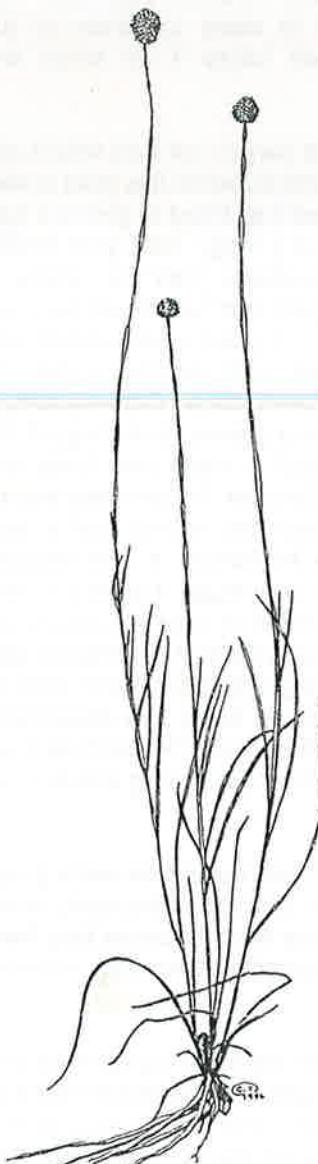


# ASSOCIATION OF SOCIETIES FOR GROWING AUSTRALIAN PLANTS

## THE AUSTRALIAN DAISY STUDY GROUP NEWSLETTER NO. 52



*Calocephalus citreus* x 56%

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## SPECIES OR FORMS NEW TO MEMBERS

### **OLEARIA RUDIS**

by Maree Goods

(On p. 49 Maree Goods from Horsham (Vic) has mentioned a form of *Olearia rufis* she is growing which she thought could be a hybrid. In September she delivered a handsome specimen for ADSG members to examine. We are still not sure of its identity, although we are inclined to think it may be a form at one end of the range of the true species. This is an account of its history.)



Dried specimen x 1/2

*Olearia rufis* — form or hybrid

shape. This year it has grown to about 0.75 x 1m, and is flowering profusely. After flowering finishes I can see it will need a severe pruning again as it is just starting to get a bit leggy. With all the tipping and pruning it made a rounded shrub this year.

I have found it strikes fairly easily, and I have two other plants in the garden. These two plants were grown from cuttings taken in April 1996. They have not received any special care at all, and are doing quite nicely but will probably need pruning after this flowering season. They are certainly more erect because they have been allowed to do their own thing. One of the plants would have received regular supplementary watering over summer, while the other was only watered about three times.

The plants in the garden are growing in 20–30cm of sand over red clay — both mediums being neutral to very slightly acidic. Both plants have survived two long dry summers. The maximum average temperature for 96/97 summer (Dec–Feb) was 33°C, for instance, the average maximum temperature for Feb 97 was 35.5°C (that's hot!) with several days well over 40°. The average maximum temperature for the 97/98 summer was 30°C with three days reaching 43°. For 1997 our total rainfall was 290mm, and so far this year we have received 200mm. Last year we experienced 85 frosts and for this year 48. The plants were not affected by any of the frosts though they would have had protection from other shrubs. My original plant is now three years old and the two in the garden are over two years old. I have read they are only short-lived but I guess time will tell. From my experience this plant is quite spectacular when in flower, is frost hardy, and is very suitable for low rainfall areas. One plant is in a garden bed which is open to our westerly winds and gets quite a battering at times but it has withstood the elements very well.

The statistics I have used on temperature and frosts have come from official records for the Bureau of Meteorology. These were recorded at Longerenong College — a campus of the University of Melbourne — which is not far from where we live. Rainfall figures are from our own records.

I am still working on the origin of the *Olearia rufis*. I purchased it from David Shiells at the 1995 Maroondah SGAP Spring Plant Sale at Ringwood. He thinks he may have got it from Norma Boschen's garden many years ago. Norma thinks she got it from a garden in South Australia. The owner of that garden is away overseas at the moment but Norma will follow it up when she returns.

I planted it in an old half barrel (not sure why?) and it has thrived. It grew and flowered like mad twelve months after I purchased it so I had to give it a light prune to stop it from going leggy. Last year (1997) we went to Western Australia from the middle of July to middle of August and when we returned home all the buds on the plant were riddled with aphids. I sprayed them with pyrethrum but the damage had already been done. Consequently I pruned off all the affected pieces (including all the buds). To my amazement it made new buds and flowered profusely in October. I kept trimming off the dead heads (sounds like roses) and it kept making new buds. By November it had stopped flowering but had gone very leggy. I gave it a hard prune (or hack — I am not sure what you would call it), at least back to about a third of its original size. Throughout the following months I have tried to continue the tip pruning to keep it a reasonable

**Addendum:** The specimen Maree sent appeared very different from other specimens of *O. rудis* that ADSG members had seen. The stems and leaves were not obviously rough but quite long septate hairs could be seen on the surfaces and leaf margins under the microscope. Many of the leaves seemed to have entire margins. The sharp eyes of John Armstrong (one of the botanical artists this Group is fortunate to have in its membership) discerned small teeth in many of the leaves, particularly at the apices, and we could all see them under magnification of x 25. The heads are mauve-blue, 3–4cm across, held in small clusters at the tips of flower stems 4–7cm long. The fruits, though immature, are cylindrical, narrow, striated, and have a tuft of 30–40 bristles. ... Judy.

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## **CHRYSOCEPHALUM SEMICALVUM SUBSP. SEMICALVUM REVISITED**

by Esma Salkin

A taxon from Blackheath Blue Mountains (NSW) was included under *Chrysocephalum semicalvum* subsp. *semicalvum* (see Chart, NL 50, pp. 8–9). It was re-examined and placed under *Helichrysum rutidolepis* based on key characters; shape and hairs on involucral bracts, habit and aroma of leaves. A report in Salkin, E., NL 26, pp. 5–8 notes variation in the *Helichrysum scorpioides*/*Helichrysum rutidolepis* complex. *H. rutidolepis* (Blackheath form) is unique among ADSG herbarium collections with its dark green broad-oblong leaves, lush habit and large flower-heads.

A few years ago Jeff Irons donated seed of *H. scorpioides* to the Provenance Seed Bank. The seed was collected at Blackheath. On examining the seed before filing, there appeared to be very few mature (plump) seed among a mass of immature or infertile seed, so the whole of the donation was sown. To my embarrassment numerous seedlings appeared, the 'immature' seed being sufficiently mature to germinate. The mature plants did not resemble *H. scorpioides*, plants were not 'tap-rooted', and when the flowerhead was fully opened the florets obscured the laminae of the involucral bracts, giving the flowerhead a 'button-type' appearance. ADSG had some difficulty with identification and eventually placed it under *C. semicalvum* subsp. *semicalvum*.

On reflection this taxon appeared to be beyond its range although perhaps it had found an arid rocky niche on cliffs at Blackheath. Nor did the lush green leaves of my plants equate with an arid area species. The Blackheath taxon was strongly aromatic, a rather pleasant aroma, whereas *C. semicalvum* subsp. *semicalvum* has a very unpleasant aroma.

It was the aroma of the Blackheath taxon that suggested I look again at this plant. Observations were made on fresh material from plants in pots and compared with herbarium specimens of *C. semicalvum* subsp. *semicalvum* (ADSG Herbarium). I also consulted an earlier study on the *Helichrysum scorpioides*/*H. rutidolepis* complex (NL 26, pp. 5–8). The type of hairs on leaves was the key character considered, as well as size of head, habit of plant, time of flowering, and the influence of altitude. All flowerheads from collections made in Tasmania and Victoria (coastal to alpine) and alpine collections in NSW had a row of female florets surrounding bisexual florets.

In coming to terms with the identification of the Blackheath taxon I sought the advice of Mr Keith Ingram and associates at Mt Tomah Botanic Gardens and Mr Neville Walsh, National Herbarium of Victoria. The Mt Tomah Botanic Gardens suggested the taxon was *H. rutidolepis* if suckering, and *H. scorpioides* if tap-rooted but with a proviso that 'Some plants with smaller heads and outer female florets, lacking a pappus, have been identified as *H. rutidolepis*. However, the vegetative appearance and opaque tipped intermediate bracts suggest they are closer to *H. scorpioides* (Harden, G., *Flora of New South Wales*, Vol. 3, p. 232).' Mr Neville Walsh identified the specimen as *H. rutidolepis*, but stressed that the *H. scorpioides*/*H. rutidolepis* complex awaits revision with the possible inclusion of additional genera (pers. comm.).

