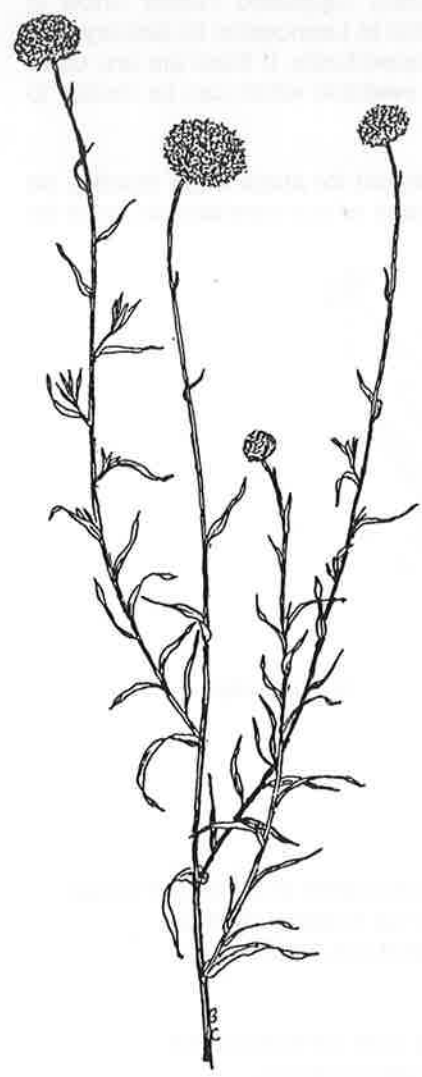


ASSOCIATION OF SOCIETIES FOR GROWING AUSTRALIAN PLANTS

ABN 56 654 053 676

THE AUSTRALIAN DAISY STUDY GROUP NEWSLETTER NO. 68



Calocephalus platycephalus x 2/3
(illustrated by Betty Campbell)

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WEB PAGE

<http://farrer.csu.edu.au/ASGAP/daisy.html>

LEADER'S LETTER

I am pleased to inform members that the Esma Salkin Studentship for the summer of 2003/2004 was awarded to Ray McMahon. Ray finished his undergraduate degree, Bachelor of Biological Science, at Latrobe University last year. He commenced field work on his project on Tuesday 9th December.

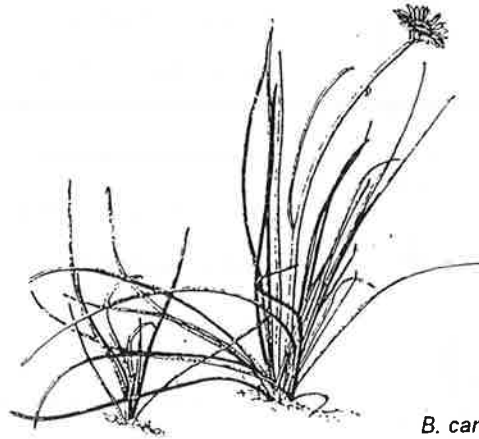
Ray is investigating *Cratystylis conocephala*, the Blue-bush Daisy. Although it occurs in South Australia and New South Wales there are apparently only three plants in Victoria, in the far north-west of the state. They have not been observed to produce seed. Under supervision by the National Herbarium of Victoria's Conservation Botanist, Neville Walsh, Ray will determine whether these plants are clones and whether or not the species can be propagated from cuttings. We look forward to meeting with him later in the year to hear about his results.

Thanks are due to Maureen Schaumann for providing a daisy display at an Open Garden weekend in October, Cheryl O'Brien for organizing an AD SG display at the APS South Gippsland Flower Show in November, and to Jeanette Closs for a similar effort at the Biennial Conference in Launceston in January. It is very pleasing that members are willing to showcase native daisies at every opportunity. If there are any other members who would like to do the same we have a 'kit' of display material available which can be mailed to you.

As you read this newsletter I expect to be heading overseas and I will be absent for about three months; so no seed sowing for me this autumn. However, I hope others will take advantage of our considerable seed list and I look forward to getting back into propagating again on my return.

Cheers,

Joy



B. cardiocarpa

COMING EVENTS

Tuesday, 16 th March	10.00am	Meeting at RBG Cranbourne at the Depot Office. This will be a follow-up meeting after our September meeting at this venue.
Tuesday, 20 th April	10.00am	General Meeting at Judy Barker's home 9 Widford Street, East Hawthorn
Tuesday, 18th May	10.00am	General Meeting at Natalie Peate's home 26 Kardinia Cres, Warranwood. [(03) 9876 3648] Natalie will show us the propagation set-up at Wonga Park.

We would be delighted to see any of our members at these meetings. We provide tea, coffee and nibbles but bring your own lunch. This is a time for swapping or accepting plants that are surplus to members' needs. We like to donate plants to members because that is one way to ensure enduring supplies of seed or cutting material in case of tragic loss.

SPECIES OR FORMS NEW TO MEMBERS

Helichrysum rutidolepis (form from Oberon, NSW)

While on business trips with Lee I spend happy times roaming the bush and looking at plants. We were in Oberon in January about three years ago, and among the plants I saw there was a species which I casually set down in my mind as *Helichrysum scorpioides*. It was growing in a small area of native vegetation bordering one of the many pine plantations about 20km along the road to Lithgow. Under the eucalypts among grasses and other small herbs there was also a much more interesting form of *Chrysocephalum apiculatum* with grey leaves and relatively large, yellow heads held singly or in twos. I brought suckering pieces of both species home in the Esky and potted them up. They have now been growing in the garden for two years. This form of *C. apiculatum* has hardly grown at all in that time but is still alive and flowers from time to time. The other plant first surprised me by suckering and startled me when it flowered by producing large button heads with bright orange outer bracts. It didn't look at all like *H. scorpioides*.

The *Helichrysum rutidolepis*/*H. scorpioides* complex was of abiding interest to Esma over many years. Her article about the Blackheath form of *H. rutidolepis* collected by Jeff Irons was printed in NL 52, pp.39–40. Blackheath is in the Blue Mountains and Oberon is about 45–50km to the west as the crow flies. The Blackheath form was identified by Keith Ingram and associates at Mt Tomah Botanic Gardens as *Helichrysum rutidolepis* if it had a suckering habit. Dr Neville Walsh also identified the specimen as *H. rutidolepis* for Esma, and added that 'the complex awaited revision with the possible inclusion of additional genera.' Esma had previously written an article on the complex in NL 26, pp.5–8. Now that I have examined the Oberon form under the microscope, read Esma's articles and studied the distinguishing characters in the key to *Helichrysum* species in *Flora of New South Wales* ed. G. Harden (1992) p. 231, I can understand Esma's perplexity and interest in the outcome of the revision. The Oberon plant now seems more likely to be *H. rutidolepis* than *H. scorpioides*, but we will not know until the revision is published.

The relevant part of the key reproduced from the above reference is as follows:

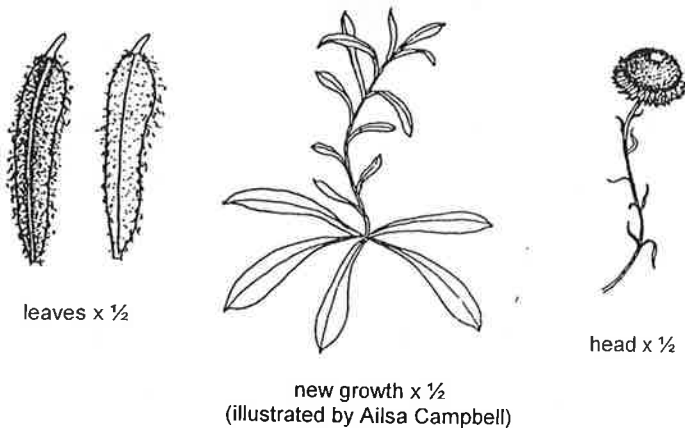
- | | | |
|----|---|----------------------------|
| 4* | Base of the involucre enveloped in woolly hairs attached to the margins of the involucre bracts. | |
| 5 | Stems mostly erect and unbranched, heads usually 2–3cm diam.; intermediate involucre bracts with an opaque yellow tip; florets usually all bisexual | 4. <i>H. scorpioides</i> |
| 5* | Stems mostly decumbent and much-branched; heads 1–1.5 cm diam.; intermediate involucre bracts transversely wrinkled and wholly scarious; outer florets female with pappus reduced or absent | 5. <i>H. rutidolepis</i> ' |

Description (Oberon form): The habit is erect to decumbent, usually 25–30cm high, but to 42cm in one case. Stems arise from the base and branch two, three or more times. Stems are covered with cottony hairs, becoming more dense towards the head. **Leaves** are first formed in a basal rosette which disappears as the plant develops. Stem leaves are sessile, lanceolate, 1–5cm x 1–10mm, dark grey-green above, paler below, the uppermost almost parallel with the stem. Margins are rolled under and the midrib is distinctly concave. The upper surface bears septate hairs, while the lower surface has a mixture of septate and long white hairs. There is an obvious apiculate point at the tip of each leaf. **Flower-heads** are 1.5–2.5cm across, held singly at the tips of stems. The outermost bracts are broad, papery, pale gold, with torn margins and wrinkled across the top half. The short claws are embedded in white hairs. The intermediate bracts are bright orange, opaque, longer and slightly less broad and the margins of the claws are edged with many long white hairs at right angles. The innermost bracts are narrower. When fully open, the tips of the orange bracts extend 2mm



Helichrysum rutidolepis x 2/3
(illustrated by Ailsa Campbell)

beyond the disc florets. The disc florets are mainly bisexual with a few peripheral female florets that have no pappus. **Cypselas** are immature but are rectangular, glabrous and appear ribbed. About 20 barbed pappus bristles are white, becoming yellow, with one or two long barbs at the tip. Some of the bases seem to be fused together.



