



ISSN: 0728-151x

February 2020

DRYANDRA STUDY GROUP NEWSLETTER No. 78

AUSTRALIAN NATIVE PLANTS SOCIETY (AUSTRALIA)



D. speciosa subsp. *macrocarpa* Hi Vallee

Margaret

Contents

Page 3 – Two Dryandra Trips in 2019

Page 8 – *Dryandra* aff. *fililoba* a new taxon? (with comments from Kevin)

Page 9 – A Mystery Solved?

Page 10 – Dryandras and Climate Change

Page 11 – Notes from Members

Page 12 – *Dryandra praemorsa* Pygmy, a new form?

Page 13 – *Dryandra nervosa* seed

Page 13 – Jill Richardson photos

DRYANDRA STUDY GROUP

LEADER

Mrs. Margaret Pieroni
 22 Ravenhill Heights
 DENMARK
 WA 6333
 Email: mpieroni@bigpond.com
 Phone: (08) 9848 3331

NEWSLETTER EDITOR

Mr. Tony Cavanagh
 16 Woodlands Drive
 OCEAN GROVE
 VIC. 3226
 Email: tonycav40@hotmail.com
 Phone: (03) 5255 1180

Hello and welcome to our first Newsletter for 2020.

Margaret has spent a large amount of time over the last few months travelling over what seems like much of southern WA to obtain pictures of many of the *Dryandra* taxa that were inadequately represented in the digital collection. What was so impressive to me was that she has documented the localities so precisely that anyone travelling in the west can visit the sites for themselves and the photos are outstanding. What is much more worrying is the statement on page 6: “The number of plants has declined as is the case with almost all the *Dryandra* populations I have visited over the last 40 or so years”. It would seem worthwhile if you are visiting WA to take the opportunity to see these populations now and all we can hope is that numbers increase in the future.

There are two articles on a possible new form which has been dubbed “aff. *fililoba*”. Somewhat surprisingly, Kevin Collins had been growing it on his Banksia Farm property for many years and an intrepid group of searchers has now found it in three bush localities, flowering in November-December, six months later than “true” *fililoba*. Will be interesting to see what happens to this. Margaret speculates about how climate change might affect dryandras, and Kevin Collins shows two pictures of plants aborting branches and losing much of their foliage in the severe dry. Does anyone else have observations of how the climate might be affecting their plants? Members Hartly Tobin and Tim Darrington provide observations and pictures of their flowering plants and Tim suggests (and I think it is an excellent idea) that our European growers could begin the systematic recording of European flowering periods to see how they compare with Australian. Finally, I have two short articles. The first describes a possible new (garden) form of *D. praemorsa* with much smaller flower heads, much smaller leaves and a smaller and more delicate growth habit which I will observe and report on in the future. The second tells of my windfall discovery of massive amounts of seed on a dead branch of my +20 year old *D. nervosa* which I have sent to Margaret so here is the chance to try growing this plant if you don't already have it.

Finally, two items which we hope are of interest to everyone and happy *Dryandra* growing.

Breaking News - Dryandra Lovers Group on Facebook. Lyn Alcock has set up this group on Facebook, similar to the very popular Banksia Lovers Group, and we are inviting Study Group members to join. You need to join Facebook first and then go to the top left hand search box and type in Dryandra Lovers Group. You will be transferred to the home page where you can request to join. There are about 100 current members, several of them Dryandra Study Group members, not bad for a group that was only established on 29 January! Well done Lyn.

Dryandra Photos Website For many years now Margaret and I have been collecting photos of all the taxa of *Dryandra*. We have tried to have a close up of the flower head and at least one view of the plant for each and Margaret has been especially busy in recent months updating the collection. We are hoping to make them available via the ANPSA website in the near future.

Two Dryandra trips in 2019

In July, together with a friend, June, from Denmark, I set out on a 5 day trip to find and photograph some more of the dryandras I still need to complete the digital collection.

In the past, I would often forget to photograph the plant. I'm aiming to get a close -up of the flower head which shows details of the flower parts, if possible and one of the whole plant to show the habit of growth.

We started off on the 25th, which was a week earlier than last year's trip with Erica – hoping for better weather and to find some of the dryandras that we were a bit too late for, last time. This time we had perfect weather for the whole trip instead of continuous rain.

