

Dear Members,

29 NOV 1985

There has been very little response to my request in our last Newsletter for all available information on the daisies you are growing.

Apart from alpine species, we know very little about other species growing in frost prone areas. This means that we need help from our country and interstate members, as well as those in the city.

We are keen to hear of your propagation techniques. All details of your methods and experiences are required, together with your germination percentages. Tell us whether your seed is germinated out in the open or under cover with overhead watering or mist.

A list of daisies you are growing in hanging baskets or containers would also be appreciated, together with your comments on their suitability.

Apart from using paper daisies as cut and pressed flowers, dried for posies, baskets and flower arrangements, can you suggest any other uses for them? Have you tried Olearias or other daisies as cut flowers, if so, what are their lasting qualities in a vase?

I would dearly like to see my mail box overflowing in the next two weeks with answers to all these questions, plus many more. I especially want to hear from all those members who are continually using the seed bank and forgetting to send in their results. Even if you only have two daisies growing in the garden, I want to hear how they are growing. The more information we can gather, the better our book will be. I eagerly await your letters.

OUTINGS:

- 10th November - 2 p.m. - Visit to Ngaire & Merv. Turner's home to see their garden and Ngaire's propagation methods. Bush Gems Garden Nursery, Old Emerald Road, Monbulk.
- 17th November - 9.00 a.m. - Laurie Gilmore of Werribee Group will be showing us some local daisy areas. Meet at Werribee P.O. at 9 a.m. sharp.
- 7th December - 9.30 a.m. - Owen McCall's Nursery, 196 km post Great Ocean Road, Apollo Bay. We look forward to spending the day with Owen & Isla, two members we rarely see because of the distance from Melb.
- 8th December - 9.30 a.m. - Garden visit to Paul Barnetts, President of the Otways Group. Paul will meet us at the Memorial Square, Main Street, Colac. Please be on time as we have no hope of finding Paul's hideaway without his help.
- I will be staying at Driftwood Caravan Park, Anglesea, that week-end, Judy will be at Aireys Inlet. Other members may prefer to stay in the area also for that week-end, but would need to make their own arrangements.

ALPINE TRIP - BOGONG HIGH PLAINS - JANUARY 19th - 26th, 1986.

The Study Group will be exploring the Bogong High Plains in January, '86. Unfortunately, we have been unable to acquire a Lodge to accommodate us all. If you would like to join us on this trip, accommodation in the area is as follows:-

Caravan Park at Tawonga - 057 57-2428

Kiewa Valley Accommodation Centre - 057 57-2647

Cont'd next page.

ALPINE TRIP CONT'D:

Kiewa Valley Accommodation Centre - 057 57-2647
 Log Cabins sleep 6 \$120 per week
 Houses sleep 8 \$110-\$150 per week
 Tawonga Holiday Village Motel - 057 57-2622

As a 25% deposit is required on all bookings, it will be necessary for each member to make their own arrangements. However, I would like to know who intends going and where you will be staying, so that contact can be made. The Cooks and the Schaumanns will be staying in a house at 10 Cooper Street, Tawonga.

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SMALL DAISIES FOR POSIES: Maureen

Helipterum venustum - Charming Sunray W.A.

As its common name implies, this daisy is a little charmer. The plants and flowers resulting from my first sowing, some time ago, were very small and disappointing and I believed they had no garden potential at all. However, from a new batch of seed, obtained from Harpers, Judy presented me with several young seedlings to try. When they produced flowers of a reasonable size, up to 2½ cms in diam., I was absolutely delighted. Plant size was also improved too.

H. venustum is a graceful annual to 20 cms high with slender branching stems and narrow linear green leaves 1-2 cms long x 1 mm wide. Even though many flowers have been picked and wired, they are still flowering profusely. Flowers wire easily and have so far kept their bright golden colour.

Aphids savour the succulent stems. These I spray with Pyrethrum or delight in squashing them with my fingers.

Helipterum cotula - Mayweek Sunray All States except Tas.

