

Association of Societies for Growing Australian PLants

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GOODENIACEAE STUDY GROUP Newsletter No. 3

Autumn is now approaching and I find that this time is ideal for the propagation of plants from cuttings. The cooler weather reduces problems with fungus attack and the season's growth is usually hard enough to make good cutting material. I have noticed that propagation methods vary from grower to grower. Could study group members write to me with details of their tried and proven methods so that we may all benefit from your experience.

Editor

Hello people, welcome to 1989. I haven't had a lot of correspondence over the past few months so I can only hope you are still being active in your pursuit of Goodeniaceae. The weather in Sydney over the summer has been incredible with mild temperatures and a lot of wet days. I lost about 50% of my potted collections mainly due to too much growth in some plants increasing the humidity levels around surrounding plants to unacceptable levels. I have approached the NSW Region for \$650 to finance a better watering system so that I can individually control the access of susceptible plants to water, particularly through the foliage where the major problems seem to occur. Interestingly, most of the plants in the garden appear to have survived well, some astonishingly well considering the weed infestation and growth over the period. Major casualties (as usual) were the Lechenaultia. My soil conditions (sandstone parentage) do not appear conducive to survival for this genus possibly due to lengthy periods where subsoil moisture gets very low (I may have to rethink this after Martin's letter quoted below!). Max Hewett appears to have few problems with his heavier soil beds particularly where drainage is facilitated. Any comments on these observations?

My major contributions to this newsletter are a continuation of my musings on cultivars of Lechenaultia, particularly L. biloba, L. tubiflora and L. floribunda, and an assessment of the various species of Goodeniaceae I have actually tried to grow in my garden. This can only be regarded as preliminary as my efforts only go back about 3 years although odd (very odd!) plants have been growing longer.

But first some housekeeping. Of most importance are the new members joining since our last newsletter, with three new active members.

Peter Aldridge
Rita Luff
Barbara Tillopon

Essendon, Victoria
Rowville, Victoria
Black Rock, Victoria

Passive members include:

S.G.A.P. Foothills Group (Victoria)

S.G.A.P. Tasmania Region

LECHENAULTIA CULTIVARS

Lechenaultia biloba cultivars

"Royale"

This cultivar has been available in Sydney for about 5 years through the Sydney Wildflower Nurseries. The name was recorded at Monaro Nursery in 1985. It has an upright habit with dark blue flowers which tend to age to a paler blue so that two-toned effects are quite common. This form does not appear to sucker freely and in my experience is difficult to maintain in pots although I have that experience with all the L. biloba forms where a soilless potting mix is used. Does better in the ground particularly where subsoil moisture is protected.

"Boddy's Giant"

One of the very early recorded forms. The "giant" tag refers to both the growth habit (<1metre) and the size of the flowers (<3 cms). Not as floriferous as other forms and difficult to propagate. As far as I am aware is not available in Sydney anymore (late flash: discovered a plant in Max Hewett's garden and given a plant which promptly went into my garden) but is still being grown in South Australia (Neville Bonney). Neville seems to be successful at growing Lechenaultia and apparently has quite a range of different forms and species. This form is relatively long-lived when established and gets to be quite a woody shrub. It is not known to sucker. I have found this form very difficult to strike from cuttings.

"White Flash"

This form has the distinction of being the only registered cultivar under the Cultivar Authority. Flowers are a mid-blue with a white centre and the petals tend to be narrower than in most forms. I had this form for a number of years in a large pot (sandy loam) and it suckered profusely. Probably one of the hardier forms of this species but relatively untried still. Propagates relatively easily from suckers. This isn't the only form with this particular colour combination. "Blue Peter" is a form described in Australian Plants (Vol, 3, 56) as "having a cascading habit and being bright blue with a white centre and very dainty."

