



Correa Mail

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DECEMBER MEETING

Dryandras in the Garden by Tony Cavanagh

It was probably in the early 1970s that I became interested in a group of Western Australian plants known as Dryandra. Like many growers of native plants at this time, I was fascinated by the spectacular plants from Western Australia but could find out almost nothing about Dryandras except that they were closely related to Banksias. Around 1974, I was talking with Bruce MacDonald from Wangaratta SGAP at a meeting in Melbourne. He was actually growing a couple of species and he said to me, "Well, if you want to find out more about them, why don't you form a Study Group?" Simple as that!! Study Groups were the brainchild of foundation editor of Australian Plants Bill Payne as a slightly more formal way for SGAP members to study and learn about various groups of Australian plants, and to publish information for other members through Group Newsletters and Australian Plants. So the Dryandra Study Group came into existence and we published our first Newsletter in mid 1974.

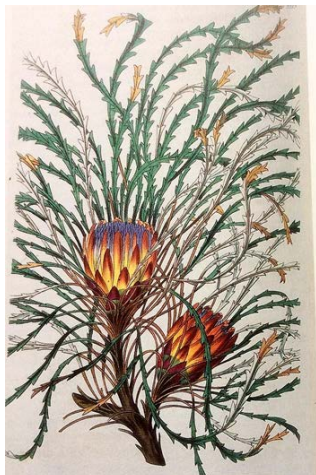


Figure 1.5 *Dryandra tenuifolia*, first flowered at the Royal Botanic Gardens, Kew in 1836, introduced into cultivation in 1803 from seed



Figure 1.6 *Dryandra pteridifolia*, first flowered at the Royal Botanic Gardens, Kew in 1836 (and "the only example of the species at this time alive in Europe"), introduced into cultivation in 1823 from seed

The earliest Dryandra were collected in King George Sound in 1791 by the English Surgeon-Botanist Archibald Menzies, while the French botanist La Billardiere collected two Banksias in Esperance Bay in 1792, one of which was later called *Dryandra nivea*. Even more astonishing was the information that some nine Dryandras were being grown in the glasshouses of

Kew Botanic Gardens by 1805 and five had flowered by 1810.

Dryandra is a group of some 135 taxa (species, varieties and subspecies) found exclusively in the South-West Botanical Province of WA. They are part of the Family Proteaceae and are most closely related to Banksia: indeed, some scientists believe that Banksia and Dryandra had a common ancestor and that Dryandra is merely a group within Banksia. This view is not universally accepted and I will continue to use the term Dryandra! They range from prostrate or small, domed shrubs to upright or spreading large shrubs. With one tree species up to 7 m high, they offer quite a range of choice in the garden.



Dryandra polycephala in Tony's garden

Unlike Banksia, where the flower-head or inflorescence is either spherical or more usually a spike, the Dryandra flower-head is mostly squat with up to 200 individual flowers growing vertically from a flat, concave or convex base at the top of the flower stem called the "receptacle". Flower colour is predominantly various shades of yellow to orange although shades of red and purple also occur. Some have two-tone yellow and pink heads while others have brown tonings. In the west, they grow on well drained soils, often sand or laterite, mostly in open or sunny situations and are rarely found in shade, and never in wet situations. I guess this tells us something about what sort of garden requirements they have here in Victoria. The vast majority flower in winter and a large Dryandra in full

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flower over July – August can really brighten up the garden.



Dryandra nivea – Photo Tony Cavanagh

Brief history of discovery and early cultivation.

One of the most influential English botanists of the early 19th century was the Scot Robert Brown. He was the botanist with Matthew Flinders during the circumnavigation of Australia in 1801-1803 in the Investigator, together with the Kew gardener Peter Good, and later was to describe many new Australian plants and name a new Genus Dryandra in 1810. They collected 11 Dryandra specimens and Peter Good sent home seed to Kew Botanic Gardens so that by 1810, nine Dryandras were being grown in pots in their glasshouses. Up to 1900, thanks largely to collections by William Baxter, Charles Fraser, James Drummond and the European collectors Ludwig Preiss and Karl Hugel, the number of known Dryandras had grown to around 50. As we now have 135, the botanists have been very busy during the 20th century.