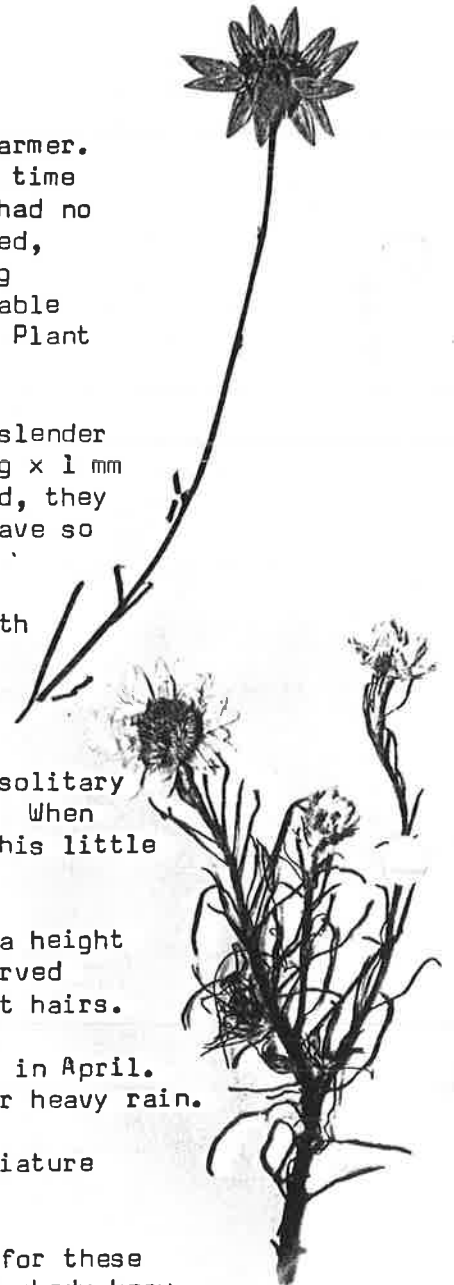
Another attractive dried flower which has pure white solitary flower-heads, 1½-2 cms in diam, with yellow disc centres. When planted in groups, the deep pink buds are a highlight of this little daisy.

The erect branched stems, reddish at the base, reach a height of 20 cms and bear many linear leaves 2 cms long with a curved brown tip. Both stems and leaves are covered in long soft hairs.

As seed is very tiny, sow on top of coarse river sand in April. May take up to 17 days to germinate, generally better after heavy rain.

A fresh white daisy to brighten any small posy or miniature arrangement.

Many Flower Show visitors commented on a further use for these small daisies - they make attractive cake decorations! Anybody know if they are lethal or not?



We had read 'Plants of Western New South Wales' by Cunningham, Mulham, Milthorpe and Leigh, and had been bowled over by the scope of the contents, the clear photographs and the excellence of the text. At the time we were casting about for some means of obtaining seed of species we were anxious to test. Since Bill is an Experimental Officer with C.S.I.R.O. in the Division of Land Resources Management, and lives at Deniliquin, in the middle of daisies, Maureen wrote to ask him if he could provide any seed for us.

Just before Christmas 1983 Maureen rang me in a state of high excitement. She had received a beer carton from Bill, filled to the brim with large bags of seed. Squeaks of joy accompanied each packet fished out. It was the best Christmas present anyone could have sent Maureen.

Also in 1983 I wrote to Bill asking for advice on the best time to make a quick trip round western N.S.W.. Effortlessly he arranged for most species to be out at the time he nominated. It was more difficult to arrange for seed to be available simultaneously, but he did manage this for Helipterum polygalifolium - though much good it did me.

So we would like to record our great appreciation for all the kind deeds he has performed for the Study Group since we first contacted him. He has answered our questions, identified our unknowns, acted as travel agent and given us seed. Long may he prosper!

We have had two seasons of pleasure from this seed now. These are the species Bill sent and a description of their performance:-

Helipterum corymbiflorum

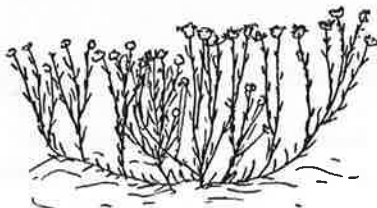
This is a slender, upright annual, 10 - 30 x 10 - 20 cm, with small white heads in clusters. The heads measure 1 - 2 cm in diameter. The silvery foliage is an excellent foil. I love the freshness of this species.

Seed sown in March germinated well in 10 - 20 days, was transplanted after 6 to 9 weeks and planted out after 15 weeks. Plants began to flower in October and continued until early December.

The heads dry well, but tend to droop after a time, and puff the discs. Perhaps a spray of clear lacquer will straighten out their lax habits.