Flowering period: Late December to March in the garden.

Propagation: Division of new growth in April has been successful. No mature seed has been produced and cuttings have not been tried.

Cultivation and uses: This form is growing in semi-shade and sun for part of the day. Stems have been pruned back hard when growth becomes untidy. That is in March in our Melbourne conditions. New basal rosettes appear in late April. This form is not a ground cover at Hawthorn

because the growth is sparse and stems pop up all around and under other shrubs. Since the heads are a most unusual colour perhaps it could be used as an accent plant if a neat, dense habit is the result of pruning stems before flowering. In Berwick clay Faye Candy has a small clump that is erect, taller and with larger heads than the plants Maureen and I are growing. This is not pleasing to two 'Daisy Ladies' but it is instructive.

Maureen grows the better known form of *H. rutidolepis* as a ground cover in her front garden. It has pale yellow button heads, 1.5cm across, on stems 26cm in length. Stems and foliage appear grey-green, but this is probably due to the white undersurfaces of the leaves. The leaves are 1.5–4.5cm x 1–2mm, narrow-linear and sessile. The involucre bracts are pale yellow and extend 3mm beyond the disc florets. This form suckers vigorously, the stems stand erect and it flowers profusely. Maureen cuts it back when the heads begin to brown off and then it blooms again. In the Candy garden this form has produced at least one stem to 40cm but it grows as a clump in the shade of a baeckea. Perhaps the Oberon form should be tested in a sunny position and cut back frequently.

Maureen mentions both forms in this newsletter on p.9. In her opinion the Oberon form is better than the more commonly grown form. One never likes to disagree with our founding leader but it should be understood that Maureen loves new forms.

by Judy Barker

CALOMERIA AMARANTHOIDES

(Revised January 2004)

by Jeff Irons

Although it was introduced to cultivation before 1800 *Calomeria amaranthoides* is less well known today than it was in Victorian times. Then it was a popular pot plant for ballroom decoration. This was because men thought that the scent of this highly aromatic plant was an aphrodisiac that would make their ladies swoon with desire. The cynical reader might think that any fainting was more likely to be the result of the combination of tight lacing, exercise while dancing and a hot ballroom. Today the species is rarely seen. It is a short-lived perennial, usually treated as a biennial and deserves to be better known and cultivated more widely than it is at present.

The first English description of the species was in Smith's *Exotic Botany*, published in December 1804. Apparently originating from Sir Joseph Banks' collection, the type specimen plant was grown in the garden of Sir Abraham and Lady Hume at Wormlebury in Hertfordshire, England. Smith called the plant *Humea elegans*, not only in reference to its beauty but also as an honour to Lady Hume. His type specimen is in the Herbarium at the National Museum of Liverpool, England. Unfortunately only three months earlier, in September 1804, the French botanist Ventenat had described the specimen growing in the gardens of the Empress Josephine at Malmaison. Quite cunningly, he latinized the name Bonaparte and called the species *Calomeria*. This is from the Greek kallos, beauty and meris, part. Meaning resembling Amaranth, *amaranthoides* refers to the flowers. Under the rules of botanical nomenclature Ventenat's name has to take priority. That is a pity for English speakers, because even when converted to botanical latin "Hume's elegant

plant" trips off the tongue much more easily than "my big boss's plant with flowers that look something like those of Love lies a Bleeding".

Calomeria amaranthoides is a short-lived perennial, in the daisy family, from south-eastern Australia. It is found in wet mountain forests and humid coastal valleys from west of Sydney down the coast to Victoria and East Gippsland then westward to the Otway Ranges. There is an isolated occurrence in the Grampian Ranges of Victoria. Banks' collection was probably made from river valleys in the area of Botany Bay. That region is now covered with houses and the closest plants to Sydney grow about 50 miles inland, at 1000m altitude, on the peaks of the Blue Mountains. There they grow only on the cool moist southern sides, never on the hot dry northern sides. Winter minima there are around +3 to -3°C and winter daytime maxima around 5 to 11°C. Profuse germinations occur after bushfires. It may be that, as is the case with many ephemerals, this follows the increased exposure to light and reduced competition. Because of the excellent germination of old seed (see later) the alternative explanation that germination has been triggered by smoke seems less likely.



Calomeria amaranthoides

(illustrated by Gloria Thomlinson)

The species has large stem-clasping tobacco-like leaves, often felted white on their undersides when young and with felted internodes. They decrease in size as they go up the stem. Both leaves and stems are sticky to the touch. The multitude of small flowers is borne in drooping heads. These are long and plume-like, with several pendulous branches, the whole being about 1m long, sometimes as much as 2m. Although each flower has tiny yellow ray florets the prominent parts are the phyllaries. Usually red, they can be pink or occasionally white.

In Heywood's *Flowering Plants of the World* it states: 'The anthers ripen before the stigmas, and discharge their pollen into the tube formed by the cylinder of fused anthers. At this stage the style is short and the style arms are pressed together. The style then elongates up the anther tube, from which the pollen is swept by the hairs of the style arms and presented at the apex of the anther tube to any visiting pollinator. Only later do the style arms separate to expose the stigmatic surfaces. Each floret thus goes through a staminate (male) then a pistillate (female) stage. Finally the style arms may reserve sufficiently for the stigmas to make contact with the pollen from the anthers of their own floret. In this way, in self compatible species, self pollination may occur should cross-pollination for some reason have failed to occur.'

The whole plant is aromatic and this has given rise to one of the common names. In New South Wales Plume Bush is used and in Victoria it is Incense Plant. Sulman records the name "Native Tobacco". Usually the smell is spicy, but I have found that when used as a bedding plant, in my soil, in early summer sun the leaves can smell of cat wet. The flowers are always aromatic.

The species is insect pollinated, self-compatible and contrary to popular belief, even a single plant will give a large seed set. Frequently its leaves have a nick at the bottom on one or both sides. This looks rather like the beginnings of a palmate shape, suggesting descent from an ancestor with palmate leaves, as is the case with many Asteraceae. (H.A. McAllister pers. comm.). Seeds fall from the flower heads when ripe and collection of capitula comprising empty bracts is responsible for the erroneous belief that there is little viable seed. Anecdotal evidence (J.K. Hulme pers. comm.) tells of old gardeners reporting that seedlings came up "like mustard and cress" round the area where plants had been grown. I have seen plants only in New South Wales. Comparison of the floras of that State and Victoria indicates that New South Wales plants have wider leaves than those in Victoria — Victoria 2 to 7cm wide, NSW 8 to 10cm wide.

Botanical description

A monotypic genus in the Asteraceae. An erect biennial or short-lived perennial, reaching 3.5m in bloom, all parts very aromatic. Stems sticky, ± white-woolly. Leaves alternate, 10–20(25)cm x 2–10(18)cm, ovate to obovate, acuminate, stem-clasping or decurrent at the base, margins frequently ± crenate, both surfaces with scattered to moderately dense multicellular gland-tipped hairs, upper surface only woolly on midrib. Upper

leaves smaller and \pm narrow triangular. Inflorescence usually 35–60cm long, branches pendent. Capitula 200–500, cylindrical, involucrel phyllaries 2–17, outermost phyllaries small increasing in size inwards to ca. 4mm long, pale brown \pm tipped pink to rose pink, occasionally almost colourless. Corollas with short glandular hairs in lower regions, dark yellow, female florets absent, bisexual florets tubular, 5-lobed, anthers tailed at base: style branches truncate. Fruit an obloid cypsela 1–1.5mm long, sparsely papillose, pappus absent.

Flowers summer–autumn. Grows in scattered colonies especially along river flats.

Occurrence: New South Wales North Coast, Central Coast, South Coast, Central Tablelands.
Victoria, Grampians, Eastern Highlands, East Gippsland.

