

AUSTRALIAN NATIVE PLANTS SOCIETY AUSTRALIA

HAKEA STUDY GROUP NEWSLETTER No. 68

OCTOBER 2018

ISSN0727-7008

Leader: Paul Kennedy
210 Aireys Street,
Elliminyt, Vic. 3250
E mail hakeaholic@gmail.com
Tel. 03-52315569

Dear members.

The gardens of our Study Group members have experienced quite dramatic climatic conditions this year. The New England members from Tamworth to Armidale have had very little rain and bitterly cold frosty mornings down as low as minus 10 degrees C. The only way Hakeas survive this degree of frost is if they are planted under a tree canopy.

Out further into NSW and southern Queensland the drought has been particularly severe and whilst there are not many Hakea species in this region they will all be stressed. I stopped to have a look at Hakea tephrosperma near Narrandra and all plants had shed their seed. However they are particularly hardy and will survive.

In Western Australia the sand plains north and west of Perth are having one of those years when the rains fell at the right times and the flowering season has been one of the best. Barry and Elva Teague will have hundreds of photos of Hakeas in flower by the time they reach Albany for the Hakea excursion.

Here in Colac after a dry summer- autumn period the winter rains have been above average and our sandy soils are quite wet. The mornings have been consistently cold, 4 degrees C with most days not getting above 11 degrees C. I often wonder what damage it does to the Hakeas with the absence of sunlight. However they seem to survive and are now flowering quite well. I lost a Hakea francisiana to wind and Hakea hastata and ferruginea to wet feet. Drainage is critical here and the more I can raise beds the better.

However there are always surprises. I had grown Hakea trineura for many years at Strathmerton but never got it to flower. Here in Colac in September a four year old plant has burst into flower despite the cold and the wet. It grows naturally around Marlborough on the mid north coast of Queensland in serpentine derived soils. The yellow racemes of flowers are quite showy and I will be interested to see what pollinates them. It is rare in the wild so I hope it sets seed to establish it in more gardens.

Hakeas where lower leaves die off.

Hakeas such as auriculata, spathulata, aculeata, and myrtoides often look ugly as the older lower leaves tend to die and hang on the plant. I am not sure why this happens but it maybe nature protecting the seed capsules which often are found amongst the upper dead foliage. Generally older leaves on plants are replaced by new ones and the old leaves fall and form mulch on the ground. One reason could be that in summer to minimise moisture requirements the plant retains a minimal amount of foliage. Another reason could be based on deficiencies such that the plant puts what nitrogen it has into ensuring the new leaves are green, which then starve the older leaves of nitrogen causing them to die. Any comments welcome.

Financial.

Balance forward 30 th . May	3235-80
Subscriptions	128-00
Expenses.	
Printing and post of newsletter No. 67	83-76
Balance as of 30 th September 2018	3280-04

Welcome to new members.

It is with great pleasure that we welcome Jan Hall from Yarrawonga, Karlo Taliana from Sydney, and Helen and John Van Riet from Wangaratta. I have not seen Karlo's garden, but Jan, Helen and John have outstanding gardens which include a number of Hakea species.

Members subscriptions.

Those whose membership subscription is due for 2018/2019 will be notified during November. I apologize for not doing it sooner, but these past five months have been very busy. I thank them for their support over the past years.

Members reports.

Brendon Stahl from Elliminyt (he resides a couple of streets away from me) has *H. dohertyi*, *cucullata*, and *corymbosa* in flower and *salicifolia* budding up. His soil consists of about 150mm of sandy loam over a gravelly clay. Because the block is flat and can be very wet in winter/spring he has built his beds up some 400mm. He has constructed a number of agricultural drains to try and get as much water out to the street.

Propagation.

Over the winter months I left seeds of *Hakea maconochieana* and *lissosperma* out in the open with the idea that the cold nights would trigger germination. I also left another tray with *lissosperma* seed in vermiculite in the hot house without being watered. I started watering again in September and so far one seed has germinated. I had no luck with the seed left in the open.

Our Western Australian members continue to propagate *Hakea chromatropa*, putting seed in the refrigerator for at least four weeks or leaving it out in the cold nights during winter. Attempts are being made to increase the small population in the wild but without regular watering during the first summer it is difficult to keep nursery grown plants alive.

The Hakea crawl in the Albany region of WA, October 2018.

