

AUSTRALIAN PLANTS SOCIETY AUSTRALIA

HAKEA STUDY GROUP NEWSLETTER No. 78

FEBRUARY 2022

ISSNO727-7008

Leader Paul Kennedy OAM

Address: 210 Aireys Street
Elliminyt, Vic. 3250

E mail hakeaholic@gmail.com

Tel. 0422813211 or 03-52315569

Dear members,

Welcome to 2022. With the coronavirus still creating havoc across Australia our gardens are becoming a safe haven to enjoy and add species to. Most areas of Australia received above average rainfall in 2021, which was good news, but in some areas gardens became waterlogged and plants died from drowned roots. John Nevins from Armidale NSW said his property went from a low of 250mm in 2018 to 1200mm in 2021 and water just oozed out of the ground because it was so wet. I believe Patrick Laler had a similar experience in Uralla some thirty klms away. Building up raised beds will help but sometimes the rainfall is just beyond what you can reasonably be expected to do. Here at Elliminyt we had very wet months from May to the end of November and the ground became very sodden. The drains worked very well in shedding the surface water but the 900mm of sandy loam was still too wet for my liking. I was fortunate not to lose much, a self-sown *Hakea multilineata*, a *Hakea dactyloides* and a *Hakea oligoneura*. I also lost *Hakea ferruginea* and *epiglottis ssp. milligani* to the wind and branches off the *Hakea adnata* due to wind damage during the wet.

Experiment with tropical Hakeas.

Some have done very well and others a total failure. *Hakea plurinervia* (benthamii) from the Atherton tablelands has responded to our cooler climate and grown into an open bush 1.3m high, flowered for a number of years and now has set seed. *Hakea persiehana* from the northern end of the Atherton tablelands has not liked our cooler conditions at all. The seed germinates readily and grow quite well in tubes in the hot house but when it comes to hardening them off they quickly lose vigour and will not survive in our sandy loam. Neil Marriott, who has grown tropical *Grevilleas*, says they need to be watered with iron chelates when planted out to overcome yellowing, which is a prelude to dying. He says the uptake of iron is blocked by low temperatures for most tropical species. The simple treatment for Hakeas is to treat every few weeks with iron chelates and after a few treatments the yellowing should disappear. As it has taken me years to get seed, I do not want to waste it, so the next lot will be grown for the purpose of grafting onto a suitable root stock. *Hakea arborescens* also responded the same way as *persiehana*, so it will be grafted too. The last of the Cape York group from the Cooktown area, *Hakea pedunculata* has survived our winter but put on no growth as yet. Surprisingly I grew both *arborescens* and *pedunculata* at Strathmerton in northern Victoria as small shrubs up against brick walls where they survived and flowered in deep sand.

Which Hakeas have divided leaves?

It is a question that caused me to do some research. There is the Lorea Group which have corky trunks and can have leaves that are singular plus compound or divided into twos or have compound leaves. These include *lorea*, *divaricata*, *eyreana*, *ednieana*, *ivoryi* and *pulvinifera*. Others with compound leaves include *erinacea* and *lissocarpha*. Then there are those that have only

a small number of divided leaves such as brachyptera, drupacea, longiflora, orthorrhyncha ssp. filiformis, stenophylla ssp. notialis, and trifurcata.

If I look a bit further I come across those that can have deep lobes such as ceratophylla and horrida. The variation in leaves of Hakeas is one of the diagnostic tools we can use to determine their species name.

Members news.

As I write Barry Teague from Swan Hill, Victoria is undergoing major surgery and I know we all wish him a speedy recovery so that he can get back to growing his Hakeas.

Neil Marriott opened his garden to members of the APS Grampians Group in November and I had the privilege of leading the Group around his garden of about 140 species and pointing out features which helped to identify the plant.

Tom Constant from Bullsbrook in WA is having to water many of his smaller Hakeas as the heat has been horrific over the December- January period. The temperature at Bullsbrook is usually 3-5 degrees hotter than that recorded in Perth. Many years ago Margaret Pieroni showed me a reserve near Corrigin when the plants looked all but dead after a very hot dry summer. Two years later when I revisited the reserve I was amazed to see how well the plants looked after a good season. The answer I think is that there is some soil moisture below even when it is hot and dry.