Cultivation: The species has a reputation for giving low germination from seed. That is probably because it is usually distributed without cleaning. If such 'seed' is inspected it will be found that most of it is empty and that only a few seeds are present. Heads collected in the wild can have as little as 1 seed in 1 litre of material. Since there is no problem with the timing of collection, cultivated plants give a plentiful yield. Cleaned seed germinates well. It has a reasonably long storage life and after 10 years storage at room temperature seeds will still give good germination (J. McVicar, pers. comm.).

Observation of the species' growth in the wild indicates how to sow it and grow it. The small seeds fall from their parent plants in winter, lodging among the grass around them. Some reach the ground and stay in a moist atmosphere until they germinate. They grow in a fertile, heavy, acid soil, containing plenty of organic matter and often derived from basalt. (Mt Wilson soil is about 20% humus and 20–40% moisture.) The fine seeds need light to germinate, and that takes place at lowish temperatures, say 10–15°C. A winter or very early spring sowing on the surface of compost will result in fairly rapid germination, usually within 10 days. Seeds sown in summer do not germinate until late autumn. Seedlings should be transplanted into a soil-based compost and potted on, so that they are in at least a 10 inch pot by autumn. Unsterilised soil gives better results than sterilised soil. Presumably this is because although not essential in fertile soil, mycorrhizal infection does result in a more vigorous plant. Soil-less composts are not recommended, because their use can lead to death from root infections. Pots should be kept fairly dry over winter and ideally overnight temperatures should not fall below –2°C. Growth is rapid in spring and plants need plenty of water. They should be potted on progressively and a 5 gallon (25 litre) or 10 gallon (50 litre) pot will not be too large. A well grown plant will reach 2½–3m (or even 4m under warm glass) by midsummer and bloom from then until May. Side branches may make it more than 2m across. It is possible to grow the species in pots as small as 3 litres but plants are then smaller. They can be kept for up to another three flowerings but become increasingly gawky and it is preferable to treat them as biennials.

Cuttings taken after flowering root easily. Their use encourages branching of the parent and reduces lankiness. Seed sown plants, however, are more compact and easier to accommodate over winter. Plants used for summer bedding are best placed at the back of a border or used as dot plants. Moist soil is needed and sites can be sunny, partly sunny or shady. Exposed windswept sites are unsuitable. The flower plumes can be cut for floral decoration.

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FIRE RECOVERY

by Ros Cornish

Last year's fires in the ACT were devastating. Much of Namadgi National Park was severely burnt and those who were allowed to visit it soon afterwards were very pessimistic. There will be some species which may not recover and it will take some of them a long time but, as is the way with many native plants, some have bounced back with amazing vigour and abundance. Many daisy species have already done so and are putting on a splendid display.

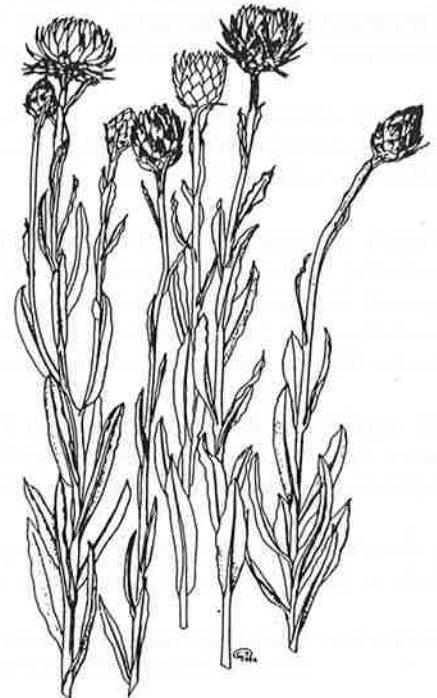
The Wednesday Walkers (of the Australian Native Plants Society, Canberra Region) visited the Brindabellas in December 2003 and drove to Mt Ginini. We had done this trip several times in the last few years but we weren't prepared for what we found. The dense eucalypt forest no longer had a canopy and sunlight flooded in to normally cool, dim areas. Many of the trees were showing signs of resprouting — some only from the base but most from the trunks and branches. All of the understorey had been completely burnt but on our visit it was covered with an array of plants. The dominant species in most areas was *Stellaria pungens* and it was a picture of white starry flowers. We couldn't recall seeing much of this plant on previous occasions so it must be an opportunistic early coloniser. There were also many grasses with flower stalks up to 1m tall. As we climbed higher, more understorey plants appeared, the best of which for me was *Podolepis jaceoides* — in full flower and taller than usual. They were interspersed with *Wahlenbergia stricta*, *Stylidium graminifolium*, *Arthropodium milleflorum*, *S. pungens* and *Bulbine glauca* giving a lovely combination of blue, pink, mauve, white and yellow.

There is an old ski run at Mt Ginini which is being rehabilitated. Without any tree cover, this is usually a floriferous area so we were pleased to find it even better than usual. Many daisies were flowering or about to — *Celmisia* sp., *Rhodanthe anthemoides*, *Leucochrysum albicans* ssp. *alpinum*, *Brachyscome spathulata*, *B. decipiens*, *B. aculeata*, *Chrysocephalum apiculatum*, *Xerochrysum subundulatum*, *Podolepis robusta*, *Craspedia* sp. and *Microseris* sp. (probably sp. 2 as described in *Flora of Victoria* vol. 4, p. 702). The *craspedias* (*C. aurantia* I think) were in profusion throughout the area and the *microseris* flowers were huge — up to 5cm in diameter. It really was a daisy paradise.

On 21 January 2004, the Wednesday Walkers did the walk to Nursery Swamp in Namadgi National Park and were again rewarded with a wonderful display. The area had been severely burnt but the regrowth was amazing. On the daisy front, there were large patches of *Calotis scabiosifolia* var. *integrifolia* which had just finished flowering, many *Brachyscome rigidula* in full flower, masses of *Cassinia longifolia*, very vigorous clumps of *B. spathulata* flowering, a few *Olearia megalophylla* and *O. erubescens*, *B. scapigera* in the wetter areas as well as a few patches of *Leptorhynchus squamatus*. The highlight though, was the large patches of *Podolepis hieracioides*. The flower stems in some cases were 1m tall and on several I counted at least 12 side branches of flowers before the terminal cluster. We had never seen such a display. Also impressive was a patch of tall, silver-leaved *Chrysocephalum apiculatum* among the granite boulders beside the swamp. I don't recall seeing this form in our area before — we usually see the low growing silver-leaved form or a tall green-leaved form.

In early January we read an article in the Sydney Morning Herald stating that the burnt sub-alpine areas in Kosciuszko National Park were spectacular this year and better than the usual good display in the alpine areas. We were able to check this out on 29 January and did the recommended short walk to Rainbow Lake — before Smiggin Holes on the Charlotte Pass road. It was quite breathtaking. The predominant colour was yellow/orange with masses of *Craspedia aurantia* (?), *Microseris* sp. 2 (?), *Podolepis robusta*, *Helichrysum rutidolepis*, *Xerochrysum subundulatum*, interspersed with the white/mauve of *Brachyscome spathulata*, the "hot" pink of *Stylidium graminifolium* and the blue of *Wahlenbergia ceracea*. We also saw a large patch of the white and mauve leek orchid, *Prasophyllum alpestre*. There were some very healthy plants of *Ozothamnus hookeri*, *O. secundiflorus*, *O. thyrsoides*, *Olearia algida*, *O. phlogopappa* and a few *Celmisia* sp. in flower as well as good patches of *Leptorhynchus squamatus* in flower. On the roadside there were good displays of *Chrysocephalum semipapposum*.

Although we all dread a bushfire going through our favourite haunts, there is no doubt that it allows a rebirth of many species and stimulates stunning displays from some plants, particularly daisies.



Xerochrysum subundulatum x 1/3
(illustrated by Gloria Thomlinson)

TASMANIAN GARDEN VISIT — November 2003by **Pat Webb**

On a recent holiday in Tasmania, John and I were delighted to see Jill and Colin Roberts' comparatively new garden. They moved from their home in Leith (near Davenport) to Ulverstone eighteen months ago. Their house is situated on the bank of the River Leven, and has a small garden with a north-easterly aspect. I was particularly interested in the daisies Jill was growing, most were in bloom on the lovely sunny days we visited.

Of course there were bright clumps of *Brachyscome multifida* here and there with their various colours — such good 'connecting' plants. Among the others noted were:

Xerochrysum bracteatum — various forms of this species made bright individual specimen plants. I know Jill will be delighted when they seed themselves. I think one species growing was *Xerochrysum subundulatum*. I saw this in the Hobart Royal Botanic Gardens and also *Xerochrysum bracteatum* 'Diamond Head'.

Ozothamnus scutellifolius (Tasmanian endemic). This small shrub (approx. 0.75–1 m) in Jill's garden was in full bloom — profuse clusters of flower heads. I understand it is not cultivated widely, but is found all over the State on dry hillsides. We saw some in the wild ourselves.

