

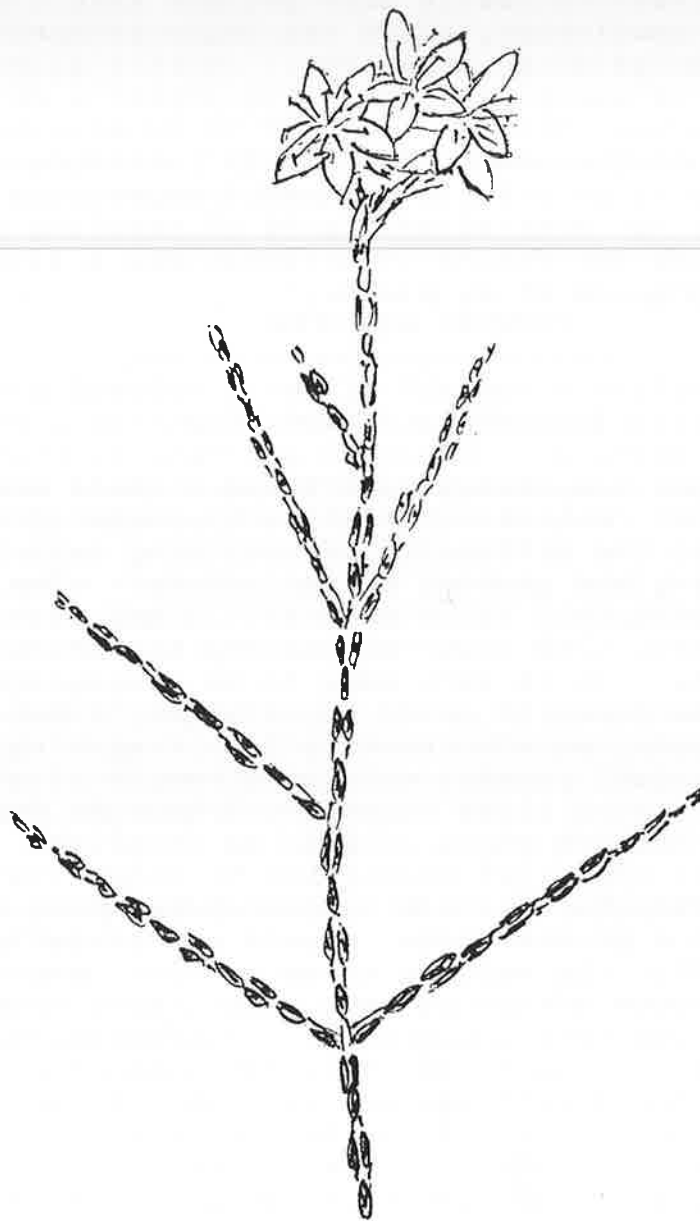
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ASSOCIATION OF SOCIETIES FOR GROWING AUSTRALIAN PLANTS

CALYTRIX STUDY GROUP

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Calytrix parvivalis

Calytrix	Calytrix
gypsophila	
habrantha	
harvestiana	
interstans	
islensis	exstipulata
laricina	
lasiantha	brownii
lasiostachya	strigosa
leucantha	sapphirina
luteola	tetragona
merrelliana	asperula
microcoma	
microphylla	exstipulata
microphylla var. longifolia	carinata
mitchellii	tetragona
monticola	tetragona
muelleri	tetragona
muricata	brevifolia
muricata var. parvifolia	brevifolia
nematoclada	
parvivallis	
paucicostata	
platycheiridia	
praecipua	
puberula	flavescens
purpurea	
rosea W.A.	depressa
rosea S.A.	tetragona
rupestris	
scabra	tetragona
schlechtendalii	tetragona
similis	
simplex subsp.	
suboppositifolia	
smeatoniana	
squarrosa	tetragona
stenophylla	simplex subsp. simplex
stipulosa	breviseta subsp. stipulata
stowardii	depressa
sullivanii	tetragona
sylvana	
tenella	flavescens
tenuifolia	depressa
tenuifolia var rigidior	depressa
tetragonophylla	flavescens
tetraptera	tetragona
truncatifolia	
verruculosa	
violacea	
virgata	tetragona
warburtonensis	
watsonii	strigosa
wickhamiana	exstipulata
Lhotskya	
acutifolia	acutifolia
alpestris	alpestris