At the location of *D. drummondii* subsp. *macrorufa*, a reserve south-east of Nyabing, I found the number of plants very much diminished. The large plants have gone and there are very few young ones. There are none left on the opposite side of the road where the photo in *The Dryandras* was taken in 1992. It flowers in January but the flowers are usually well hidden so I photographed one of the few largish plants.

At the reserve 4 km north of Nyabing – one of the 'Dryandra hot spots', we only found a few flowers on *D. armata* var. *ignicida*. Just before and also just beyond the top of the hill, we found the type location of *D. sp.* Wheatbelt, recently named *Banksia zygophylla* and previously the common, green-leafed form of *D. conferta*.

After over-nighting at Corrigin, we drove up the Corrigin- Quairading Rd to the location of *D. conferta* Corrigin Blue, now named *Banksia densa*. I got my best photo yet of a plant in full flower.

We drove from Quairading, through York, Northam and Toodyay and took the road through Calingiri to join the Great Northern Highway at Bindi Bindi.



D. conferta “Corrigin Blue” at type location

About 3 km south of Yerecoin we came across a very good patch of remnant bush with large plants of *D. purdieana* covered in flowers. This was my chance to replace the rather poor photo I already had, of the plant. An odd feature of this species is that the flowers are often inside out. Instead of the styles bowing outwards they appear on the top of the perianth towards the inside of the flower head giving it the appearance of something more like a dandelion.



D. purdieana, south of Yerecom



***D. purdieana* with “inside out” flowers**

There is a good population of both *D. kippistiana* var. *kippistiana* and *D. carlinoides* at the same location.

After spending the night at Dalwallinu, on day 3, we drove across to the Midlands Rd and up to Three Springs. The photos I wanted were of two of the 'Three Springs Three' (*D. fraseri* var. *oxycedra*, *D. borealis* subsp. *elatior* and *D. trifontinalis*). Before heading out west of the town, to look for the plants in their natural state, we checked out the plants in the town garden. The plant of *D. borealis* had died since my last visit, but it had been over-grown by the magnificent plant of *D. fraseri* var. *oxycedra* which had flowered profusely and grown much taller. I managed to get a photo of the plant from an angle that avoided showing the dead plant of *D. borealis* which had been growing through it.



***D. fraseri* var. *oxycedra*, Three Springs**

We went out to the location on Nebru Rd, where all three grow. This is the type location for *D. trifontinalis* but the road has been cleared right across to the fences on both sides. Straddling the fence on the north side of the road was just one plant of *D. borealis* which was flowering – abundantly, too. We looked around and into, the old

gravel pit where there are many more plants but not one other plant was in flower.



***D. borealis* subsp. *elatior*, west of Three Springs**

We made our way south to Tootbardi Rd and Hi Vallee Farm. I would have liked to have had time to look for *D. cypholoba* at Tathra Reserve and/or at the junction of Coorow – Greenhead and Tootbardi Rds in Alexander Morrison National Park but we were running a bit late for getting to Don and Joy's by noon.

Don told me that he had looked at the plants of *D. cypholoba* that we had found last year but they were not showing any signs of flowering. It would probably have been a bit early in the year to see the flowers, in any case.

We spent three very enjoyable hours at Hi Vallee and this time, in perfect sunny weather.

We found good flowers to photograph on *D. catoglypta* and *D. speciosa* subsp. *macrocarpa*. As always, it was a delight to spend the time with Don and Joy and to share their wonderful place.

Returning to Dalwallinu on the Marchagee Track, I was hoping to stop at the spot where, in 2015 during the Dryandra Get-together we found 9 different dryandras in the one spot. I have recorded it as 8 km east of Dewar Rd but, although we drove back and forth a couple of times I failed to re-locate the spot.

After a very successful and enjoyable day, we spent a second night at Dalwallinu. The following day we drove to Wongan Hills and Mount O'Brien, where I hoped to photograph a plant of *D. comosa*. I found



***D. catoglypta*, Hi Vallee**



***D. speciosa* subsp. *macrocarpa*, Hi Vallee**

that very few plants are left and they are very old, tending to collapse and with other plants growing through them and so, not very suitable to photograph. They had escaped the fire of three or four years ago. Where there had been many before the fire, we could only find one plant which is still to flower. We saw fewer plants of *D. pulchella*, as well.



