

Summer seemed to be reluctant to leave us in Melbourne this year so autumn was also very warm and as we had had very little in the way of storms compared with other parts of Australia, southern Victoria gardens were very dry. I have not lost hakeas but three long established grevilleas and several small plants perished. June has arrived wet and cold and I cannot wait for a "go" at all the weeds.

During preparation of the March newsletter, coming in from a walk around my garden I tripped on the top step of my patio, skidded on the right side of my face, fractured the bridge of my nose, bashed one knee and I don't ever expect to use this excuse again for missing a deadline! I am now able to use my glasses and breathe o.k. again.

Norm McCarthy of Toowoomba has suggested a solution to the fungal problem David Lightfoot was experiencing: "The relatively new clear oil (DC-tron plus) in large commercial packs (like 50 litres) is awfully cheap if shared but quite dear in flash containers and spray packs in small containers, but it may be the answer to the problem. It is said to be good as a fungicide and preferred to white oil. It is sold in small packs as "Pest Oil".

Norm has also procured seed of *H. sp. nova* aff. *gibbosa* now named *H. macrorrhyncha*. He saw it growing at Gibraltar National Park in November 1997, a local grower had it growing and gave me the seed.

Regarding Clair Lithgow's *H. clavata* not setting seed, Norm comments that good size plants grow and flower well in Toowoomba too without setting seed. Does this species lack the right pollinator? I think this could be the answer, as my *H. clavata* at Eaglemont is over 3 m. tall, very vigorous, and flowers very profusely every year. I tried cuttings last year and had a very good strike. It never sets seed.

Norm also has tried Paul Kennedy's wet towel germination procedure. It gave him 100% success with two species. 1st species 16 seeds for 16 strikes, 17 days into 2" tubes with strong radicles apparent and cotyledons exposed. Masses of roots were evident, potted in to 3" tubes in cold frame 12 weeks from initial setting of seed. New growth 3" tall - 2 leaved sp. *florulenta*. Originally many years ago I used 3" tubes with 4 parts sand 1 part peat - result: poor strikes and slow germination.

Finally, Norm has had no success with Clonex gel in raising *H. archaeoides* in an igloo with underneath heat and mist, so congratulates Pauline Tully on her results.

Recently I had a long talk with Cas Liber about *H. archaeoides*. He had some seedlings to give away of this species and suggested that you could ring him at 02 9559 2656, his address is 21 Bedford Cr. Dulwich Hill, NSW 2203. We also discussed *H. bakeriana* now part of the *Verrucosa* Group. Most of the *H. Bakeriana* plants I have seen have been about a metre high and very easily grown here in spite of the lack of sandy soil. There used to be a group growing outside a church in Niddrie, one of our western suburbs, planted in a narrow strip of hard soil between the footpath and the street gutter. In spite of kids on bikes and other forms of misuse, those plants produced flowers every year. I know of another in a beautifully prepared garden which is over 2 metres high which is a mass of flowers in spring and I wondered where it came from. Cas said they are very common in his area and all appear to be the larger form. When I saw them in the Sydney area they appeared small, however they are described in the Flora of Aust. as a low dense shrub 1-2m.

At a lecture on gardening the speaker made the statement that no plants will grow in limestone soils but that some plants will tolerate some lime and it depends on the strength of the alkalinity in the soil. He then mentioned many exotic plants that could be used in such areas and then added as an afterthought that in our native species some grevilleas also could be used!

I thought it is time I should list the species of hakea I know and if you have others to add, all the better. I do not know to what extent their tolerance stretches but they will tolerate some alkalinity.