### ***Helichrysum rutidolepis* (Blackheath taxon)**

A compact suckering dark green leafy plant to 40cm, which becomes more open as unbranched flowering stems elongate to 40cm. **Leaves** are sessile, about 3.5cm long and 7–10mm wide, oblong with an apiculate tip, undulate, slightly revolute, and becoming smaller below the flowerhead. The base of the leaf broadens into 2 small lobes and is stem-clasping. The upper surfaces are well covered with septate hairs, masking a few short glandular hairs; the lower surfaces have woolly hairs intermingled with a few short glandular hairs. The yellow **flowerhead** is to 1.5cm in diameter and, when fully open, it obscures the rows of involucral bracts. The outer row of florets is female. Involucral bracts are light brown to straw-coloured, the inner bracts the longest, the laminae crinkled to about half the length, and the claw is enveloped in wool. Inner bracts can be stramineous and narrow. (See sketch below.)

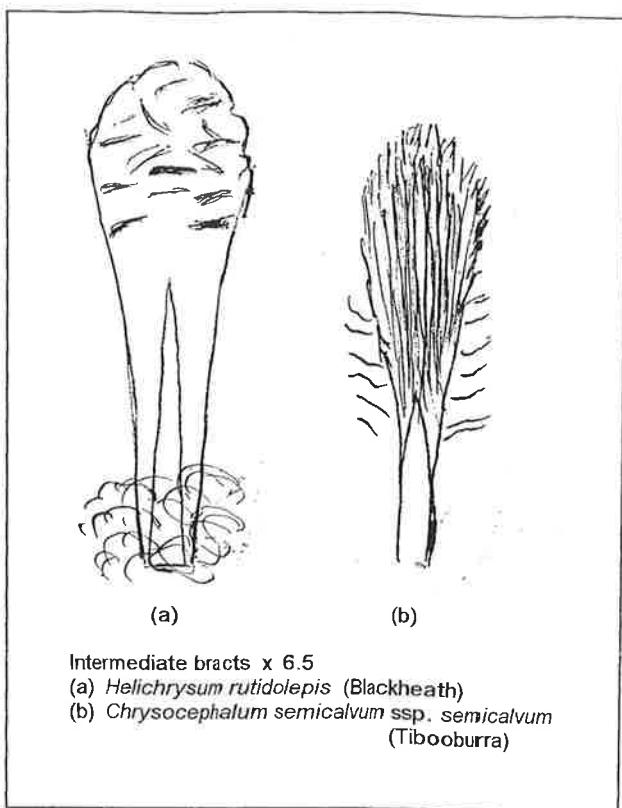
### *Chrysocephalum semicalvum* subsp. *semicalvum*

A malodorous sprawling to compact woody plant to about 30cm. Suckering habit. Leaves are sessile, lanceolate, undulate and revolute, to about 1.5cm x 2mm. Upper leaves are narrower, about 1mm wide. The upper surfaces are covered with short glandular and woolly hairs; the lower surfaces are more sparsely covered. The yellow flowerhead is terminal, about 1cm in diameter, and on branching stems. Involucral bracts are scarious, laciniate (torn), and edged with stiff bristles to 2/3 its length. (See sketch, also chart, NL 50, pp. 8-9.)

#### Propagation and cultivation:

*H. rutidolepis* (Blackheath) germinates easily but garden cultivation has been disappointing. Two plants in a south-westerly aspect failed to survive the summer of 1997-8.

*C. semicalvum* subsp. *semicalvum* (Tibooburra) was grown from root cuttings and planted out in a north-westerly aspect. It suckered so vigorously that it had to be painstakingly removed. Seed from collections in Northern Australia, South Australia and Western Australia have failed to germinate for this member.



Intermediate bracts x 6.5

(a) *Helichrysum rutidolepis* (Blackheath)  
(b) *Chrysocephalum semicalvum* ssp. *semicalvum*  
(Tibooburra)

### *Helichrysum scorpioides/Helichrysum rutidolepis* complex (NL 26, pp. 5-8).

Collections were divided into groups: typical *H. scorpioides*, typical *H. rutidolepis*, and a large intermediate group under *H. scorpioides* (elsewhere in other texts included under *H. rutidolepis*). Subsequently I have referred to this group as 'HRS' (*H. rutidolepis/H. scorpioides*).

*H. scorpioides* (Coastal, dry sclerophyll forests [collections from Victoria and Tasmania]). Non-branching flowering stems arise from tap-rooted clusters of leaves. Leaves are scabrous, pubescent, the upper surfaces covered with septate glandular hairs visible without magnification, lower surfaces bear loosely woolly hairs. Yellow flowerheads, 2-3cm diameter, appear in spring. The outer row of florets is female. Involucral bracts are straw-coloured to brown, laminae crinkled and brown. Rhizomatous.

#### *H. rutidolepis* (Alpine and lowland grasslands)

Sprawling low suckering plant. Leaves 'flaccid', thin, green above and white below, predominantly glabrous, densely cobwebby below. Small terminal flowerheads, c. 1.5cm, on branching stems in summer. Outer row of female florets.

#### Intermediate or Indeterminate Group (Sub-alpine to alpine)

Low suckering plants, 0.5-1m across. Leaves narrow-lanceolate, grey-green to silvery grey. Feel 'thick'. Upper surfaces woolly-cobwebby with septate hairs; lower surfaces similar. Small flowerheads pale lemon to orange in summer. High altitude plants have broader leaves, covered with a very thick woolly indumentum.

#### Propagation and cultivation:

*H. scorpioides*. Seed germinates easily and remains viable for a number of years if stored in a foil packet at 4°C.

*H. rutidolepis*. Limited experience with seed but propagates easily from suckers. Cut back after flowering. Plants regenerate in winter/spring.

#### *H. scorpioides/H. rutidolepis* — Intermediate Group.

Seed germinates easily. Propagate from suckers. Cut back after flowering. Regenerates winter/spring.

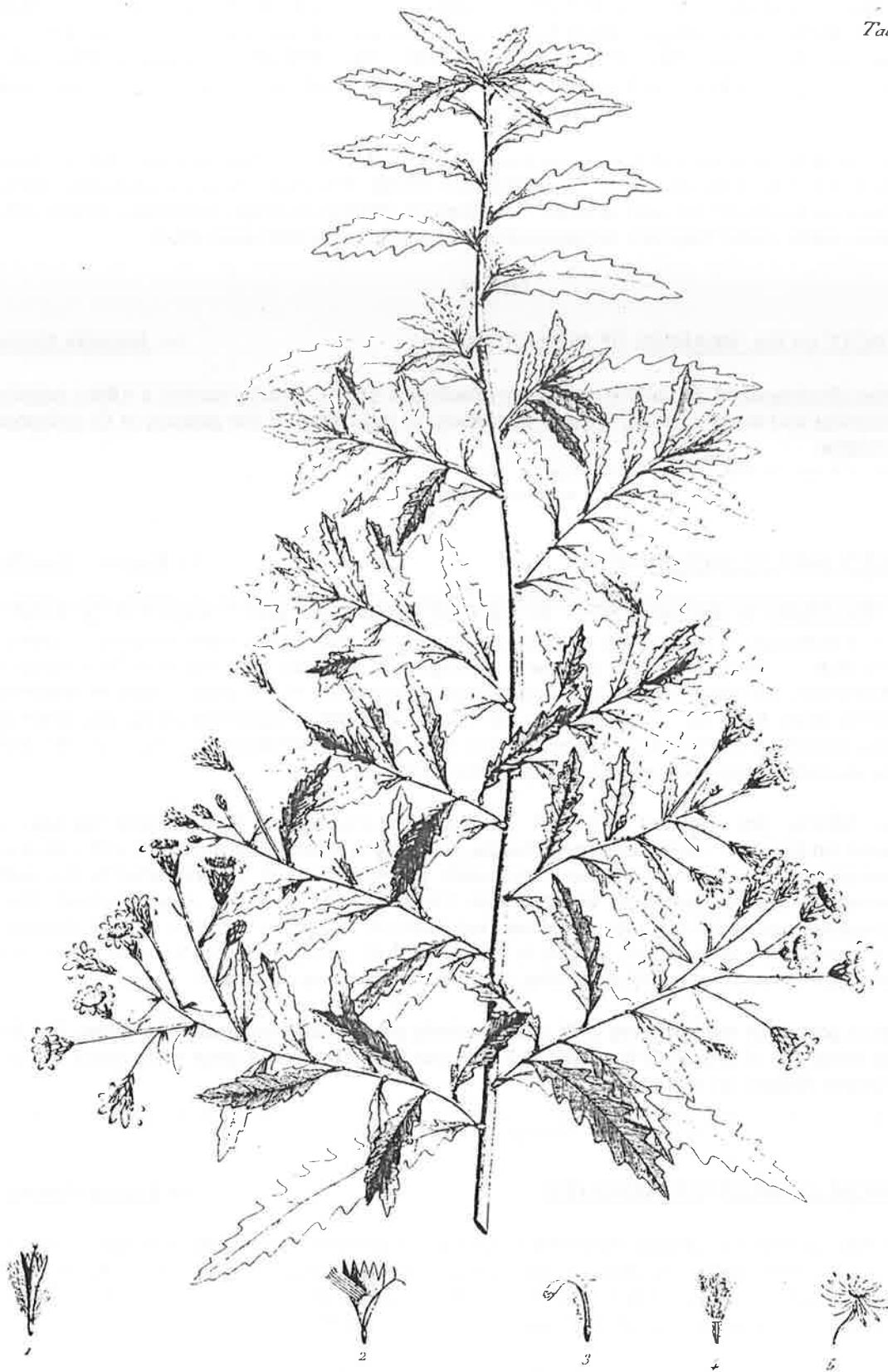
I would be grateful for seed or specimens of *H. rutidolepis* forma Blackheath.