Ozothamnus turbinatus (Coast Everlasting). Jill's plant was growing in an open position but not in flower.

Rhodanthe anthemoides — two forms, one with erect single stems, and a branched form, 'Paper Cascade'. Another great daisy for a smaller garden.

Olearia phlogopappa, pink form was in flower. Another, *Olearia archeri*, is a Tasmanian endemic. I understand this species is only cultivated to a limited degree. It grows quite tall and I imagine Jill will need to keep this bush well pruned.

Odixia achlaena is another Tasmanian endemic, with only two species in the genus. (They were previously included in the genus *Ixodia* — note the spelling transposition.) It is a small shrub with golden yellow new growth; the leaves are narrow, linear and quite sticky. Plants have small white daisy flowers with short stalks and clustered flower heads. This species grows in a limited area in north-east Tasmania in wet sclerophyll forest. Apparently the picked flowers are long-lasting and used for indoor decoration.

Of course the lovely bright yellow *Chrysocephalum apiculatum* (various forms) and *C. semipapposum* were much in evidence, adding to this delightful, developing small garden. I certainly would love to see it again in eighteen months to two years.

I know it's not a daisy, but what a gem is *Clematis gentianoides* — another Tasmanian endemic. We saw it both in Jill's garden and in the wild — lovely white flowers, 3–4cm and prolific.

References: *Everlasting Daisies of Australia*, AD SG.
Encyclopaedia of Australian Plants, Elliot and Jones.

SUMMER FLOWERING DAISIES AT MULGRAVEby **Maureen Schaumann**

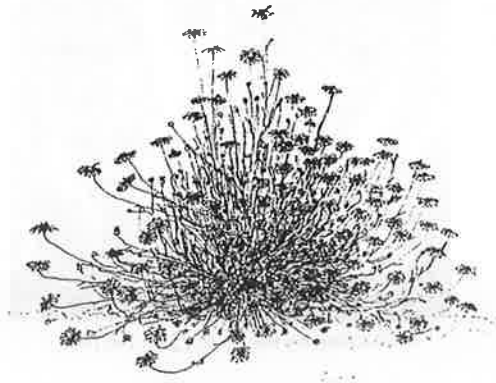
Where would I be without the daisies? Their charm and array of colours make them a must for every garden. Here are a few favourites that are not only popular with me but admired by passers-by as well.

Chrysocephalum apiculatum is one that is always bright and cheery and long flowering too. Four of the best are a grey prostrate and green upright form from the late John Emms, the lovely silvery variety from Anglesea with its colourful orange buds and the form sold as '*Helichrysum ramosissimum*' which suckers and flowers all through the year. All these I use mostly as edging plants, planting taller forms behind.

Chrysocephalum semipapposum from Mt Buller stands tall when in flower, its erect stems can reach up to 80cm high, whereas the Anglesea form with its bright golden clusters is more compact and neater in habit.

Paper daisies create their own splash of colour. Clumps here and there of white *Chrysocephalum baxteri* add a nice contrast to all the yellows and golds, as do the varying colours of orange, cream and yellow of *Xerochrysum viscosum*.

Xerochrysum palustre with its bright golden heads looks neat standing to attention in the middle of the ephemeral soak, or meandering amongst its neighbours — *Calocephalus citreus*, the dainty *Leptorhynchus tenuifolius* and *Brachyscome basaltica* (below, illustrated by Gloria), *Goodenia viscida* and the brownish heads of *Leptocarpus tenax*.



Xerochrysum papillosum is dainty with smaller white heads and pretty pink buds. *Xerochrysum bracteatum* 'Princess of Wales' on the other hand makes a statement being 70cm high x 150cm wide. The brownish buds and large golden heads smother the foliage with their many blooms.

From Tassie come *Argentipallium dealbatum* and *Helichrysum leucopsideum*. The former is in a round bowl and is a delight to the grower. Being prostrate and suckering, the bowl is nearly filled. Leaves are dark green, grey beneath, and buds are an eye-catching red, opening to white. *H. leucopsideum* is also lovely but with soft pink buds and white satiny bracts.

One of the shrubby daisies, *Cassinia leptocephala*, is brightening a shady spot with its dark green foliage and large clusters of mustard-coloured blooms. I also look forward to the massed display of greenish gold flowers put on by *Cassinia quinquefaria* in February.

Another daisy to show its colour during summer is *Helichrysum rutidolepis*. My form is lemon-coloured. Judy grows a much nicer variety from Oberon in New South Wales which has orange outer bracts. I hate saying that Judy has a plant that is better than mine, but in this case it is so.

Add to the above range of colours the bright yellows of the *Podolepis* and *Leptorhynchus*, splashes of mauve, purple, white and pink of the brachyscomes, and you can see why summer need not be a dull time but alive with colour by including a few of the aforementioned daisies in your garden.

IN MY EMERALD GARDEN

by Pat Tratt

Seeds gathered from my garden plants of *Rhodanthe chlorocephala*, *Schoenia filifolia* and *Brachyscome iberidifolia* were scattered in gravel mulch in January/February this year. By May many seedlings appeared, some forming buds in June. Very windy wet weather took its toll, but many survived. The first flowers of *Rhodanthe* and *Schoenia* opened at the end of July and were promptly destroyed by White Cockatoos. By September they were a picture but rather tall and prone to blowing over. (Parts of the garden are open to wind damage.) I must get into the habit of pinching out tips to bush them up. *B. iberidifolia* is flowering now (November) but plants grown from a recent sowing are stronger than those that over-wintered.

I have had mixed results with the seed sown in punnets:

Podolepis jaceoides and *Vittadinia muelleri*, about 45% germination.

Brachyscome nivalis and *Helichrysum adenophorum* var. *waddelliae*, nil.

Brachyscome sp. aff. *curvicarpa*, several germinated but only one survived to plant out and this has just started flowering.

Rhodanthe manglesii, good germination, possibly 60%, just starting to lift their pretty heads in the garden.

Xerochrysum subundulatum and *Leptorhynchus elongatus*, only a few germinated but have refused to progress beyond tiny.



Brachyscome aff. *curvicarpa* habit (drawn by Gloria)

Brachyscome cardiocarpa plants given to me by Esma — a cherished reminder of her — are flowering profusely so I am hoping to collect seed for the seed bank.

Several daisies are putting on a wonderful show, providing cut flowers and attracting butterflies. Where would I be without them?

PTEROCAULON SPHACELATUMby Barrie Hadlow

This species is a 'daisy' that I find of great interest and have come across it in a variety of habitats, usually well inland! These habitats include the northern Flinders Ranges (SA) and north-western Queensland at Lawn Hill National Park. The aromatic leaf oils have given the species its vernacular title of 'Fruit Salad Plant' which I agree with — a favourite of mine. Sometimes large and coarse in its appearance it may look out of place in the woodland, grassland or dry riverbed environment where I have come across it growing.



Print taken by Barrie at Lawn Hill N.P.

OZOTHAMNUS LEDIFOLIUSby Pat Webb

We have had this little plant (0.5m) growing in our small unit garden for two years. I planted it before really knowing the microclimate of various spots and it hasn't been very happy in its situation, but I have enjoyed the plant. Today I pulled it out and have taken several cuttings. Last year I took a few cuttings but only one has survived — at the time of writing it looks good with new growth.

When we were in Tasmania in November we had hoped to see it in the wild — but no luck. When I see its natural habitat is the high country of Tassie I was crazy to plant it where I did.

Whilst the flower-heads are profuse and conspicuous (white) it is the new growth and the buds which are most attractive. I see in Elliot and Jones that plants grow well on the south coast of England. I should like to know if any member has tried this small plant as a container plant with any success. I should imagine that a position in dappled shade would keep it happy. I expect it would grow well in the Dandenongs. I missed seeing Jeanette Closs' garden in November or I should have been picking her brains on the subject.

PROPAGATION PAGES

1. **Bev Courtney** observed on 25/1/04: 'I had a lot of tubes of Yam Daisy that I thought had died right away, but when I tipped them out many had a small healthy tuber in them, so I've repotted them and hope they will resprout in autumn. They had "died" back before spring, so hadn't flowered and I really thought they had gone for good.

I've given up perlite as a seed-propagating medium. I've been using a mix of 2 parts perlite/1 part cocopeat for many years. The mix was nice and light so that it was easy to lift out the little seedlings, but it didn't always provide a nice fine, level surface on which to sow seed. Tiny seeds tended to get lost amongst the perlite and weak roots sometimes couldn't seem to push down through it. It's dusty to work with and I also wanted to use what materials I had on hand on the property, in other words, to be more sustainable. So I've switched to equal parts of sieved grey sand (from the property) and cocopeat. It makes a fine, level surface and I have one of those spice jars with holes in the top to shake sand on to the seeds if they're big enough to need covering. Seed trays are watered with a fine mist sprayer. I might even get some surprises — local pink heath seedlings might appear.