H. adnata	Shrub 2-3m., flowers white, sand heath.
H. elliptica	Erect shrub 2-3m., fls. white, reported as thriving on limestone soil
H. laurina	
H. myrtooides	Diffuse shrub to .3m. fls purplish.
H. nitida	Spreading 1-3m. fls white
H. nodosa	Variable species, some plants will grow in wet areas, seed needs to be collected from such plants if that characteristic is important, otherwise normal plants will die in those conditions. I would think the same rule might apply regarding limestone tolerance.
H. oleifolia	Small tree 4-6m. fls. white, recommended but not confirmed.
H. prostrata	Reported success with some plants, not confirmed for all.
H. purpurea	2m. sandy soil, fls. red.
H. rostrata	2m. fls. white
H. scoparia	W.A. fls. cream to red 2-3m.
H. sulcata	1-2m.

For most of us this information is of little use, but new gardens made near new buildings or paths are often a headache for new owners.

Paul Kennedy has sent more information about the new classifications for which I thank him.

The Prostrata and Varia Group of the Hakea Genus.

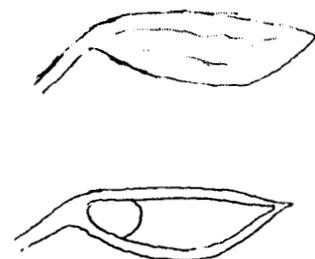
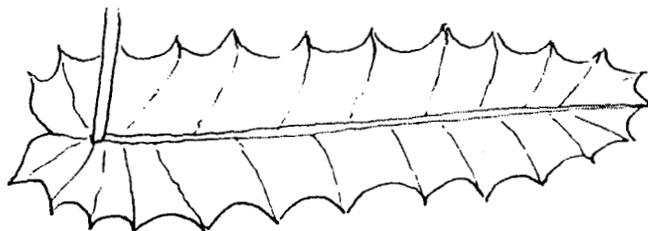
Of the thirty groups listed in the Hakea revision, the prostrata and varia group are perhaps the most difficult to decipher as the botanical description suggests many leaf shapes for most species and lack of detailed drawings makes it difficult to determine which species we are looking at in the field or garden.

I therefore propose to give a brief description of each species in the above groups and invite members input as to whether there are other parameters which would help us in identifying each species by sight rather than having to put flower parts under the microscope. In some cases species at the perimeter of their distribution merge with species of the same group such that it becomes very difficult to identify plants by leaf shape. In many cases the seed follicle is also very similar in shape, but the surface texture can vary. I will try drawing details of each one. The stalk of the follicle is bent or twisted. All are easily germinated from seed, but cuttings of the Hakea varia group and Hakea linearis strike readily for me and I prefer this method. In cultivation I believe leaf and plant height may be larger due to less competition from other plants.

The Prostrata Group.

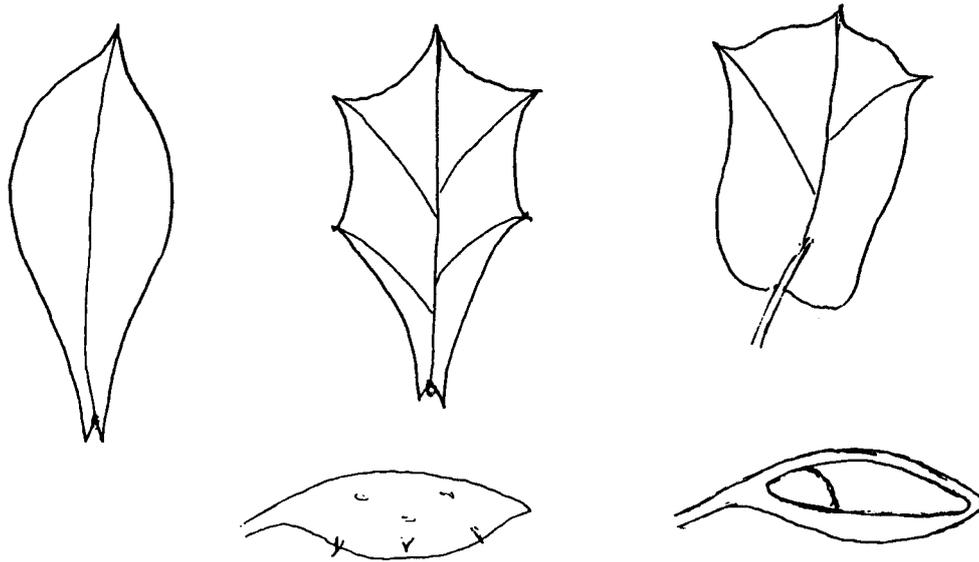
Hakea amplexicaulis.