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## ADDENDUM TO THE 'MEANING OF PHLOGOPAPPA'

by Paul Wilson

Tab. 195.



Poulet Del.

## ASTER phlogopappus.

P. Sculp.

1. Flosculus hermaphroditus. 2. Idem, corollulâ antherarumque tubo fissis longitudinaliter, expansis, pappo adempto. 3. Semiflosculus. 4. Semen pappo coronatum. (Figuræ præcedentes auctæ.) 5. Calyx expansus, vix auctus, receptaculo conspicuo.

The discussion in the Newsletter on the origin of the epithet *phlogopappa* intrigued me so I looked up Labillardière's original description (as *Aster phlogopappus*), a copy of which I enclose. Here, he states that the pappus is 'dilutè flammeeo', that is 'pale flame-coloured' or 'pale scarlet'. For the epithet he evidently decided to use the Greek word 'phlogo-' which means flame. So your correspondents were correct. I looked at the one specimen from Tasmania that we have here and it had dirty white pappus bristles; however, Joseph Hooker in 1856 described the Tasmanian plants as having a white or rufous (i.e. reddish) pappus when dry.

Paul enclosed a copy of the description of *Aster phlogopappus* [which is entirely in Latin] and a very pleasing illustration of the plant (see p. 41). The reference is J. J. H. Labillardière, *Nova Hollandiae Plantarum Specimen* (1806). The relevant sentence is reproduced for the Latin scholars — '... Semina elliptico-oblonga, substriata, pappo coronata piloso, subscabro, nitido, dilutè flammeeo, receptaculo nudo, papilloso, scrobiculato affixa.'

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#### ADDITIONAL NOTE on the 'MEANING OF PHLOGOPAPPA'

by Jeanette Closs

I have asked Alex (Buchanan) if any of the herbarium specimens from Tasmania exhibit a rufous pappus. He rang me this morning and there is white, creamy or yellowy, in the colour of the pappus of *O. phlogopappa* but no reddish colour.

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#### EXPERIENCES with *R. anthemoides*

by Margery Stutchbury

(Written from Bundaberg in August 1998.) In my front garden last year I sowed study seed of *R. anthemoides* — unbranched. Still have two of those plants looking good. There have been many, many self-sown plants this year — all around them and even coming up in the lawn near the bed. Too numerous to count. I have been busy transplanting many of them around the garden. In the back garden *R. anthemoides* was first grown in 1996, then '97. Still have two '97 plants, and again there are many self-sown plants coming up. I was interested in the Barry Hadlow method, must try it. *R. anthemoides*, sown on 18/12/97 in a polystyrene box and left without regular watering, germinated in May '98.

Highlight of our holiday (for me) was seeing *R. anthemoides* unbranched at Davesons Springs, on Mt Kaputar. We went on the walk, which was really lovely, part way a board walk around a rocky area with a small creek and springs. It was an area of mountain heath, and there was *R. anthemoides* by the path and amongst the mossy rocks. *Hardenbergia violacea* was flowering everywhere — very beautiful. Also saw some *R. anthemoides* amongst the grass when we had lunch at Big Rock Lookout coming down the Mt Kaputar road. I took photos and was so thrilled to have found *R. anthemoides* in the wild but on arriving home I found that our camera had a broken shutter, and none of our films came out!!

My front garden is poised for the flowering of *R. chlorocephala* plus some *Brachyscome* species, and *Bracteantha bracteata* forms. My *B. bracteata* from Moore Park (near Bundaberg) is a large plant about 104cm high and has many yellow flowers on branching stems.

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#### REPORT FROM JAMBOREE HEIGHTS

by Beth McRobert

(Written on 6/9/98). It seems as though third time proves it — I decided I would plant the seeds (sent in late June) which I did on 28th June. On June 30 we had a severe weather warning issued for Brisbane — extremely cold, high winds were predicted. Now that doesn't usually happen here, so the coincidences of my planting daisy study seed and extreme weather conditions continued. (See NL 51, p. 31.)

Yet, despite the weather, true to form seedlings began to appear 5 days after being planted and, you were right, it was not too late for me to plant the seeds. Flowers have begun on the *Lawrencella*, and there are buds on both of the *Rhodanthe chlorocephala* subspecies (these have been kept in pots). The dwarf white *R. chlorocephala* though have turned out to be pink. *R. humboldtiana* is a bit slower but coming on, and I have high hopes of flowers next month. I shared some of the seed with Western Suburbs SGAP Branch members, and some of the plants have gone to other homes, so I am hoping that others will have similar enjoyment to mine when the plants flower.

I was intrigued also with the differences in numbers of plants which responded to the different treatments. With your comments about the possibility of damage to embryos if seeds were left in detergent/water for longer than 24 hours, I tried a little Sunlight soap instead. Results of germinations were as follows:

Species	No. seeds planted	Treatment	No. germinated	Percentage germination
<i>Lawrencella rosea</i>	25	SISP	20	80%
	20	Water	12	60%
	25	No treatment	19	76%
<i>R. chlorocephala</i> ssp. <i>splendida</i>	30	SISP	21	70%
	30	Water	5	17%
	30	No treatment	1	3%
<i>R. chlorocephala</i> ssp. <i>rosea</i> (dwf. white)	30	SISP	20	67%
	30	Water	13	43%
	30	No treatment	13	43%
<i>R. humboldtiana</i>	25	SISP	19	76%
	25	Water	5	20%
	25	No treatment	0	0

I have been absolutely delighted with one plant of *R. chlorocephala* ssp. *splendida* which survived the planting of early this year. It has had over 40 flowers on it, some of the stems nearly 1m in length. It really lived up to its name. Not many of the flowers were picked so I'm hoping for lots of seeds. The *R. chlorocephala* ssp. *rosea* are lovely also, as are the *R. manglesii* — I am so thrilled with this year's daisies. While the seeds I planted in late June are in bud and flower, the plants are not as big as those that have grown through the autumn/winter. There are times though when I have murderous thoughts directed towards various cats which haunt our garden from who knows where, as three precious *splendida* plants from this last planting were scratched out last week. *R. stricta* plants which self sowed from last year are also in flower.

I bought some seeds through the Erica Vale seed range — *Helipterum 'Ebony White'*, which is in flower and the black 'eyes' contrast with the white bracts, and *Brachyscome iberidifolia 'Purple Splendour'*, flowers awaited. Good to see some commercial availability.