Helipterum jessenii

This dear little, bushy annual is a delight for anyone who loves small plants. It grows 8 - 16 cm tall by 16 - 25 cm across and is covered with tiny brown buds opening to bright yellow heads, 5 - 10 mm in diameter. The bracts and disc are the same colour. Linear green leaves are 3 - 10 mm long, getting smaller up the stem.



It flowers from September to December in Melbourne. The heads dry well, but the bright colour fades slightly.

Seed sown in March and April germinated in 5 - 20 days, was transplanted into 3 cm pots after about 6 weeks and planted in the garden after 11 - 15 weeks. When sown in February '85 it did not germinate for 62 days - obviously (and sensibly) waiting for conditions to suit it. (All my pots are left outside.) Seedlings are very small.

Germination was low in the first year, but improved when the seed was sown on the surface with no cover. Seed is small, yellow and papillose. H. hyalospermum is very similar, but has a transparent margin around the achene.

Helipterum praecox



This is an excellent, easily grown species. Quite stiff, upright stems tipped with bright yellow heads form little tufts, but as the plants develop the stems tend to become less erect.

The leaves are linear, 1.5 - 2 cm long. The leaves give the plant a curious appearance against the light, at least when it is young. They have a transparent, scarious tip which is usually held at an angle to the leaf pointing towards the stem, and measuring 1 mm on the lower leaves. This appendage increases in length as the leaf size decreases up the stem until it reaches the involucre which it seems to surround like bracts. At this stage it is 5.5 mm long and broader.



It has hollow stems which make it easy to wire, but it also dries very well. It's delightful in posies or baskets as it holds its bright colour. Other hollow-stemmed species we have grown are H.cotula, H.venustum and H.chlorocephalum (usually).

The seed is small, orange-brown and germinates well on the surface if sown in March. It takes 4 - 24 days to germinate or longer, 5 - 9 weeks to transplant, 15 weeks to plant out, and it begins to flower after 19 weeks. If kept picked, watered and fed it flowers from early September to November in Melbourne.

There is a bit of confusion about the name. The Herbarium of New South Wales identified it as Helipterum praecox F.Muell., but Dr. Philip Short from the National Herbarium has advised that it belongs to the H.cotula (Benth.) DC. species complex and he thinks the complex requires revision. Since that advice I have grown seed labelled H.cotula from two different sources and found it resulted in plants of two different kinds. One is very similar to the species described above except that the inner bracts open pale yellow and fade to white. The other is much more hairy and compact, and has pink buds and white inner bracts. Jacobs and Pickard (1981) in Plants of New South Wales list H.praecox F.Muell. and in brackets [H.cotula (Benth.) DC. misappl.] Perhaps we should continue to call it H.praecox until the position is clarified. It is a valuable addition to our repertoire whatever its name may be.

Helipterum pygmaeum

I don't think this annual will ever be Nurseryman's Choice. In the garden it grows to about 8 x 20 cm. Without my specs. there is just a faint dusting of white in the foliage, but with glasses the tiny cylindrical brownish buds and white inner bracts can be seen in leafy clusters at the ends of the stems. They must have appeared in September. It is now mid-October and it is still flowering. The leaves are soft, narrow linear, 10 - 20 x 1 mm, and smell pleasantly of something I can't identify. The stems are much branched and its habit reminds me of fine, green, shining seaweed draped on the ground, but some forms seem to have a more erect habit.

The achenes are the most conspicuous things about it. They are silky-hairy with 10 - 20 pappus plumes. Seed would not germinate when first tried, but many little seedlings resulted when the medium had a pinch of dolomite sprinkled on it. There was no germination on the same medium without dolomite, but these two trials were not run simultaneously, so I will try again next autumn to see if I can repeat the result.

Helipterum polygalifolium

This rather handsome seed is proving very difficult to germinate. I have tried



almost everything except hitting it with a hammer. At last I have one seedling which appeared in my usual medium (3:1 - sand : vermiculite) with a pinch of dolomite mixed into it. Until it was about 2 cm tall and had a yellow bud on it I disregarded it - thinking it was H. roseum in the wrong place. So this is the only seedling to germinate out of hundreds sown in various ways. The dolomite probably had nothing to do with it. I'm not discarding any pots, but am putting them at the bottom of the garden. It may be that its dormancy will be broken by the heat of the summer and it will germinate next autumn after heavy rains. I hope so as it is a most handsome yellow flowered, blue-green foliaged annual, 6 - 3 cm high, in the wild. I'm determined to grow it from seed and mass it in the garden.

