderful part of Australia at its best, and
- lucky because we had to take a week's food and drinks, and I survived my own cooking.

The purpose of the trip was to find all of the numerous varieties of Brachyscome there, and to collect material for a book being written by the members of AD SG. So we travelled to various areas and searched for the plants until someone found them. Then the botanists took over; those experts, with their noses near the plants and their bums up in the air, were busy counting the hairs on the stems, measuring the length of the leaves and stems, and counting the number of ray florets, etcetera. Other botanists continued the search, while the rest of us sat on rocks on top of a hill admiring the wonderful scenery or acting as sentries.

The results were satisfactory, but a few of the trips involved some unaccustomed exercise at 2000 metres above sea level. The walk from Charlotte's Pass to Blue

Lake and back meant steep climbs and descents, and painful crossings of the Snowy River at its source. It was painful because the approved way of crossing was to wade the cold, fast running, knee-deep stream with its treacherous, stony bottom in bare feet. I decided to keep my boots on for the return journey, while our Leader, Esma Salkin, and consort Alf tried the swimming method.

We travelled there and back through Gippsland, Buchan, Suggan Buggan and Jindabyne (about 550 Km) which is the shortest route and the most satisfactory because the gravel parts are well graded and it is below the snow level all the way to Jindabyne. Part of the trip is beside the Snowy River, now a wide stream without much water. The river bed is choked with exotic plants, such as roses and willows, which were washed down from the Snowy Scheme construction camps about thirty years ago.

My main impressions were:-

1. The great beauty of the alpine country in summer, and the remarkable variety of plants.
2. The enormous investment in ski-tube trains, ski lifts, lodges and hotels - all for the purpose of sliding down a hill on snow.
3. The continuing battle between the conservation people in the National Parks Department who want to save the precious areas, and the ski people who want more open areas for skiing.
4. The growing pollution problem caused by too many people in a fragile area. There are notices beside all the beautiful clear streams telling us to boil all water before drinking.
5. The remarkable thirst that Daisy people develop after a long day of botanising.

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#### MEMBERS' REPORTS

Pat Tratt (from Metung, Vic.) writes on 21/4/92:- " ... I have grown quite a few of the daisy family in my garden over the past year, and I am learning to identify those found on field trips with the local Field Naturalists Club. Just loved my first ever trip to the high country earlier this year, all those lovely snow daisies.

My part in the recent Brachyscome Study had disappointing results, but since submitting my record sheets I find a couple of B.melanocarpa seedlings, which appeared to be dying, have really flourished. One is now 37cm high x 58cm wide, the other 30 x 39cm, both flowering magnificently with 2cm heads of pretty lilac-blue. I put them in a south-facing, open site with some dappled shade and fairly moist sandy loam. This is where I am experimenting with native grasses (another area of great interest for me). I have used rocks and logs to protect roots. Many daisies are delightful grown in a grassland situation; some I have tried are species of Craspedia, Calocephalus, Leptorhynchus, Podolepis and Olearia. I should have some seed to contribute later on.

In another area of my garden I tried a mound and channel garden based on J.Hunt's book "Creating an Australian Garden" and have had great success with Helichrysum bracteatum, which seeded everywhere producing many interesting colour variations. Another good species is Helichrysum leucopsideum - no success yet raising this from seed, only by division - and B.parvula, as well as many other plants.

I should have mentioned Brachyscome curvicarpa - I have several clumps in the grass areas - beautiful yellow heads 2cm across, 29cm high x 70cm wide. The yellow does not fade and I hope they will self seed.

I had only moderate success with Brachyscome tadgellii and Leptorhynchus tenuifolius but some seedlings survived and are growing in the garden, but not yet flowering."

Dolly Stanley (from Auburn, SA.) writes:- "The few B.melanocarpa plants that grew for me are now scattering seeds and I'm thrilled to see that they are self sowing themselves. We had a long dry spell over summer, four rainless months, so things



that don't get watered gave up, and now I'm going round our block pulling out all the dead bushes—Olearia phlogopappa died and some of the O.rudis, but O.decurrens is flowering at present. They get very woody, but I'm always surprised to see new growth coming from the dead-looking branches.

There are no brachyscomes growing in this area because the place has been so thoroughly cleared. The nearest bush to here is down at Halbury (west of us) which is on the plains, we are in the hills, and that hasn't been cleared because they meant to have a large town there. It is a very small place of about a dozen houses, about 25 Km from here. The scrub is mallee type and so far I haven't found any brachyscomes although there are other daisies growing—Olearia decurrens and O.muelleri, Minuria sp., Helipterum corymbiflorum, H.polygalifolium and H.stuartianum and Helichrysum leucopsideum. About 20 Km further on towards the Hummocks at the top of St. Vincent Gulf we found B.lineariloba. Brought some seed home, but they didn't germinate, and when we went back last season we were too late—the seeds had all gone.

I was interested in Corinne's article in our March Newsletter as I have both Olearia pannosa and O.grandiflora growing, but the grubs always seem to eat the seed heads out. O.pannosa was very straggly so I got to work with the snips and now it is a nice rounded bush about 18 inches (45cm) high. They grow naturally on the roadsides on Yorke Peninsula, but they always seem to be very straggling bushes."

