


ASSOCIATION OF SOCIETIES FOR GROWING AUSTRALIAN PLANTS

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THE AUSTRALIAN DAISY STUDY GROUP NEWSLETTER NO. 61

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|  <p><i>Celmisia sp x1</i></p> <p>Another candidate for selection as the AD SG emblem. Drawn by Gloria Thomlinson</p> | CONTENTS | |
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DEADLINE FOR MARCH NEWSLETTER IS 1ST FEBRUARY 2002

LEADER'S LETTER

"Australian Plants in a Changing World" was an appropriate theme for the biennial conference hosted by SGAP Canberra Region in September/October, because the world has certainly changed drastically in the past few weeks. Although growing plants may seem of little consequence in view of world events, it has an important role for many of us in preserving a measure of sanity.

The conference was an excellent forum for exchange of ideas and to meet other members of ASGAP and the Study Groups, and was a very well organised event. Congratulations to all concerned, particularly to Gwyn and Geoff Clarke who were presented with an 'Australian Plants Award' for this and previous services to ASGAP.

The keynote speaker, Professor Henry Nix, reminded us of the three R's for the new millenium – Rehabilitation, Restoration and Ressurrection. We need to be aware that the rare, relic and disjunct plant populations of today may be the future source of expansion in the next phase of global climate.

The conference also afforded a chance to meet Study Group members from the Canberra region. Neal and I spent two thoroughly enjoyable days getting to know Ros, John, Jo, Barry and Jenny and seeing the wonderful work they are doing with the National Botanic Gardens Friends Group. The drive to Canberra was a good excuse to call in on both Gloria and Ray and discuss plans for AD SG participation in the International Flower Show next year. It was a very successful trip all round.

The end of yet another year is at hand. Now that 'the book' manuscript has finally been delivered to the publisher I am expecting to adhere to a more positive and varied meeting program. Ideas for inclusion would be most welcome.

Regards,

Joy

COMING EVENTS

- | | | |
|---|------------------|--|
| Sun 25 th Nov | 10.30am – 3.00pm | Christmas Break-up & garden visits. Meet at the home of Gretna Weste, 605 Park Rd, Park Orchards at 10.30am. (Melways 23 E 10) We will then proceed to Cheryl Southall's garden at 6 Mountain Drive, Mooroolbark. BYO lunch. |
| Tue 19 th Feb 2002 | 10.00am – 3.00pm | General Meeting Maureen's 88 Albany Drive, Mulgrave The topic will be small headed species (<i>Angianthus</i> , <i>Gnephosis</i> etc.) Bring any specimens, seed, photos etc of these species you may have). |
| Tue 19 th Mar – Fri 24 th Mar | | Field Trip. We will meet at Natalie's near Eildon, prior to a drive across Victorian Alps via Jamieson and Mt Skene to Licola where we will stay/camp for 2 nights. From Licola we will tour to Bryces Gorge and Howitt Hut and return (171kms). The next day we will drive home through Heyfield, perhaps calling at a nursery along the way. Please notify your intention to participate by phoning Joy on 5158 0669 before the end of February. |
| Fri 29 th Mar – Mon 1 st Apr | | Easter |
| Wed 10 th Apr – Sun 14 th Apr | | International Flower Show (see article page 46) |

SPECIES or FORMS NEW to MEMBERS

Helichrysum 'Helping Hand'

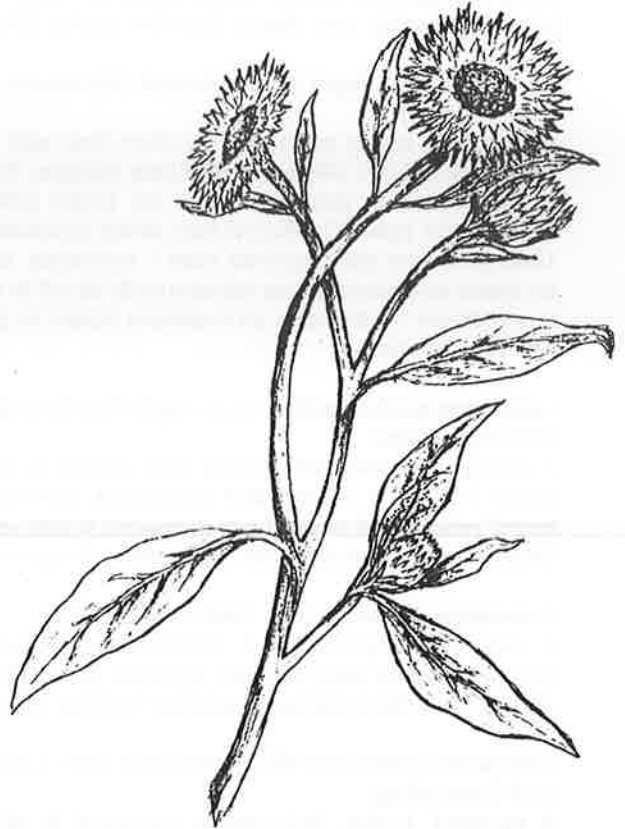
by Joy Greig

Helichrysum 'Helping Hand' is a compact everlasting daisy growing to about 1 metre. It appears to be a form of *Helichrysum elatum* that occurs naturally on the basalt cliffs of Mt Warning in NE NSW. Plants have been grown at the Australian National Botanic Gardens since 1996 where they have been developed for release as the floral emblem of the International Year of Volunteers.

