BRACHYSCOME/HELIPTERUM STUDY GROUP

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NEWSLETTER NO.12

JULY. 1985.

Dear Members,

For some time now the Group has been considering publishing a book on our subject and finally a Committee has been appointed to look into all aspects of this project.

We are thinking of including genera other than Brachyscomes and Helipterums, because we feel that this will have greater public appeal. What do members think about this idea?

As the major obstacle will be cost, the Committee is seeking a variety of ways to finance this publication. Any suggestions?

This will be a Study Group rather than a personal publication and I appeal to all members who can assist, to send in information on any of the following plants they are growing:-

Brachyscomes

aculeata (white)
angustifolia var. angustifolia
angustifolia var. heterophylla
ciliaris & varieties
multifida var. dilatata
multifida var. multifida
parvula
rigidula
spathulata
sp. Pilliga

Helipterums

albicans ssp. albicans, ssp. alpinum, var. albicans, var. buffaloensis, var. incanum. anthemoides (2 varieties) corymbiflorum cotula humboldtianum manglesii molle roseum, splendidum

The following format would be most helpful:-

Name of Plant
Height & Width
Age
Cultivation (Soil type, well drained
or wet, aspect etc.)

Landscaping uses Flowering period Growth habit Other comments

Please help us by letting us know of your experiences and results.

PLEASE NOTE: Book Committee will meet at my home on the last Tuesday of each month at 1 p.m.

MONTHLY MEETINGS FOR MEMBERS:

The first Tuesday of each month has been set aside for members to visit my home from 10 a.m. to 3 p.m. to talk over any problems they may have, or just to have a chat. Bring your own lunch, I will provide tea and coffee.

Please note that we will meet on the <u>second Tuesday</u> in September and November, due to school holidays and Cup Day.

NEW MEMBERS:

I would like to welcome the following new members to the Group and hope all enjoy their association with us. Pat has already established herself as a valuable member by sending us delightful slides, photos and cutting material of many interesting daisies from Queensland.

Pat Shaw of MacGregor, Queensland Beverley Courtney of Frankston, Victoria Bill Owen of Ballarat, Victoria.

DAISIES OF THE NELSON AREA CONT'D. - LEILA HUEBNER

DRAWINGS - KATHY ALCOCK

In my garden, which comprises all and only natives and very informal, I allow many "opportunist" native species to grow amongst my planted specimens. At times, I am rewarded with an unexpected floral display from such intruders as Senecio lautus, which is by far the commonest, as well as \underline{S} . odoratus and \underline{S} . quadridentatus amongst others.

However, I was quite surprised to find that I had a <u>Senecio orarius</u> looking like a smaller flowered version of <u>S. lautus</u>. It is nowhere near as common as the latter, but is welcome to make a claim for "land rights" amongst its more alien native "migrants".



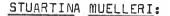
Senecio orarius

LAGENIFERA STIPITATA:

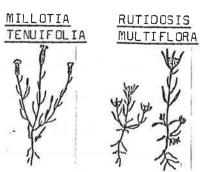
Also in my garden and commonly found throughout the surrounding drier forest floor areas, is the stoloniferous creeping <u>Lagenifera stipitata</u>, with its pert white to pale lilac vertical short stemmed flowers. Again, these sparse ground-cover type little plants are welcome to spread anywhere they please.

CYMBONOTUS PREISSIANUS:

Growing in patches in similar situations to the above, is the Austral Bear's-ear, <u>Cymbonotus preissianus</u>, with its rosette of soft, large, light green leaves and its small, short, but sturdy stemmed bright yellow daisy flowers, that cheerfully flower over a long period.



Another garden intruder and common to disturbed ground in open grassy situations on red earths, is a rather pretty little herb called <u>Stuartina muelleri</u>. It is inclined to be a bit of a weed, in the sense that it can be somewhat invasive, so that I am forced to thin its ranks periodically.



A couple of widespread annual daisies, only an inch or so high, also jostle for room in my garden; they are not in the least eyecatching, but nevertheless somewhat "cute" in their diminutiveness. They are the annuals Millotia tenuifolia and Rutidosis multiflora with longish yellowish flower heads

SOLENOGYNE DOMINII:

Another widespread plant is <u>Solenogyne dominii</u> (syn. S. bellioides) which looks like a larger leaved version of a Lagenifera, though not having any ray floret ligules and few disc (sterile) florets.