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## EVERLASTINGS PROJECT PROGRESS

It is now three years since we embarked on this project. By the end of next year we should have written up in draft form the introductory chapters and the descriptions of all the species we are studying. If we find that we have forgotten to record results or that results are confusing, we will still have time to do the tests again. This then leaves us six months for editing and revision in the year 2000 before the book goes to the printer.

Bev Courtney has found that the time taken by the building of a new house on a large block at Langwarrin has left little time for trialling all the Project species for which she was responsible. She has therefore given Joy Greig the handling of *Waitzia* to add to Joy's *Bellida*. Our thanks must go to Bev for all the work she has done so far on the species included in *Waitzia*.

So now we have the following co-ordinators responsible for the following genera:

Bev Courtney	Joy Greig	Natalie Peate	Judy Barker and Maureen Schaumann
<i>Chrysocephalum</i> <i>Schoenia</i>	<i>Bellida</i> <i>Waitzia</i>	<i>Bracteantha</i> <i>Cephaelipterum</i> <i>Hyalosperma</i> <i>Leucochrysanthemum</i>	<i>Rhodanthe</i>

There are a few matters to clear up from statements made in past newsletters:

1. The cuttings taken from the tips of annuals and stuck into the soil beside the plants flourished for some time and then quietly died. (NL 51, p. 27.) Natalie has had the same experience, and so we no longer waste our time with this method.
2. The optimum temperature for germination of *R. chrysanthemum* has been quoted several times in these pages as being 28°C (NL 47, p. 7, NL 50, p.4). It has been stated that germination falls off steeply on either side of this figure. My best result has been 18 seedlings from 50 seeds (WP011) sown on 9/11/97

with a pretreatment of SISP. It is possible that Melbourne had a burst of hot weather at that time. We often do in November. Imagine my perplexity then when 9 seedlings resulted from 50 seeds (WP011) sown on 25/6/98 with a pretreatment of GA<sub>3</sub> + Soil Wetter (SW). I can guarantee that our temperatures would have been about 9–14°C at that time. All the results from this baffling species are presented in the following table:

Trial location	Source	Storage temp.	Date sown	No. seed sown	Pretreatment							
					None	Water soak	Water + SW	SISP	SISP + SW	GA3	GA3 + SW	Best pretreatment
Hawthorn	WP011	RT	18/3/97 9/11/97 16/1/98 25/6/98	50 50 50 50	0	1 1 0 0	0 0 2	18 8 1	4 6 6	2 7	0 9	SISP SISP GA3 + SW

I can only think that the metabolism of the seeds has altered in the intervening 5 months. This is one of the tests that will have to be done again.

The best time for sowing these species is also exercising our minds. Julie Strudwick's observations on the time to sow everlasting (p. 46) are very interesting. I have been leaning towards late autumn/winter sowing for some of them because the germination has been better than at other times for some species, and I could not be sure of keeping the seedlings safe through our cold winters. The results have yet to be evaluated but I think Julie may have a point. She usually does! Beth McRobert's report (p. 43) adds further evidence for autumn probably being the best time for sowing in Brisbane, and I think Marjery Stutchbury feels May is her best sowing time in Bundaberg.

We have collected material of *Chrysocephalum eremaeum*, *C. pterochaetum*, *Hyalosperma zacchaeus*, *Rhodanthe gossypina* and *R. uniflora*. Now the wanted list is as follows:

<i>Chrysocephalum puteale</i>	<i>Rhodanthe corymbosa</i>	<i>Rhodanthe nullarborensis</i>	<i>Rhodanthe sphaerocephala</i>
<i>C. semicalvum</i> ssp. <i>vinaceum</i>	<i>R. forrestii</i>	<i>R. pollackii</i>	<i>Waitzia corymbosa</i>
<i>Hyalosperma pusillum</i>	<i>R. frenchii</i>	<i>R. polyccephala</i>	<i>W. podolepis</i>
<i>H. simplex</i> ssp. <i>graniticola</i>	<i>R. fuscescens</i>	<i>R. pyrethrum</i>	<i>W. suaveolens</i> ssp. <i>suaveolens</i>
<i>Leucocrysum graminifolium</i>	<i>R. heterantha</i>	<i>R. rufescens</i>	

Nineteen species are still eluding us. The task is becoming painfully slow and difficult! We thank all those members and friends who have been out looking for species for us. Esma and Alf have made a quick trip and returned with a most interesting array of specimens. Esma looked for *R. rufescens* at Noccundra in vain. We have such faith in her powers of finding species that we are convinced that *R. rufescens* has disappeared.

We are very grateful for the help the members have given us so far. Please keep growing these species and reporting on your results. Every observation made is recorded. Eventually we may be able to answer all the questions that plague us.

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### TASMANIA'S TREE GROUNDSEL

by Jeff Irons

Earlier this year a gardening friend recommended that I borrow and read a book called 'In an Irish Garden'. It contains a series of accounts about gardens in both the north and the south of Ireland. One of them mentioned *Trochocarpa thymifolia*. Luckily my local library has a copy of the book, so I borrowed it. As usual most of the content was unremarkable, but there was mention of a plant called *Senecio brunonis* in one garden. The sight of that name raised my excitement level, and a letter was sent to an Irish contact. By return I was told that he had just been given a rooted cutting of the senecio, and that the donor had some spare ones. My request for one went off immediately.

That 'Senecio' is now called *Brachyglottis brunonis*, and the Irish plant is in the National Trust garden at Mount Stewart in Co. Down, and is 15 feet high. It took only a little detective work to discover that it had been raised from seed collected on Mount Wellington. The collection was made in 1964 by Lord Talbot de Malahide. In 1971 he had 108 seedlings, many of which were distributed to various gardens, mostly in Ireland. Ironically all those planted in his own garden at Malahide (now the Talbot Botanic Garden) have

died; and I guess that most, if not all, of the others have too. The survival of the Mount Stewart plant illustrates the horticultural importance both of distributing a species widely, and of growing more than one clone. *Brachyglottis brunonis* is described in both the Flora and the Endemic Flora of Tasmania, and the Identikit to Mt Wellington shows it.

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### 'HOW DO YOUR DAISIES GROW?'

This article by D. Cheongsaat, J.A. Plummer and D. W. Turner was delivered at the I.P.P.S Conference in Perth in May. Two everlasting were tested, *R. chlorocephala* ssp. *rosea* and *Schoenia filifolia* ssp. *subulifolia*, with the aims of investigating the water requirements needed to produce high yields of viable seed, the best temperature at which to store the seed, and methods for breaking dormancy.

A deficiency of water when plants were actively growing reduced the number of stems produced, which in turn reduced the number of terminal heads and therefore the amount of seed produced.

Seed was cleaned and stored at ambient temperatures for 3 months, then stored at 5°, 15°, 25°, 30°, 40°, 55° and 60°C. Seed was tested for viability and germinability at intervals — 2-monthly in the case of the rhodanthe and 1-monthly for the schoenia. Both species were found to be highly viable but dormant when first harvested.

- The rhodanthe had broken its dormancy and produced 97% germination after storage at ambient temperatures for 3 months, and this percentage germination did not alter much when stored for another 3 months at temperatures between 15–55°C. Germination was reduced to 90% at 5° and 65°C storage.
- The schoenia produced 8% germination after 3 month at ambient temperatures but was 96% viable. In this species, however, germination increased to 53% after a further 3 months at 5°C, to 63% at 15°C, and to about 90% at 25–40°C. At 65°C for 2 months germination was 80% but it was reduced to 60% after a further month at 65°C.

For *S. filifolia* ssp. *subulifolia* dormancy was broken with GA<sub>3</sub>, the best concentration being 30µM, at which 87±4% germination resulted. Dormancy was also broken by exposing seed to 80°C for 11 days, after which 78% germination was achieved.

This work indicates that seed can be harvested in summer, treated and sold by seed companies in time for autumn sowing. They would prefer to use the high temperature method of breaking dormancy since wetting and drying of seed would then not be necessary.

ADSG members have found this research most interesting. Our results for some of the tests are similar, although it must be remembered that our methods are more basic — perhaps primitive would be a better word. We still wonder whether exposing seed to 80°C for 11 days will cause a more rapid decrease in percentage germination with time than exposure to a lower heat regime, say 25–40°C for a longer time.