"Mid-Blue suckering form"

There appear to be an awful lot of cultivars bearing this name and it is difficult to determine if they are the same cultivar or not or whether they relate back to the original form(s) of this description shown in Boddy's catalogue (1967). I currently have two forms, one from Max Hewett and one from Martin Swanson (see below). At this stage I have just planted out the latter and it is too early to tell whether it will survive. The form from Max does appear to grow quite happily in a variety of conditions; the parent plant tends to die down almost annually however if left alone suckers will spring up all through the garden bed sometimes

metres from the original plant. Growth tends to be in late autumn through winter and this about the only time of the year that cuttings will strike.

Apart from the above, there exist numerous form of *L. biloba* from pure white through to very dark, almost dwarf forms. Unfortunately few of these forms have been maintained in cultivation and it is therefore difficult to categorize them. I would appreciate knowledge of any other forms that people are growing, particularly sourced material.

Lechenaultia floribunda cultivars

There are a series of cultivars of this species now appearing in the nursery trade however now, as in the past, there is some difficulty in the identification of species as much as in cultivars. There are references to Boddy's "Forget-me-not" and "Borealis", however I suspect that these forms are no longer extant. If anyone has information on cultivars of this species please get in touch.

Lechenaultia tubiflora cultivars

There are a number of forms of this species around. These include a cream form which was available in Sydney for a while. It did well in my light soils for a couple of years until it collapsed and was lost. Max Hewett had more difficulty keeping this going in his heavier soils. Relatively easy to propagate from cuttings. We need more material from this form. There are a variety of forms around with pinkish flowers with white or cream tips. I can't keep these forms going at all and would appreciate any propagating material if it is available (another late flash: given a plant by Max Hewett - I should have asked him first!). Max also has a brilliant, small (very small!) red form which grows as a small cushion. Very slow growing and propagation is from very small tip cuttings which are carefully cleaned up with very fine scissors. Is surviving in Max's garden but in danger as there is no other plant material available. Great potential as a garden plant but still very much in the experimental stage at this moment.

SUCCESSSES AND FAILURES

by Your Leader

I suspect this will be a continuing feature of newsletters in the forthcoming years (?), particularly with regard to the latter, although all is not negative. I sincerely hope that all study group members can be enthused to write to me or the Editor about their own successes and failures as otherwise the group will have little of no reason for being. In the long term the group is about assessing these plants in a garden situation and I am hopeful that we can go a long way towards at least defining those species of horticultural potential.

In this article I am going to concentrate on the *Goodenias*.

G. blackiana

For a long time this species has been grown as a form of *G. affinis*. The foliage of this species tends to darken to purplish tones in winter however this small (ca 20 cm across), clumping species is delightful in a warm sunny position in late spring and summer with steel grey foliage and large yellow flowers held tightly above the foliage. Appeared to thrive in my garden in a very open position in light sandstone soils with a quartzite mulch. Died after being overtaken by a nearby groundcover so competition may be a no-no. Survived on minimal watering and, in fact, appeared to resent overwatering or very humid conditions. Did sucker in large pots but appeared to multiply more from stoloniferous growth i.e. short runners or side branches. Relatively easy to propagate particularly from suckers treated as cuttings (without excessive hormone treatment).

G. affinis

This species is another very desirable one similar in habit to the species described above. Foliage tends to be a paler form of grey and at times green and the flowers appear larger. Throws out stolons readily and appears to appreciate hot conditions. Is probably prone to rotting in conditions of high humidity. After one year is over 20 cm across and appears to be enjoying itself hugely even in our very wet summer and autumn. Just finished flowering in April.

G. varia

The form I have in the ground is the small-leaved suckering form. I suspect the original plant is defunct and the existing plant(s) are from sucker growth and layering. Is growing in very hard conditions on a steep slope next to a rock path and appears happy. This was one of the first plants in this section of garden and doesn't get any artificial watering. It is probably about 4 years old at this stage and going strong. Seems always to be in flower and the flowers, although not large, are displayed well against quite open, bright green foliage. Easy to propagate from cuttings or suckers.

