ASSOCIATION OF SOCIETIES FOR GROWING AUSTRALIAN PLANTS

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Our first small heat wave suggests that this will be our hottest summer for some years and already there is official muttering about possible water restrictions but fortunately our hakeas when well established pose no problems.

The Volume 17B, Proteaceae 3 has been my holiday reading lately and will take a long time to cover fully. If you have used the Blackall & Grieve books to identify plants you will find this very different. On the other hand if you are familiar with the Grevillea books by Peter Olde and Neil Marriott you will probably recognise the method used. Families are arranged in the system of A. Cronquist, "An Integrated System of Classification of Flowering Plants" (Columbia University Press, New York 1981). Within families, genera and species are arranged to show natural relationships as interpreted by contributors.

We used to talk about the 'multilineata group' and the 'sulcata group', those two groups have been altered and all species are now in groups, even as in the case of H. clavata which is in a group called Clavata Group but is the only species in it.
Multilineata Group now comprises H. maconochieana, bucculenta minyma, francisiana multilineata, grammatophylla and omits H.coriacea.
Ulicina Group comprises the following 21 species: H. subsulcata, meisneriana, invaginata, sulcata, scoparia, rigida, gilbertii, lehmanniana, cygna, mitchellii, costata, myrtoides, repullulans, pycnoneura, stenocarpa, aenigma, dohertyi, carinata, marginata, erecta, ulicina.

Recently I received an enquiry from Perth about a hakea growing beside a road south of Perth which was unknown to the sender. He sent pictures, fruit and foliage and seed but given the locality I could not be sure. He wrote again and said a senior W.A. botanist had suggested it might be H. Sericea. I did find it in the new Sericea Group, it was H. kippistiana.

SEED BANK

Some members have the space and like to collect and grow all species of hakea. Most people have limited and sometimes very small areas to use for large shrubs so are only interested in the three metre or less types. However whichever category we class ourselves in, we want to be able to obtain seeds or cutting material to further our garden design. Some seeds are nearly 25c each, this is not a worry in itself, our bank balance can easily cope, but I am concerned that I am buying seed that sits around unwanted. In the next newsletter I am going to include a sheet on which you may list your "wish-list" and any other comments that you can think of.

Another aspect of choosing hakeas refers to the length of their flowering season. If for a small garden it is important to have as long a show as possible. I would like your suggestions too.

I have fresh seeds of the following:

Adnata, amplexicaulis, arborescens, arida, ceratophylla, cinera, clavata, corymbosa. costata, cucullata, dactyloides, epiglottis ssp milliganii, epiglottis ssp. epiglottis, falcata, ferruginea, florulenta, francisiana, gilbertii, incrassata, invaginata, lasianthoides, leucoptera, lissocarpha, lissosperma, loranthifolia, macreana, macrocarpa, minyma, neurophylla, nitida, obtusa, pendens, petiolaris, (tall), platysperma, propinqua, prostrata, pycnoneura, purpurea, recurva, roei, rostrata, ruscifolia, scoparia, stenocarpa, strumosa, sulcata, trifurcata, ulicina, undulata, verrucosa, victoria.

I am unable to obtain: Flabellifolia, myrtoides, smilacifolia.

Paul Kennedy reviews the revision:
Changes made to list of Hakea species as a result of the publication of Flora of Australia, Vol. 17B.

I have endeavoured to simplify the botanical description so that the ordinary member of the Australian Plant Society can arrive at some conclusion as to the identification of the plant that they are looking at. I apologize to the authors if they consider my review too brief. Any comments I have made are my own personal views based on garden or field observation. The authors of the review should be congratulated on at last getting the revision published.

Hakea acuminata: This is a newly described species from the Ravensthorpe area in WA which has acuminate type leaves, narrowly ovate to elliptic, very rigid, 3-10cm. long by 9-39 mm wide and 1-3 prominent longitudinal veins above and below in the leaf. The shrub has affinites to H. corymbosa, cinerea and victoria which also grow in the area. I have not seen this species in the wild, but would expect it would require a well drained sandy loam to grow it in the eastern states.