An article reporting on the above research appeared in *Australian Horticulture* October 1998, p. 71, written by Antony Konig. It contains substantially the same information but it states that the subspecies of *Schoenia* under investigation was ssp. *filifolia* rather than ssp. *subulifolia*, although the colour illustration accompanying the article appears to be that of ssp. *subulifolia*. There must be a mistake somewhere.

One of the concluding paragraphs reports that 'While the industry problem of breaking dormancy in *Schoenia filifolia* ssp. *filifolia* has been solved, Peter Luscombe from Nindethana comments that other *Schoenia* species require different treatments to increase germination and that it is impossible to generalise. *Schoenia macivorii*, for example, will achieve up to 98% germination with totally different treatments from *S. filifolia* ssp. *filifolia*.'

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### NEW NAME FOR THE 'DAM DAISY'

by Judy Barker

*Bracteantha palustris* has been described by Christina Flann in *Muelleria* Vol. 11: 97–100 (1998). We believe that this is the identity of the plant that John Clark grows around his dam at Lovers' Leap Nursery. ADSG members have grown plants given to us by John, and have also acquired plants from the nursery at

Latrobe University. We have not been able to germinate seed. The roots are rhizomic, and so the main method of propagation is by division.

Synonyms for *Bracteantha palustris* are *Helichrysum acuminatum* var. *angustifolium* DC. and *Bracteantha* sp. aff. *subundulata*. It occurs in southern Victoria and eastern Tasmania, and it differs from the other *Bracteantha* species in habitat as well as in morphological characteristics. Plants flower from November to March and fruit from December to April.

*B. palustris* is somewhat similar to *B. subundulata*. The distinguishing characters are that *B. palustris* has sparse cobwebby hairs for 5–15cm below the head compared with a dense covering of hairs to the base of the stem; plants are taller (30–100cm) compared with 30–45cm; the tips of the involucral bracts facing away from the stems are smooth rather than scabrous; the leaves are lanceolate to elliptic and narrower than those of *B. subundulata* which are usually oblanceolate.

Flann notes that 'Most specimens of *B. palustris* at HO (Hobart Herbarium) had been determined as *B. bicolor* (Lindl.) A. Anderb. & L. Haegi (formerly *Helichrysum bicolor* Lindl.), but comparison of specimens at K (Kew) regarded as types of *B. bicolor* show that it is part of the *B. bracteata* (Vent.) A. Anderb. & L. Haegi complex (as noted by Curtis 1963) or even synonymous with that species. *Bracteantha bracteata* sens. lat. is a polymorphic assemblage that occurs in all states and territories of Australia and requires revision. Jim H. Willis had noted on one of the *B. palustris* specimens at MEL that it differs from *B. bicolor* in its quite simple stems, rhizomic habit, non-scabrid foliage and narrower more acuminate bracts which are essentially the same features that distinguish *B. bracteata*.'

This article has proved very informative and useful for ADSG as *B. palustris* is one of the species included in the Everlastings Project.

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## TWO REPORTS FROM TASMANIA

The first report is from Rosemary Verbeeten.

(Written on 17/7/98) Below are results from the seed sent to me:

*Craspedia paludicola* (1/11/93) 30% germination.

" " *variabilis* (Wallace, 3/7/96) No germination.

" " sp. (Viking Saddle, 4/97) Excellent germination.

" " sp. (Lankeys Plains ex garden, 95/96) Excellent germination.

*Erigeron* sp. (Head of Cape Creek) 50% germination.

*Podolepis auriculata* (NS 4887, 6/96) No germination.

" " *canescens* (The Granites, 21/9/96) 30% germination.

" " *gracilis* (NS '92) No germination.

" " *jaceoides* (Anglesea ex garden pot, 4°C) Sporadic germination.

" " *neglecta* (Oats' garden, 1/97–2/97, 4°) Excellent germination.

" " *nutans* (Oats' garden, 2/97) Excellent germination.

" " *nutans* (NS 14428, 6/96) Excellent germination.

" " *rugata* (JB pot, '96 4°C) Excellent germination.

I lost a few potting on and to the rabbits. I now have the two *Craspedia* spp., *Podolepis jaceoides*, *neglecta*, *nutans*, *rugata*, *Erigeron* sp. and *Craspedia paludicola* planted out in the garden. *Podolepis canescens* I appear to have lost.

We had our driveway realigned in February and so I have been landscaping. Our driveway is 100 metres long. The new beds have taken 30 metres of mulch. I have planted the daisies with local *Poa*, *Themeda australis* and *Stylidium graminifolium* along the edge. Spring is eagerly awaited.

The *Rhodanthe anthemoides* I am growing for the Project are thriving after being put in the ground. I lost a few in the dry summer and to the rabbits (wish that virus would work in Tassie!). The *Leucochrysum albicans* withstood the dry better, and grew and grew — some bushes 45cm in diameter with flower stems growing to 25cm. After 6 months they still have a few flowers.

The *Rhodanthe chlorocephala* ssp. *rosea* I grew in the garden have self sown in the gravel path and have so far withstood the frosts. They are in full bud. The ones that self sowed in the mulch the blackbirds dug up in one afternoon. Gravel has a lot going for it.

The second report is from Jeanette Closs.

(Written on 19/9/98) I actually got my seeds in on the 9th of this month, and already some of them are up. I also used the soil wetter as suggested. The mix was 3 parts sand to 1 part peat, and I stood the trays on the misted bottom heat but took them off when they seemed to be getting too wet.

So far the results are:

*Pycnosorus thompsonianus* — 2 up in 11 days with treatment, and 2 up in 11 days untreated.

*Rhodanthe anthemoides* (unbranched) — 2 up in 11 days with treatment, and 2 up in 11 days untreated.

*Rhodanthe chlorocephala* ssp. *rosea* (Balladonia) — 5 up in 4 days with treatment, 4 in 8 days untreated.

*R. chlorocephala* ssp. *splendida* — 5 up in 5 days with treatment.

*R. diffusa* ssp. *diffusa* — 2 up in 6 days with treatment.

*R. stricta* — 10 up in 4 days with treatment, and 3 up in 4 days untreated.

I have an infestation of Mealy Bug on the roots of nearly all my brachyscomes in pots. I have given them a bath in a concoction of rhubarb leaves boiled in water with a little detergent and then strained. I hope that it works. Do you know of a safe treatment? Many of my *Brachyscome multifida* in the garden are partly dying back, so I think I must pull them out as they possibly have the bug also. (An addition on 14/10/98 states: 'The rhubarb treatment didn't appear to work, so I sprayed the infestation with Pyrethrum and they now appear free of the mealybug.')

The early sowings of *R. diffusa* ssp. *diffusa* started flowering in late July, and it is very pretty. *R. stricta* started early in September.

Jeff Irons mentions in his article in the last newsletter that *Ozothamnus rosmarinifolius* 'Silver Jubilee' is unregistered, but this is not so as I registered it with ACRA in October 1993 for John May, the nurseryman who gave it the cultivar name.

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## TWO SPECIES OF LEPTORHYNCHOS IN STRANGE PLACES

- Greg Powell alerted ADSG to the fact that a daisy, which had been thought to be extinct in Victoria for fifty years, had been found in the Terrick Terrick Grassland, a property near Mitiamo (Vic). This property was acquired in 1997, and added to the existing Terrick Terrick State Park to form the Terrick Terrick National Park. The Ranger at Kerang kindly sent a paper by Tim Barlow from *Park Watch* December 1997, in which this daisy is identified as *Leptorhynchos scabrus*, Annual Buttons. The author adds that 'there is some confusion surrounding the taxonomy of this plant, and it may in fact prove to be an undescribed species.' Other daisies found on this property which are rare at state level are *Ixiolaena* sp. (*Leptorhynchos panaetoides*), and *Minuria integrifolia*. *Craspedia haploorrhiza*, the status of which is 'K' — that is, unknown at the state level — has also been found in this area.
- Ros Cornish (27/9/98) has reported — 'exciting news — for us. Jo Walker and Merren Sloane found a daisy they'd never seen before at a local school while helping to identify plants in a small patch of bushland. Jo later found the same daisy at Brooks Hill Reserve. (She's on the management Trust.) It's turned out to be *Leptorhynchos elongatus* which I know is widespread but we've never seen it here before so we're all thrilled. I've only seen a pressed sample at this stage but will be seeing it "live" soon.'