**Bob Magnus** (Of Woodbridge, Tas.) writes:- "Yesterday I went with a group (SGAP) to look at a newly discovered (one and a half years ago that is) colony or population of Calocephalus citreus near Sorell on the eastern edge of Hobart. This little daisy had been considered extinct—destroyed by urban development—until found by Jill Hickie doing road verge studies in 1990. (I think she works for the Herbarium in Hobart.) As you might expect, once found it's popped up in lots of places nearby, including a private paddock where it is growing in almost a pure stand of maybe a quarter acre, with spear grass mostly, so it's doing O.K. It's a tough little plant and as it's growing all around the Orielson Lagoon there is speculation that it grows on very saline soils. It is also a very arid area of Hobart and, even in a benign year like this one, it is very dry and hay'd off over there. It seems the Botany Department at University and the SGAP take quite an interest in this little daisy so you may hear more of it from them in due course." (Probably written 1/92.)

9/11/91 "... I'm getting lots of Craspedia globosa this season and I really love them. I yanked out a big clump accidentally so divided it up into about thirty bits. Hope it takes!"

23/11/91 "... Propagating craspedias by division. Yes, it's being done and they are growing and (don't tell anyone) it's dead easy. Actually I think it may be better to break them up every two years as mine are tending to die out a bit in the middle."

**Julie Strudwick** (from near Benalla, Vic.) writes on 25/6/91:- "After a very dry last three months of 1990 we had the driest first five months on record this year and all the animals have been very hungry. The garden has been decimated—what hasn't died from lack of water has been eaten or broken by wallabies jumping about.

It's amazing though—since this month's rain the Helichrysum apiculatum plants are all shooting again, likewise H.semipapposum, H.ramosissimum and H.rutidolepis, even H.leucopsideum (which I was sure was dead as it has never totally dried off before) is shooting again.

The one that has really amazed me was a tube plant of B.aff. curvicarpa (yellow) which I bought at last year's Maroondah Show. I put it in a spot that I intended to keep watered through summer but, because various disasters conspired to make me desperately short of water, I was unable to spare any. I'd actually forgotten about it so was pleasantly surprised to see (about a week ago) that it is shooting up from the bottom. It is in a small rockery pocket, elevated 0.5m and only 20-25cm wide so it must be one tough cooky!"

#### **HELP HELP!!!**

Maureen is beginning to collate information on drying the many species of everlasting daisies we are growing. Could you please advise her of methods you have been using (whether successful or not). Please include the date of picking and the stage of development. (Mrs. M.Schaumann, 88 Albany Drive, Mulgrave, Victoria, 3170.)

SEED LIST:

ADDITIONS

Brachyscome exilis, graminea, latisquamea, lineariloba, nivalis, parvula (Otways),  
radicans, aff. formosa.  
Helichrysum adenophorum, diosmifolium. Hyalosperma cotula.

DELETIONS

Bellida graminea. Brachyscome angustifolia (Tea Gardens), ciliaris var. ciliaris,  
multifida var. multifida (Weethalle, NSW), procumbens.  
Calocephalus citreus. Celmisia asteliifolia. Craspedia glauca.  
Gnephosis leptoclada.  
Helichrysum bracteatum (Condobolin, hybrid pink) - now Bracteantha bracteata.  
H.thyrsoideum.  
Helipterum anthemoides ('Paper Baby', unbranched form from Snowy Mountains),  
diffusum (white), fitzgibbonii, margarethae, pygmaeum, stipitatum.  
Ixiolaena chloroleuca, supina. Olearia ciliata, magniflora.  
Senecio magnificus. Waitzia suaveolens.

All correspondence and requests for seed (**ENCLOSING A LARGE, STAMPED, SELF-ADDRESSED ENVELOPE**) should go to Esma Salkin, 38 Pinewood Drive, Mount Waverley, Victoria, 3149.

Seed is for sale to non-members at 50c per packet plus postage. (Please note postage has increased recently.) Larger amounts of seed can be bought by arrangement. Most seed for sale has been collected from cultivated plants or bought in for the convenience of members. Much of the seed in the Seed Bank has come from gardens and may have crossed with other species. One parent only is guaranteed.

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SEED DONORS:

We are grateful to the following members for seed donations:- Beth Armstrong, Judy Barker, Barbara Buchanan, Bev Courtney, Colin Jones, Bob Magnus, Gloria Thomlinson, Colleen Simpson and Julie Strudwick.

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NEW MEMBERS:

ADSG welcomes the following new members:-

Linda and David Handscombe, 10 Cassell Court, Pomonal, Victoria, 3381.

Dr. Kerry Sharman, Qld. Dept. Primary Industries, Horticultural Centre, Redlands Research Station, P.O. Box 327, Cleveland, Qld., 4163.

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SUBSCRIPTIONS:

Subscriptions are \$5.00 per year for Australian members and \$10.00 per year for overseas members. Cheques should be made payable to the Australian Daisy Study Group and forwarded to the Leader, Esma Salkin (address above) or to the Treasurer, Bev Courtney, 3 Burswood Close, Frankston, Vic. 3199.

**FEEES ARE DUE ON 30th JUNE, 1992. THIS IS YOUR SECOND AND LAST WARNING. A LARGE RED CROSS MEANS YOU WILL BE OVERDUE IF YOU HAVE NOT PAID BEFORE THAT DATE.**

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NEWSLETTER DEADLINE:

The deadline for the NOVEMBER NEWSLETTER is SEPTEMBER 20th. It has been brought forward to suit your Leader and Editor who would both like to take part in the October expedition to the New England Plateau. Many thanks to all those whose contributions help us to get out the three newsletters each year.

Please send articles to Judy Barker, 9 Widford Street, East Hawthorn, Vic, 3123.