Other seed Bill sent was of Helpterum moschatum, H. molle, and Brachyscome lineariloba. Their performance will be described in the next Newsletter.

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Following on from Esma's article in the last Newsletter, Esma has now tested the dimorphic seed (both disc and ray fruit) of B. ciliaris var. lanuginosa with the following results:-

GERMINATION RESULTS - BRACHYSCOME CILIARIS VAR. LANUGINOSA - ESMA SALKIN.

Seed collected 27/9/84 - Fowlers Gap roadside
 Seed examined x10 hand lens
 Ray fruit - very black, almost 100% mature
 Disc fruit - % maturity low

Medium: 3 parts sand) thoroughly watered by immersion before sowing
 1 part peat moss)

25 seed sown on top of medium, not covered, out in open covered with gauze.
 4 pots of each type of seed sown

Date sown 10/6/1985

Germination rates:-



	<u>Disc fruit</u>				<u>Ray Fruit</u>		
	At 1/7/85	7/7/85	15/7/85		At 1/7/85	7/7/85	15/7/85
Pot 1	6	6	8	Pot 2	6	12	11
" 3	4	5	6	" 4	0	1	2
" 5	1	1	1	" 6	1	3	4
" 7	3	5	5	" 8	1	1	1
	100 seeds - $\frac{20}{100} = \underline{\underline{20\%}}$				$\frac{18}{100} = \underline{\underline{18\%}}$		

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The following is reprinted by courtesy of the Board of the Botanic Gardens, Adelaide:-

Brachycome xanthocarpa D.A. Cooke, sp. nov.

Etymology. Greek xanthos, yellow; karpos, fruit; referring to the distinctive yellow colour of the achenes.

Annual herb, lacking glands, up to 12 cm high. Stems erect to ascending, up to 4 cm high, sparsely branching, terete, sparsely pubescent, becoming reddish. Basal leaves oblanceolate, attenuate at the base, 3-18 mm long, 1-5 mm wide, entire or pinnatifid with obtuse to subacute lobes, glabrous on the upper surface, pubescent on the lower surface, soon withering. Cauline leaves few, obovate to ovate, amplexicaul at the base, 3-9 mm long, 1-5 mm wide, decreasing in size up the stem, pinnatisect with acute segments or the uppermost leaf entire, pubescent. Peduncles 2-9 per plant, erect, unbranched, 4-8 cm long, leafless, smooth, glabrous, each terminating a leafy branch of the stem. Involucral bracts 9-15, obovate to oblanceolate, 2.3-3.2 mm long, 0.7-1.5 mm wide, membranous, greenish, glabrous; apices obtuse to subacute, minutely erose, often purple. Receptacle hemispherical, 2.0-2.5 mm diam., hardly pitted. Ray florets 15-27; ligules 4-5 mm long, white to lilac. Anthers 0.6-0.7 mm long; connective not produced beyond the loculi. Achenes cuneate, hardly flattened, 1.5-1.7 mm long, c.0.6 mm wide, margins wingless, narrow, smooth, greenish, glabrous; dorsal and ventral faces depressed, covered by large crowded ochre-yellow tubercles 0.1-0.2 mm high, glabrous except for a few minute hairs near the apex. Pappus prominent, 0.3-0.4 mm long, white, of unequal bristles connate at the base.

B. xanthocarpa is known only from two collections from the Hincks Conservation Park, Eyre Peninsula, where it occurs in mallee scrub on sand dunes.

B. xanthocarpa is related to the other species of the genus which lack sterile anther appendages and which were grouped in the informal 'subgenus' *Metabrachycome* by Davis (1948). The achenes most closely resemble those of such species as *B. exilis* Sonder, *B. trachycarpa* F. Muell and the disc achenes of *B. ciliaris* which are cuneate, flattened and wingless with thick marginal ridges. In the vegetative state, *B. xanthocarpa* most closely resembles *B. exilis*, but lacks the glandular hairs characteristic of the latter species.