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## MEMBERS' REPORTS

Sylvia Oats of Elizabeth East (SA) writes on 5/6/98: 'Do you remember that we planted about 105 *Bracteantha bracteata* plants last November? They are still going. They have been a wonderful display, and have gained a new lease of life with the cool, wet weather. Everyone comments on them as they are the only plants in the front garden, and are planted in an arc. We have just noticed literally hundreds of young

seedlings growing everywhere. They would look terrific but unfortunately hundreds of weeds are coming up too. We are going to try and pot up lots of the seedlings as we hope to landscape the garden shortly.

Now Syd's shed is up, and when he finally gets some order he will be able to make our "dry" shadehouse for seeds and cuttings. Hopefully we will get time somewhere along the line!"

(Syd and Syl moved to South Australia from Beaufort (Vic) last year. ... Judy)

Julie Strudwick of Lurg near Benalla (Vic) writes on 6/6/98: 'On the subject of sowing *Rhodanthe* I was wondering about Luke Sweedman's comment that the time to sow is the second week of May. I can understand that being the time for Perth, etc., but both day and night temperatures in Melbourne would be very different to those of Perth at that time of year — we're 5–6 degrees south of Perth. From my experience with *R. chlorocephala* ssp. *rosea* and *R. chlorocephala* ssp. *rosea* (Balladonia), they flower at the same time no matter when they are sown, and the later they are sown the smaller the plants. At one of Wangaratta's Shows one of the members brought some ssp. *rosea* plants he'd sown in June. They were about 6 inches high and had one flower head each. Some of the other species may not be so seasonal, of course, but I do wonder about the temperature for germination.'

Still on the subject of germination, I sowed some of Peg's (McAllister) Flannel Flower seed in the ground and some in punnets. Nothing happened after 4 weeks, so I put them on the heat mat and they started coming up within a week. I told Ray, to whom I'd given about half the seed, and he sowed several punnets and brought them to put on the mat on the way to the May meeting. They started germinating in 3 weeks and he has incredible germination — literally green lawns. It looks as though that is the way to get Flannel Flowers to germinate. I've just potted mine on in clusters with as little root disturbance as possible, and am now keeping my fingers crossed that I can now grow them on.

John Barrie's *Olearia pannosa* is looking terrific (shh!) and is just starting to show buds. I had two survivors of eight seedlings I planted last year and have moved one of them from outside the fence (where it would get eaten without a permanent guard) to near John's plant in the hope of getting seed eventually. It doesn't look, so far, as if the seedling will flower this year but it is about 10 inches high so one never knows. The second survivor is also looking good at about the same size and is on the back landing.

(One never knows indeed! When Julie came to Melbourne for the October Plant Sale she murmured that her *O. pannosa* was in beautiful flower, and indicated its size with her hand. It looked about 60cm high to me. ... Judy.)

Linda Handscombe of Pomonal (Vic) writes on 22/6/98: 'The dried flower business has been slow this year, with those big silk flowers being more popular. Mine are stored in the shearing shed, still full of rats, mice, possums and dampness. It is a battle to keep them clean. I've given up doing baskets, etc., as they are too hard to transport. I mostly do wired *Bracteantha* and mixed posies.'

I did sow some seeds for pots for our spring flower show. The *Rhodanthe chlorocephala* ssp. *rosea* and Balladonia forms, and one *R. stricta* were doing very well in four big pots when I noticed some mould forming on them. They were in the tunnel house so I put them out and bang — three heavy frosts in a row! They are looking sad but not completely dead. (I've just checked again. They look really sad.)

I also have some big pots with *Calocephalus citreus*, *C. sonderi* (Jerilderie), *Pycnosorus thompsonianus*, *Podolepis lessonii* and *P. rugata* for the flower show. They are covered with earthmite, as is everything else in the tunnel house. I am about to try some garlic spray on them as commercial earthmite preparations are systemic and potent I think. I made the garlic spray in summer to combat the grasshoppers. They treated it as an hors d'ouvre or like a dressing on the salad, and kept on munching. They stripped the leaves and fruit off all our new little fruit trees, roses, and the *Bracteantha* (which re-shot as soon as the grasshoppers left). No doubt all our country members had a bad summer. We lost quite a few things but were surprised at the things that did survive. We went back to our old house a few months ago and took lots of cuttings. Although they had also lost a lot, it still looked like a jungle. What a lot of growth in just a year!'

Gloria Thomlinson of Shepparton (Vic) writes on 25/6/98: 'Frost! — we have had a few. Two doosies at -5° hit *Rhodanthe manglesii*, to the socks I'm afraid. I had pinched them back when planting out and they had grown to 20cm. Some are shooting from ground level. Not all is lost as I had not planted out all the trays. *R. chlorocephala* ssp. *rosea* (white) didn't blink. *R. stuartiana* planted in fine sand in the garden mostly damped off. The sand seems very cold. They were not frost bitten. Those in pots are OK. *R. diffusa* ssp. *diffusa* growing in the same sand are untouched, but they were larger when they were planted out than the *R. stuartiana*. Most *R. humboldtiana* plants survive but now look rather bedraggled after looking so good.'

Doll Stanley of Auburn (SA) writes on 30/6/98: 'It's really winter at last, and what a lot of native plants flower at this time of year, acacias, eremophilas, templetonias, sennas, hardenbergiyas, thryptomenes and correas, to mention but a few. They all seem to be frost hardy, the plants that weren't frost hardy died years ago, so we don't bother with them. The daisies, mostly olearias, have also started to flower. The *O. pannosa* that I planted out late last year have grown beautifully, without benefit of extra water, and are now covered with buds. Think they must be drought proof. I've been growing brachyscomes in hanging baskets, and they are hanging down like a veil sprinkled with stars (flowers). The only trouble is that I've run out of places to hang the baskets.'

The *Rhodanthe* species I planted didn't do much this year. I have visions of them growing like they do in the wild but somehow it never happens. Oh well, another year.'

June Rogers of Horsham (Vic) has had a partial knee replacement but still manages to tend her daisies. She reports on 5/7/98: 'Not knowing that this operation was ahead of me I planted daisy seeds and managed to get some potted on before I left, in early June. I've had a good strike of *Ixiolaena supina*, so must get them potted on soon.'

Apart from seedlings to pot on, I notice that *Helichrysum rutidolepis* all need their spent heads cut off, the *Chrysocephalum apiculatum* plants need cutting back and the rampant ones curtailed. The weeds need to be attended to (spraying may be the only solution this year) and, of course, there is the ever recurring battle with Smilax.

Our SGAP group had a Nursery Crawl early in May to SA, which included the Barries at Coonalpyn, so came home with lots of treasures. Then, I'd rashly ordered 50 shrubs from the local council, so I had quite a lot of planting to do. Thankfully we'd had good rain by then — at this stage all are surviving despite some severe frosts.'

Maree Goods of Horsham (Vic) writes on 12/7/98: 'I was disappointed to see the Daisy Sale Weekend is the same weekend our garden is open in the Australian Open Garden Scheme. Never mind, I will strike it lucky one day.'

The garden is fairly dull at the moment except for a few of my daisies flowering (that is what is left after all the frosts we have had). I am thrilled to bits with one plant June Rogers gave me last year, that is *Ixiolaena brevicompta*. It flowered profusely all summer and well into the autumn. It is now a dense mat about 40–50cm across. After all the frosts it is not sure whether to get the winter blues or stick it out till next summer. I believe in this part of the country it does die back over winter and comes again in late spring. *Olearia microphylla*, *rudis* (? hybrid) and *pimelioides* are budding up well and are ready to break out any moment. Some of our *Olearia pimelioides* are 10 to 12 years old and each year they are a mass of white flowers. They do not seem to mind our dry summers — that is my type of plant.'

Jan Hall of Yarrawonga (Vic) writes in July: 'We have had some rain and it's finally enough to soak in. But it did come at frost time — not soon enough to prevent nasty damage. Both garden and nursery look a bit sad. The frosts were down to -5°C. We need a nice moist and warm (not hot) spring to do a healing job on it all.'

