

ASSOCIATION OF SOCIETIES FOR GROWING AUSTRALIAN PLANTS

HAKEA STUDY GROUP NEWSLETTER

NUMBER 20. ISSN 0727-7008 July 1994.

Hello Everyone,

Living in Australia we are used to great extremes in our climate, this year Melbourne had its third cool summer spell with more summer storms than usual affecting my garden. One storm with strong wind gusts managed to tear down half of a tall *H. marginata* in my back yard, and another about ten days later, brought down the rest of the shrub. This event gave me the chance to reassess plantings in the whole area. The *H. marginata* had been reaching for light against the needs of *Persoonia pinifolius*, *H. minyma*, *baxteri*, *meisneriana* and *Grevillea "Pink Surprise"*. Above all towered a grafted *H. coriacea* on one side and a rather sparse twisted *Euc. sideroxylon*. The effect was that everything was tall and skinny instead of being bushy. I took out all the smaller plants that had struggled in this environment, pruned back the *persoonia* and *grevillea* and then after pruning the *H. minyma* and *meisneriana* very hard decided to leave these two to decide their own fate. In less than a week *meisneriana* had sprouted all over the stems, *minyma* after a month had not, so *minyma* was tossed out. I dug over the whole bed, added compost and a little blood and bone, collected loads of coarse mulch (free of charge from the council) and replanted several ground cover natives and only one hakea, *H. cinerea*. I am so pleased with the result that I am now progressively rehabilitating other beds.

Over the years I have found hakeas respond to pruning very well, they do not have die-back problems and removal of seed capsules when mature encourages more flowers. However perhaps some species do not respond as readily as others.

On the list of registered cultivars (21st January 1993) issued by the Australian Cultivar Registration Authority, there is only one hakea, *Hakea salicifolia "Gold Medal"*.

**GRAFTED HAKEAS.** Grafting has become a very popular method of propagation, particularly with genera difficult to propagate by seed or cuttings. Hakeas grow readily from seed or cuttings in most areas but the challenge of making successful grafts is spreading and for those of you wishing to try, this may help.

All methods of grafting rely on the cambium region of the stock and the scion (bud or cutting) being placed together in such a way that a union is formed and the two plants grow together as one. This depends on both physiological and environmental factors. Thus you must choose a stock which grows well in your garden conditions.

Main points to watch:

- Use a sharp knife
- Keep work area very clean, no dead material about
- Make the closest fit possible between stock and scion. The cambium layers must meet tightly on one side at least.
- Proper care of plants after grafting.
- Compatibility

*Hakea salicifolia* works very well with all the grass-leafed hakeas (*multilineata*, *bucculenta*, *coriacea*, *minyma*, *francisiana*) and is used widely. However other hakeas work well as stock and I am anxious to hear from members who have been successful. *Grevillea robusta* can work with some hakeas too.

**IMPORTANT** Please report successful grafts, noting both stock and scion used. Please report unsuccessful grafts too, it may be difficult to use certain species.

TASMANIAN HAKEA EPIGLOTTIS. Dick Burns, a member living at Penguin, Tasmania, reports that in a paper published in "Aspects of Tasmanian Botany - A Tribute to Winifred Curtis" published by the Royal Society of Tasmania pp 79-84, R.M. BARKER splits it into two species: *H. epiglottis* and *H. megadenia*. *Hakea rostrata* and *H. rugosa* (Tasmanian populations only) were submerged into *H. epiglottis* some years ago.

The key distinction between the two species is the size and shape of a gland at the base of the flowers, but there are some obvious field distinctions, with some gradation between.

	<u>H. EPIGLOTTIS</u>	<u>H. MEGADENIA</u>
Distribution	Statewide	East coast from Furneaux islands Tasman Peninsula
Size/Habit	Compact bush to 3m. Tends to grow in wet areas.	Erect shrub to tree to 7m Tends to grow on slopes
Flower time	Spring	Autumn
Flower colour	Tends to yellow	Tends to cream
Lignotuber and sexuality	- More work needed -	
Leaf (Dick's personal feeling)	Thin and glossy	Thicker and dull

Dick Burns' work in the field is very well known to SGAP members.