Helichrysum 'Helping Hand' is admired throughout the year for its beautiful silver-grey foliage. In spring the plant is covered with clusters of large white 'paper daisy' flower-heads. It may be planted singly or in small groups, ideally in a raised bed. It grows best in full sun or semi-shade in well-drained soil and is very suitable for pot cultivation. Soil should be kept damp (but not wet) by deep weekly watering. It is preferable not to water the open flowers, and to allow the foliage to dry completely between waterings. Pruning after flowering will encourage new growth, and fertilising with a slow-release fertiliser will be beneficial.

This cultivar has been registered with ACRA and will be released this month (November).

The plant has some similarity to *Helichrysum sp. nova* from Point Lookout, NSW which study group members have been trying to grow - with limited success. The specimen of 'Helping Hand' growing at the Botanic Gardens is certainly enough to inspire further effort. It is simply dazzling.



Helichrysum elatum x 2/3 Drawn by Betty Campbell

SUMMARIZING LEOCARPA

by Joy Greig

Leiocarpa are variously woolly branching perennial herbs, with flower-stems sparsely bracteate. Leaves are linear to oblong. The involucre is hemispherical to top-shaped with linear or linear-acuminate outer bracts which are entire to dentate or woolly ciliate. Florets are bisexual or the outer ones female and the corollas are yellow. Cypselas are terete or somewhat compressed and 2-4 ribbed (not beaked) and pappus bristles are linear to filiform and barbellate. The type species of the genus is *Leiocarpa leptolepis*.

***Leiocarpa brevicompta* (syn. *Ixiolena brevicompta*)**

A bushy, aromatic, annual or perennial herb growing to 60cm high with glandular-scabrous and woolly-cobwebby leaves and stems. Leaves are sessile and oblanceolate to linear, 1.5-3.5cm x 3-5mm, green and hairy on both surfaces. Flower-heads are 1-1.5cm across, bright yellow, with linear glandular pubescent outer bracts. Inner bracts usually have a brown scarios apex. Cypselas are glandular-hairy at the apex and

pappus bristles (8-13) are about half to two thirds as long as the corolla. It is extensive on flood plains in Qld, western NSW and SA on heavy clay soils.

Leiocarpa gatesii (syn. *Leptorhynchos gatesii*)
(Wrinkled Buttons)

A short-lived perennial, 10-20cm high, with white-cottony stems and sessile, linear to narrow-oblong leaves, 2-25mm x 1-4mm, reducing up the stems. The upper leaf surfaces have scattered cobwebby and septate hairs while the lower surfaces are densely cottony with underlying septate hairs. Leaf margins are wavy. Flower-heads are about 1.5cm across, orange-yellow, and the outer involucral bracts are linear and acuminate with woolly margins. Cypselas are glabrous and oblong-quadrangular, and the pappus bristles are white and shorter than the corolla. It is endemic in the Anglesea-Lorne area of Victoria.

Leiocarpa leptolepis (syn. *Ixioleana chloroleuca*, *I. leptolepis*)
(Plover-daisy)

An aromatic bushy perennial, 10-40cm high with sessile pointed linear to oblanceolate, pale green leaves, 1.5-4cm x 2-5mm, often with undulate margins. Flower-heads are 1-2cm across with outer involucral bracts lacking scarious apices. Florets are bright yellow. Cypselas are 1.5-3mm with dense glandular hairs towards the apex. Confusion has arisen because *Ixioleana chloroleuca* which was described by Haegi in 1986 (and was distinguished from *I. leptolepis* by the apices of the involucral bracts and the indumentum on stems and leaves) was subsequently found to be conspecific with *I. leptolepis* (Paul G. Wilson, 2001). *L. leptolepis* is found in all mainland states in grassland and woodland on a variety of soils, and adapts well to cultivation.

Leiocarpa panaetioides (syn. *Leptorhynchos panaetioides*)
(Woolly buttons)

A bushy perennial with silvery-grey woolly or cobwebby leaves and stems. Leaves are sessile, narrow-linear 1-1.5cm x 1-2mm, and acuminate, with recurved margins. Flower-heads to 1cm across are pale to bright yellow and have linear involucral bracts with scarious apices. Pappus bristles are minutely barbed. Generally found growing on heavy soils, it occurs in Qld, NSW and Vic in grassland and woodland.

Leiocarpa pluriseta (syn. *Ixioleana pluriseta*)

A very similar species to *L. tomentosa*, it occurs at the Head of the Bight in SA, eastwards to the Eyre Peninsular, and near Morgan, growing on alkaline soils. It differs in having larger flower-heads, to 2.5cm across, with more numerous pappus bristles. A decorative species worthy of cultivation.

Leiocarpa semicalva* ssp. *semicalva (syn. *Chrysocephalum semicalvum*)
(Hill Everlasting)

A pungent, bushy, herbaceous perennial to 40cm high with glandular scabrous and somewhat woolly leaves and branches. Leaves are linear to lanceolate, green, sometimes undulate, 8-30mm x 1-4mm, with recurved margins and an acute apex. Flower-heads to 1cm across have yellowish outer involucral bracts with long woolly hairs enveloping the head. Florets are bisexual and female. Cypselas are glabrous, the pappus bristles of bisexual florets barbellate, the female florets with no pappus. It flowers for most of the year in dry sclerophyll forest in NSW, SA, WA and NT in a variety of soils. Adapts well to cultivation in semi-shaded sites. Light pruning is beneficial.