2. **Judy Barker** reports that seed of *Leptorhynchos nitidulus* collected in early December last year from the side of a road through the Angahook forest at Aireys Inlet is germinating better than usual. When sown in early January, eight little seedlings appeared in 19 days. Five more seedlings arose after Hawthorn received 128mm in one night — a deluge which also flooded two of our rooms. This represented amazing success compared with the experience of the previous year. Seed had been collected from exactly the same spot at the same time the year before, sown one month later and had yielded one seedling after 56 days. Success may have been the result of good rain in October/November '03 compared with almost no rain in that time in '02. This season plants were more numerous, suckered more vigorously and produced larger heads on longer flowering stems. These are tough little plants. Once the flowers have withered, the plants resemble low tufts of coarse grass, about 5cm tall. They are growing in a hot, open situation at the feet of *Olearia teretifolia* and *Pultenaea daphnoides*.

Admittedly, thirteen seedlings would still not be considered good germination when the amount of seed sown was recorded as 'plenty' but it is a great advance on one seedling. More may emerge with time. In any case, members have often observed that, when species sucker vigorously, their seed rarely germinates profusely.

Seed of *B. basaltica* var. *gracilis* was selected from Esma's private collection of daisy seed (donated by Alf) and sown last September. It was labelled "ex Kerang, 11/94 and 3/95". It was from the Pinewood garden — always designated by a capital P in a circle. It germinated quickly and produced about 35 seedlings, which were potted on in 3s and 4s on a cool January day. The further they developed, the less they looked like Gloria's drawing in the *Brachyscome* Book. The basal leaves were long and toothed at the apex. It seems that either Esma's garden plants may have crossed with another species or the seed was labelled incorrectly. When we deal with a lot of seed it is surprisingly easy to make a mistake. I have given some pots to Faye Candy and have planted some pots in our garden. It will be interesting to see what grows.

3. **Matt Hurst** rang in January to report that the Wagga nursery for which he works had better results than usual with *Daviesia latifolia* last year. The plants were sheltered over the winter under a poly-shelter with open sides. It was surmised that the *Rhizobacter* spp. which had been included in the potting medium had worked better when conditions were warmer.

Good germination of *Chrysocephalum apiculatum* resulted from 1/2kg seed surface sown over 40 cell wet hikos — 20 hikos per rack — and the racks kept wet. Good results were also produced for Flannel Flowers when young seed was soaked in SISP overnight.

MALLACOOTA MAGIC WEEKEND, 17th–20th OCTOBER

by Sylvia Oats

I am so very glad I was able to go Mallacoota for the AD SG meeting. It really was a most enjoyable weekend. My thanks go to Neal and Joy for their excellent hospitality throughout our stay.

The views from their lounge window will stay with me forever (that was Mallacoota magic on its own), and to walk around their property — what a feast that was. It was a wonderful display, with so many different species of native plants, and certainly a lot of work had gone into it. Many beautiful birds were attracted to it.

Joy took us to an area in Mallacoota near the aerodrome, where we saw several different species of orchids and *Helichrysum elatum*. A huge area that had been mown as a windbreak has hundreds of *Xanthorrhoea* growing in it. They had sent up large spikes which will look wonderful in a few week's time when they flower.

Joy did a fantastic job in the catering department and kept us well supplied the whole week. It was most enjoyable, and Neal did a great job driving to several locations on Sunday. We started out at 9.00am. The weather had been perfect on Saturday and Sunday morning was even warmer.

Mallacoota has an abundance of wildflowers and they are of a huge variety, so I will only mention a few we saw. *Ricinocarpus* and *Leptospermum* were in flower, and in some areas the bush looked white, there was so much of it. *Olearia lirata* was plentiful and we saw a few plants of *Olearia tomentosa* in flower, also *Helichrysum elatum*, *Cassinia aculeata* and *Ozothamnus obcordatus*. I had my first sighting ever of *Calomeria amaranthoides*, but it was not in flower. One of the loveliest sights for me was a thick patch of *Prostanthera melissifolia* (a sight that made me green with envy as I always manage to kill it off here in South Australia). We had a picnic lunch in a wonderful spot, and Joy's heavenly quiche and chocolate cake added to the enjoyment. At about that time the weather decided to deteriorate and it started to drizzle. It didn't, however, dampen our enthusiasm as we still drove around. Joy and Neal had plenty to show us.

My biggest highlight was when Joy and Neal took us to see a patch of duck orchids. I have always wanted to see one, but they have always been elusive. I also got to see my first pomaderris (or was that a dozen or two) but that's another story.

To round off a lovely weekend we all met at the Tide Restaurant in the evening. We had a lovely meal, great company and the local guitar strumming club even treated us to a couple of medleys.

It was very worth while taking the long trip from South Australia to Mallacoota. It was a shame so few were able to attend, they missed out on a great weekend.

DAISIES for CHRISTMAS DECORATIONSby Ros Cornish

As it's a "bush Christmas" and my colour scheme for place mats is cream and gold, I have been harvesting *Xerochrysum bracteatum* and *X. viscosum* buds in the gold and cream colours for table decoration. Betty (my aunt) did a nice arrangement for the centre of the table using the small gold, wire Christmas tree (that I bought at Spotlight for \$7) surrounded by *Xerochrysum* flower-heads (minus stalks so that they sat flat), some Ferrero Roche chocolates (gold wrappers) and some gold stars she'd bought from Lincraft. She tied lovely bows out of gold ribbon around the serviettes and everything blended in well with the beige place mats which have gold stars on them and the crackers I made from a Lincraft kit — beige with gold stars.

The front door decoration looked particularly nice, even if I say so myself. I used some young stems of *Eucalyptus crenulata* which were bluish-white with the bloom that they have, teamed with the dried stems of *Chrysocephalum semipapposum* and *C. apiculatum* and a few dried *Xerochrysum bracteatum* and *X. viscosum* flowers, sort of layered so that there weren't too many stems showing. I tied it with some gold ribbon that had an antique look and it blended in beautifully. I then hung it all with some fishing line to a drawing pin hammered into the top of the door. The eucalypt leaves gradually dried out but stayed looking good, and as the daisies were already dried the whole arrangement was fine until the twelfth night.

CRATYSTYLIS CONOCEPHALAby Judy Barker

Natalie Peate is the only Melbourne member to have seen the Blue-bush Daisy. It grows at Bookmark, a property north of Renmark in South Australia. Natalie says that there it grows as a shrub, 1–<2m, narrower than it is tall. The habit is dense, upright, rather woody, with grey foliage, and it bears a resemblance to *Maireana sedifolia*. She has not seen it in flower. Dr Jim Willis states in *Plants of Victoria* vol. 2, p. 698: '... its crowded, flat, obovate leaves are 5–10mm long and the solitary cylindrical flower-heads about 14mm long.'

This species is the focus of Ray McMahon's investigation for this summer's Esma Salkin Studentship (see p. 2). After one of Natalie's trips last year the Bookmark people sent seed of *C. conocephala* to her and she gave some to me. My seed was sown with no pretreatment last August, began to germinate 13 days later, and after 18 days I had 8 seedlings. They grew steadily but all died during a period of early hot weather, probably because they were in a north-facing position with no protection. The pots were all moved to their summer position (filtered sun for 2–3 hours per day) in November. In early December a lone seedling appeared, did not grow very well and was potted on in early February. Natalie had good germination and now has three pots growing well under nursery supervision. That is the extent of our knowledge of this species.

Natalie also reported that Dr Neville Walsh requested propagating material of *Olearia astroloba* because it was thought to have disappeared from Marble Gully during last year's Gippsland fires. Natalie gave him cutting material and seed from one plant in Bob O'Neill's garden, although we were not sure that this would germinate. Dr Walsh needed to know the source of Bob's plant so Natalie traced the trail from Bob to Max McDowall to Esma and back to seed collected from Marble Gully and given to Esma by Gill Earle. *Olearia astroloba* has since regenerated after the fires so the urgent need has passed, but Natalie was interested that the trail had led to Esma and we remembered that *O. astroloba* was another of her pet projects.

MEMBERS' REPORTS

Sylvia Oats of Elizabeth East (SA) writes on 25/10/03: 'All the daisies we grew in large pots for the Adelaide Plant Show have gone into the garden, and what a display now that they are in full flower!'

Just a footnote about *Rhodanthe polygalifolia*. They are so viable here. When Syd sent you some seed he tipped all the dross just outside the door to the garden after he had sorted the seed from the rubbish. Now we have a lovely patch of *R. polygalifolia* flowering there.'