A lignotuberous shrub, 1-3m tall. Leaves ovate, 3-18cm long by 20-65mm wide. Leaf base wrapped around stalk (amplexicaul), margins with saw like protrusions (dentate) with 12-30 teeth per side. Teeth 2-6mm long. An easy one to recognize and usually multi stemmed. There is a very large specimen in the Canberra Botanic gardens. These come up like weeds on my brother in laws property in the Darling Ranges. They pull them out much to my disgust.

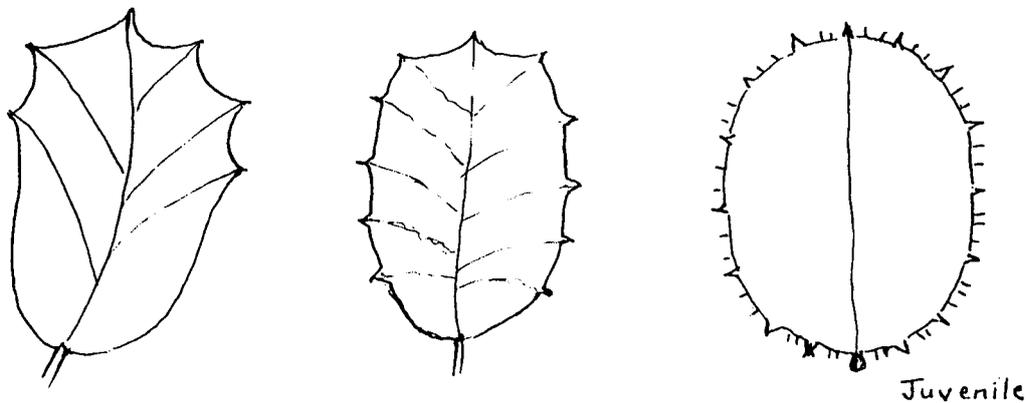


Hakea pritzelii.

A shrub to 2.5m tall, leaves usually obovate but can also be cordate. 1.7-4cm long by 10-20mm wide within base of teeth. Margins entire, auriculate or denticulate. 1-7 teeth per side. Flowers dark red with green style in leaf axis or on wood of stem. Pritzelii can merge with prostrata or denticulata. A plant of the Stirling Ranges.

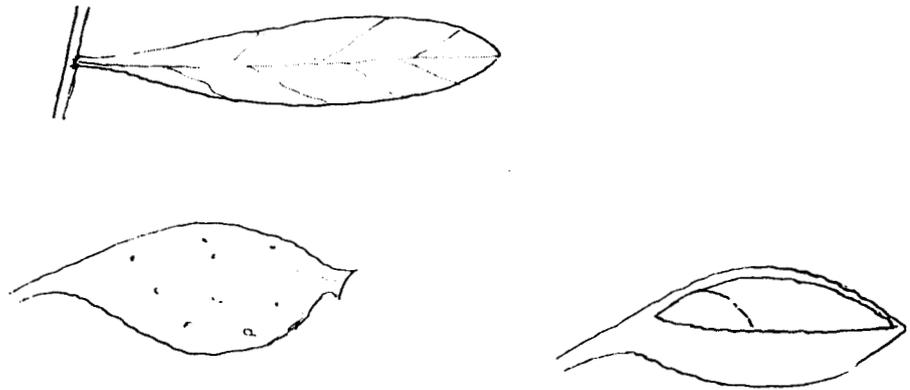
**Hakea denticulata.**

A dense rounded shrub to 1m, leaves flat, elliptic to obovate, wedge shaped (cuneate) or heart shaped (cordate). 1.5- 4.6 cm long by 10-25mm wide. Margins dentate, 2-10 teeth per side, teeth 1-2mm long. Flowers red and normally unpleasantly scented. Extends from the Stirling Ranges to Esperance.