G. pterygosperma

This is one of the blue-flowered forms from WA. I obtained some seedlings of this species and have one plant growing in my "new" bed. So far it appears very successful with two lots of suckers coming up recently and the main clump doubling in size and displaying an extraordinary number of buds. I say extraordinary because this plant has been flowering now since early spring. Flowers are a dark blue with white centres, about 1 cm across and held above the foliage on pedicels about 10 cm high. I would say this plant has a great deal of potential for small gardens with a sunny outlook.

G. viscida

This is another brilliant little plant. As the name suggests the foliage, which consists of very small, bright green leaves on

fairly rigid stems to about 1 metre, is quite sticky. The flowers are tiny but a bright yellow and vast quantities appear all along the stems presenting well. The plants sucker freely and form quite dense clumps. My plant has been in the ground now for about 18 months and has suckered profusely almost since it was planted. This summer was the first time it has flowered well however. Another species which doesn't like too much moisture around its foliage. Older stems tend to die back and should be removed when completely dead - mainly for cosmetic reasons.

G. lanata

This species is one those which straggles over the ground but can cover quite large areas successfully as a ground-cover. Leaves are 2-3 cms across and tend to lie flat on the ground and the flowers are large (1-2 cms across), yellow and lie on top of the foliage so they present well. The form I am growing was obtained in Victoria and I understand it was collected there although the provenance is uncertain. My plant is now about 1 year in the ground and, with this last lot of rain and the warm weather, has started to grow rapidly. Time will tell as to whether it is a stayer.

G. glomerata

A "local" species which has potential in rockery situations. It is unfortunate that this species has rosette leaves closely resembling a number of imported weeds as it makes a lovely display when in flower (over spring and early summer). I haven't had this species in the ground very long (ca 6 months) however it thrived over the past summer with numerous suckers or seedlings extending the clump over about 20 cms. Seems to grow in relatively open situations with little competition in nature so may require a little maintenance in the garden. At this stage it has potential but is "untried". The single flowers (on tall pedicals) are bright yellow and 1-2 cm across.

G. humilis

This is a species which can form extensive "mats". It suckers freely particularly if it isn't water-stressed and flowers profusely with hundreds of small yellow flowers held above the foliage (rosette form) of a clump. Likes a sunny but not bone-dry situation and fills in nicely between rocks. My clump is now ca 18 months old and ca 50-60 cms across and colonising rapidly.

G. paniculata

Another "local" species which is truly local to the Sydney Basin area particularly the area around the foothills of the Blue Mountains. Likes swampy areas and in the garden resented being in a dry situation (enough to die on me!). Unfortunately, I don't have a permanently wet area to hold these water-loving plants so I guess this one remains in a pot for the foreseeable future. A very attractive feature plant in a pot with long (40-50 cms), slender but fleshy, clumped foliage and attractive yellow flowers (1 cm) held on similarly long pedicals displayed both within and above the foliage.

G. "unidentified"

This is the only other Goodenia I have in the ground at this moment. It is similar to G. hederacea however the small ovoid leaves have serrations (?) along the margins and the flowers are held down in the foliage rather than above on pedicels. Has not been in the ground for long and at present is slow growing. Did not appreciate even a relatively short period of dry weather and brightened up considerably with the extensive period of rain we have had over March and April. Difficult to estimate eventual mature size of clump but growth is nice and compact at present so could be a neat rockery plant.

Don't forget, we welcome any and all correspondence on the subject of growing Goodeniaceae. Please write either to me
Phil Strong, 6 Jetty Ave, Charmhaven 2263 or
Dennis Margan, 58 B Norman Ave, Thornleigh 2120.

Most native plant enthusiasts and probably all study group members would have an ambition to grow Lechenaultia successfully. Very few people in Eastern Australia seem to be able to maintain even the hardiest members of the genus in cultivation for any length of time. Martin Swanson of Glenmaggie in Victoria has obviously given considerable thought to the problems he has encountered with this genus and below are some of his thoughts on the subject:

"Why do Lechenaultia die?"

by Martin Swanson

What is the lifespan of Lechenaultia growing in the wild? Are we dealing with a genus in which the plants have an inbuilt genetic timeclock such that they reach a certain size and age and then expire regardless of the suitability of their growing environment. An example of this trait, from another family, is Boronia megastigma.