Bev Courtney of Langwarrin (Vic) reports on 11/11/03: 'The garden, such as it is, is looking very nice at present, providing you ignore the weeds, which I'm working my way through at present. There are literally hundreds of seedlings of *C. semipapposum* coming up — it will be the Anglesea form I think — and *Brunonia* has also seeded naturally. I'm pulling out all the old tired flannel flowers and finding that there are many new seedlings underneath them. *R. anthemoides*, Liverpool Range, is also doing well and a few seedlings have

appeared. This is the "informal" garden. It has weeping grass which I will never be able to eliminate and the odd stem of bracken which I allow to remain.

The "formal" garden would probably be more to your liking (or to Maureen's anyway). It has no weeds, no grasses and no bracken. I've recently added lots of plants, most of which came from cuttings from Shirley Carn's previous garden. There are a lot of mint bushes so I hope they survive.'

Philip Wilson of Woodend (Vic) writes in November '03: 'We seem to be having a good show of wildflowers this year due I'm sure in part to the smoke which hung here for weeks during the bushfire crisis in the north-east last summer. It's been great to see after the last few drier than average seasons. The local *Podolepis jaceoides* appears to be the Basalt Plains variant (sp. 1) and they too seem to be heading up nicely. Although I find much of the seed produced is non-viable, I have had some success in raising this rewarding plant at home.

Let me know if anyone would like some of the "less spectacular" species at all. I have a number of *Senecio* species which make dramatic, fast-growing foliage plants, plus the local *Euchiton* which lends a natural look to a bush garden, especially in those difficult, boggy sites.

A couple of years ago I sourced some of the Gisborne population of *Xerochrysum palustre*, and it was interesting to read Bev's report on germination trials of this increasingly rare plant. My potted specimens are suckering wildly again at the moment, so I must plant them in the acre or two of seasonal wetland to establish another safe haven now that the cattle have been fenced out. Pleased to know that Bev has had ongoing interest in the yam daisy I sent in a while ago. I haven't been game enough to sample mine as yet!

Ros Cornish of Carwoola (NSW) reports on 29/11/03: 'The "open garden" is still to happen. It is on 9 December. We have made things look a little better by putting in some old sleepers as edging to part of the path in the front garden and I am now in the process of replacing leaf litter/shredded *Kunzea* mulch with pebbles in the garden and close to the house. This will be better in case of a bushfire and I hope it will also encourage some seedlings to grow. The other mulch tends to smother everything and I quite like the daisies, in particular, to come up where they wish. It would probably have been better to have had people here in November as we've had a marvellous display of *Craspedia variabilis*, *Calotis scabiosifolia* var. *integrifolia*, *Ammobium craspedioides*, *Rhodanthe anthemoides*, *Podolepis jaceoides* and *Leucochrysum albicans* ssp. *albicans* var. *tricolor* and var. *albicans*. However, the *Xerochrysum bracteatum*, *X. viscosum*, *Helichrysum calvertianum*, *Brachyscome iberidifolia*, *Rhodanthe chlorocephala* ssp. *rosea*, *Chrysocephalum apiculatum*, *C. baxteri*, *C. semipapposum* and *Leptorhynchos squamatus* are starting to look good and the leucochrysums are coming again.

I will have all the pebbles in place on the beds and paths in the next few days. We've just had the most wonderful rain for two days — and maybe more to come — so the pebbles will go down on well watered beds. John has been to have a look at the house dam and he says that a lot of water is running into it so let's hope it brings the level up considerably. We are still at least 2m down, which is a worry if we get a summer like the last two.

I helped in the germination trials of both varieties of *Leucochrysum albicans* ssp. *albicans* for the Everlastings Book and planted a number of the resulting plants in the garden. As I think I've mentioned before, these varieties tend to choose where they want to grow and have gradually self-seeded into bare earth, mainly in paths, and are intermingling. I am now starting to get hybrids, presumably, — the flowers are lemon. Have others noticed this? Am I in danger of losing the white ones — var. *tricolor* — eventually? I have a population of these which are native to the block and would not want to lose them. Although they are not in the same area, they are not too distant from the others.

It has been an excellent spring for our local daisies. The area on the Captains Flat Road where I found *Brachyscome aculeata* many years ago has been a blaze of colour. There is a patch of *Calotis scabiosifolia* var. *integrifolia* which must be 3m in diameter at the base of a big eucalypt. It looks stunning and has been flowering for weeks. Also there in large quantities are *Calocephalus citreus*, *Leucochrysum albicans* ssp. *albicans* var. *tricolor*, *Helichrysum scorpioides*, *Xerochrysum viscosum* and *Leptorhynchos squamatus*. These together with *Bulbine bulbosa*, *Ranunculus lappaceus* and *Viola betonicifolia* have been superb. I led a wildflower walk there right at its peak, on behalf of our Landcare group, for the general community. More than twenty people turned up again which was gratifying. They were most impressed with the difference from last year when we spent most of our time looking at pictures in books to see what the dead and dying plants were supposed to look like. Although we're not out of drought yet, we've had just enough rain at the right time to bring on a great display.'

Angus Stewart of Erina (NSW) reports on 29/12/03 with feedback on the germination of seed of *Brachyscome* species sent to him by AD SG earlier in the year. He has been concentrating on this genus as he has been running a breeding program on it. He was able to germinate and flower most of the species he received. All the seed had been stored at 4°C, and many were still germinating despite the fact that some had been collected in '91 (*B. halophila* from Yarra Yarra Lakes in Western Australia, probably by Esma), and in the years '95-'99. Some of the seed had been collected in '01 and '02 but did not always yield good germination.

Angus observed that the majority of 'species had produced most of their seedlings after 2 weeks, with small amounts of further germination by week 4. *B. aculeata*, *B. readeri*, and *B. segmentosa* were exceptions, taking 3-4 weeks for most germination to occur.

I have now included these species into my breeding program with species such as *angustifolia*, *formosa*, *multifida*, etc, and am getting promising results. *B. halophila* looks interesting and has a pleasant honey-like perfume.'

Matt Hurst of Wagga Wagga (NSW) rang in mid-January to report that there were masses of *Pycnosorus* and/or *Craspedia* species flowering profusely between Lockhart and Collingully, about 30km from Wagga. An interesting *Swainsona* sp. was also observed at this spot. At Ardlethan he had noticed an upright form of *Xerochrysum bracteatum* which was 30cm high.

Matt had also been part of the city's Open Garden weekend last year and many people had passed through and admired the garden.

REPORTS FROM FRIENDS OF AD SG

Pat Fitzgerald of Murrum Station, Mt Magnet (WA) writes on 23/10/04: 'We went to Perth about a month ago and decided to take a different route in the hope of seeing a few wildflowers. As we went quite close to *Rhodanthe collina* we went in and had a look for her. It was terribly dry, but we searched around and actually found a few tiny flowers — one per stem, about 2 inches high! You were so lucky to have the season you did when you found them first, as we were to get the seed. Since that time (8/96) the seasons have been progressively worse, and this year is the worst my husband can remember in his 62 years of living here. Not a blade of green or a flower anywhere on Murrum. The few sheep we have left are running on the saltbush and bluebush country — which we are so lucky to have, but this is looking pretty desperate too. Here's hoping for a big big rain soon!'

Margaret Guenzel of Ocean Grove (Vic) writes in December '03, 'My garden has not as many daisies as last year but I am pleased with a *Helichrysum leucopsideum* from Faye Candy, the Tasmanian form, which has 9 flowers on it and was planted only 8 weeks ago. A second plant, 4 weeks old, has 2 buds on it and a third from Maureen (the other form) looks a bit sickly. It may have had less water as it is a bit hidden.'

(I think the other form to which Margaret referred was propagated from seed Esma collected from (SA). It usually looks sickly for me too, so we probably don't provide the right situation for it. The beautiful form that many members ordered from Tasmania has been difficult to keep alive. If Margaret has been successful with it at Ocean Grove I will plant my remaining little pot at Fairhaven in autumn. ... Judy)

CHRISTMAS OUTING

On 18th November we set off to visit John and Barbara Bell's large garden in Horseshoe Bend Road, Torquay. John grows plants for sale as cut flowers, so there are not many daisies on view, but we were dazzled by the excellent growth of acacias, banksias, eremophilas, eucalypts, grevilleas, isopogons, melaleucas, petrophiles, and waratahs. Naturally, there were also odd rows of superb proteas and leucadendrons. Of particular interest were a lovely *Agonis linearifolia*, a very large *Banksia baueri* and a handsome *Eucalyptus torquata*. We were made very welcome, supplied with morning tea and invited in for lunch when we returned from our tour of the garden. We presented the Bells with a copy of *Australian Brachyscomes* and some daisies, so we hope that we have enticed them to try a few choice species in their garden.