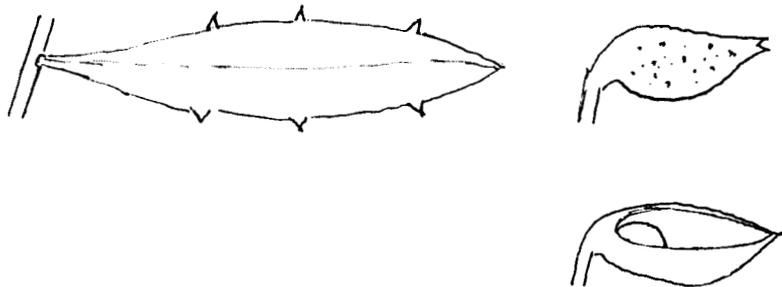
Varia Group
Hakea oleifolia.

Can grow to tree proportions near the coast. Leaves flat, elliptic, narrowly attenuate to cuneate, rarely dentate, 2.7-8.5cm long by 5-25mm wide. Flowers white. Great specimens in Bremer Bay caravan park.



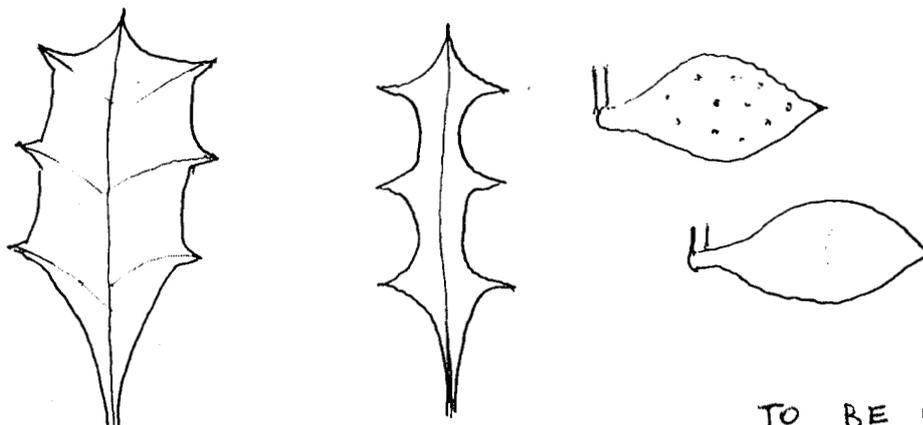
Hakea florida.

A dense shrub to 1.8m. Leaves flat, narrowly elliptic, rarely obovate, 1.5 -5cm long by 8- 25 mm wide. Base of leaf can be attenuate or cuneate. Margins dentate with 1-10 teeth per side. Teeth 1-2 mm long. Flowers white. Likes semi shaded conditions.



Hakea ilicifolia.

A shrub to 3m with holly like leaves which are subpetiolate, rigid, flat and elliptic, 1.5-5cm long by 5-20 mm wide. Base of leaf attenuate or cuneate, coarsely dentate. Teeth mucro 1-2.5mm long. Flowers cream to yellow. Extends from Albany to Ravensthorpe and into wheatbelt.



TO BE CONTINUED

WISH LIST, QUESTIONS AND COMMENT PAGE.

I was delighted with the response to send requests for seeds and was disappointed that I could not supply them all. Please add some this time.

Norm had a lot to say in this N/L and here is another question. Please copy his example if you wish.

NORM: I've been told "don't fertilize hakeas." What's your opinion?