Is the major cause of death in cultivation root failure or leaf and stem malaise? The forms of L. formosa we propagate seem to be at risk when we get a spell of wet, overcast weather and the plants are in a semi-crowded position in the nursery. The natural assumption is that the roots failed and this was reflected in the sick-looking foliage and flowers. It is, however possible that the foliage failed and slowly starved the roots. Some Eremophilas die in the foliage during humid weather and can be saved by heavy pruning back to hard wood.

My experience with L. formosa has been that the "hardy" forms (Tango, El Dorado, and the Large-flowered, prostrate red form are almost impossible to kill by lack of water. I put out two plants of the prostrate, red form into "death" row in the

nursery where plants to be thrown out are put and not watered and they both confounded me by surviving the entire summer. Even potted Grevilleas and Eremophilas died of thirst in that area.

One form of *L. formosa* we have has the curious (and reliable) habit of dying in the autumn and then reappearing in the spring. Over a period of years this plant has been known to end up in a very different spot in the garden. One plant I know is now 3 metres from where it was originally planted. Another plant disappeared for a complete season and then re-emerged. Both of these plants are growing in 1000 mm plus rainfall areas in raised garden beds.

Coarse sand does seem to be the best mulch when planting *Lechenaultias*. The heat from it keeps the foliage dry and healthy whilst the roots are protected from sudden changes in soil microclimate. Our previous *Lechenaultia* bed was raised soil with a thin sand topping, but our new bed is 200 mm of coarse sand on a gentle slope facing due north. I intend to see how "dry" I can grow them in this new bed because my experience with other genera from dry habitats is that they respond to more available moisture by producing lush and soft top growth which is more prone to fungal attack than plants which have to hunt for water."

Martin also sent along the following thoughts on weed control:

"I've noticed that one of our greatest problems in years past with *Lechenaultia* has been the problem of weeds emerging in pots and garden beds. Firstly, many *Lechenaultia* are brittle and hence break when removing weeds. Secondly, the major problem with weeds, from my experience, is that they trap moisture against the stem during wet and humid weather. The pathway to success with *Lechenaultia* seems to lie with unobstructed air circulation through the foliage and blazing, full sun. Weeds restrict the health and vigour of the plants. Ronstar crystals are a long-lasting pre-emergent herbicide and widely used in the ornamental realm of horticulture. They control most problem weeds for 8 to 12 weeks. They do not kill existing weeds - only germinating ones.

CAUTION 1. Some plants which sucker (i.e. shoots emerge from underground) are killed by Ronstar. *Wahlenbergia gloriosa* does not survive its action. Some plants are injured but survive e.g. *Hibbertia dentata*. Strangely (and fortunately) all the suckering *Lechenaultias* and *Dampieras* we grow appear to be immune. 2. Always hose the foliage of your plants after applying Ronstar, especially those with crowded, small, healthy leaves, as the crystals tend to lodge in them and slowly kill the leaves. An example of such a plant is *Astroloma ciliatum*. 3. Test each new batch of plants with Ronstar before treating the rest of your batch with it. 4. Spread crystals on the surface of the soil evenly - do not mix in with the soil. The application rate is 20 grammes per square metre. In rough terms this is about the amount required to cover a 2 cent coin (unheaped) per 15 cm pot and twice that amount for a 25 cm pot. I made a small spoon to sprinkle it on the pot and then I water the pot to distribute it as evenly as

possible."

We have also had correspondence from Kathie Strickland at Balnarring in Victoria describing her garden situation. She says:

"We have a property about 1 km from Westonport Bay. As a result we suffer from winds. Our soil is clay and in order to grow many natives we are building up banks of topsoil and/or sand as required. We also have a glasshouse and polyhouse to propagate cutting material."

Kathie also sent a list of species she is growing at present:

Dampiera aemula (?)

D. linearis

D. trigona

D. rosmarinifolia

D. diversifolia

Goodenia varia

G. humilis

Lechenaultia chloranthera

L. formosa 'prostrate

form' and semi-erect

form