Again this was a great success with fifteen members participating. The area we concentrated on was the Albany area where quite a few Hakeas grow. On the Saturday morning we drove some ninety klms east to Mettler Road where our first stop was to look at *Hakea lasiocarpa* growing in winter wet ground that would dry out in summer. The soil was sandy but underneath it would be much heavier to protect the roots from waterlogging. There were four locations along the road where this endangered species grows. Its leaves (1.2-4 x 0.1-0.4 cm) are stiff and up to 6 serrated points and the white flowers are some 2.5cm across, which make it quite attractive when in flower. The oblong seed capsules are 2.5cm long and 1cm wide, rough and warty surface with the stalk bent at right angles to the limb. The plants here were up to 3m tall but the plant that Tony Crawford has in Tasmania is very much prostrate. Surprisingly other Hakeas in the vicinity of this Hakea were *ceratophylla*, *corymbosa*, *trifurcata*, *ferruginea* and *denticulata* and obviously can tolerate some winter wet soils as well.

Moving on to the intersection of Mettler Road and Sandalwood Road we stopped to look at *Hakea gilbertii* growing again in a winter-wet depression. I had not expected to see this species growing so far south as its range is generally known from Eneabba to Dumbleyung. Again the narrow sharp pointed leaves (2-9.5 x 0.09-0.11 cm) spread out horizontally and are grey green in

colour. The leaf has 6 grooves in a rectangular cross section. The seed capsules in the leaf axis are quite small but in flower it is very showy with white flowers. Usually does not grow more than a metre high so it makes a good garden plant.

We spent the rest of the day going down Sandalwood Road to the sea, stopping frequently to look at many Hakeas which I will describe below.

Hakea cucullata has green sessile orbicular concave shaped leaves (to 7 x 4-8cm) with pinkish red flowers in the leaf axils. It tends to grow leggy and tall in the wild but with pruning it can be made into quite a nice rounded plant. It is one of the more desirable plants that members like to grow and likes well drained sandy or gravelly soils. Here in Colac it enjoys the cooler climate and flowers well in September. The small seed capsules are hidden in the leaves and have a long tapering point.

Hakea marginata extends over a very large area of the south-west of WA from Thee Springs to Esperance. Its lanceolate leaves (3-11 x 0.15-0.35cm) are firm and end in a sharp point. Its leaf has a distinctive yellow margin and midrib. Mostly a small shrub but can grow to 2m if conditions are ideal. The seed capsule is an erect oblong shape with a slight bend. It has small white flowers in spring.

Hakea prostrata grows over a wide area similar to *Hakea marginata*. It has oblong-obovate leaves with a central vein (1.5-5.5 x 1-3.5cm) that can have margins varying from entire to quite dentate with a sharp point. It grows on a wide variety of soils and has an ovoid shaped fruit which has a few protrusions. This Hakea can have quite a variation in leaf size and in the Kondinin area we saw some that were quite small and could have been linked to *Hakea pritzelii*, which grows at the back of the Stirling Ranges. However, on closer examination the flower size of the Kondinin plants was larger than that of the plants in the Stirlings. Flora of Australia Vol. 17B says the two could be the same species but more work needs to be done. The name is confusing as the original specimens brought back to England were from prostrate plants near the sea but further inland it can grow into a large shrub. My initial plant in Colac grew to 3m across and one metre high before a very wet winter caused it to die. It has a lignotuber, so can be cut back if it gets too big.

Hakea ruscifolia has a lignotuber. The new growth is thick and rusty brown in colour. Generally a small shrub which likes to grow as an understory plant. The leaves are small and elliptic (1.2-3.2 x 0.3-1.0cm), stiff and with a sharp point. The branches are numerous and spread out in an upward direction. At times it can be quite columnar. The flowers are white and often profuse. The seed capsule is smooth and not large, and hidden amongst the foliage.

Hakea denticulata. Another Hakea with a lignotuber. Its flowers can have a strong obnoxious odour. This species is regarded as being rare and I must admit I have not come across too many plants on my excursions in WA. It has shiny obovate leaves with a prominent central vein ending in a sharp point. The margins can have several teeth with a mucro. The flowers are pink to red. It likes to grow in sandy loam soils which have some moisture retention. Plants can grow to 2m high. The seed is ovate with a smooth surface. It is often hard to find viable seed as grubs attack the seed capsules before they are ripe.