COTULA REPTANS:

In the damper areas around the edges of swamps, is found the perennial stoloniferous <u>Cotula reptans</u> with greenish heads containing no ligules.

Cotula reptans

DAISIES OF THE NELSON AREA CONT'D.

From areas where water has receded is found the annual Centioeda minima and growing in damp protected gullies around the Moleside creek, some 15 miles north of Nelson, is an unusual looking daisy, Sigesbeckia grientalis. No horticultural beauty, it is still a very intriguing plant with its 5 ray floret yellow flowers.



Centipeda minima



Siqesbeckia orientalis.

LEPTORHYNCHOS TENUIFOLIUS:

Just behind the sand dunes near the Glenelg estuary, the wiry buttons, <u>Leptorhynchos tenuifolius</u> grows in scattered groups in association with colonies of an also wiry stemmed, squat dense form of <u>Helichrysum apiculatum</u>, which has shortly linear leaves. The somewhat small orange buttons of profuse flowers are quite attractive and well worthy of tucking into a corner of a rockery, or as a border.

Of the two other forms of \underline{H} . apiculatum, one is the larger leaved, grey-felted, coarser corymbose headed, bright yellow dunal form that grows in dense colonies. The other is the grassland form, with soft grey finely felted linear leaves, occurring in scattered colonies, of small upright habit, with very bright orangy-yellow flowers. These maintain their colour well when dried.

Leptorhynchos tenuifolius

IXODIA ACHILLAEDIDES:

One of my favourite daisies in our area is our endemic form of 'Mountain Daisy', <u>Ixodia achillaeoides ssp. alata</u> 'Donovans' form. There are actually two quite separate varieties and they can be found growing within 100 yards of each other; the forest form, <u>Ixodia achillaeoides ssp. alata</u> flowering a good six weeks before the open area variety 'Donovans'. I feel that there are enough singular features of this unique 'Donovans' form to warrant inclusion as a separate subspecies, as despite evidence of some polymorphicity within the variety, it is nevertheless very uniform in features and habit. It is certainly nothing like the Adelaide hills <u>ssp. alata</u>, which contrastingly, has very thick winged stems, at the extremities of which, are small dense corymbose flower heads, with narrow, long and conical receptacled, small petalled, flowers.

Under accidentally created shelter (from a subsequent pine plantation planting) 'Donovans' grows sparser, taller and ranker. It still maintains the numerous branchings and sub-branchings with singular, but closely sequenced flowers, on longish peduncles right along the full length of the branches, with a good size terminal corymb. In the open, it flourishes into a neat, dense pyramidal shaped bush which has thin flexible stems, with hardly any decurrent wing. The leaves are sparse, linear and light green. It flowers around mid to late January, when the whole bush is smothered in small, open, white flowers (occasionally a pale shell pink). These are crisp, round petalled, cup-shaped receptacled and "everlasting". The centre disc florets can be yellow (rarely), lemon (common), mauve or white, but every bush produces its own disc colour different from its neighbour, so that clones can be grown for a desirable trait. These flowers dry beautifully and the shrubs can be cut for flowers for several years without disfiguring the bush.

DAISIES OF THE NELSON AREA CONT'D.

IXODIA ACHILLAEDIDES:

This actually invigorates and stimulates further branching. If left unpruned, they can grow to over 2 m tall, but not as tall as the forest form, where 8-10 year old plants can be up to 4.5 m tall. By this time they have become very sparse and woody, with flower heads much reduced in size. With the younger plants of this forest form, the flower heads contain relatively larger flowers than 'Donovans'. These are in dense umbel or pyramidal shaped corymbs, which the florists love to incorporate into dried flower arrangements.

However, I feel that the 'Donovans' form is a most desirable horticultural specimen and it would serve a dual purpose in that with today's accents on the use of natural products in floral and other crafts, which utilise flowers for decorative effects, one could have an annual supply of dried flowers gathered from ones own garden grown shrub. It is also an ideal fresh cut flower for the vase. 'Donovans' also exhibits strong resistance to frost, unlike the forest form, which suffers severe deformities to the flower heads, when grown in the open.