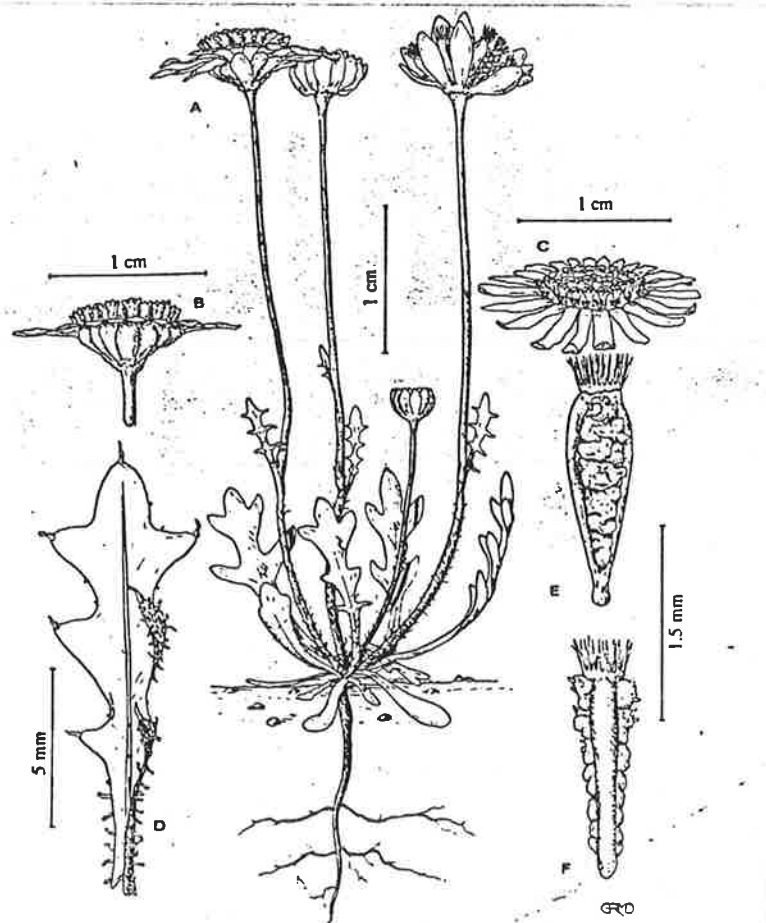


Fig. 1. *Brachycome xanthocarpa*: A, whole plant; B-C, flowering capitulum; D, basal leaf; E, achene, ventral view; F,

RAPT PLANTS - SHIRLEY DIXON

I have spent a lot of time helping in my friend's garden and recently livened up the slowly developing banksia mound with a few *Helipterum manglesii*. Although very delicate, they sprang up quickly after the good August rains and delighted the lady of the household, who is not yet a native plant enthusiast and looks with envy at the neighbours' exotic annual flower-beds.

Caroline, the youngest, is just 4 and the potential gardener of the family. When I visit, she always rushes out and if Cilla (my dog) is in the car, Caroline is soon leading her around on a leash kept in their garage just for this purpose.

Cilla is usually quite accommodating, although naturally like a horse, she jogs more enthusiastically when she's heading in my direction and has been known to leap through the open window of the car when she has had enough of "obedience training!!!"

One morning, I had almost finished my coffee, when Caroline's voice came bursting in. "Mum! Cilla" and some more I couldn't catch, closely followed by Caroline herself, whose serious but unharmed expression I was relieved to see. She is inexperienced with dogs and if she over exerts her authority, there is always the chance of a nip. I breathed easier and gave her my full attention. She repeated her message loud and clear. "Cilla sat on your rapt plants!" It took awhile to sink in ... rap dance, ... rat pants, ... wrapped plants. What was she talking about? Cilla was certainly being reported for some misdemeanour, but what had she done?

Then her mother worked it out. "She's talking about the new flowers out the front. The other day I said to Caroline, gee I'm rapt in those plants". Sure enough, on inspection, we found that a couple of the thin stems had been flattened.

Of course the question remains. Was Cilla sitting there by herself, or did her adopted mistress stray off the path and walk around in the garden too? Was Cilla simply taking a short cut to my car? Having been growled at often for not watching where she walked, Caroline was bursting to alert the adults to the fact that someone lower than her in the hierarchy had done something wrong and she may have just forgotten to mention her own involvement.