Hakea anadenia: Hakea anadenia is very similar to H. undulata and comes from the east and north of Perth. It was previously included under H. undulata but because it has smaller leaves, 2.7-8.5 cm. long, 6-20 mm. wide and only 1-3 longitudinal veins it has been given a separate name. The leaves of H. undulata are 4 -11.5 cm. long, 20-65 mm. wide and have 3-7 longitudinal veins.

Hakea archaeoides: Hakea trineura has consisted of two colored flower forms. A lemon/ yellow form from near Rockhampton in Queensland and a reddish flowered form from northern NSW. The latter one has now been given the new name of H. archaeoides and H. trineura now only applies to the Queensland form.

Hakea coriacea: One of the big surprises in the revision was the deletion of H. coriacea. The authors considered that it was too difficult to split H. coriacea from H francisiana and hence incorporated it under H. francisiana. The pink flowered forms of both species were always difficult to split. However I believe the cream flowered form of H. coriacea should have been retained as either a separate species or at least H francisiana sub species coriacea.

The number of veins in the leaf is no longer the sole indicator of species type in the "grassleaf group" but can be used to short list the species type.

Hakea dohertyi: A hakea from the high Blue Mountains which has triangular shaped leaves, 20-30cm. long, 1.8-2.2 mm wide and deep. Three longitudinal veins at angles of lamina. A few Hakea enthusiasts have this species in cultivation which will grow on clay loam soils. Included in the ulicina group and rated endangered in the wild.

Hakea eneabba: For a long time this yellow flowering species was considered a form of H. corymbosa. However H. eneabba has a number of differences in that it is a small plant with bright yellow flowers in terminal clusters, and the leaves are considerably larger than H. corymbosa. As per its name it occurs in the northern sand plains around Eneabba.

Hakea epiglottis ssp. milliganii: H. epiglottis is endemic to Tasmania and occurs in all areas but the north east coast where it is replaced by the closely related H. megadenia. H. epiglottis has terete leaves 1.5- 7.5 cm. long, 1-2mm wide which curve upwards. There are two ssp., ssp epiglottis having perianth with concolorous hairs throughout claw and limb and ssp. milliganii having perianth with yellowish white hairs on claw, ferruginous hairs on limb. Fruit sigmoidal (S shaped).

Hakea laevipes ssp. laevipes. H. laevipes was formerly part of H. dactyloides. However in the revision the lignotuber form of H. dactyloides has been separated out and given the name H. laevipes. There are two ssp., laevipes and granitcola. The former having pedicels pubescent and the latter, pedicels glabrous. As with H. eppiglottis it will be very difficult in the field to distinguish between the ssp.. The lignotuber may not always be visible either.

Hakea stenophylla ssp. notialis: The fine leaf form of H. stenophylla is probably a separate ssp. of H. stenophylla. It occurs north of the Murchison River bridge in open woodland in sandy soils. Can only be verified by examination of the width of the brown and white wood zones in the fruit.

Hakea megadenia: A new species from Tasmania which grows only on the north east coast. The terete leaves can be considerably longer than those of H. epiglottis, being 3.5-13.5 cm. long, 1-1.8 mm wide. It also has white to cream white flowers whereas H. epiglottis has more yellow colored flowers. A member of the rostrata group, all of which have sigmoidal (S shaped) fruit. Should grow well in a variety of soils in the eastern states.

Hakea maconochieana: This species was originally known as H. species Quilpie, Queensland. The plant has similarities to H. bucculenta with its bright red flowers, but the leaves 7-13.5 cm. long are blue green in color, stiff and much narrower. The plant grows in gibber hard pan which is nearly impenetrable, where rainfall is uncertain and seldom exceeds 250mm. The species needs to be

brought into cultivation as it is not common. Thanks to SGAP Toowoomba members, arrangements were made for me to see it in flower. Hakea collina grows in association with it.

Hakea mitchellii: The new name for H. muelleriana as research has shown that this plant was originally named H. mitchellii.

Hakea petiolaris: In the review the authors decided to split H. petiolaris into three ssp. based mainly on leaf size and geographical location.

Ssp. petiolaris: leaf spathulate 5.5-8.6cm. long, including petiole 0.8-1.8cm. long, 24-46mm. wide. Occurs from the Darling Range east to York in Jarrah forrest.