There is another Ixodia species growing behind the coastal dunes which could be a hybrid between <u>I. achillaeoides ssp. alata</u> and <u>I. arenicola</u>. The latter is found growing along the cliffs at Portland and Carpenter Rocks in South Australia (about 15 miles west of the Victorian border).

IXODIA ARENICOLA:

Bob Bates, who has done a lot of research on Ixodia, gave me my first seed, which I grew under forest conditions. It grew tall and rank to about 1 m, whereas in its exposed cliff-top habitat, it rarely exceeds 30 cm. It still kept its thickened spathulate leaves and rather coarse very large flowers in loose terminal corymbs.

BRACHYSCOMES:

Along the Glenelg river banks on protected grassy shelves, there grows a tall, thin stemmed large flowered perennial Brachyscome, which is possibly Brachyscome diversifolia. Until we find out differently, we call it locally 'Donovans Daisy' (not to be confused with our 'Donovans' Ixodia). I transplanted a couple of young plants into my garden a couple of years ago and they prospered until the invading kangaroos discovered that they were tasty tucker. (Hopefully someone will send us some seed so that this species can be identified correctly - Ed).

There are approximately 10-11 species of Brachyscome in the Grid E area surrounding Nelson, and there are a number I haven't tripped over yet. Both B. leptocarpa and B. goniocarpa (?) can be found on the border in the Donovans bend area. B. graminea can be found in sparse colonies in grassy or heath areas amidst more open forests and B. parvula along the beach road just out of Nelson. Although B. ciliaris is not found as far south as Nelson, I do have a jauntily flourishing young plant which has "appeared" in a pot already occupied by another inhabitant, which is not prospering so well, apparently glum, probably miffed by the intruders audacious "illegal parking".

One could add many more daisies to the list which can be found around Nelson, but I hope that some of the above give a fair representation of those that can be more easily found.

DAISIES AS CUT FLOWERS - NGAIRE & MERV. TURNER.

This summer (1984/85) has been the first time Merv. and I have exported native cut flowers, in reasonable quantities, over a continuous period. Kangaroo Paws (including some of our own selection/hybrids) have been to the forefront. However, you may like to know that several common? daisies have sold well. In other cases, samples have excited considerable interest. We have been exporting to West Coast U.S.A. and not even bushpicked dried W.A. "Daisy" material appears to have penetrated there. Successful items included:-

Helichrysum apiculatum (tall stemmed gold variant) both fresh and dry;
Helichrysum bracteatum (tall, gold flowered annual? form with slightly sticky narrow leaves), fresh;

Helichrysum semi-papposum fresh;

Helipterum roseum, fresh, dry and wired, dry with leaves stripped from stems - especially good 'pinks';

Craspedia globosa, fresh and dry.

All bunches were packed and presented in a cellophane sleeve.

Naturally, we are expanding our plantings of daisies, both quantity and variety and some breeding/selection work is planned.

Our principal buyer is a major grower in southern California of unusual cut flowers. He has visited Australia to see our flora, in which he has a great interest and was very impressed with Helichrysum semi-papposum. His comment, when he received H. semi-papposum and heard it was easy to grow, was "why struggle trying to grow Verticordia nitens as a cut flower". (Max Hewett, Verticordia Study Group Leader, may not like to hear this!)

Our latest efforts are with seed of a beautiful daisy collected by a friend (Margaret Guenzl) near Chetwynd in Western Victoria. We have tentatively identified it as Helichrysum blandowskianum. Does anyone know anything about it? If seed germination fails, it looks like a trip to collect cutting material. Apparently a variable species, this form is a "trimmer", so let's hope we can succeed with it!

(For information on H. blandowskianum refer Leila Huebner's article, March Newsletter, Page 2 - Ed.)

FIELD TRIPS:

On <u>Sunday</u>, <u>27th October</u>, we will be visiting Hilda Crouch's alpine garden (not all natives) at 2113 Geelong Road, Mt. Helen. Hilda, who is a member of our group, will also lead us on an excursion to either Mt. Buninyong, which is only a ten minute drive from her home, or Mt. Beckwith, depending on which mountain has the most daisies.