Hakea pandanica ssp. *crassifolia*. This Hakea is easily recognized by its thick green leathery leaves (3-12 x 0.6-3.3cm) that are linear-elliptic in shape. The plant can grow to over 4m in height and have an open structure about it. The flowers are large and creamy-white to rusty brown in colour but are not very noticeable. This species will grow in a large variety of well-drained soils and is extremely hardy once established. The seed capsules are large and have a rough surface but are not corky. The seed capsules can take some years to mature. It has a lignotuber.

Hakea ilicifolia. This species caused a lot of interest on the excursion as it can intergrade with *Hakea florida* and *Hakea horrida* on its margins. I am now convinced that the plants we saw down Sandalwood Road are *Hakea ilicifolia*. A few days earlier Tom Constant, Jean Sloan and myself had looked at *Hakea horrida* north of Kondinin and we had no doubt from its pinnate leaf shape that it was *horrida*.

Hakea ilicifolia has much smaller holly-like stiffer leaves with dentations and is very prickly. It has white flowers in axillary clusters and was in flower. The seed capsule is up to 2.5cm long with a rough surface. It is a plant that should not be planted near pathways. In Margaret Pieroni's garden I had a look at a *Hakea* she called *florida*. Unfortunately it was not flowering nor had any seed capsules on it to help identification. The type specimens listed in *Flora of Australia Vol. 17B* are not precise in location, however on a future excursion a bigger effort will have to be made to observe it in the wild.

Hakea trifurcata. This *Hakea* is unique in that it has two leaf forms on the one plant when it gets to the stage of flowering and setting seed. The predominant leaf form is a terete leaf (2.2-7.5 x 0.08-0.13cm) with a sharp point which may be single or divided into three segments. The other leaf form is a flat leaf which may have curved edges and is very similar to the seed capsules which are oblong and end in a point. It is said the plant forms the flat leaf to deter birds from finding the seed capsules. Certainly if you are looking for the seed capsules it takes some time for your eyes to get adjusted to seeing the seed capsules. This species is widespread throughout the south-east of WA and grows on a variety of well drained soils.

Hakea corymbosa. This species has very stiff rigid leaves (3-9.5 x 0.25-1.0cm) that end in a sharp point. The terminal cream flowers appear across the top of the leaves giving the appearance of a cauliflower. It is a very hardy plant for gardens and will tolerate sandy to clay loam soils which can be wet in winter. It has flowered as a very young plant in members' gardens. The plants we saw were not large, about 1.3m x 1.0m but they can get much bigger to about twice that size. The seed capsule is obovate shaped amongst the stiff foliage and hard to extract.

Hakea ferruginea. This species is endemic to the Albany and Stirling Ranges area. The leaves are cordate-ovate shaped (1.5-8.5 x 1.2-2.7cm) and end in a short tapered point. The creamy white flowers are particularly striking. The seed capsule is rounded and tapers to a point.

Hakea hastata from the Harrismith area had large leaves similar to *ferruginea* but the seed capsules ended in a blunt point. The *Hakea hastata* I saw at Katanning had much smaller leaves and seed capsules. In the description in *Flora of Australia Vol. 17B* *Hakea hastata* can have large leaves as we saw at Harrismith, however it is much more difficult to separate from *Hakea ferruginea*. In due course I hope to get some more photos of other populations, which will help to build up information on the leaf and seed capsule variations in *H. hastata*. It seems to grow where soil has been disturbed at some time in the past and likes well drained conditions.

Well that covers only what we saw on the Saturday, so the other species of *Hakea* that we looked at on Sunday and Monday will have to wait to the February issue. These *Hakea* excursions are great fun, and help to increase our knowledge of *Hakeas* as well as uniting friends of similar interests.

In my garden.

This spring has seen many *Hakeas* flower, which has been a great joy to me. However, I have not spent the time I would have liked observing growth rates, pollinators etc. The weeds which I thought I had got on top of reappeared with a vengeance and getting them under control took up quite some time.

Now that the open garden activity of our local group is over I must get into staking more plants to prevent wind damage and start doing some pruning and mulching before the hot summer days arrive. These tasks seem to be left to last and should have much higher priority.

I wish you all an enjoyable summer period watching your *Hakeas* growing in the garden. I hope for our members in the eastern States that the summer will not be too hot and some good falls of rain will occur. Growing Australian plants is always a challenge but a very rewarding one.

Photos.

I have included photos taken by Tom Constant of *Hakeas cucullata* and *erecta*, and some of the members on the excursion. Photos of *Hakea denticulata*, *ilicifolia* and *prostrata* were taken by Mike Beamish. I thank all members who have sent photos in.

Cheers, Paul