***D. comosa*, Mt. O'Brien**

As we had plenty of time to get to Corrigin, via Goomalling, Meckering and Cunderdin and because we were in good time for the flowering of *D. speciosa* subsp. *macrocarpa*, I decided to do a side trip to Charles Gardner Reserve to look for subsp. *speciosa*. It was about a week earlier than my last visit in 2016 with Alex George and Brian Moyle.

On Gardner Reserve Rd, we found some plants with bright lemon yellow flowers as well as some with pale orange flowers, as in the photo on the cover of newsletter 72. *D. speciosa* subsp. *macrocarpa* has red flowers or very occasionally, orange-red but subsp. *speciosa* comes in a range of colours. Because of the nodding habit of the flower heads that are surrounded by long, grey, hairy bracts it is necessary to lift each one up to see the actual colours of the flowers.

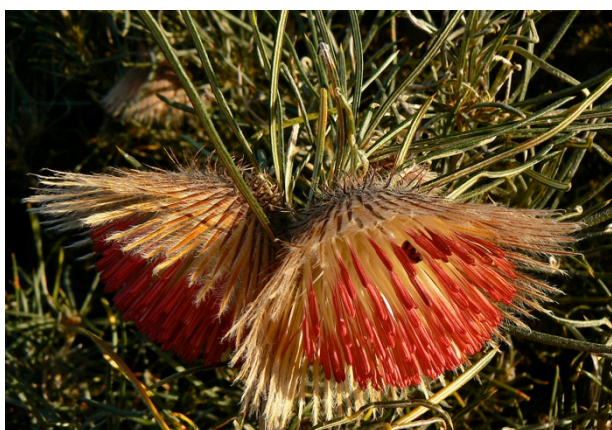


***D. speciosa* subsp. *speciosa*, Chas. Gardner Res.**



***D. speciosa* subsp. *speciosa*, as above, plant of yellow flowered form**

Having missed the track that forms the eastern boundary of the reserve, we drove north on Tammin South Rd and then west on Dixon Rd, where we found another patch of *D. speciosa*. Some of the plants had red flowers. As I was taking a photo of one of them, I noticed a small blob on one of the flowers and when I previewed the photo on the computer, the blob turned out to be a ladybird. I have always thought that the flowers of plants in the same group, such as *D. cynaroides*, *D. horrida* and *D. erythrocephala* and also most of those in the *Aphragma* group, like *D. nervosa*, *D. fililoba* and subspecies of *D. pteridifolia*, (except for subsp. *pteridifolia*), must be pollinated by crawling insects. They have a straight style, shorter than the perianth, with a long stigma/pollen presenter.



***D. speciosa* subsp. *speciosa* with ladybird**

West of Woodanilling, on our last day, I photographed plants of *D. rufistylis* and *D. armata* var. *ignicida* at the reserve on the corner of Dinwoodie and Orchard roads and *D. acanthopoda* at Wingedine Reserve on Carters Rd.

At the corner of Albany Hwy and the road into Cranbrook, we stopped to look at the plants of *D. mucronulata* subsp. *retrorsa* where I had re-discovered it in 1995, when there were about 20 plants there. Now there are only three left. They are old and starting to collapse and we couldn't find any seedlings or small plants.

Because subsp. *retrorsa* intergrades with subsp. *mucronulata* from west to east across its range, this taxon is no longer recognised and so the few plants with large flower heads that are still left have no protection and will probably be lost. We have never found any plants of the magnificent many-flowered one that is long gone from Tambellup from which seeds were obtained and some of us used to have in our gardens.

On 11th October, we set off again for just two days with an overnight stop in Corrigin. Our first objective was *D. meganotia* subsp. *meganotia* at Yilliminning Rock, east of Narrogin. I was in time to get photographs of this, in flower. The number of plants has declined as is the case with almost all the *Dryandra* populations I have visited over the last 40 or so years.



***D. meganotia* subsp. *meganotia* Yilliminning Rock**

At the Corrigin Reserve lookout hill west of the town, we looked for flowers on the *D. ferruginea* subsp. *obliquiloba* and *D. lindleyana* subsp. *agricola* plants. It's been many years since I have been able to find either of them in flower. Most of the *D. ferruginea* plants had a few flowers that were finished but eventually we found some with fresher flowers. This subspecies has the smallest flower heads, usually in profusion but this year they had flowered fairly sparsely.



***D. ferruginea* subsp. *obliquiloba*, Corrigin**

A few plants of *D. lindleyana* subsp. *agricola* had flowered but we were too late for them; the flowers were finished. I had never seen freshly opened flowers of this species; the photo in *The Dryandras* is of almost spent flowers.