How to get there:- As you come in towards the centre of Ballarat on the Western Highway, turn left onto the Midland Highway (Geelong Road). Continue down this Highway approx. 7 kms passing Greenhill Road and Gear Avenue where there is a B.C.A.E. sign (Ballarat College of Advanced Education) on the left. Continue around a slight curve and turn left into the service road in front of the tennis courts. This will take you above the main road. Hilda's house is set well back and has blue Agapanthus in front on the bank. We will meet there at 10 a.m.

WERRIBEE - 17th NOVEMBER - 9 a.m.

Laurie Gilmore has offered to be our guide on this day and we will meet him at the Werribee Post Office at 9 a.m.

Laurie assures me that there will be many daisies to see on this outing, but my eyes will be seeking Brachyscome trachycarpa, reported to be growing in this area.

Areas to be visited - Truganini Cemetery, Vic. Rail, Werribee Little

BRACHYSCOME CILIARIS (Labill.) Less. - ESMA SALKIN

This is a widespread Brachyscome found in all States, but rare in Tasmania and confined to the east coast. In the Revision of Brachyscomes, Gwenda Davis lists four varieties, B. ciliaris var. ciliaris, var. lanuqinosa, var. lyrifolia and var. subintegrifolia. Dr. J.H. Willis lists an additional variety, var. brachyolossa, a variety found in the Murray lands of South Australia and similar situations in Victoria, such as the Little Desert and Wyperfeld National Park. Var. brachyolossa is identified by its very short rays of 2 mm. (See Brachyscome/Helipterum Newsletter No.8, page 10 for propagating details).

Botanical Description (Adapted from Davis)

B. ciliaris is a much branched ascending perennial, shortly glandular, pubescent or covered with white woolly hairs of varying density. Leaves up to 6 cm long, linear to lyrate, entire, pinnatisect or lyrate. Lobes when present, acute to pungent, narrow to broadlinear, rarely with lateral teeth. Ray florets white to purple, 2.5-7 mm x 0.5-1 mm. Fruit dimorphic. Ray fruit 1.3-1.8 mm x 0.4-0.7 mm dark brown to black, tuberculate on each face, margins smooth. Disc fruit larger with a wing, 1.5-2.5 mm x 0.8-1.5 mm, the body flattened, elliptical, brown to black, glabrous or with a few glandular hairs. The wing white or straw-coloured, entire or irregularly or shallowly lobed. Pappus on ray fruit minute, but conspicuous on disc fruit.

Key to varieties:

1. Leaves pinnatisect or pinnatifid

2. Stems with woolly hairs

2. * No indumentum

3. Leaves usually pinnatisect with linear segments . var. ciliaris

3. Rays consistently short, 2 mm

3. * Leaves lyrate

4. * Leaves mostly entire

2. * Var. lanuqinosa

3. * Var. ciliaris

4. * Leaves mostly entire

4. * Leaves mostly entire

5. * Var. subinteqrifolia

In the northern flinders Ranges and in western and north-western N.S.W. last spring, we observed three varieties of <u>B</u>. <u>ciliaris</u>, namely <u>var</u>. <u>ciliaris</u>, <u>var</u>. <u>lanuqinosa</u> and <u>var</u>. <u>lyrifolia</u>. <u>Var</u>. <u>lyrifolia</u> is most specific in its habitat requirements. We saw this variety growing in moistened crevices on the southern face of Mt. Chambers and among rock crevices along Chambers Creek. This variety is easily recognised by the lyrate leaves.

Apical leaves become more pinnatisect.

6 along var lyrifolia

We also searched for this variety at the other location quoted in Davis, Mt. Lyndhurst. The specimen examined had been collected in 1898.
Mt. Lyndhurst (350 m) is an apology for a mountain, being a mere low prominence of residual rock of extruded quartz and slate. Northwards lay the vast inland plain, a grand flat landscape. Visiting Mt. Lyndhurst today, one is incredulous, that var. lyrifolia was ever able to gain a foothold on this dry exposed hillock. A thorough search of all possible niches in the vicinity of the summit, revealed one plant of Isotoma petreae, 2 spp. Cheilanthes and a healthy infestation of oxalis. As the summit area is accessible to grazing stock and pests, the summit area is devoid of trees and shrubs except for a few hardy Acacias, Eremophila freelandii, Prostanthera striatiflora, saltbush, a few spp. of ephemerals and some grasses. One can surmise that European occupation has altered the critical environment that sustained var. lyrifolia in this northernmost niche. It is oxalis perhaps, that now occupies the niche in rock crevices lost to var. lyrifolia.