Leiocarpa semicalva* ssp. *tenuifolia (syn. *Ixioleana* sp.1 SE Qld)

An erect perennial to 45cm high with slender woolly stems and linear-acuminate leaves to 5cm long with revolute margins. Leaves are glabrescent above and cottony below. Flower-heads are terminal on slender peduncles and have narrowly linear scarious outer bracts. Outer florets are female and the pappus is absent. Bisexual florets have barbellate pappus bristles. This subspecies is found in SE Qld on sandy loams in *Eucalyptus*/*Acacia* woodland.

Leiocarpa semicalva* ssp. *vinacea (syn. *Chrysocephalum semicalvum* ssp. *vinaceum*)

Found in the far north of SA in the Everard Ranges. It differs from the typical species in that it suckers, the leaves are less woolly on the undersurfaces, and the stems are glabrous and reddish.

Leiocarpa serpens (syn. *Chrysocephalum serpens*)

A prostrate to ascending scrambling herb to 15cm high, rooting at the nodes and forming a mat. It is similar to *L. semicalva*, but differs in having ovate leaves and a scrambling habit. Young stems are densely glandular, older ones reddish, glabrescent and ribbed. Flower-heads are 9-11mm across and outer involucral bracts are membraneous and woolly-ciliate on the margins. Florets are bisexual and female. Cypselas of bisexual florets are oblong, glabrous, golden brown, 4-ribbed with a barbellate pappus, while those of female

florets are similar but 2-ribbed and without a pappus. The species is restricted in distribution to three isolated sites in NSW coastal ranges where it is locally frequent.

Leiocarpa supina (syn. *Ixeoleana supina*)

This species occurs on the south coast and off-shore islands of SA and on Bass Strait islands. It is a sprawling perennial herb with stems to 20cm long and spreading to 1m across. Stems and leaves are moderately hairy. Leaves are spatulate to elliptic, tapered to the base, green and somewhat fleshy. The margins are hairy and often recurved. Flower-heads to 2.5cm across are cream or white. The margins of the involucre bracts are hairy. An interesting species for cultivation in well drained soils, and has been used effectively in hanging baskets.

Leiocarpa tomentosa (syn. *Ixiolena tomentosa*)

(Pale Plover-daisy)

An erect or sprawling bushy perennial to 70cm high with woolly to cobwebby stems with underlying glandular hairs. Leaves are linear, 1-3cm x 2-4mm, acute and mucronate, both surfaces woolly, often with undulate margins. Flower-heads are 12-18mm across and involucre bracts are woolly-cobwebby with underlying glandular hairs, broad-linear, the outer ones shortest. Cypselas are glabrous with 18-24 pappus bristles. It flowers for most of the year in mallee and arid woodland in NSW, Vic (rare), SA, WA and NT. This species is distinguished from *L. leptolepis* which has glandular-hairy involucre bracts, although the foliage may be similar.

Leiocarpa websteri (syn. *Ixiolena websteri*)

Found in all mainland states and territories, this species is very similar to *Leiocarpa panaetiodes* but has larger flower-heads, broader leaves and glandular puberulous (not woolly) involucre bracts. The two taxa are known to grade into each other in NSW. It also has similarities with *L. leptolepis* and intermediates with this species are also known.

References:

Paul G. Wilson (2001), *Leiocarpa*, a new Australian genus of the Asteraceae tribe Gnaphalieae

Nuytsia 13(3): 595-605

Paul G. Wilson, P.S. Short and A.E. Orchard (1992), Some Nomenclatural Changes in the Angianthinae and Cassiniinae (Asteraceae: Gnaphalieae) *Muelleria* 7: 519

Elliot W. R. and Jones D. L. (1990, 1993) *Encyclopaedia of Australian Plants* Vols 5 & 6 (Lothian, Melbourne)

Walsh N.G. & Entwistle T. J. (eds) (1999) *Flora of Victoria* Vol 4. (Inkata Press, Melbourne)

Harden, G. J. (ed) (1992). *Flora of New South Wales* Vol 3. (University of New South Wales Press, Sydney.)

COMPARISON of *Chrysocephalum*, *Ixiolaena*, *Leptorhynchus* & *Leiocarpa*

by Joy Greig

| | <i>Chrysocephalum</i> | <i>Ixiolaena</i> | <i>Leptorhynchus</i> | <i>Leiocarpa</i> |
|---------------------------|--------------------------|---------------------------|----------------------------|-----------------------------------|
| 1. Outer involucre bracts | Papery, with stiff cilia | Thin, linear, herbaceous | Oblong to elliptic hyaline | Entire to dentate, woolly ciliate |
| 2. Cypselas | Not beaked Hyaline | Not beaked Stiff hairs | Blunt or beaked Hyaline | Not beaked Smooth, 2-4 ribs |
| 3. Pappus bristles | Deciduous individually | Deciduous as a whole | Persistent | Persistent |

Brachyscome muelleroides is rare and vulnerable

by Joy Greig



Brachyscome muelleroides x ½ Drawn by Gloria Thomlinson

Brachyscome muelleroides is an easily overlooked daisy found south from Wagga Wagga in the south-east of the riverine plain of NSW. The most recent recordings are from the Jerilderie district, but it is also found (rarely) in the Nathalia district of north-central Victoria. The Study Group have observed it at Ulupna Island.

It is a small herb to about 20cm high with very narrow, finely lobed leaves and small white daisies. The cypselas are small and dark-brown with folded back wings, giving a somewhat inflated appearance to the fruit, which has curled hairs in the centre of the outer face and is crowned with a tuft of tiny bristles.