Ros Cornish of Bungendore, near Canberra, writes: 'This year, to try and overcome our inhospitable winters I have taken to germinating seed inside the house in a sunny position. It has worked well as we have been here enough to keep up the water and to pot on when necessary. John and I have been vying for space as he has been growing eucalypts and acacias for our windbreak while I have been growing daisies and other small, interesting plants to go inside our fence. I have renewed enthusiasm now that the fence is keeping all four-footed wildlife at bay. Parrots and choughs still cause some problems but nothing compared to wallabies. It's remarkable what has started to regenerate inside the fence. We had a lovely display of ground orchids after the first autumn rains and now we have other orchid leaves showing up, getting ready for spring. A few daisies have come back despite the constant chewing — my *Brachyscome aculeata* plants are flourishing and the *Helichrysum ramosissimum* (is it still *Helichrysum*?) has returned from the dead as have a number of forms of *Chrysocephalum apiculatum*. I have successfully transplanted inside the fence a number of daisies that I grew last year within the vegie garden fence — *Rutidosis leptorhynchoides*, *Brachyscome sieberi* var. *gunnii*, *B. graminea*, *B. nivalis*, *B. dentata*, *Podolepis jaceoides*, *P. robusta*, *Rhodanthe anthemoides*, *Calocephalus citreus* and many, many seedlings of *Leucochrysum albicans* which arose from my trials of *L. albicans* ssp. *albicans* var. *albicans* and var. *tricolor*. So I'm expecting a good show this spring/summer. In addition I have sown seed of *Helichrysum collinum*, various *Olearia* spp. from our

Wednesday Walks, a number of *Calotis* spp. and many *Brachyscome* spp. from ADSG. I will have a busy spring — hope they all survive while we are away in the Warrumbungles.'

Jeff Irons of Heswall, England, writes about his 1998 trial results on 12/8/98;

***Brachyscome aculeata*** (N. Dargo, Vic). 1997 seedlings were over-wintered under un-heated glass and planted out in spring, 6 inches apart. Flowering began in June and continued throughout summer. A good garden plant, especially if it is perennial. Otherwise nothing to mark it out from other daisies.

***Brachyscome rigidula*** (Mt Cope). A lavender form which can be flowered as an annual. Unfortunately the colour fades. Britain has a commercial form which does not fade. An excellent scree plant.

***Craspedia aurantia*** (N. Dargo). A very fine plant which can be flowered as an annual. Unfortunately Britain appears to lack the specialized insects needed for pollination. Neither I nor Ness Gardens got seed.

***Bracteantha bracteata*** (N. Dargo). A monocarpic form which dies immediately after flowering. Has nothing special to offer.

***B. bracteata*** (Crescent Head, NSW). An excellent garden plant with 6–7cm diameter heads on a 70cm plant. I shall be surprised if it is winter hardy.

***Helichrysum adenophorum* var. *waddelliae*** (Newnes S.F.). A monocarpic strain which is a good scree plant for the rock garden. Regarded highly at Ness Gardens. It behaves as a biennial here. The small size makes it very useful for dried flowers. I hope that it can be kept vigorous with a small population, and have 30 seedlings for planting out in 1999.

Maureen Schaumann of Mulgrave (Vic) reported in mid-October that *Brachyscome* 'Sunburst' had rooted in water in two weeks.

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## SNIPPETS

- Fred Mazzaferri of Shailer Park (Qld) has reported on another giant plant on 7/7/98: 'Among my self-sown seedlings I suspect that I may have stumbled across a prince amongst *Rhodanthe chlorocephala* ssp. *rosea*. This has not budded yet, but stands out with leaves all of 7.5cm long and a main stem 5mm thick. Of course I am anxious to collect seed.'
- Jeff Irons has been corresponding with Anne James, the holder of the National Collection of *Olearia* at the Talbot Botanic Garden. Jeff has sent ADSG the list of species she is growing, and it is quite extensive. Some are from New Zealand, and some are hybrids or cultivars. She particularly wishes for seed of *O. frostii* and *O. lirata* but would be most happy to receive seed of any Australian species we could provide. If members could collect seed for Anne, especially cold climate species, and send it to me, I could send it on to her.
- The August 1998 issue of *Australian Horticulture* carries an article by Samantha Schelling on commercial biological products using *Trichoderma* and *Mycorrhiza* species, two genera of fungi which have formed mutually beneficial relationships with plants. *Trichoderma* species do not compete with the plant for nutrients but grow around the developing root hairs. The mycelium can grow over pathogenic fungi, such as *Fusarium* or *Armillaria*, and stop the infection of the roots from proceeding. Trichoseal, Trichoject and Trichodowels have been registered in New Zealand and are marketed as preventative bio-pesticides. *Mycorrhiza* species form symbiotic relationships with plants by absorbing nutrients from the host plants and by taking up inorganic or organic nutrients from the soil (which would be unavailable to the plants). These nutrients are then made available to the host plants in an easily absorbed form. Many Australian soils are deficient in phosphorus. Mycorrhizal fungi aid the uptake of phosphorus into eucalypts and other plants. Numerous daisies have been proved to have mycorrhizal relationships (see NL 14, pp.3–4). ADSG has suspected for some time that there is a definite requirement for an inoculum for the successful growing of *Argentipallium dealbatum* and *A. obtusifolium*. Vaminoc is an inoculant made with species of V-A mycorrhiza (V-A means vesicular-arbuscular) which enter the root of the host plant. We should trial it. It costs \$55 per kg, and each plant needs 1–5g applied close to the root zone or added to the potting mix. Advantages of using mycorrhizal inoculants are that fertiliser additions can be reduced

by up to two thirds, the resistance of plants to pathogenic fungi is increased, the water uptake of plants is increased, a glue-like substance is produced which helps to hold soils together, root initiation is improved and the feeder roots (hyphae) of the fungi form bases for growth-promoting fungi.

- The August issue of *Australian Horticulture* also contains an article by Anita Boucher reporting on topics presented at the Conference of the International Plant Propagators' Society held in Perth in May. Dr Kingsley Dixon, talking on 'Smoke as a new tool for plant propagation', observed that his team had found an inconsistent response to smoke. For spinifex they had found that plants from different provenances responded differently to treatment with smoke. Lotte von Richter has made the same observation about Flannel Flowers.
- David Penn sent two articles which identify nitrogen dioxide ( $\text{NO}_2$ ) as the possible compound in smoke that triggers germination. Keeley, J.E. and Fotheringham, C.J. (1997). (in *Science* 276: 1248–1250) reported that seeds of *Emmenanthe penduliflora*, Whispering Bells, germinate after exposure to  $\text{NO}_2$  for only one minute. These workers found that  $\text{NO}_2$  makes the subdermal membrane more permeable. The point was raised by Malakoff, D.A. (1997) (in *Science* 276: 1199) that the nitrous oxides in air pollution could perhaps trigger germination of seed when conditions were unfavourable for the survival of the resultant seedlings. Seed banks of native seed might be depleted in this way over time. On the other hand, weed management might be easier if banks of weed seed could be subjected to nitrous oxides when conditions were unfavourable. If weeds germinated in numbers they might then die due to lack of water in times of high temperatures, thus depleting the seed bank.

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### ASGAP AUSTRALIAN DAISY STUDY GROUP

Statement of Payments & Receipts — July 1, 1997 — June 30, 1998

RECEIPTS		PAYMENTS	
Members subscriptions	\$727.50	Newsletter	\$255.53
Seed sales	\$98.80	Postage	\$295.70
Bank interest	\$1.44	Subscriptions	\$94.00
		FID	\$2.74
		Stationery	\$79.93
		May meeting	\$48.85
		Sundries	\$26.70
		Photocopying	\$7.00
Total receipts	\$827.74	Total payments	\$810.45
Surplus for year	\$17.29		
<b>SUMMARY</b>			
Cash at bank at beginning of year	\$1313.55		
Surplus	\$17.29		
Cash at Bank at end of year	\$1330.84		

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### LEADER'S LETTER

Dear Members,

Thank you again for your letters this year. Hearing about the trials our country members experience makes city dwellers feel that they should never grumble, no matter what befalls their gardens. We always have water and, although we might have possums and the odd mouse, we don't have wallabies, rabbits, grasshoppers, earthmites, etc., eating our plants, nor do we have snakes around our feet. Country members

are Trojans! On the other hand, their plants are not blanketed in smog, nor do they take hours to get short distances in heavy traffic.