Lhotskya	Calytrix
alpestris var. bracteosa	alpestris
brevifolia	sylvana
ciliata	nematoclada
cuspidata	achaeta
ericoides	acutifolia
genethylloides	alpestris
genethylloides var.	
bracteosa	alpestris
genethylloides var. glabra	alpestris
glaberrima	glaberrima
glaberrima var. magnisepala	glaberrima
harvestiana	harvestiana
hirta	acutifolia
purpurea	purpurea
scabra	acutifolia
smeatoniana	smeatoniana
violacea	violacea
violacea var. merrelliana	merrelliana

The names Calycothrix and Calythrrix are also incorrect and should not be used.

I hope this list will be of use to you in renaming your plants. If you are interested in obtaining a key to the genus please let me know.

From Peter Cox

Peter lives at Garfield [60 klms. east of Melbourne]. He has a 900mm rainfall to contend with. So far he has grown *C. tetragona* and *C. angulata*, but both have been short lived in the garden. Wind damage has been a problem for these plants. They developed bushy tops and were very susceptible to rocking. This caused stem damage. He is now trying them in raised beds and hopes to also try some in containers.

I suspect that grey mould could also be a problem for some *Calytrix* spp. in this high rainfall area, but shouldn't present any problems for the spp. he has already tried.

Peter also aims to experiment with seed. We will be looking forward to hearing of his experiences.

My latest thought on seed is to have a mini bush fire on top of the planted seed. To this end I have been saving small tins. I have plenty of tins, but haven't got round to the experiment as yet. Maybe Peter will have a go.

Growing Calytrix.

The *Calytrix* or Star flowers are rarely seen in gardens, and most people would not realise that there are over 70 species growing in the wild. They are quite spectacular when in flower and have colourful calyces to follow. The most commonly grown species is *C. tetragona* which is very widespread and variable. Other species may be available from time to time at specialist nurseries. Why then have these plants not been seen more often in cultivation ?

Problems:-

1. **Availability.** Since many of the species come from W.A. obtaining plant material has not been easy. Seed has generally proved to be of low viability. Perhaps the seed was old, had dormancy factors or germination inhibitors or sustained considerable insect damage. When seed has germinated it has been slow to grow on and has had poor root systems. Cutting material has given greater success, but is more difficult to obtain.

Experimenting with Seed.

I purchased seed from Nindethana Seed Co. in W.A. The seed of *Calytrix* is indehiscent with calyx and awns present. The calyx and awns were removed, and the seed pushed into the soil point first. The top of the seed should be level with the soil. The seed was watered by lowering the seed punnet into the water until water level was at the top of the punnet, the seed punnets were then placed in a capillary bed. Air movement around the seed punnets was important as seedling *Calytrix* are very prone to fungal attack. The seedlings were kept inside the house with underfloor heating operating. The temperature in the room varied between 15 and 23 degrees. This was done because it was winter in Canberra and I had no other suitable facilities. Germination time was very variable, *C. angulata* appearing after six weeks and *C. aurea* after 13 months. Plants should be potted on as soon as practicable.

I had success germinating the following species:-
C. angulata, *C. glutinosa*, *C. leschenaultii*, *C. exstipulata*, *C. fraseri*, and *C. depressa*. *C. aurea* only produced one seedling which died before reaching a usable size.

The seedlings were potted on and there were the usual losses. Most of the living seedlings grew until they were about 2.5 cms. Then they just sat there. Some damped off and I was afraid I was going to lose all of them.