In NSW it grows amongst other herbs in damp areas on the margins of claypans or lagoons and in depressions. In Victoria it is restricted to open positions on the Murray River floodplain. Plants flower in September and October following good rainfall but are generally not plentiful.

The main threats to the species are from cattle grazing, recreational vehicles and clearing with subsequent erosion and weed infestation.

MY *Rhodanthe chlorocephala* EXPERIMENT

by Tam Kendall

I have experimented with home-grown *Rhodanthe chlorocephala* seeds (from Yates Co. parents) and potting into various mixes- failed dismally! The idea was to see what type of media would suit growing annuals in pots and whether they would grow in tiny pots.

Germinated in a mix of perlite/vermiculite over an 'Absorba rock' base, I transplanted on 21/12/00 into an assortment of potting mixes when the first true leaves began to appear. On transplanting, I fertilized with 10ml of a liquid fertilizer (NPK=30:9:1.5) in 1.5 litres of water. This immediately caused the plants 'true' leaves to curl under on most samples. Three days later, when they were obviously 'going under for the last time' I tried to leach out some of the nutrients by watering with tap water (pH 7.5) by the flood and drain method. This had an immediate improvement and they all survived the overdose.

On 4/01/01 I fertilized with a mix of 10ml liquid fertilizer to 3litres water by standing the pots in until they were soaked through. This seemed to work much better. As the weather was so hot I was soaking the pots on a daily basis. On 10/01/01 I again applied fertilizer (10ml/2litre) by soaking.

The experiment was a total hash! I had no idea how to go about cultivating the annuals, I didn't have a clear regime of maintenance and feeding, the weather made me panic and move the plants around too much, and I didn't have a clue as to their nutrient requirements - I presumed it would be low but I wanted to

see how they would react to a greater amount. I should have tried that in another experiment, because it dawned on me that I had just ruined the whole show by adding an extra dimension – over fertilization. In addition, I had to transplant twice because they became too top heavy and roots were growing out of the bases long before flowering. I transplanted them into 500ml pots in the height of summer and they all proceeded to wilt immediately. I tried to resuscitate them with spray mist and 'Seasol' feeds but to no avail.

The reason for trying the small pots was because I had dug whole plants out of hard clay soil in the yard that had small root growth but still looked healthy and flowered well. Next time I will prepare larger pots and sow directly, or germinate in perlite/vermiculite and transplant to larger pots at an early stage, and then leave them – and not in the height of summer!

| Rating | Media Type/Combination | Description |
|--------|--|---|
| 1 | ¾ Absorba rock/ ¼ coco peat | Slightly drooping primary growth (21cm) Strong secondary growth. Some tertiary growth. Minor leaf damage. |
| 2 | ¾ Absorba rock/ ¼ peat | Wild curling stem, otherwise strong. Healthy primary growth (18cm). Strong straight secondary growth (9cm). Some tertiary growth. |
| 3 | ¾ sandy loam/ ¼ Absorba rock | Strong primary growth but deteriorating due to leaf tip damage (16cm). Strong, healthy, straight secondary growth (10cm). |
| 4 | Perlite/ vermiculite/ sandy loam | Strong upright primary growth (22cm). Long leaves (2.5-3cm) with 'raised' midrib. Small secondary growth (8cm). |
| 5 | ¾ Absorba rock/ ¼ sandy loam | Strong primary growth, not much thickening of stem (20cm). Uneven secondary growth. Minor leaf damage. |
| 6 | "Richgro" potting mix | Wild curling stem, otherwise healthy primary growth (18cm). Small secondary growth. |
| 7 | 1/3 perlite/ 1/3 vermiculite/ 1/3 Absorba rock | Severe leaf curl, drooping primary growth (20cm). Small but straight secondary growth (7cm). |
| 8 | ¾ Absorba rock/ ¼ perlite | Media shrunk to half the pot. Moderate, weak primary growth (13cm). Secondary growth elongated but weak. (3cm) |
| 9 | ¾ perlite / ¼ Absorba rock | Wild curling stem, otherwise healthy primary growth (18cm). Small secondary growth (1cm). |
| 10 | "Richgro"/ Absorba rock | Weak curling drooping primary growth (16cm). Minor secondary growth (1cm). |
| 11 | sandy loam/ cow manure | Weak, slow primary growth (12cm). Some leaf tip burn. Miniscule secondary growth. |
| 12 | ¾ coco peat/ ¼ Absorba rock | Weak spindly primary growth (11cm). Miniscule secondary growth. |

MEMBERS' REPORTS

Ros Comish of Bungendore reports on 8th July about a recent article in Australian Geographic (Vol 63) "We're Saving Daisies".

An Australian Geographic Society sponsored project has discovered the largest recorded area of threatened native daisy. Greening Australia, Wagga Wagga was surveying 96 travelling stock routes around Gundagai in southern NSW, when it found 2 hectares of Yass Daisies (*Ammobium craspedioides*) blooming in the Indian Creek Travelling Stock Route – one of 123 stock reserves and routes in the region. Other threatened species unearthed in the extensive survey include the Tumut grevillea and superb parrot.

We have managed to germinate over 20 plants of *Ammobium craspedioides* from AD SG seed. Others include *Bracteantha bracteata*, *Calocephalus citreus*, *Calotis glandulosa*, *Chrysocephalum semipapposum*,

Helichrysum scorpioides, *Leptorhynchos squamatus*, *Leucochrysum albicans* ssp. *albicans* var. *tricolor*. & *Podolepis jaceoides*.”