We often tend to forget that there was a tremendous interest in Great Britain and Europe from the 18th century onwards in growing plants from foreign countries. Books were published giving lists of all the plants being grown in various Botanic gardens while gardening magazines featured full page colour plates of many species that flowered, irrefutable proof that they had been flowered, despite the rigours of the European winter. I have been able to trace around 28 named species and a further 9 of uncertain identity which were grown in Britain and Europe during the 19th century.

Botanical Features of Dryandras

I will try to keep the technical details to a minimum. We have already seen how the flower-head of Dryandras differs from those of the Banksias, tending to be squat rather than a spike or spherical. The slide shows three examples of such heads, the first of *D. quericifolia*, one of the most spectacular of the group, the second is *D.*

nervosa, in which the individual flowers remain tightly packed together after they have opened, forming a "shaving brush" and the third is *D. brownii* or *nivea*, members of the so-called "honey pots" group, where the flowers grow in a ring around the receptacle with a hole in the centre. It is thought that small mammals, in trying to reach nectar at the base effectively pollinate these plants.

Dryandras in the wild (and even in gardens) can show remarkable variability in size and shape and the way they grow. There are around 25 small to prostrate with a further 20 as large shrubs above 2.5 m. with one tree up to 7 m tall. The majority are medium shrubs between 0.5 and 2 m which may be spreading or upright in habit. There are two forms of growth which are not found in Banksia, a dense, columnar habit with many small lateral branches around the upright stem (*D. columnaris*) and a low, mounded shrub with numerous short, multi-stemmed branches hidden beneath dense foliage (so-called "mound" Dryandras, *D. nivea* or *D. drummondii*).



Dryandra columnaris – Photo Tony Cavanagh

Another fairly distinctive feature of Dryandras is the great variety of leaf shapes, forms and colours. In many, the leaf lobes are stiff and prickly. In others, they are

soft, long and thin. They are usually shades of green but some have a distinctive bluish tinge while in others, the new growth is covered in fine, brown or pink hairs, making them great foliage plants in the garden.



New Growth on Dryandra – Photo Tony Cavanagh

As far as habitat goes, Dryandras are confined to the South West Botanical Province of WA, but excluding desert and densely forested areas. The climate is Mediterranean with most rain falling in winter (between 300 and 800 mm) with summers being relatively dry. Soils are predominantly sandy or lateritic but always well drained. Dryandras reach their greatest development in a type of open heath vegetation known in WA as “kwongan” which is characterized by being near full sun or light shade. There are two so-called Dryandra Hot Spots – around Eneabba – Badgingarra in the north and around the Stirling Ranges – Barrens and leading into the Esperance Sandplain in the south. These have very high species density, in some places as many as 120 species per square kilometre, for example, there are around 25 Dryandra taxa in the Stirling Range National Park.

Why grow dryandras? – propagation and cultivation.

In my case, the answer is obvious. I like them as a group of plants. But there are other reasons –

- With around 135 taxa from a range of habitats and shrub sizes, there is plenty of choice.
- The low mounded and column-like shrub forms are attractive and unusual and are not found in Banksia.
- The variety of foliage and foliage colours, some prickly, some soft.
- Many species have long lives in the right garden situation, some of my plants of *D. longifolia* are over 35 years old.
- Great range of flower colours and flower-head sizes.
- Some species have interesting and coloured new growth in various shades of brown or pink, or show long hairy new growth.

But, and there is always a ‘but’, some of the prettiest and most spectacular species such as *D. falcata* are very difficult to cultivate in the east. They seem to be very fussy about drainage and the amount of sunlight they receive and unfortunately cannot be considered reliable as garden plants.

Propagation.

The vast majority of Dryandras are grown from seed and we are fortunate that the WA seed merchants Nindethana generally hold a good stock. Members of the Study Group can also obtain seed from the leader, Margaret Pieroni. They take from 4 to 6 weeks or longer to germinate and often, the success rate is low. Both sowing medium and potting mix must be well drained and kept in a sunny location facing north. Best times are March – April or late winter. Regrettably, they are not easy to grow from cuttings, a trend they share with Banksia. Species such as *D. nobilis* and *D. praemorsa* with thick and often hairy stems are nigh on impossible. More success has been had with species such as *D. polycephala*, *D. tenuifolia*, *D. hewardiana* and *D. quercifolia* which is grown commercially for cut flowers. These have smooth, small diameter stems often covered with thin black bark and free of hairs. It is preferable to take semi hardwood cutting in early autumn or if a watering system can be set up over summer, late winter-early spring may be even better as the rooted cuttings may develop stronger roots over summer. They are slow, taking from 6 to 8 weeks up to several months to root, and require careful handling in potting up. There is almost no information on success with grafting although if they follow Banksias in their behaviour, there is little reason to expect much success.