Like all pet names this one is bound to stick and although it may say *Helipterum manglesii* in every book on the subject and the common name is daisy, as far as I'm concerned, they have been renamed. They are "Rapt plants" and Caroline will reprimand any thoughtless dogs, or others, who do not treat them with respect.

The mother attended our October meeting in the hope she can learn how to grow more "rapt plants".

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I have just received a letter from Shirley saying that they have been fired with enthusiasm since our visit and talk last week-end. Already they have started a collection of dried specimens, which they intend using in a mini daisy display at the "Dookie Show". While this enthusiasm is still firing within you girls, may we look forward to some seed of the "Dookie Daisy", *Brachyscome gracilis*, in the near future? Thanks for a very happy week-end.

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NEW MEMBER:

I would like to welcome Sharon Howard of 25 Galeka Street, North Coburg to the Group and hope she enjoys being a member.

OLEARIA IODOCHROA - JOY COOK

Every year, in early September, I never fail to be pleasantly surprised by the instantaneous burst of colour from Olearia iodochroa, an insignificant shrub at other times of the year.

The pale mauve or bluish ligulate ray florets present a spectacular display, causing me to look in detail at the other features of this plant.

How strange nature is to have made the upper surface of the spatulate leaves (1 cm long) shiny, whilst the underside is tomentose, (densely matted with cream hairs). The leaves that glisten after rain are sessile, alternating along the slightly pubescent branches, forming a delicate and attractive pattern.

My plant is 1.2 metres high x 1.3 metres wide, growing in a northerly aspect. Although it has grown well under the protection of a large eucalyptus in past years, the removal of the tree this year hasn't intimidated its growth habit.

Olearia iodochroa is found growing naturally in the rocky hills of East Gippsland ascending to the Alps.

It is worthy of cultivation as an understory plant, giving great pleasure to the gardener with its floral display in September.

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SEED DONORS:

Nice to see all that seed still coming in. A special thank you to the following members and others:-

Leila Huebner, Barbara Buchanan, Nell Anderson, Esma Salkin, Pat Shaw, Jeff Irons. Cutting material has been received from Pat Shaw, David Jones and Neil Marriott.

Additions to Seed List:

Brachyscome ciliocarpa?
Celmisia asteliifolia
Helichrysum baxteri
" bracteatum "Hastings Gold"
" " White
Podolepis neglecta

Deletions:

Brachyscome ciliaris var. brachyglossa,
var. lanuginosa
Calocephalus brownii
Helichrysum obcordatum, obtusifolium,
semi-papposum (Mt. Buller & Anglesea)
Helipterum albicans var. buffaloensis,
anthemoides, floribundum.
Humea elegans
Olearia adenophora, tomentosa

SUBSCRIPTIONS: \$3.00 PER YEAR (\$6.00 OVERSEAS)

SOME 1985 SUBSCRIPTIONS ARE STILL OUTSTANDING. A LARGE RED CROSS means you are an unfinancial member and this will be your last Newsletter unless payment is received. Cheques to be made payable to the Brachyscome/Helipterum Study Group.

Receipt is acknowledged of the following subscriptions for 1985:-

Jenny Rejske ('85 & '86)	Owen McCall	Canberra SGAP	Shirley Dixon
Beryl Birch	Lyn Millington	Joy Cook	Irving James
Pine Rivers SGAP	Brenton Isted	Jo Walker	Betty Turk ('85 & '86)
Mary McKay	Jeribee Group	Ngair Turner	Val McConchie
Foothills Group	Margaret Milburn	Sharon Howard	W.A. Wildflower Soc. Inc.

FLOWERING TIME TABLE: Maureen

Over the past eighteen months, I have kept a record of flowering times of all the daisies growing in my garden. I hope this list will assist you when choosing species to add colour to your garden all through the year and help interstate, as well as local members, when planning for future flower shows etc.