BRACHYSCOME CILIARIS CONT'D.

We saw Mt. Lyndhurst in a good year with slopes well covered with native grasses and <u>B. lineariloba</u>, an annual forb, whose basal cluster of leaves hug the soil. White flowers radiate from this basal clump. Flowering is brief and the distinctive capitulum, the hard cap of densely packed achenes covered with white tufted hairs, gives this daisy its common name, "Hard-headed Daisy".

8. ciliaris var. ciliaris is more widespread than var. lyrifolia. but is not common in this arid zone. This variety appears to prefer shady positions where moisture is conserved, e.g., in shade in a pine forest or in or near creek beds. The pinnatisect leaves of some plants have a superficial resemblance to var. lyrifolia and the plants we found at Malloga Gorge and at Chambers Creek had leaves with broad lobing and white flowers.

Var. lanuqinosa is by far the most widespread of the B. ciliaris Typical leaf for varieties. This Brachyscome and B. heterodonta were the most common Brachyscomes seen. The main characteristic of this variety is the white hairs on the stem, which gives the plant a glaucous appearance in contrast to var. ciliaris and var. lyrifolia, which are dark green. The indumentum on the stems seems to relate to aridity and would appear to be a survival mechanism in an arid environment, but note that Davis states, that the presence of indumentum cannot be related to climate or altitude, but could be related to ecological factors. Flowers are predominantly mauve, occasionally almost Ray width is often very fine. Seed production is prolific, a characteristic not shared by var. lyrifolia or var.ciliaris. Var. lanuqinosa is a useful coloniser and this habit was observed on the roadside north-east of Blinman, where the roadside verge, formerly graded, was thick with this Brachyscome growing in regimented rows for $\frac{1}{2}$ km. The plants were closely cropped so obviously grazed as well. Var. lanuqinosa should prove to be a valuable garden plant.

Seed of <u>B. ciliaris var. ciliaris</u> supplied by the Seed Bank germinated easily in the open on a mixture of sand and peat moss (1:3). The plants have been flowering freely in numerous spots in my garden for over three months, a Brachyscome well worth growing.

References:- Davis Gwenda L., "Revision of the Genus Brachycome Cass", Part 1, Proc. Linn, Soc. N.S.W. 73, 1948

Willis, J.H., A Handbook to Plants in Victoria, Vol.11, M.U.P., (1972)

ROOT APHIDS:

At long last I am able to report that the root aphids are finally disappearing from my potted plants - thanks to "Kilval". I am now in the throes of controlling the ants.

Reports from members using other methods are:-

"Folimat" has not been successful, also causes damage to foliage. Gwenda Macdonald is soaking her pots in Pyrethrum with some success.

John Philp is using a product called "Dysiston", obtainable from local Nurseries at about \$4 a tin. This can be sprinkled around plants and watered in. I think I would prefer this method to spraying, but believe it is still dangerous to pets and humans. John's most affected pots were those which needed weeding and contained rye grass and dandelions.

Glyn Sago's advice is to grow Mentha as a companion plant to combat the ants. Some will then say "how do we control Mentha"?

The following article, together with botanical illustration, has been reproduced with the kind permission of Miss Mary White, Geelong Naturalist and the Royal Society of Victoria:-

A PLANT THOUGHT TO BE EXTINCT IS FOUND IN A HEALTHY STATE: REDISCOVERY OF LEPTORHYNCHOS GATESII - MARY D. WHITE

On 15th June, 1984, some of us set out to walk the tracks behind Eastern View. After climbing uphill for some time, I suddenly noticed a small plant with yellow flowers in the centre of the old track. It appeared to be a Leptorhynchos, but not a species I had seen in the area.

In the recent book Extinct and Endangered Plants of Australia, I had read of L. gatesii once found near Lorne and now thought to be extinct. First recorded in 1921, described in 1922, L. <u>qatesii</u>, or Wrinkled Buttons, is a plant about 20 cm in height, with wrinkled involucral bracts with bronzy ciliate tips. The wavy leaves are bright green above and cottony white on the underside.