In July Lee and I flew to Alice Springs for a week's sightseeing with friends. It was a crowded week — the main aim being to collect propagating material of *Chrysocephalum eremaeum* and *C. pterochaetum* for the Project. This aim was achieved with the assistance of Hilary Coulson from the Alice Springs Herbarium, for which I was very grateful. I am also grateful to Bev Courtney and Natalie Peate for propagating the material sent to them. We are about to trial the resultant plants in our gardens.

In September we were most fortunate to have Peter Horsfall speaking to us on the subject 'Splendid Isolation'. Peter is the Nursery Manager of the Alice Springs Desert Park, and has first hand knowledge of the flora, fauna, and geology of his region. It was one of the most informative and fascinating talks I have heard for a long time. It was illustrated by slides of plants, animals, people and rock formations, some of which were taken by hanging out of the side of a helicopter from which the door had been removed. He took us to many places we would never have reached otherwise. Peter also explained how to propagate certain species in ways that were completely new to us. For instance, *Triodia* cuttings were taken in summer, moistened, popped into plastic bags and thrown into a shed until Peter remembered to retrieve them. Apparently they produced roots within three days by this method, although they are normally very hard to propagate. It set our minds racing to adapt this method to daisy growing. Peter announced that this season was a one in ten year season for Central Australia, and numerous reports from travelling members are proving him right. Since he had more slides than we could digest in one sitting he returned to finish showing them to us at a Book Committee Meeting a week later. Both meetings were most enjoyable, and we all thank him for the time he spent with us.

The Plant Sale in early October was held at Peg McAllister's home. We have never had such luxurious surroundings — a four car garage lit with fluorescent tubes, a capacious car port, and Natalie's large urn from PGA bubbling away in the kitchen. The greatest boon was that Peg's superbly designed garden was ablaze with beautiful plants, most of which had burst into flower during the weekend before the sale. We had been promised cold temperatures and rain but the sun shone almost all the time, as if to bless the undertaking. Thanks to Maureen's advertising skills we seemed to have a good crowd on both days, and everybody expressed their amazement at the beauty of the garden. The sale seemed to have been a success — socially as well as financially. Our thanks to Peg for housing us, and for her hard work before and after the weekend. We must also thank Natalie Peate and Joy Greig (with some assistance from Peg) for producing so many marvellous small plants at such short notice as a donation to ADSG. It was a great deal of work for a few people, and a wonderful boost to our funds. Gloria Thomlinson also sent down many plants with Esma, the proceeds all to go to ADSG. Thank you, Gloria, and we are grateful to Esma for selling them with her own plants. Thanks also to all the members who took part, especially the country members.

The Book Committee had the good fortune to include Lotte von Richter and her sister, Suzie, in the October meeting. Both contributed valuable information and considerably enhanced the proceedings. Lotte had been working on species of *Leucocrysum* for her bedding plants project at Mt Annan, and had brought slides and plants to show us. She presented ADSG with a copy of her thesis for the degree of Master of Science in Agriculture. It is titled 'Native Plants of Eastern Australia as Bedding Plants', and it contains information on seed germination of *Leucocrysum* species, the effect of temperature and light on seed germination, dormancy of seed, and storage of seed. Pure gold!

Val Hando, a Field Naturalist from Chinchilla in Queensland, kindly offered to look for two rhodanthes we needed when she made a field trip to the area around Windorah and Adavale. She sent three specimens, two of which we were especially delighted to receive. One looked very like *R. gossypina*, but the white blades on the inner bracts were too short, and there were no dark red-brown resinous hairs on the claws of the bracts. Paul Wilson has kindly identified it as a variant of *R. microglossa*. We are hoping to grow it from some of the mature seed on the specimen. The second specimen was of a robust form of yellow-flowered *Schoenia ramosissima*, and we hope to grow it too. Val has also presented us with a copy of *Going Bush with Chinchilla Nats* which she and her late husband, Roy, edited. It is a most comprehensive compilation of the flora and fauna of the area, including birds, fish, insects, spiders, frogs, reptiles and everything else that a visitor to the area might wish to know. It contains black and white drawings as well as coloured prints, one of which is of Hando's Wattle.

Bev Courtney has done her usual excellent job of balancing the books for this financial year. She takes cheques, cash and numerous explanatory notes on bits of paper in her stride, and makes perfect sense of

them. My respectful admiration and gratitude to you, Bev. Just as well we raised the subscriptions since we have only \$17.29 more than we had at the beginning of the financial year!

Syd Oats telephoned in August to report that he had used 'acid rain' in an attempt to increase germination, and he believed he had been successful. His health and energy level had improved, and he was getting back into growing daisies with a vengeance. Just as I was ready to ask him to write his methods out for this NL, Sylvia telephoned to tell me Syd had broken his hip. We all wish Syd a speedy recovery, and that there will be no more mishaps for the next couple of years.

The twins arrived safely — girls, weighing in at 5lb. 13oz. each — Ciara and Niamh. Lee and I are working hard on the pronunciation. They take up a certain amount of time, and so if you do not receive instant answers to your letters please bear with me. The time I spend with them is time well spent.

We hope to see some of you at the Christmas Break-up on Tuesday, 1st December (see below). It seems early to wish those members who cannot come to the Break-up a Merry Christmas and a Happy New Year but it is my last chance to do so. The next two months always pass extremely swiftly in my experience. Thank you to the Melbourne members for their invaluable help in all the facets of running the Group. Special thanks to Maureen for hosting the Book Committee meetings, and for the superb morning teas. Thank you to all members for their letters and articles, and to those who contributed illustrations, notably Ailsa Hamilton, Gloria Thominson and the Salkins.

Sincerely,

\*\*\*\*\*

## CHRISTMAS BREAK-UP

We are planning to travel down the South Gippsland Highway to visit a few nurseries in the area of Korumburra to Leongatha, one of which will be Brown's Wildflower Gardens and Handcraft at Kardella (advertised in SGAP Vic Newsletter, p. 50). As a guide, it took a little longer than 1½ hours to travel from Hawthorn to Leongatha. We would hope to be at our first nursery at 11.00am. Final arrangements have still to be made, so members should ring Judy in mid-November to hear our exact plans.

\*\*\*\*\*

## SEED DONORS

Many thanks to the following members and friends who donated seed: Judy Barker, Hilary Coulson, Barrie Hadlow, Val Hando, Jeff Irons, Esma Salkin, Mark Saxon, Luke Sweedman, Rosemary Verbeeten, Connie Whitwell.

## SEED LIST \* Species marked with an asterisk will be retained for the Everlastings Project.

ADDITIONS: *Brachyscome aculeata* (ex Captains Flat, ACT)  
*Bracteantha bracteata* (ex nth. of Dargo, Vic; ex Diamond Head, NSW), *viscosa* (Lidsdale, NSW)  
*Calomeria amaranthoides*, *Haptotrichion colwillii*\*, *Leptorhynchos squamatus*  
*Podolepis jaceoides*, *Pycnosorus globosus*  
*Rhodanthe manglesii* (small form)\*

DELETIONS: *Brachyscome segmentosa*

## PROVENANCE SEED LIST

ADDITIONS: *Brachyscome ciliaris* (S-W Qld, 9/98), aff. *curvicarpa* (S-W Qld, 9/98), *dentata* (Tambo, S-W Qld, 9/98),  
*melanocarpa* (S-W Qld, 9/98), *whitei* (S-W Qld, 9/98).  
*Calotis multicaulis* (S-W Qld, 9/98), *Cassinia* sp. (yellow, Grampians, 1/96)  
*Chrysocephalum eremaeum* (Lasseter Hwy, NT, 7/98)\*, *C. pterochaetum* (Alice Springs)\*  
*Ozothamnus hookeri* (Tantangarra Res. Plains, NSW, 5/98, Alt. 1260m)

DELETIONS: *Brachyscome bellidifolia*

**SUBSCRIPTIONS WERE DUE ON 30th JUNE 1998.** Subs are now \$10.00 within Australia and \$20.00 for overseas members.

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