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ASSOCIATION OF SOCIETIES FOR GROWING AUSTRALIAN PLANTS. THYSANOTUS AND RELATED GENERA STUDY GROUP NEWSLETTER No $\,7\,$

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A number of letters have come in to me outlining the difficulties a number of you have had growing Thysanotus. If growing the plants were easy, I for one, would not be in it. A challenge is much more interesting. On that note, why am I so cheerful this newsletter? At last I have a few seeds of a few species of Thysanotus that might be of some use to our group.

Before going into the details, I think a few comments about the success or lack of it are warranted. In my earlier gardening days, I always tried all interesting plants in my garden, regardless of where the plants came from. Considerable confusion should have reigned, but for some reason, many of the plants died. The remainder were frequently species or selections that came from environments similar to my home garden. The lesson for me was to make sure that the plants I grew were provided with as similar a climate to their natural habitat as I could provide. The application of this lesson to Thysanotus is that in Sydney, I am attempting to grow T. tuberosum from the east coast of Australia with some confidence and plants from the arid areas with less confidence. We will eventualy have selections of arid zone species that will grow in the humid regions and vice versa.

Therefore may I suggest that people in the Ceduna area of S.A. do not attempt to grow T. tuberosum, stick to T. multiflorum, T. tenellus etc and the people in Toowoomba avoid T. pattersonii and try T. tuberosum. I suspect I will get a request to repeat information that first appeared in the earliest article in Australian Plants on Thysanotus.

I have limited seed of T. tuberosum from Armidale grown in a glasshouse in Sydney, a few seeds of T. pattersonii from the Adelaide Hills of S.A. and some seeds of T. murrayanum (possibly a new species from the Riverland of S.A., thank you Anne). I have also placed T. tenellus (arid summer), pattersonii (dry summer), murrayanum (very dry hot summer), dichotomus (goodness knows) and tuberosum (Central Tablelands of N.S.W. and Central Coast of N.S.W.) in to tissue culture. I have also collected seed from my own plants of Arthropodium milliflorum, A. minor and A. fimbriatum (all Australian and seemingly very easy to grow) and A. cirrhatum (from New Zealand and also easy to grow). Seed is avaiable to a few early birds who wish to attempt to grow these species. I would also like expressions of interest from people who would like to attempt to grow plants from tissue culture. The latter group will have to wait until I can bulk up my plant numbers and will have to be prepared to sterilise soil, inoculate with mycorrhizal fungi and grow the plants of Thysanotus with a companion plant (see the article on growing Thysanotus in May's Australian Plants.

To add to the news on available species, Dr John Conran, formerly of Monash University, has just given me his collection of living plants of a number of Australian and New Zealand species of Arthropodium, some of which he says are new species. We should have seed soon and maybe even some tubers of these and the other species I have in my collection at home.

SOME THOUGHTS ON Thysanotus IN THE WILD.

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Thysanotus murrayanum from the Morgan/Cadell area of S.A.

T. murrayanum is possibly an undescribed species of Thysanotus, or it may be a subspecies of T. baueri. Thanks to the efforts of Anne, samples are now lodged with the herbarium of S.A. and a decription forwarded for submission for publication. Hopefully, we will see it all in print soon.

The plants grow in red to yellow sands, usually deep with little or no clay. The soils are usually free of humus and plants widely spaced. Plants often become obvious in disturbed areas where associated herbs have been trampled or removed. The associated trees include Callitris, Eucalyptus and Acacia and other plants include Dodonea, Eremophila, Bossea, Vittadinia and Minuria. Rainfall averages 250mm each year and falls mainly in winter.

It is always dry and leaves have withered when the flowers first appear in late October. Flowering continues through into January under ideal conditions. Flowers open in the middle of the day and remain open till evening. Cut flowers follow the same pattern and can last for up to a week in water inside, with the flowers opening as if programmed when in full sun. Considerable variation in flower colour occurs, from pale mauve to deep violet and almost blue. Some plants seem to exhibit more reflexed flowers.

The species has some possible horticultural potential in arid areas. It grows very strongly in the glasshouse in Sydeny but can become infected with leaf pathogens in humid conditions. Seeds are relatively large and germinate within about 14 days in ideal conditions. The species is easy to grow in tissue culture and some rare forms maybe preserved in this way.

Thysanotus tuberosus: some further comments on specimens from Queensland to Wollongong

The species grows on clay to loam soils in the southern Queensland areas. Flowering occurs in spring and plants only become evident when the flowers are open (usualy morning). On the Central Coast of N.S.W., the species was very common on sandy soils near Woy Woy and was seen flowering from late October to Late January in areas burnt during a bush fire last Spring. Flower colours were mostly a reddish purple with the anthers having a reddish tinge too. On the plateaus of the Wollongong escarpment, it occurs in sandy soils, flowering in summer with flowers opening in the morning. On the Central Tablelands near Cherry Tree Hill, plants grew in the sandy soils in gullies protected from the winds. Flowering occurred from late spring to early autumn and flowers were only observed in the morning. Cut flowers followed the same pattern as given above. In the glasshouse, this species will grow easily, with an appropriate mycorrhizal fungus and companion plant. Leaves reappear following flowering and the plant will continue to grow strongly. Flowering seems to be strongly correlated with the day length. Pathogens seem to be of little importance so far in Sydney for any of the forms from Cherry Tree Hill, Woy Woy and Armidale. Seed from Queensland would be extremely useful.

Thysanotus tenellus from near Port Lincoln, S.A.

I have only seen one plant of this species and it was growing in a loamy soil at the base of a <u>Eucalyptus</u>. Seed grew readily in the glass house in Adelaide and it is now in tissue culture in Sydney. The flowers are held above the leaves and the many buds, though pale, make a spectacular sight when open. Very similar to tuberosum in style, though smaller.

That is all for the moment. I think the article on growing Arthropodium will appear soon in Australian Plants.

Happy gardening,

Peter.