***Dryandra carlinoides*, Pink form - Tony Cavanagh**

Cultivation.

Think of western Banksias and you have a good yardstick. Some of these are quite successful here in the east and over a wide range of garden situation, while

others can best be described as “touchy”. You need to consider the following-

- Where the seed comes from may be important, for example, *D. fraseri* plants grown from seed collected in the southern end of its range tend to be more successful in southern Victoria than those grown from northern seed.
- Best results are obtained from freely draining, preferably sandy or gravelly soils which do not retain moisture for long periods. Raising garden beds can help.
- The more sun the better although some species can grow well in light shade although flowering may be reduced.
- Dryandras also benefit from good air flow around the plants.
- Many can withstand extended periods of dryness once established, and, as mentioned previously, others are naturally long lived.
- All species are adversely affected by Phytophthora.
- And, related to point one above, species from the Southern Sandplains tend to be more successful here in Southern Victoria.



Dryandra formosa – Photo Tony Cavanagh

UPCOMING MEETINGS

2nd December Xmas break-up. Matt and Pam Baars’ house at 8 Rotella Avenue, Corio. Lunch at 12.00 noon, BYO everything.

19th February, 2019 - Members’ night. We have decided to have a ‘proper’ meeting in February and to kick the year off we are inviting all our members to tell us what has been happening in their gardens or in the bush over summer, or what they’ve seen on their holidays that would be of interest to the club. Perhaps a report on the High Country trip may be in order?

March 2019 - Maria Hitchcock OAM will speak to us about Correas. Maria is the author of “*Correas – Australian Plants for Waterwise Gardens*” and “*Wattle – Australia’s National Emblem*”. She has the Registered

National Collection of about 200 *Correa* varieties in her garden in Armidale, NSW. Don’t miss this fascinating talk.

April 2019 – Dr. Dean Nicolle is an Australian botanist, arborist and ecologist. He is widely recognised as the leading authority on the genus *Eucalyptus*. He has written five books on Eucalypts, including Field Guides to the Eucalypts of South Australia, Victoria and Tasmania. He founded the Currency Creek Arboretum in South Australia where over 900 Eucalypt taxa are grown. Dean has a PhD in mallees.

ON THE TABLE

with Matt Baars

The plant table this month featured a number of *Callistamon*, *Melaleuca*, *Kunzea* and *Beaufortia* which many folks, including our leader Matt Baars, consider to be the same thing. Lively and good-natured discussion on the differences, if any, began the presentation.

Beaufortia schauri is a small shrub to about 1.5 m with small, purple/mauve rounded flowers presented terminally. *Melaleuca trichophylla* is a hardy shrub with deep pink flowers, which needs some judicious pruning to keep it dense and compact. *M. pentagona* is a small shrub with tiny purple flowers and a deep honey smell.



Melaleuca pentagona – Photo Ian Roberts

Melaleuca fulgens is a scraggly shrub with soft grey-green foliage and brilliant red flowers. *Melaleuca decussata* is a medium shrub to about 3m with leaves in rows along the stems. Flowers are pale mauve fading to white. *Melaleuca elliptica* is a medium shrub with elliptical leaves and deep scarlet flowers.

Callistamon pinifolius is a small shrub to 1.5 metres with narrow leaves resembling pine needles. Flowers are bright green and most unusual. *Callistamon pellidus* is a small shrub with yellow or orange-tinged flowers, found in the Brisbane Ranges locally. *Callistamon phoenecius* is a shrub to 3m with deep red or pinkish flowers. As with many of those on the table there is

controversy as to whether *Callistamon* or *Melaleuca* should be used.

Eucalypts made up a good portion of the flowers on show among then the spectacular mallee, *Eucalyptus pyriformis*. The specimen on the table has large deep yellow flowers. There is also a red form.