Ssp. trichophylla, leaf spathulate and abruptly acuminate, 8-11.2 cm. long, including petiole 1-1.6 cm. long, 32-60 mm. wide. Occurs in the Wogan Hills area of WA. in shrubland associated with granite outcrops. This ssp. is probably the most common type grown in our gardens.

Ssp. angusta, leaves elliptic to narrowly so 7.5-15 cm. long including petiole 0.2-0.5cm long and 23-40mm.wide, gradually long acuminate. Known only from a few outcrops at and to the east of Pingaring in WA. Note the short petiole length compared to the others. Ssp. petiolaris tends to have much longer fruit to 3.1-3.6 cm. long.

I have been measuring leaf lengths of garden specimens and find that the length- width relationships do not always match. I am aware of the H. petiolaris-laurina hybrids which some of the garden species maybe. I feel more field sampling maybe necessary and to ignore the shortest and longest leaves on the plant. In the meantime known seed source would be an advantage in identifying the ssp.

Hakea pritzellii: Similar to H. prostrata and denticulata. Leaves obovate , thick and rigid, 1.7-4.0 cm. long, 10-20mm. wide with a stem clasping base. There is a central vein ending in a fine pungent point. Leaves can be entire or 1-7 teeth per side. Flowers are dark red with light green style in clusters in the leaf axis and along the stem of old wood. This species is found in the Cranbrook and Stirling Ranges area and prefers winter wet depressions.

Hakea recurva ssp. arida. H. arida is no longer a species on its own but included under H. recurva as a ssp. In the wild, the flowers look the same but the terete leaves of arida are upturned and shorter than the long terete down curved leaves of recurva.

Hakea salicifolia: H. salicifolia has been split into two sub species. Ssp. salicifolia tends to have light green leaves and the flowers are located in the leaf axis. Ssp. angustifolia tends to have dark green leaves and has flowers both in the leaf axis and along the branches. It may take four years for the flowers to appear on the branches.

Hakea scoparia: Again in the Hakea revision we have another species split into two sub species. Ssp. scoparia is the plant common to the southern portion of WA excluding Mt. Ragged. Ssp. trycherica is only found on the lower slopes of Mt. Ragged with leaves shallowly concave between angles.

Hakea teretifolia: I have been shown a prostrate form of this species which the grower claims remains true to form. In the revision the differences between ssp. teretifolia and ssp. hirsuta are not as clear as I imagined. The botanical description is quite daunting.

Ssp. teretifolia is a low spreading shrub 0.3-2.6m tall and occurs from Coffs Harbour to the Sydney region.

Ssp. hirsuta is an erect , much branched or compact spreading shrub, 1-4m tall, and occurs from Sydney to Tasmania on coastal heaths with an outlier in the Grampians.

Selecting seed outside the Sydney region would ensure the ssp. type.

Hakea rigida: A shrub 0.6- 2.7m tall, known only from a few locations between Merredin and Kalgoorlie on sand heath. Leaves variable, terete to almost flat, linear, pentagonal in cross section, convex to shallowly concave between angles, 3.5-14 cm. long, 1-2mm. diameter, often twisted at base, 5-9 longitudinal veins. Pink flowers like H. erecta. Needs to be brought into cultivation to ensure its survival.

Hakea lorea etc.: In comparing H. suberea, H. cunninghamii, H. lorea and H. fraseri (Qld.), the Botanists considered that the differences between each was so minimal and that plants could be variable in leaf shape within themselves, that all should be included under H. Lorea .

H. lorea ssp. lorea now comprises those previously known as H.lorea, H. suberea, and H. fraseri (Qld.) So we now have a species which extends from Cape York to Central Australia and encompassing a wide range of climate. I have seen all the forms of ssp. lorea in flower in Queensland and to me there appear to be some differences by the way the leaves hang down. I have all previous species growing here at Strathmerton, but they are only young plants yet.

WELCOME TO NEW MEMBERS

THANKS FOR DONATION OF SEEDS:

FINANCIAL STATEMENT 1998-1999.

Balance b/f			1313.24	
Subscriptions			208.50	
Bank Interest			1.43	1523.17
Expenditure				
N/L 25	Copying	30.00		
Postage (1 roll)		45.00		
N/L 26	Copying	20.00		
Stationery		2.40	Balance	1425.77