After checking local species again, I sent specimens to the Melbourne Herbarium and to La Trobe University, which is working on rare and endangered species. The plant was identified as Leptorhynchos gatesii and La Trobe sent a botanist, Mr. Steve Platt, to visit the area with us to study the plant, ascertain the extent of its occurrence and recommend any action necessary to save the species.

Involucral bracts: Bracts forming a whorl or several whorls, surrounding an inflorescence, a flower, or a cone. Ciliate: Fringed with hairs

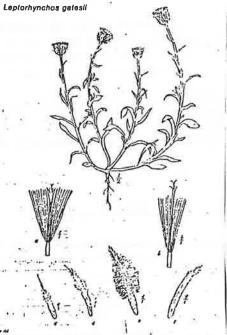
Since this article appeared, many reports have come in from various sources. It now appears that it can be found growing on many of the ridges around Lorne, especially on the roadsides where, apparently, the light and lack of competition favour its survival.

After the first sighting on Coalmine Creek Track. Eastern View, more were found along Mogg's Creek Track, Clark's Spur Track. We walked the Gentle Annie Track from Mogg's creek and found a patch up towards the end of the track. Later reports came in from Seaview Road and from Four Wheel Drive Track running south from it.

Mrs. Bell, one of Angair's members from Lorne, Mrs. Bell, one of Angair's members from Lorne, Botanical Illustration by H.B. Williamson, accompanying his original found many patches on the old tracks leading off from Series 35(1922)24-6), Reproduced by parmission of the Royal Society of Victoria.

Lorne-Dean's Marsh Road at the Five Mile. It was of Victoria. Lorne-Dean's Marsh Road at the Five Mile. It was also reported in the Geelong Naturalist by L. Conole, that he saw it in December whilst walking from Sheoaks Picnic Area to Phantom Falls, via Henderson Falls and the Canyon. He states "the plant was abundant on bare, hard ground in Eucalyptus globulus tall open-forest, burnt about two years previously".

Photograph by Trevor Pescot



(Extract from Angair Inc. Newsletter, May - Miss Mary D. White)

As I am always advocating autumn sowing for annuals, I was very pleased to hear of Ngaire Turner's successful sowing in spring in Victoria.

SOWING ANNUALS IN SPRING - NGAIRE TURNER.

All seed sowing was done in late September, 1984. The mix used was equal parts of vermiculite, perlite, coarse sand and peat moss, into 8 cm square pots, pressed in, not covered and grown in a polythene tunnel house. Water was supplied by light sprinkling from a hose, done often enough to keep the mix moist.

As I had only weekends to monitor progress in detail, results were either very positive or totally negative within seven days of sowing, most others were making-a show by the next count.

The seedling plants were grown on in tubes, again in a soiless mix, but with fertilizer added (details below). They continued on in a tunnel house until established and then seemed to enjoy life on the north verandah of the house. Their next move was into the garden in massed plantings.

A mulch of pine needles proved very successful in reducing unwanted weeds, while complimenting the daisies in flower.

BUT! while the daisies were in tubes on the verandah, the snails and slugs left the garden areas and concentrated on the new menu of delicacies I had provided. Baysol got the snails, but the slugs were decidedly sneaky and lurked unseen. However, a sprayed barrier of Mesurol (plus Baysol pellets) put the game back in my court. Losses here were generally the daisies I'd had fewest plants of - little slimy beasts, those slugs!

Whitefly was a nuisance too. Pyrethrum spray had some control, but my trigger finger gave up, so I decided to ignore the lot of them. They had a lovely summer. The leaves of my plants got a bit speckled. I wired the heads.

It was fascinating as a beginner to wire flowers, experimenting to find the best times to harvest. The spare bedroom had a distinct smell of vegetation, so quantities of roseums were hung outside, upside down, under the verandah overhang. Two weeks later they were dry. The colour has been maintained, and the quality is good. They will be stored inside, I am not sure how.