Gloria Thomlinson of Shepparton, notes on the 10th July, “*Brachyscome ciliaris* ‘Yarrowonga’ from Jan Hall’s garden germinated well. Sown fresh with a sprinkling of ‘Regen’ it came up like a little lawn. It grows around the roadsides in Yarrowonga and should be tough here in the summer.”

June Rogers of Horsham, writes on 11th July, “This year I had quite good success with my seed, both self collected and AD SG. The biggest thrill is *Olearia pannosa*. After many tries, Esma suggested I use SISP and I think it did the trick. All the others I soaked in smoke water and covered them with smoke impregnated vermiculite just for good luck. It seems to have worked – which I am not sure. Last years *Podolepis rugata* and *P. jaceoides* have responded to being cut back and are making lovely little clumps with buds appearing. *Ixiolena supina* (now *Leiocarpa supina* - ed) is doing very well both in the garden and in pots. I have put one in a hanging basket, like I saw it for the first time at Ida Jackson’s on Kangaroo Island. My plants originated from her seed.”

Margery Stutchbury of Budaberg, Qld writes on 17th July, “The first flowers of my *Rhodanthe chlorocephala* ssp. *rosea* are out. It looks as though there is not much wilt so far. I have watered a lot less and used Yates ‘Anti-rot’ Phosacid systemic fungicide twice. Seed of ssp. *splendida* which germinated so well last year has failed to germinate (the same seed!).”

Jeff Irons of Heswall, England says on 25th July, “*Bracteantha subundulata* died in last winter’s wet, but I have a good crop of re-sown seedlings. The first of my 17 *Craspedia variabilis* (from Ros Cornish seed) is in bud. *Brachyscome decipiens* flowered this spring. *Craspedia* ‘Lankeys Plain’ put on its usual good display, and as usual set little seed. My form of *Olearia phlogopappa* with scented flowers nearly died as a consequence of last winter’s inundations.”

Matt Hurst, of Wagga, NSW writes on 11th August, “SUCCESS!! At last. *Ammobium craspedioides* from both seed lots has germinated. While not little lawns, there will be plenty for my needs.

Schoenia cassiniana and the Fraser Island form of *Bracteantha bracteata* are attracting attention at our Sunday markets. *Rhodanthe chlorocephala* ssp. *rosea*, *Brachyscome microcarpa* seem to interest people, but why *B. stuartii* and *B. readeri* don’t warrant attention is beyond me.

Rhodanthe diffusa ssp. *diffusa* is quite impressive. The flower colour ranges from deep yellow to almost white.”

Then in a later letter, “*Ammobium craspedioides* given to me at the May Meeting has flowered. I must say it is a dainty little thing. Several plants in a pot would be most pleasing to the eye. *Helichrysum calvertianum* has also flowered – another dainty species that has some merit in mainstream horticulture.

I have found our version of a massed Western Australian daisy display. Approximately 30km from Wagga on the road to Lockhart are masses of *Craspedia*, *Brachyscome*, *Leptorhynchos*, *Minuria*, and *Calocephalus* species with some *Pycnosorus globosus*, *Rhodanthe corymbiflora* as well as *Swainsona* and assorted lily species. What a sight as orange, white, yellow and purple all blend together.”

Judy Barker reports that “in mid-October the three olearias in Angahook Forest Park behind Aireys Inlet are flowering beautifully. *Olearia lirata* and *O. phlogopappa* grow together in the lower, damper areas where there is plenty of shade from tall eucalypts. Both have white flower-heads; *O. lirata* having more numerous, slightly smaller, creamier heads while *O. phlogopappa* has pure white heads. In this district the leaves of *Olearia lirata* are olive green and deeply veined, while *O. phlogopappa* has narrower, grey-green leaves which are not obviously veined. There also seem to be some forms which are intermediate between the two. *Olearia teretifolia* is more common further up the hill and grows in drier, open situations along the road through the Park. The narrow, dark green, slightly sticky leaves (from which the species derives the common name of Cypress Daisy-bush) and the profusion of small white heads make this a most attractive plant. This year the winter/early spring rainfall in the Otways has been very good, and that may be the reason for the excellent showing of these olearias.

In Hawthorn the clump of *Myriocephalus suffruticosus* in its large pot are beginning to form terminal buds. The dark green, shining foliage and pale stems resemble a small group of *Argentipallium obtusifolium* which is flowering in a pot nearby. The latter has never grown to the flowering stage for me before, but this year it

has Fairhaven company in the pot. There are two plants of Blue Squills, one of *Goodenia geniculata* and three of *Microseris* sp. 3. Fingers crossed that both these pots flourish!"