Neil Marriott sent me a photo of Hakea eneabba suckering from roots. Whilst only a few members have this species in their garden, I would like to hear from any member who has observed this effect on their plant. Perhaps WA members may check out Hakea eneabba in the wild to see whether it suckers.

Hakea book.

I have reviewed the initial write-up of 169 species and now have begun to consider the introductory portion to the book. Neil Marriott has offered to photograph the Hakeas in his garden as they flower for which I am very grateful. Neil has photographed many Grevillea species over the years and is co-author of the tree volumes of the Grevillea books.

Christmas flowering

Most of the Hakeas flower in the winter/spring part of the year. However there are a few Hakeas which flower in summer about Christmas time with white flowers. They are kippistiana, leucoptera ssp leucoptera, leucoptera ssp sericipes, linearis and ruscifolia. The white flowers attract a lot of insects. Hakea linearis will flower for many months but does like a bit of summer moisture.

Propagating.

I have continued using the saucer method to germinate a small number of Hakeas over the summer months. Once the first leaves and roots appear on the paper toweling on the saucer, I transfer the seedlings into a tube and then into the hot house. However on very warm days the hothouse ventilation is not that good and I prefer to shift them out into shade beside a southern brick wall. I am mindful of the advice that Joe Stephens from Cann River in East Gippsland has given that he has very good success putting cuttings etc. out in shade where air flow keeps away fungal type diseases. Wire covering may be needed to keep mice, rabbits and birds away from interfering with the seedlings.

Seed bank.

There is plenty of seed available to members in the seed bank. Whilst some nurseries and APS plant sales do sell 30-50 species, the remainder need to be sourced from seed suppliers, members gardens or from seed banks.

Financial statement.

Balance 1 st . October 2021	3840-19
Income from subscriptions	280-00
Expenditure	
Printing and posting newsletter No 77	105-33
Balance 1 st February 2022	\$4014-86

A new Hakea species?

A friend sent me a report on a new species of Hakea which has been named Yambulla. From what I can ascertain it comes from near the Victoria boarder with NSW in the Genoa River area and consists of only a few plants. It has been separated from Hakea eriantha because it has come true from seed in respect to having consistently very wide leaves up to 30mm wide. East Gippsland members are well aware that Hakea eriantha is a variable leaf plant in their area varying from quite fine leaves to broad, and in Flora of Australia Volume 17B its leaf description is given as 8-18.5 cm long x 1-30 mm wide and questions whether it is lignotuberous. Seed from Hakea eriantha is known to produce leaf widths different to the plant the seed is collect from. I am concerned that it should be given species ranking considering other Hakea species such as salicifolia have been given ssp. names for the fine leaf form. I am also concerned that no one has been back to observe this small population for more than ten years and in recent bushfires it may have been wiped out. I am also told that the track to enter this area is blocked off by gates and perhaps it is in a logging area, in which case after logging are likely to bulldoze the debris into heaps for burning. The Yambulla plants are apparently non-lignotuberous. The fine leaf form also grows in that area. I will leave it to the East Gippsland members who at some stage will visit the site and forward their observations.

The Corymbosa Group of Hakeas.

There are five listed under this grouping, corymbosa, cinerea, acuminata, eneabba and victoria. All are worthy of a place in our gardens.

Hakea corymbosa.

Known as the cauliflower Hakea because the upper part of the plant consists of dense foliage and when in flower the white flowers form a dense cover over the foliage. It can grow to 2m tall and quite wide and inhabits heath and scrub heath from Quairading south to the Stirling Ranges and east to Israelite Bay. Non-lignotuberous and multistemmed. The leaves in the lower parts are alternate, flat, stiff and linear but in the flowering portion usually whorled, stiff, concave and narrowly obovate 2.8-12 cm long and 2.5-10 mm wide. The light green leaves have one mid vein and 1-3 prominent veins below. Pinnate veins slightly visible. Inflorescence consists of 12-18 white flowers. Fruit is ovate in shape to 2.7cm long with a small beak and slightly rough surface.

Considered to be a very hardy species that will grow in a range of soil types and tolerate cool to warm temperate climates in a sunny well drained location. Here at Elliminyt it has grown slowly to over a 1m tall in six years and flowers and set seeds from age two onwards. Frost hardy.

Hakea cinerea.