The daisy bed is still yielding fresh roseums (H. roseum), Helichrysum cassinianum and bracteatum, with seed gathering from Helichrysum subulifolium and Helipterum moschatum still going on. Just yesterday, I picked and wired my first Helichrysum leucopsideum from a lone survivor.

Details of mix used in tubing up:~

A pinebark soiless mix with 8 parts 3/8" minus Pinebark, 3 parts coarse sand, 1 part ligna peat or peat.

Add grams/litre 2 g IBDU Add kg/cubic metre 2 kg. IBDU .5 " .5 g Osmocote Osmocote .5 " .5 g Potassium sulphate Pot. sulphate 2 g Dolomite lime 2 " Dolomite l g Micromax 1 " Micromax .5 q GU49 GU49

I hate to tell you this, but root aphids have shown up in my roseum bed. Dr. Jim Willis suggested Gammecare as a possible control. We are seeking help from Knoxfield just in case there is a safer and simpler solution, but Merv. noticed root aphids here on grass roots 5 years ago, so the problem may always be in the garden with us. However, we can take control of tube stock by using sterilised media that does not contain soil - so I'm told!

GERMINATION RESULTS from AUTUMN SOWING, 1985.

Judy Barker.

Briefly, a few conclusions have been drawn from our results over this last autumn season:-

1. Sowing Position.

Some seed (small seed and Helipterum species) germinated faster and better when sown on the surface of the medium and wet with a fine water spray. They were neither buried nor covered with even the finest layer of sand. For example, the percentage germination of H.albicans (Rokewood) increased from 56% (buried) to 72% (surface). The surface sown seeds also germinated faster and were potted on in half the time taken by the buried seed. It's also much more fun to see what's going on. John Colwill of Harper's Seeds tells us (pers. comm.) that he sows very fine seeds such as Helipterum cotula and Waitzia citrina on the surface. It will be interesting to test Helichrysum species and larger seed from areas where you might expect litter cover. At least Helichrysum lindleyi germinates better on the surface, from 12% (buried) to 46% (surface).

2. Sowing Time.

Best germination results from original stock were obtained from sowing in April and May. Seed from seedsmen germinated well as early as February, e.g. $\underline{\text{H.roseum}}$ and $\underline{\text{H.manglesii}}$. John Colwill also confirms this observation. He says that after selection for three to four years he can manipulate germination time to his desire. Selection also improves the germination rate from 10% for original stock to 90% after selection.

3. Celmisia asteliifolia.

Jeff Irons (our U.K. member) suggested to Maureen that seed of this species needs to be sown as soon as possible after collection. This is confirmed by Elliot and Jones in "Encyclopaedia of Australian Plants", Vol. 3, and Ken Gillanders in "Know Your Rock Garden Plants and Dwarf Bulbs". My results show 32% germination when sown 27 days after collection, and 4% when sown after 39 days and none thereafter.

NOTES FROM MEMBERS:

Helipterum albicans ssp. alpinum:

Jeff Irons would like to know if this particular species is self-infertile? His one bought plant of "alpinum" has never produced fertile seed. He propagates it vegetatively, but Kew Gardens flower it an an annual.

Seed collected in the home garden of the other Helipterum albicans' varieties has germinated well, so it may be a case of having more than one plant, grown from seed. to enable cross fertilisation to take place.

SNAIL & SLUG CONTROL:

Ian Smart would like suggestions from members on their methods of controlling snails and slugs without resorting to snail pellets. Being an avid user of Baysol blue pellets myself, I could only suggest surrounding the plants with buzzer chips, which are supposed to deter these beasties.

Ian has also reported on his attempt at cuttings of the annual, Brachyscome iberidifolia, which he originally grew from seed. All struck easily, but were poor to grow on. So far other members' results have been the same with cuttings of Annuals. Anybody else tried lately?

NOTES FROM MEMBERS CONT'O.

In Ian's polyhouse with intermittent mist, he has rooted cuttings of B. multifida within two weeks, Helichrysum bracteatum and baxteri within 3 weeks.

Just recently, I too, have had the joy of rooted cuttings in two to three weeks. My local S.G.A.P. Group (Waverley) purchased a Propagating Unit for members to encourage them to grow more plants for our two plant sales which are held each year.