R.M. Barker

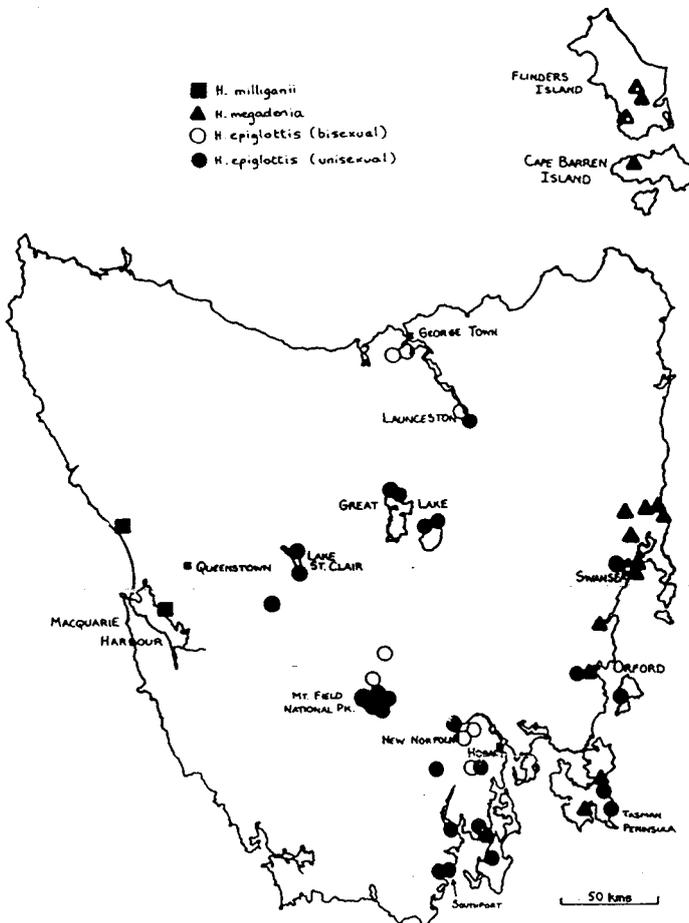


FIG. 1 — Distribution of *Hakea epiglottis* Labill., including bisexual and unisexual populations and specimens referable to *H. milliganii*, and *H. megadenia* R.M. Barker. Only flowering specimens have been plotted.

NANGAWOOKA FLORA RESERVE. Ron Taylor, a member of the Fleurieu Group SGAP S.A. Inc. has contributed this report of some of the indigenous species of *Hakea* growing in the remaining natural bushland and reserves in his area having some diversity of form.

1. *Hakea carinata*. A variable species which tends to form a singular stem of around 2m. with a few divaricate branchlets near the base to about halfway. Leaves are narrow linear or convolute or trigonous and vary from 1.5mm - 7mm in width. They are growing in 4.5PH - 6.5PH soil of varying depths of sand or sandy loam over clay shale.

This species has for many years been considered to be *H. ulicina* or *H. ulicina* var. *carinata*. A paper "Taxonomy of the S.A. species allied to *Hakea ulicina* R.Br. (Proteacea) by Haegi and Barker now delineates the differences.

2. *Hakea rostrata*. A species of variable height and density depending on its exposure to wind and humidity. Leaves are always terete and vary in length from 80mm - 150mm. Height varies from .5m on exposed headlands amongst low heath to around 2.5m on inland road verges and forest understorey, fruits vary from 30mm to occasionally 50mm in either location.

3. *Hakea rugosa*. A small harsh shrub ranging from .3m to 1m high in this area. Terete pungent leaves range from 20mm to 35mm with the latter form appearing inland in less harsh environmental conditions. Fruits are also very variable in size and appearance but generally resemble a smaller version of *H. rostrata*. This species suckers where roots are exposed or disturbed. It is growing in 6.5PH sand over clay shale in areas of heath and also in clay over a limestone base among *H. vittata* and *H. muelleriana* further towards the Murray mouth along our coastline.

4. *Hakea muelleriana*. This variable species is growing in small colonies near our coast as a 1m to 1.5m shrub of mounded shape with trigonous leaves 40-60mm long which at first appear to be terete. This contrasts with the larger flat leafed variety of this species found on Kangaroo Island offshore 17km.

This park also many species not indigenous to the area but are growing well. Ron adds that it is situated 3km from the sea and the soil is 7 - 7.5PH sand of varying depths over clay. No fertilisers are used but paths and mulch consist of sawdust and woodchips.

#### WELCOME TO THE FOLLOWING NEW MEMBERS:

Mark Ashdown, 41 Malahang Pde., Heidelberg West 3081.

June Carmichael, P.O. box 227, Lara 3212.

• Len Coe, Waratah Native plant Nursery, Boovie, Via Kingaroy, Queensland.

Sandra Comley, 21 Beaminster Rd., Elizabeth Park 5113.

David Falla, RMB 710, Donald 3480

Mrs. Margaret Garrett, RMB 3019, via Violet Town 3669.

Margaret Ingall, 344 Beryl Street, Broken Hill 2800.

Jeffrie G. Jones, P.O. Box 131, Strathalbyn 5255.

R. Miller and Miss A. Stevenson, 7 Sylvan Grove, Picnic Point 2213.

Barbara Pennington, 22 Madison Drive, Adamstown Heights 2289

SGAP N.S.W. Inc. Tamworth Group.

#### SEED BANK

I have new stock of most species and we have just been given a very large amount of *H. suberea* (lorea) by one of our former members. I also have a few seeds of *H. brownii* (could be described as a smaller *H. baxteri*) and *H. neurophylla*, a medium shrub with pink flowers from W.A.

Good gardening

HAZEL BLACKNEY