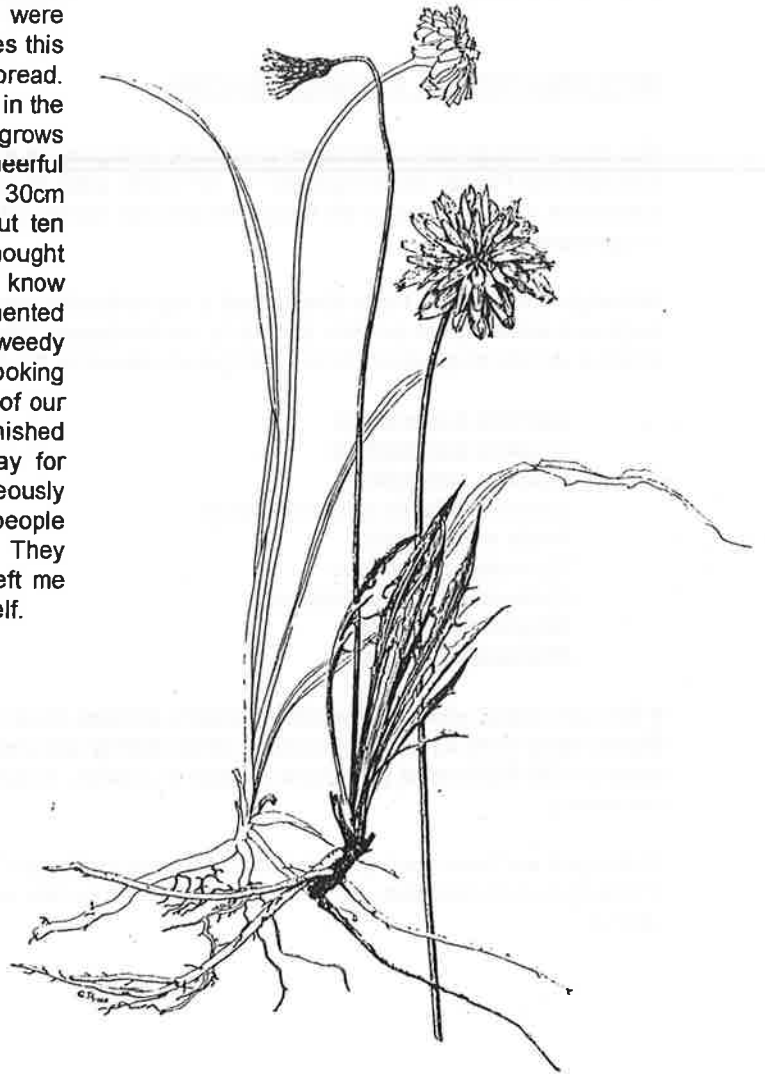
Some Daisies in the Chiltern Box-Ironbark National Park

by Judy Barker

On a recent September trip to Burrinjuck Dam we called at the Chiltern Forest to see what was flowering. This area of (4,320 hectares) is renowned for its spring wildflower display as well as the sites associated with the early mining history of this area. My father was born in Christmastown, a short distance from Chiltern. In the early 1900s this was a thriving community with nine pubs, but the only trace of it now is Christmastown Road. Perhaps it is this association and Dad's stories of the old times that attracts me to the area, or perhaps it is the wildflowers.

The trees of the higher ground are Red and White Box and Stunted Blakeley's Redgum, while on the flatter ground Red Stringybark, Grey Box and Mugga Ironbark dominate. There are many walking tracks and unsealed gravel roads throughout the park. Although the latter are said to be all-weather roads they seemed pretty slippery to us after several showers.

The daisy species we saw on this occasion were all yellow-flowered. Fewer plants of *Bracteantha viscosa* were present in the lower areas than I have seen in previous years, but Yam Daisies were abundant. The *Flora of Victoria* Vol. 4 identifies this as *Microseris* sp. 3, and says that it is widespread. This is also the identity of the species growing in the heathlands around Anglesea. In cultivation it grows as quite a neat tuft and produces many cheerful yellow heads, 2-3cm across, on stems about 30cm high. At the Angair Nature Show I had about ten forestry tubes containing small clumps and thought they would disappear very rapidly. I should know better than to predict trends. If anyone commented on them, it was to say rather rudely, "Those weedy things!" By the middle of Sunday I was looking forward to putting the lot into the heathy part of our own block at Fairhaven. No sooner had I finished this pleasant musing (Sunday is a slow day for selling, the keen buyers all arriving simultaneously as the Show opens on Saturday) than two people fronted up, both clamouring for Yam Daisies. They went off happily with five tubes each, and left me wondering whether I had retained any for myself.



Microseris sp 3 x 1/3 Drawn by Gloria Thomlinson

The most attractive daisy species in the park is *Leucochrysum albicans* ssp. *albicans* var. *albicans*. The plants form small, neat tufts with bright golden yellow heads. The leaves and stems are greener than those growing at Longwood, which is only a matter of about 130km away.

One of the tracks led up a gradual slope, on top of which were numerous plants of *Craspedia variabilis*. They were sturdy, robust plants with quite large heads. Why is it that the forms I have growing in Hawthorn are so puny? Caterpillars chew their leaves and the heads are pin-sized, malformed arrangements. These Chiltern plants have inspired me to keep a motherly (or grandmotherly) eye on that little clump when it appears next year, and to keep the pyrethrum up to it.

The lilies were just beginning to flower — *Arthropodium strictum* and *Bulbine bulbosa*. *Stackhousia monogyna* and two goodenias, *G. lanata* and *G. pinnatifida*, were out, as well as a small, red-flowered *Grevillea* species. *Cheiranthra cyanea* also grows there but was not flowering on this occasion. We admired three orchid species, *Glossodia major* which appeared to be everywhere, *Diuris sulphurea* which had almost finished and *Caladenia carnea*. Hibbertias and a variety of peas lent more colour to the scene.

This district is noted for the many famous vineyards within a short distance of Rutherglen. Taking everything into account it seems a place to visit as often as possible.

INTERNATIONAL FLOWER SHOW

The Study Group has undertaken to provide a display as part of the Victorian Region exhibit at the International Flower Show from 10th to 14th April, 2002 at the Exhibition Building. This is an ambitious enterprise, which we hope will co-incide with the release of 'Australian Everlasting Daisies'. (but there are no guarantees!).