Eucalyptus pyriformis – Photo Ade Foster

E. woodwardii has huge rounded leaves and bright yellow flowers. *E. priesiana*, the Bell-fruited mallee grows to about 3m with masses of deep yellow flowers and large fruits. Among the hybrids (I think naturally occurring) were:-

E. woodwardii x *E. torquata* which has the yellow flowers of *woodwardii* and the red stems of *torquata* .

E. youngiana x *E. kingsmillii* with large red flowers. It is growing in a pot at Matt's Corio garden.

Eucalyptus platypus var. *nutans* (now *E. nutans*?) is a small, single stemmed Eucalypt which reaches about 3m with lovely red and yellow flowers.

Of the more unusual plants on the table, *Petalostylis labicheoides* was notable. A small, rounded shrub from northern WA it features large yellow and orange flowers. It responds well to pruning and requires an open, sunny position.



Petalostylis labicheoides – Butterfly bush

Another was *Chorilaena quercifolia* from the south west of WA. It has dark green, oak-shaped leaves and red or green flowers similar to the more widely known *Diplolaenas*, to which it is related.

Agonis baxteri is a large, bushy shrub to about 3m. It is found in coastal areas of the far south of WA. Its large, elliptical leaves are dark green and prominently veined, and it has large, white flowers resembling those of the *Leptospermums*.

PLANT OF THE MONTH - *Eucalyptus burracoppinensis*

The Burracoppin Mallee is so named after the area it is found near Burracoppin, about 280 km east of Perth. It grows to a height of 3-8m x 3-6m wide. It is a typical Mallee with lignotuber, a spreading, fairly open habit with either a single or multiple trunks. It has rough, dark grey, almost black, bark on the lower trunk and grey, smooth bark on the upper branches. Leaves are 8-11cm long x 1.5-2cm wide and are alternate, mid green or sometimes bluish green in colour and have a thick texture.



Flowering occurs in spring months here in Southern Victoria but in Western Australia it is late winter. Flower buds come in groups of three and are 2.5cm across. When the cap falls off the flower is up to 5cm across and a deep cream or yellow colour. Seed capsules are retained on the tree.

Although it was originally collected from Burracoppin region it is not restricted only to this area. It is widely spread across the Western Australian wheat-belt from Wubin to Corrigin and extends to Southern Cross in the east. It is found usually in open heathlands with acidic sandy soils, often containing lateritic gravel. It usually forms dense thickets. It is an excellent plant for the nectar loving birds and insects as it is high in nectar yields.

This ornamental Eucalypt has been growing at my place in Inverleigh for around 12 years from seed

obtained from Western Australia. It is growing in a raised bed of its own of lateritic sand. It has obtained a height of just over 3m with a reasonably dense canopy. However, at present the branches are sagging under the weighty of the many hundreds of flowers and buds, so an open canopy it has become. The weight has been too much for some of the branches and they have broken or split.



This plant is tolerant of drought and moderate frosts but previously at Inverleigh the heavy frosts have burnt all the flower buds off. This year's lighter frosts have seen it flower for the first time for a couple of years. This plant has only flowered three times in seven years due frost damage to flower buds. When the flowers have finished leaving the capsules behind the plant becomes fairly decorative with the large grey capsules being quite a feature. The birds and insects fight over the flowers at present.

GARDEN VISIT

October 27th

Those members who attended Doug McKenzie's garden at Ocean Grove got a real treat. Doug and his son are commercial growers specialising in grafting difficult plants. The garden is where they grow their source material.

Set in a quiet back road it has a 'natural' bush feel, and the array of wonderful plants on display, especially Verticordias, is breath-taking. Banksias, Eremophilas, Geleznowias, Prostantheras and many others feature prominently. Many of the plants are quite small, some because they are recent plantings some because they provide a constant supply of cutting materials.

We had a look at the nursery area, to see the amazing work they do with grafts and double grafts. All the plants are sold to commercial nurseries, and are not available direct to the public, or to us. It was a lovely afternoon in a wonderful garden.



Verticordia mirabilis in McKenzie's Garden

MERRY CHRISTMAS AND A HAPPY NEW YEAR

And so another year comes to a close. It seems that the days pass slowly, but the years pass quickly. Thanks you to all who have contributed to the Correa Mail during the year. Your assistance is invaluable. And thanks you to those who have provided photos for the Facebook page. Again a great help to me and the club.

So, from Penny and me, have a wonderful and safe Christmas, however you choose to celebrate it, and we hope to see you all in the new year.