On inauguration day only six members turned up. I appeared to be the only enthusiastic one, arriving with a plastic bag filled to the brim with cutting material. More modest members brought only a few. Imagine my surprise, $2\frac{1}{2}$ weeks later, when I was presented with a batch of cuttings, all well rooted, containing 8. segmentosa, rigidula, Olearia adenophora, ramulosa, Ixodia achillaeoides just to name a few.

Even though my Birthday is six months off, I am casually mentioning to "him indoors" that one of these great inventions wouldn't go amiss in our back yard. So far there has been no comment, nevertheless, I do like surprises.

FINANCIAL STATEMENT TO 30th June, 1985.

Cash Receipts 1/7/84 - 30/6/85		Cash Payments	
Cash at Bank 1/7/84	120.58	Postage	173.71
C_{ash} in hand $1/7/84$	18.00	Petty Cash	18.00
Subscriptions '	178.00	Seed	290.00
Donations	153.90	Travelling expenses	22.00
Cutting Material, Newslette	rs 44.30	Stationery, Misc. items	108.28
Interest	1.32	F.I.D.	1.68
Refund Nindethana Seed	20.50		613.67
Seed sales	666.50	Cash at Bank	589.43
	\$1203.10	\$	1203.10
		-	

Your attention is drawn to the fact that subscriptions barely cover postage costs. It is only our income from seed sales and donations that allow the Group to operate.

JOY COOK (TREASURER)

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

1985 SUBSCRIFTIONS ARE NOW DUE. Cheques should be made payable to Brachyscome/ Helipterum Study Group and forwarded to Leader.

Receipt is acknowledged of the following subscriptions for 1985:-

Tom Stitt Bill Owen Pat Shaw Judy Barker
Barbara Buchanan Ian Smart Maroondah Group John Colwill
Plant Sciences Library Allan Foster Joy Greig Bev. Courtney
Maureen Schaumann

: SNOITANOC

Thank you all for that "little extra" sent with your subscriptions. It will be most helpful in building up our 'Book Publication Fund'.

Allan Foster \$7.00
Maroondah Group 2.00
Pat Shaw 1.90 plus a lovely selection of slides and photos of Queensland daisies. The unknown daisies are always much more appreciated. Thank you Pat.

Beryl Birch Delightful slides of our Mt. Kosciusko trip. Thank you Frank for taking them.

SEED & PLANT DONORS:

Since our last Newsletter lots of interesting seed has been received from many areas, even as far away as England. I thank you all for your help and assistance in providing a comprehensive selection for our Seed Bank. Others have been very kind in donating plants, rooted cuttings, cutting material Your generosity is greatly appreciated. from interstate and pots.

Pat Shaw, Louise Gilfedder, Carl Rayner, Jeff Irons, Margaret Milburn, Beti Armstrong, Judy Barker, Bob Mylius, Inez Armitage, Paul Barnett, Esma Salkin, Ian Smart, Betty Turk, Lorraine Marshall, Gwenda Macdonald, Allan Foster, Dorothy Woolcock, Peter Vaughan, Ngaire Turner, Jenny Rejske, David Jones, Dot Brown, Bill Owen, Stephanie Rennick.

ADDITIONS TO SEED LIST:

ciliaris, ciliaris var. lanuginosa, diversifolia Brachyscome

(King Island, Urquharts Bluff, Portland, Mt. Samaria), *exilis, *heterodonta var. heterodonta, * iberidifo' `,

* melanocarpa, nivalis, * readeri, segmentosa,

spathulata. (* Denotes annual)

citreus Calocephalus

Calotis scabiosifolia, scapigera

acuminatum, ambiguim (Syn. Leptorhynchos ambiguous) Helichrysum

backhousii, bracteatum "Dargan Hill", collinum,

ledifolium, lindleyii.

Humea elegans

Leptorhynchos sp. Port Douglas, tenuifolius

integerrima (White & Mauve), sp. Minuria

- stuartii Myriocephalus

algida, argophylla, pinifolia Olearia

Podolepis jaceoides

Rutidosis leucantha, sp. Qld.

gregorii, pectinatus var. ochroleuca (white) Senecio

Vittadenia bicolor

acuminata, aurea, citrinia Waitzia

DELETIONS:

Helichrysum baxteri

Waitzia suaveolens

Maureen

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

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