On the way home we called in to see what Glenleith Nursery could provide. As we drove down their long drive most of us were claiming that we would not be seduced into buying any more plants at that time of year. We already had so many pots still to plant before the hot weather hit us that we weren't coming to buy any more. So much for good intentions! The nursery was surprisingly well stocked for that time of year. They keep a large range of plants in 5cm pots and they proved too tempting for some of us. It made us think that an early autumn foray might be a good idea — that is if we have planted all the pots that we are still sheltering and watering. Before we left we were granted permission to look at the extensive garden around the MacMahon house, and were warned that snakes might be about. This is usually enough to make me remember how tired I am but I followed the others because I hoped the snakes would be frightened by all the noise our little group was making. The garden was a revelation, filled as it was with unusual and interesting plants. We saw dampieras, hypocalymmas, verticordias, a tremendous range of grevilleas and many large eucalypts from Western Australia. Maureen was especially interested in a small white/mauve hibiscus. Unhappily, there are quite stringent water restrictions in the Geelong area and the garden needed a lot of weeding and loving attention which John does not have time to give it. The bones, however, are there if he ever gets time.

It was a very pleasant day spent in good company. Our thanks to Maureen for organising it.

WE WERE WRONG

In the last newsletter, NL 67, Jeff Irons referred to '*Ozothamnus antennaria*'. I thought I remembered that the synonym for this species was *Helichrysum antennarium* and that when the shrubby helichrysums had been included in *Ozothamnus* the specific names ending in 'ium' now ended in 'ius'. In my editorial hat I consulted Anderberg, A. (1991). Taxonomy and Phylogeny of the tribe Gnaphalieae (Asteraceae). *Opera Botanica*, 104, p.89. Sure enough, the relevant entry read '*O. antennarius* Hook. f. (= *Helichrysum antennarium* (DC) F. Muell.)'. I changed Jeff's epithet without consulting him, thinking that I was being very meticulous. Jeff was surprised by this change. He pointed out that the specific name was *Ozothamnus antennaria* in the *Encyclopaedia of Australian Plants suitable for cultivation* vol. 7 (1997) by Elliot, E. and Jones, D., and also in *A Census of the Vascular Plants of Tasmania* (1995) edited by A. M. Buchanan. Good Heavens!

Jeff consulted a botanist, Mike Grant, about the history of the various names given to *Ozothamnus antennaria*. This answer is reprinted with Mike's permission: "The name was originally published as *Swammerdamia antennaria* by De Candolle (1838). At the time he said that the specific epithet was chosen because of the resemblance of the pappus apices to *Antennaria*. J.D. Hooker moved it to *Ozothamnus* in 1856, at which point he called it *O. antennaria*, recognising that there was no need to change the termination. Bentham moved it into *Helichrysum* in 1867 but he made the mistake of treating it as an adjectival epithet and listed it as *H. antennarium*. Presumably Anderberg thought the epithet should be changed too. Although there isn't actually any correction needed here if we retain the spelling of the epithet as De Candolle intended, the ICBN (article 60.1) does allow for correction to endings:

<http://www.bgbm.org/iapt/nomenclature/code/SaintLouis/0065Ch70aGoNSEcla60.htm> "

Judy Barker (with many thanks to Mike Grant and Jeff Irons).

EDITOR'S NOTE

I am extremely grateful to all the members and friends who write articles or report for the our newsletter. The December issue of *Growing Australian* held this statement from Bob O'Neill's ASGAP Study Group News under his AD SG heading: 'As usual I am impressed with the sheer volume, variety and quality of this newsletter — there are so many contributors.' So congratulations to you all and please keep the articles flowing.

At one time in early January there were a mere 9 pages in the computer. Disaster appeared imminent and Lee even offered to write an article in a bid to calm the household. Perhaps it was this threat that stirred Maureen (who hates writing) into giving me a lovely addition. Then Ros sent a great article and members rang to give more news. NL 68 grew like Topsy and the excellent seed list (expanded by Alf's donation of Esma's private seed collection) has filled it.

In articles written by Pat Tratt and Maureen, written quite separately and at different times, they both wonder where they would be without daisies. It is very true that the summer is usually saved by their colour and the fact that they flower for such long periods.

I am very grateful to Ailsa Hamilton for continuing to illustrate specimens for us. Together with Gloria's, Betty Campbell's and Ailsa's drawings we have an extensive range from which to choose.

We all congratulate Gloria and Jock on the birth of their first grandson, Joseph, weighing in at 7lb 7oz. Jock has proclaimed himself 'Grandfather of the Year'.

Please note that Joy's telephone at the Boronia unit has been disconnected until further notice. Think about using the seed bank and good daisy growing, from



NEW MEMBERS

ADSG extends a warm welcome to new member, Peter Lord, PO Box 286, St Agnes, SA, 5097.

SEED DONORS

Many thanks for the donations of seed to the following members and friends: Judy Barker, Faye Candy, Barrie Hadlow, Jeff Irons, Christina Leiblich, Alf Salkin, Maureen Schaumann, Pat and John Webb, Philip Wilson.

SEED WANTED PLEASE

Brachyscome cardiocarpa, *B. formosa*, *B. tenuiscapa* var. *pubescens*, *Calotis scabiosifolia* var. *integrifolia*. Although Faye Candy has donated seed of *B. basaltica* var. *gracilis* and *B. cardiocarpa* from her garden we would like more seed of the latter as it is a species in great demand.

SEED LIST

A full seed list is published in each March newsletter. Please keep this list for reference; only additions and deletions will be recorded in other 2004 newsletters. **A STAMPED SELF-ADDRESSED ENVELOPE (111 x 220mm) MUST BE ENCLOSED WITH EACH REQUEST FOR SEED. (POSTAGE REQUIRED IS USUALLY \$1 DUE TO THE BULKINESS OF SOME SEED.)** Please write to Maureen Schaumann for provenance seed or to Judy Barker for garden or commercial seed. (The addresses are on the front page.) If both types of seed are required a letter to either Maureen or Judy will suffice.

Please note that much of the seed listed below has been collected in the gardens of Study Group members, and some species may have crossed with others, especially those of *Brachyscome* or *Xerochrysum*. **One parent only is guaranteed.** Much of the seed listed has been kept in the refrigerator. The curators welcome feedback on your germination results since the task of testing the germination of so many species and the cost of such an undertaking are not feasible.

GARDEN or COMMERCIAL SEED

Judy Barker (Co-ordinator)

Ammobium alatum, *craspedioides*.

Anemocarpa podolepidium.

Asteridea athrixoides, *chaetopoda*.

Angianthus tomentosus.

Bellida graminea.

Brachyscome aculeata, *basaltica* var. *gracilis*, *cardiocarpa*, *ciliocarpa*, aff. *curvicarpa*, *dentata*, *dissectifolia*, *diversifolia* var. *diversifolia* and var. *maritima*, *exilis*, *goniocarpa*, *gracilis*, aff. *gracilis*, *halophila*, *iberidifolia*, *lineariloba*, *melanocarpa*, *microcarpa*, *muelleri*, *multifida* (ex The Rock, NSW), *nivalis*, *nodosa*, *petrophila*, *ptychocarpa*, *pusilla*, *readeri*, *rigidula*, *riparia*, *segmentosa*, *sieberi* var. *gunnii*, *spathulata* var. *spathulata*, *stuartii*, *stuartii* complex, *tadgellii* (orig. Falls Ck), *tenuiscapa* (ex Spencers Ck), *tesquorum*, *trachycarpa*, sp. (Darling Downs), *whitei*.