Lyn Craven suggested I take cuttings as this might help break their dormant state. This proved to be the case. The cuttings taken were 2 cms long, with about 4-5 pairs of leaves. They were prepared in the usual way, care being taken not to damage the delicate stem. They were placed around the edge of a black pot in a mix of 2/3 washed river sand and 1/3 peat. The pot was then placed in the hot bed.

Within 10 days most of the cuttings had roots and were potted up. I used the hot bed because this material was quite soft.

That was in January 1985. Most of those plants are still alive today, 2 doing very well in a raised garden bed, the others quite happy in pots. The cuttings of *C. angulata* and *C. glutinosa* haven't flowered yet, while those of *C. leschenaultii* and *C. depressa* have. Unfortunately *C. exstipulata* succumbed to the frost, I forgot it was likely to be frost tender in Canberra. It did survive some light frosts, but -5 was too much. *C. fraseri* died from collar rot.

Experimenting with Cuttings.

Cuttings taken in the normal way also do very well, but I have found that placing the plants in a cold frame or in open shade with low humidity gives better results than a hot bed, even though it may take a little longer. This was particularly true for *C. longiflora* from Queensland. All forms of *C. tetragona* also respond well to this treatment.

2. Life Expectancy

Interesting species in this genus have often proved short lived in cultivation, and susceptible to grey mould. However, given the correct conditions, *Calytrix* can do well and live for a reasonable length of time. At present our garden specimens are at least five years old and very healthy.

Calytrix in the Garden.

Calytrix like good drainage, in sun or semi-shade and enjoy living close to other species. They also like a spot with plenty of air movement as this helps prevent grey mould. I have mine in garden beds with gypsum and washed river sand added, or in raised beds made of washed river sand, peat, compost and local clay. Raised beds are particularly important for species from W.A. All the beds are mulched with sand or an open mix of stems, twigs and leaves. This allows good aeration round the stem and prevents collar rot. Some mulches pack down hard around the stem and should be avoided. *Calytrix* should also be pruned lightly and regularly to avoid woodiness. If a plant should become woody heavy pruning can restore vigor.

Plants doing well in the described environment include upright procumbent and prostrate forms of *C. tetragona*; *C. angulata*, *C. longiflora*, and *C. leschenaultii*.

Pot Culture.

Some of the small species from W.A. make excellent pot plants. All those I have in pots are doing well. They do not require repotting too often, (about every two or three years) and respond well to regular watering with half strength

Aquasol.

There is still much work to be done with this genus. New members to the Study Group are always welcome. You do not have to be a great propagator. Perhaps you would be more interested in trialling plants, working on pressed specimens for a herbarium collection, collecting plant material in the field to assist the propagators, or preparing a taped script to go with the slide collection. You may even have interesting ideas of your own of ways in which you could assist. I am always happy to hear from anyone who would like to be involved.

Members of the Canberra Region have volunteered to assist. Some will do this through their involvement with the propagation group, and others have volunteered their help in other ways. One member has offered to write the newsletter. This kind of support is very encouraging and gives me renewed energy to carry on, for being a Study Group Leader can be very lonely and frustrating. I'm sure all leaders feel this way from time to time. Think of your favourite native plants. You could join the Study Group, or if there isn't one yet, maybe you could start one with the help of your local group or some SGAP friends.

Anyway *Calytrix*, with their dainty star flowers are really worth growing, and with a little care they can be propagated and maintained in the garden. The flowering period can be quite short, but the colourful calyces which follow are as delightful as the flowers themselves.

We are only at the beginning of the development of these plants for horticulture. There are still many things to be discovered, and many experiments to be attempted. Cross pollination between species could produce plants with larger flowers or extend flowering times. The robust qualities of *C. tetragona* could perhaps be passed on to its more fragile relatives. Grafting, budding and tissue culture have yet to be attempted.

You can be part of the development of and the experimentation with this genus. These little gems will reward you with their colourful flower displays, bright calyces and scented leaves. I have even found seedlings growing happily under the parent plants. What greater reward could you ask ?