The ashy green leaves are a feature of this plant and with its yellow flowers it is very attractive. A shrub to 2.4 m tall and possibly lignotuberous. Found from Ravensthorpe east to Israelite Bay and to 70 klms inland on sandy soils in heaths and mallee heaths. Its leaves are alternate, firm to rigid, flat or shallowly concave, narrowly obovate 6-16 cm long x 8-18 mm wide. Longitudinal veins 1-3 above, 3-6 below. Pinnate veins may be visible. Inflorescence consists of 40-56 bright yellow flowers in the leaf axis. The fruit is narrowly ovate to 2.5 cm and tapering to a long point. There can be up to 5 fruits per inflorescence.

This species is easy to recognize and makes a lovely garden plant. At Elliminyt it tends to

spread out and put up erect branches. Appears to be frost hardy and prefers sandy to loamy soils in a well drained sunny position.

Hakea acuminata.

One of the rarest of the *Hakea* species and in great need of preservation. Grows in a small number of locations between Jerramungup and Ravensthorpe in mainly deep sand in heath and Mallee heath. It can grow to 1.8 m tall. The leaves are slightly dark green, alternate in lower parts, flattish and obovate to almost whorled in the flowering parts. The upper leaves are concave, narrowly obovate to elliptic and rigid to 3-10 cm long x 9-38 mm wide, mostly entire and acuminate at tip. Longitudinal veins prominent 1-3 above and below. Inflorescence of 16-24 cream flowers towards end of branches. The fruit is obliquely ovate to 3.1 cm long with a short beak.

I have a couple of plants in the ground at Elliminyt. The upper leaves are quite bright green with the veins a yellowish color. The upper leaves are more ovate with a sharp pointed tip. The plants have flowered but loathe to set seed. The older leaves tend to die with age and drop off, leaving stems with masses of leaf rubbish. The spiders love making webs in the foliage.

Hakea eneabba.

As the name suggest it grows in sandy heaths in the Eneabba area, as a multi-stemmed plant with a lignotuber to 1.3 m tall. The bright green leaves are alternate in the lower parts and tend to be whorled in the flowering parts. The leaves are narrowly obovate and rigid 4.5-12 cm long x 5-14 mm wide, entire and with a sharp tip. The longitudinal veins consist of 1 above (which maybe faint) and 1-3 below. There are faint pinnate veins. The inflorescence consists of 14-18 yellow flowers and the fruit is of obovate shape to 2.4 cm long with a short beak. It has some resemblance to *Hakea corymbosa* but is lignotuberous and has bright yellow flowers. The plants I have here at Elliminyt in sandy loam are slow growing compared to many other *Hakeas* which put on growth readily. Not well know and deserves to be planted in our gardens in a sunny well drained location.

Hakea victoria.

The leaves on this species are quite different to the others above. Confined to the Barren Ranges in the Fitzgerald NP in WA, growing in heath and scrub heath on quartzite or lateritic sands where it tends to grow as a number of erect stems to 3 m tall. The leaves are 4-11.5 cm long x 40-130 mm wide, alternate, flat and narrowly elliptic in lower parts to concave, nearly circular in upper parts. The teeth around the perimeter of the leaf can be rounded or pointed. There are prominent veins above and below which converge at the leaf base. The most attractive feature of this plant in the wild is that the leaves change from green to cream to red with age due to mineral deficiencies in the soil. The older leaves die and fall off to form nutrients for the younger leaves. The inflorescence consists of 26-42 cream flowers in upper parts of leaves. The fruit can be in groups of up to 4, broadly elliptic to 2.8cm long and becoming corky with age. I have grown this plant in well drained sandy soils where it has flowered but getting the leaves to show that brilliant red color is difficult as our soils have more mineralization in them.

It has been a most trying summer. The November rains encouraged a whole crop of weeds which have taken up a lot of my gardening time. One in particular which is related to oxalis just keeps coming back from the smallest roots left in the ground. It loves to grow under the prickly *Hakeas*. I thank Hans Griesser for inserting the pictures to this text and sending out to members. His garden at Gumeracha will probably be looking very green after those heavy late January rains in South Australia.

Regards, Paul.



Hakea meisneriana



Hakea commutata (both Neil Marriott)



Hakea acuminata



Hakea horrida (both Jennifer Young)