- Calocephalus citreus, lacteus.*
Calomeria amaranthoides.
Calotis cuneifolia, dentex, lappulacea, plumulifera.
Cassinia laevis, leptoccephala, uncata
Chrysocephalum apiculatum (Adventure Bay [Tas], Anglesea, John Emms' prostrate, Seaford suckering, Mt William, Urana [NSW]), *baxteri* (orig. Wilsons Prom), *semipapposum* (alpine form, Anglesea, Frankston, Langwarrin, Lara, Mt Buller, Seymour/Bendigo, ex Tamboritha Saddle tall form with large green leaves, ex Valley Reserve Mt Waverley, ex York Peninsula SA with fine grey leaves and small heads, form about 2.5m high with large green leaves).
Cotula alpina (Bogong High Plains)
Craspedia variabilis (ex ACT)
Helichrysum adenophorum var. *adenophorum, calvertianum, elatum.*
Hyalosperma cotula, praecox, simplex.
Ixioclamys cuneifolia.
Lagenophora huegelii.
Leiocarpa sp. (ex Jan Hall).
Leptorhynchus elongatus, hieracioides, squamatus, tenuifolius (Croydon).
Leucochrysum albicans ssp. *albicans* var. *albicans* (orig. ACT, Longwood [Vic], Wagga Wagga [NSW]),
Leucophyta brownii.
Microseris sp. (NSW)
Olearia argophylla, astroloba, axillaris, elliptica, erubescens, frostii, floribunda (white), *glutinosa, hookeri, ledifolia, lirata, obcordata, phlogopappa* (white, pink, blue), *pimelioides, purpurascens, viscosa.*
Ozothamnus adnatus, cordatus, costatifructus, diosmifolius (white), *ledifolius, obcordatus, scutellifolius.*
Picris evae.
Podolepis auriculata, canescens, jaceoides, lessonii, neglecta, nutans, rugata, sp. 1 (the Basalt Podolepis).
Podotheca gnaphaloides.
Polycalymma stuartii.
Pycnosorus globosus, thompsonianus.
Rhodanthe anthemoides (unbranched form, Liverpool Range, Whitlands), *charsleyae, citrina, chlorocephala* ssp. *rosea*, ssp. *rosea* (Balladonia form), ssp. *splendida, corymbiflora, corymbosa, diffusa* ssp. *diffusa* and ssp. *leucactina, haigii, humboldtiana, manglesii, polygalifolia, polyphylla, propinqua, pygmaea, spicata, stuartiana, tietkensii.*
Schoenia cassiniana, filifolia subsp. *filifolia* and subsp. *subulifolia.*
Senecio amygdalifolius.
Vittadinia muelleri, sp. (white).
Xerochrysum bracteatum — (Ebor, Pambula, Sandy Beach, dwarf mixed form, mixed garden form, white forms, tall red form, tall form [Tenterfield]), *macranthum, subundulatum* hybrids, *viscosum.*

PROVENANCE SEED

Maureen Schaumann (Co-ordinator)

Freshly collected seed is thoroughly dried and treated for insect infestation. Seed storage procedures are constantly under review. Most seed is stored in sealed foil packets at 4°C. Seed of arid and semi-arid origin is now stored at room temperature.

- Allopterigeron* sp. — (Qld).
Ammobium craspedioides.
Anemocarpa podolepidium 8/96.
Angianthus tomentosus — (WA) Murrum Station, (SA) Kimba.
Argentipallium obtusifolium — (Vic) Aireys Inlet.
Asteridea athrixioides — (WA) 97.
Brachyscome aculeata — (ACT), (Vic) Gippsland Alps; *basaltica* var. *gracilis* — (NSW) Kinchega; *blackii* — (NT); *ciliaris* — (NSW) Wilcannia, (SA) Flinders Ranges, Eyre Hwy; Iron Knob, Wirrulla, (NT); *ciliocarpa* — (WA); *cuneifolia* — (SA) Tintinara; *dentata* — (Qld), (NSW), (SA); *diversifolia* var. *maritima*; *erigona* — (NSW); *exilis* — (SA; aff. *exilis* — (NSW); *goniocarpa* — (SA) Tooligie; *gracilis* — (Vic); *iberidifolia* complex — (WA) Esperance; *latisquamea* — (WA); *leptocarpa* — (Vic); *lineariloba* — (SA) Streaky Bay, Gawler Range; *melanocarpa* — (Qld), (NSW); *microcarpa*; *muelleri* — (SA); *multifida*; *nivalis* (Vic) Falls Creek (atypical forms), Mt McKay; *nodosa* — (Qld) Cunnamulla, Quilpie, (NSW) Narrabri; *obovata*; *parvula* — (Vic) Mornington; *ptychocarpa* — (NSW) Mt Canobolas, (Vic); *pusilla*; *radicans*; *readeri*; *rigidula* — (NSW), (Vic) Falls Creek; *scapigera* — (Vic) Dargo High Plains, Gippsland Alps; *spathulata* subsp. *spathulata* — (NSW), (Vic) Falls Creek, Dargo High Plains, Gippsland Alps; aff. *stuartii*; *tadgellii* — (Vic) Dargo High Plains, Falls Creek; *tenuiscapa*;

- whitei* — (Qld) Quilpie 8/95, 9/93; *xanthocarpa*.
- Calocephalus citreus*
- Calomeria amaranthoides* — (Vic).
- Calotis cuneifolia*; *inermis*; *multicaulis*; *scabiosifolia* var. *scabiosifolia* — (Qld).
- Campactra barbata* — (Qld).
- Cassinia aculeata* form — (Vic), (SA); *adunca* — (NSW); *compacta* — (NSW); *longifolia* — (NSW); *quinquefaria* — (NSW); *subtropica* — (Qld, NSW); *tenuifolia* — (NSW) Lord Howe Island; *sp. aff. uncata* — (Vic); *sp.* — (Vic) Pine Mountain; (NSW) Joonama Dam.
- Celmisia sp.* — (Vic) Gippsland Alps.
- Cephalopterum drummondii* (cream large heads, pink and white, small yellow) — (WA).
- Chrysocephalum apiculatum* — (NSW) Gunnedah, (SA) Eyre Peninsula; *baxteri*; *semipapposum* — (Vic), (NT) Trap Yard Gap area.
- Craspedia sp.* — (SA) Yorke Peninsula.
- Erigeron bellidioides* — (Vic) Falls Creek; *nitidus* — (Vic) Falls Creek; *?paludicola* — (Vic).
- Erymophyllum glossanthus* — (WA) Mt Magnet.
- Haptotrichion colwillii* — (WA); *conicum* — (WA).
- Helichrysum adenophorum* var. *waddelliae*, *elatum* — (Qld), (NSW); *leucopsideum* (SA); *rutidolepis*
- Hyalosperma cotula* — (WA); *glutinosum* ssp. *glutinosum* — (NSW, WA) and ssp. *venustum* — (WA); *jessenii*; *semisterile* — (Qld); *zacchaeus*.
- Lawrencella davenportii* — (WA); *rosea* — (WA).
- Leiocarpa supina* — (SA); *sp.* — (Qld), (NSW).
- Leptorhynchus baileyi* — (Qld); *nitidulus* — (Vic) Aireys Inlet; *squamatus* ssp. *alpinus* — (Vic); ssp. *squamatus* — (NSW); *tenuifolius* — (Vic).
- Leucochrysum albicans* ssp. *albicans* var. *albicans* — (Vic) Winton, Alps, (ACT); var. *tricolor* — (NSW); *fitzgibbonii*; *molle* — (Qld); *stipitatum* — (NT).
- Leucophyta brownii* — (Vic).
- Microseris sp. 1* — (Vic); *sp. 2* — (Vic) Mt Buller, Mt McKay; *sp. 3* — (NSW, Vic).
- Myriocephalus guerinae* — (WA).
- Olearia axillaris* — (Vic) Fairhaven; *ciliata* — (SA) Kimba; *decurrens* — (SA); *erubescens*; *floribunda* — (NSW); *frostii* — (Vic) Falls Ck; *imbricata* — (WA); *megalophylla* — (Vic); *phlogopappa* — (Vic); *pimelioides* — (Vic) Hattah Lakes, (Qld); *stuartii* — (NT), *subspicata* — (Qld), *tenuifolia* — (ACT)
- Ozothamnus cuneifolius* — (NSW); *diotophyllus* — (Qld); *ericifolius* — (Tas); *hookeri* — (Tas); *obcordatus* — (Vic) Frankston; *retusus* — (SA); *rosmarinifolius* — (Tas); *scutellifolius* — (Tas); *secundiflorus* — (NSW); *thyrsoideus* — (Vic); *sp.1* (previously thought to be *O. hookeri*) — (NSW).
- Picris evae* — (Qld) nd.
- Podolepis canescens*; *kendallii* — (WA); *monticola*; *rugata* — (SA) Murray Bridge.
- Podotheca wilsonii* — (WA).
- Polycalymma stuartii* — (NT).
- Pterocaulon sphaceolatum* — (NT).
- Pycnosorus chrysanthes*.
- Rhodanthe chlorocephala* ssp. *splendida* — (WA); *citrina* — (WA); *collina* — (WA); *corymbiflora* — (Vic, SA); *gossypina* — (Qld); *polygalifolia*; *polyphylla*; *pygmaea* — (WA); *rubella* — (WA); *stricta* — (WA); *stuartiana* — (SA).
- Rutidosia leptorrhynchoidea* — (Vic); *leucantha* — (Qld); *multiflorus* — (WA)..
- Schoenia cassiniana* — (WA); *filifolia* ssp. *arenicola* — (WA); ssp. *filifolia* — (WA); ssp. *subulifolia* — (WA); *macivorii* — (WA); *ramosissima*.
- Stemmacantha australis* — (Qld).
- Streptoglossa liatrioides* — (Qld).
- Vittadinia decora* — (Qld); *dissecta* var. *hirta*; *gracilis* — (WA); *sp.* — (NSW) Wagga Wagga.
- Waitzia podolepis* — (WA).
- Xerochrysum bracteatum* — (Qld); *viscosum* — (NSW, Vic).

DEADLINE FOR JULY NEWSLETTER — 1st JUNE 2004