Although our displays have always had a reputation for excellence, this time will we need to contend with large and extravagant exhibits staged by professionals. We will require lots of quality material, (either fresh, dried or wired) of species which might be of interest to the florist trade. For example :-

Cassinia aureonitens
Cassinia quinquefaria
Cassinia subtropica
Chrysocephalum semipapposum
Ixodia achillaeoides
Pycnosorus globosus
Pycnosorus thompsonianus
Rhodanthe manglesii
Rhodanthe splendida

If you can assist with these or other suitable species (even in small amounts) we would be most grateful. Stems need to be as long as possible when cutting specimens. To help with planning, could you let Joy know (5158 0669) what you might be able to provide. Arrangements could be made to transport material if necessary.

At present we have good prospects of obtaining sufficient *Cassinia leptcephala*, *Cassinia longifolia*, *Ozothamnus diosmifolius*, and *Rhodanthe chlorocephala* ssp. *rosea* for our needs, (courtesy of Ray and Gloria).

TWO NEW SPECIES OF *ASTERIDEA*

by Judy Barker

Dr Philip Short has described and illustrated two new species of *Asteridea*, *A. archeri* and *A. morawana*, both occurring in Western Australia. His article appeared in *Australian Systematic Botany* 13, 739–744. (2000).

Dr Short has included a key to the nine species now recognised in the genus — *A. archeri*, *A. asteroides*, *A. athrixioides*, *A. chaetopoda*, *A. croniniana*, *A. gracilis*, *A. morawana*, *A. nivea* and *A. pulverulenta*.

Asteridea archeri is a stiff, compact subshrub to about 15cm high. Leaves and branches are densely covered with long white septate hairs. Leaves are 2–5 x 0.5–1mm, lanceolate to ovate, crowded, sessile, closely pressed against the stems for most of their length. Single heads, about 5–7mm across, have bracts in many rows, the outermost with white, hairy outer surfaces. There are 60–100 florets in each head, the corollas all being tubular and white. Cypselas are papillose, brown, 1mm long, and have one pappus bristle (or rarely two), the lower part smooth and the top third densely feathery.

This species grows on gypsum mounds and has a restricted distribution in the area near Mt Buraminy. It is closely related to *A. nivea* which may be distinguished by its longer leaves which are not appressed and have glabrous or sparsely cottony upper surfaces. There are 4–8 pappus bristles per floret compared with 1 (rarely 2) pappus bristles for *A. archeri*.

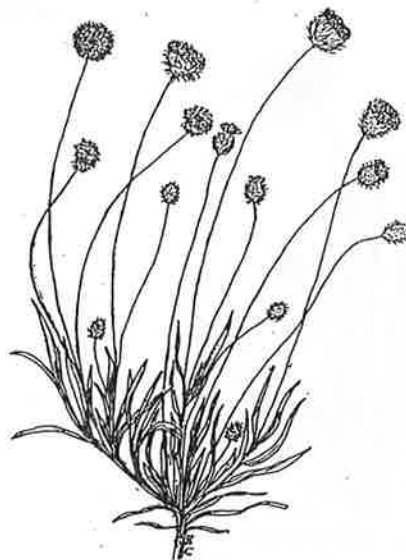
Asteridea morawana is an annual herb, about 20–30cm high, with an erect or ascending habit. Stems and leaves have a sparse cover of septate hairs with broad bases. Leaves are 5–40 x 0.8–3.5mm, sessile, linear to lanceolate. Single heads, about 4–4.5mm across, have rows of narrow glandular-hairy bracts with ciliate tips. There are 65–118 florets per head, all tubular and bright yellow. Cypselas are brown, about 1mm long, with globose hairs containing mucilage. There are 3–6 pappus bristles, smooth below, becoming plumose in the top half to one-third.

Dr Short collected this species near Morawa in loam soil over limestone and it is only known from this locality. It is closest to *A. athrixioides* and *A. chaetopoda*.

A. athrixioides is distinguished mainly by having obviously plumose margins along the length of the outer bracts and the surface is less glandular-hairy.

A. chaetopoda is distinguished by being a perennial subshrub with densely white-woolly leaves.

We thank Dr Short for sending the Study Group this article. Any member with a particular interest in the genus *Asteridea* may borrow it from Joy.



Asteridea athrixioides x ½ Drawn by Betty Campbell

QUEST FOR AN EMBLEM

The publication in the last newsletter of Gloria's drawing of *Oleara frostii* prompted comment from four members. Three expressed enthusiastic approval of the drawing as an emblem for AD SG – for letterheads and such- but one (none other than Gloria herself) disapproved.

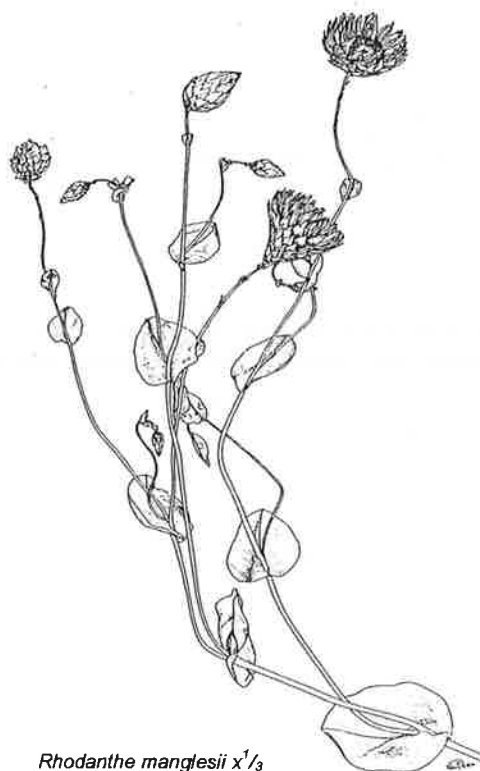
This newsletter features another of Gloria's drawings, a species of *Celmisia* and below are three more, *Rhodanthe chlorocephala* ssp. *splendida*, *Rhodanthe manglesii*, and *Brachyscome scapigera*. What do you think?