Brachyscomes:

angustifolia var. angustifolia	- Late September to April
" var. heterophylla)	- All year
Mt. Drummer form)	
Hawks Nest form)	
basaltica var. gracilis	- Late Sept. to April with odd flowers all year
cardiocarpa	- Late September to April
ciliaris (dark purple form)	- August to October
debilis (annual)	- September to November
decipiens	- October - Nov. (if seed sown in autumn)
diversifolia Urquharts Bluff	- October - December
" Mt. Samaria form	- Sept. - (First year grown. Will
" King Island "	- Late July - report later when
	- October - flowering ceases).
exilis (annual)	- Sept. - Nov. (if seed sown in autumn)
gracilis (annual)	- September - Oct. (if seed sown in autumn)
graminea	- September - April
iberidifolia "Purple Splendour" (annual)	- October - December " " " " "
leptocarpa (annual)	- October - November " " " " "
heterodonta var. a	- August - April
melanocarpa	- October - (First year grown)
microcarpa	- All year
muelleroides (annual)	- October - November
multifida var. multifida	- All year
" var. dilatata dark purple	- All year
" " " white	- August - February
" " " pink	- September - April
" " " Cushion Bush	- September - April
nivalis (small plant only)	- Late August - October
parvula	- All year
sp. Pilliga	- February - October (Odd flowers all year)
readeri (annual)	- Sept. - Oct. (if seed sown in autumn)
rigidula	- Late December - April
segmentosa	- All year
scapigera (small plant only)	- December - January
spathulata	- Late September - February
stolonifera	- Late July - (New plant)
tenuiscarpa var. pubescens?	- Late Sept. - " "

HELIPTERUMS:

albicans var. albicans	- October - December/January
" var. buffaloensis	- Sept. - New plant
" var. incanum	- October - December
anthemoides with wine col. buds	- July - November
anthemoides	- December - February
chlorocephalum (annual)	- Late August - Oct. (if seed sown in autumn)
corymbiflorum	- October - December " " " " "
cotula	- October - November " " " " "
humboldtianum	- September - October " " " " "
jessenii	- October - November " " " " "
manglesii	- Late August - October " " " " "
molle	- Late October - Dec. " " " " "
moschatum	- Late September - Dec/Jan " " " "
praecox	- September - November " " " "
pygmaeum	- October - November " " " "
roseum	- Late August - October " " " "
strictum	- Late September - October " " " "
venustum	- Late September - still flowering

To be continued

WITH THANKS:

We are indebted to Dr. Philip Short of the Melbourne Herbarium for his assistance with identification and other innumerable problems which arise from time to time. Thank you Dr. Short for your help, we greatly appreciate it.

Book Committee:

Many thanks to the hard working Book Committee for the tremendous job they are doing, especially our Editor, Judy Barker and typist, Joy Greig.

S.G.A.P. Shows:

Pat Shaw from Qld. reported that her potted daisy display at their recent Flower Show created a great deal of interest and surprise, especially from Professor Specht, Head of the Botany Department at St. Lucia University.

Lyn and Dot also staged a very successful daisy display at their recent Annual Wildflower Show in Newcastle. Lyn's mother and sister did a fresh and dried arrangement of daisies, which was raffled, raising about \$300 towards their funds.

Stringybark Festival - Foothills Group:

This Show is always a great success, but even more so this year, because they had a display of daisies!! To put it in Ngaire's own words "the Daisies were a hit! Comments about their colour and variety came from the tiniest tots to the grey-haired grannies, with lots of interest shown in our display boards and aims." Judy took along samples and potted specimens for display and helped Ngaire and Val McConchie with setting up. Beryl Birch gave a helping hand on Sunday and Barbara Buchanan kindly returned all our gear safe and sound. In appreciation of our help, Ngaire kindly donated \$10 to the Study Group from her posy sales. Thank you Ngaire for your very kind thought.

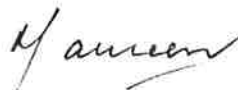
Donations:

I am extremely grateful for the following donations and thank you for your generosity:-

Beryl Birch	\$2.00	Margaret Milburn	\$2.00	Shirley Dixon	\$7.00
Pine Rivers SGAP	2.00	Canberra SGAP	2.00	Ngaire Turner	10.00
Brenton Isted	10.00	Val McConchie	7.00	Mary McKay	7.00
Owen McCall	5.00	Lyn Millington	5.00		

As this will be our last Newsletter for the year, I would like to thank all members for their help and co-operation over the past twelve months. To those who have written articles for the Newsletter, thank you, they have all been excellent. To Judy, who has been my 'out of town speaker' on many occasions and been delighted to go, thank you.

I hope you all have a very happy Christmas and a peaceful New Year.



All correspondence and requests for seed, enclosing stamped self-addressed envelope to Leader:-

Mrs. M. Schaumann
88 Albany Drive,
MULGRAVE. 3170