Rhodanthe chlorocephala ssp. *splendida* x $\frac{1}{3}$
Drawn by Gloria Thomlinson



Brachyscome scapigera x $\frac{1}{2}$
Drawn by Gloria Thomlinson



Rhodanthe manglesii x $\frac{1}{3}$
Drawn by Gloria Thomlinson

SNIPPET

The Dasiy Study Group is now officially "ON-LINE". We have an excellent web page which is part of the ADSG web site and linked to a number of other related sites. The address is:

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

We would appreciate any constructive comments from members. We owe thanks to Brian Walters, ASGAP web master for his expertise in constructing the page on our behalf. Brian will be making up-dates periodically.

OOPS....

While compiling the index for this year's issues, a few errors were blatantly obvious. I cant understand how they escaped my notice before.

In NL 59, page 11, *L. scabrus* should read *L. scaber*
page 12, and page 14 *Rhodanthe chlorocephala* ssp. *manglesii* should read *Rhodanthe manglesii*

Apologies for these and any other errors I have missed.

NEW MEMBERS

Welcome and happy daisy growing to the following new member:-

Judy Whish-Wilson, PO Box 847 Liton, Tas 7250

SUBSCRIPTIONS

Subscriptions for the current financial year are \$10.00 per person for members within Australia and \$20.00 per year for overseas members. Cheques should be made payable to the 'Australian Daisy Study Group', and forwarded to Bev Courtney or Joy Greig (addresses on P1.) **FEES WERE DUE ON 30TH JUNE 2001.**

SEED DONORS

Many thanks to the following members and friends who donated seed to the Study Group: Judy Barker, Pat Clarke, Matt Hurst, Jeff Irons, Tam Kendall, Esmá Salkin

Jeff Irons has sent us seed of *Calomeria amaranthoides* purchased from an outlet new to us — Jekka's Herb Farm, Rose Cottage, Shellards Lane, Alveston, Bristol, BS12 2SY.

In mid-October one of the Angair members, Barbara Leavesley, allowed me to gather seed from her three large plants of *Rhodanthe anthemoides* (red-bud, branched form) which were growing at Aireys Inlet. In this species there are never many mature-looking seeds among the masses of puffing heads collected. In this instance, a friend and I gathered three large seed envelopes crammed full of heads. Mature seeds separated from the mass of material collected represented about one-twentieth by volume. Barbara's seeds are bigger than those from my own plants in Hawthorn. This may be due to the fact that her plants are about 1m across and very healthy indeed. — Judy Barker

SEED LIST AMENDMENTS**Garden and Commercial Seed Bank****Additions**

Asteridea chaetopoda (Nind., Sandstone, WA), *pulverulenta* (Nind.)
Brachyscome ciliaris ssp. *ciliaris* (Nind.), *goniocarpa*, *gracilis*, *muelleri*, *nodosa*, *procumbens*
Calomeria amaranthoides, *Calotis cuneifolia*
Ixiochlamys cuneifolia (Nind. Dampier, WA)
Myriocephalus guerinae (Nind.)
Olearia gravis (Nind.) *phlogopappa* (pink and blue forms), *paucidentata* (Nind., Glen Forrest, WA)
Polycalymma stuartii (Nind.), *Pycnosorus globosus* (Nind.)
Rhodanthe anthemoides (red-bud, branched form)

Deletions

Brachyscome nivalis, *B. spathulata* var. *spathulata*

Provenance Seed Bank**Deletions**

Minuria cunninghamii

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 2001 newsletters. Seed remaining after the 'book project' will be added to the list in the new year. A STAMPED, SELF-ADDRESSED, BUSINESS SIZED ENVELOPE MUST BE ENCLOSED WITH EACH REQUEST FOR SEED. Please write to Esma for provenance seed or to Judy for garden or commercial seed. (The addresses are on the front page.) If members require both types of seed a letter to either Esma or Judy will suffice.

SEED WANTED

Seed of any of the 'small-headed' species such as *Angianthus*, *Gnephosis*, etc would be most welcome as there are a number of members who would like to specialise in growing these.

FINANCIAL STATEMENT.

Payments and Receipts -- July 1, 2000 -- June 30, 2001

| Receipts | \$ | Payments | \$ |
|-----------------------|-----------|------------------------------|-----------|
| Members subscriptions | 915.00 | Newsletter | 134.40 |
| Seed sales | 59.09 | Postage | 212.42 |
| Bank Interest | 8.59 | Subscriptions | 10.00 |
| Other | 18.00 | FID | 2.55 |
| Donations | 87.65 | Stationery | 96.59 |
| | | May Meeting costs | 23.00 |
| | | Sundries | 17.66 |
| | | Seeds | 58.80 |
| | | Gifts | 48.65 |
| Total receipts | 1088.33 | Total Payments | 604.07 |
| Surplus for year | 484.26 | Cash at bank on 1 July 2000 | 1442.48 |
| | | Surplus | 484.26 |
| | | Cash at bank on 30 June 2001 | 1926.74 |

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