The next day, we drove west on Brookton Hwy to a spot 17 km west of Corrigin to look for more plants of *D. lindleyana* subsp. *agricola*. Amongst low vegetation and some *Casuarina* trees we found quite a few plants – again with very few spent flowers. I was able to observe, however, that the flowers are all uniformly yellow and not variously coloured as in some of the other subspecies of *D. lindleyana*.

On my return home, I contacted Corrigin resident and Study Goup member, Robin Campbell who was able to send me some excellent photos of subsp. *agricola*. Robin has been a great help to me over many years. In 1998, she took me to another reserve near Corrigin where I photographed the *D. octotriginta* which appears in *The Dryandras*.



***D. lindleyana* subsp. *agricola*, Robin Campbell**

We called in to see the population of *D. ionthocarpa* subsp. *chrysophoenix* at Aldersyde. I hadn't been back to see it in flower since I first found it in 1999. The plants are now overgrown with small shrubs and have many dead leaves on them but they were flowering fairly well.

The Wildflower Society is conducting a survey of *D. lepidorhiza* to find out if it should have 'declared rare' status. The populations are definitely in decline as I have observed over the years. I was asked to report on previously collected locations to find out whether they are still there.



***D. ionthocarpa* subsp. *chrysophoenix*, Aldersyde**

From Woodanilling, we drove along Orchard Rd to River Rd, where I had previously collected it in three locations but we were only able to find the one plant I found last year.

On Albany Hwy, just north of Weir Rd, we took the co-ordinates for the population on the eastern side of the road, where it grows with *D. preissii* and *D. porrecta* among other low shrubs. There was no time to try to estimate the number of plants and it's not possible to count them as this is one of the underground-branching species.

The co-ordinator of the survey, Judith Harvey, has provided me with copies of all of the collections of *D. lepidorhiza* and there are two from the 1960s collected by Ken Newbey, which I didn't know about. It's quite likely that the Albany Hwy location is one of them as the co-ordinates are very close. I find it quite astonishing that co-ordinates can be recorded retrospectively from the geographical

positions of the collections, many of them measured in miles.

Many thanks to all who helped with these trips, especially June, Don and Joy Williams and Robin Campbell.

***Dryandra* aff. *fililoba* a new taxon? (with Kevin's comments)**

On my first visit to Johns Well Reserve, north east of Woodanilling, I noticed that there were plants of *D. fililoba* growing on the western edge of what had been a gravel pit and inside the gravel pit itself. The plants outside were smaller with smaller, more twisted leaves with a softer appearance than *D. fililoba* from the Harrismith area. The word that came to my mind to describe these plants was more 'gracile'. We have subsequently referred to these plants as aff. *fililoba* and what follows is a short history of their discovery in other locations. The following article "A Mystery Solved?" gives some more details and includes photos.

The plants inside the gravel pit were more robust and I took them to be the typical *D. fililoba*.

I made frequent visits to the location since then – I don't remember whether I made any herbarium collections, but one year, I found what I thought was a hybrid between (aff.) *fililoba* and *D. preissii*. The latter is one of several dryandras in and around the gravel pit.

D. preissii, *D. armata* var. *ignicida* and *D. rufistylis* grow in the gravel pit. Just to the south, among casuarinas, there are *D. armata* var. *armata*, *D. fraseri* var. *fraseri* and *D. sp.* Wheatbelt, (*Banksia zygocephala*). The aff. *fililoba* plants appear to be moving into this area and becoming fewer, as well.

At the Banksia Farm, at Mount Barker, Kevin Collins had a 'mystery' plant that appeared to be the aff. *fililoba*. I first photographed it in flower in December, 2006. Since then, Kevin has propagated several plants from seed of this plant, which had since died. He had no record of the original seed provenance but we have always suspected that the plants could be what we had begun to call the aff. *fililoba* at Johns Well and also at Strathmore Hill Reserve. We had never seen these plants in flower.

In both locations, the length of the longest leaves varies a great deal between the plants in the population.

In June, last year, I visited some locations on Link Rd, south west of Woodanilling with Jill Richardson and found plants of the aff. *fililoba*, there. They had long since finished flowering.

Plants at Strathmore Hill and in the latter location occur where there is *Eucalyptus drummondii* growing.

In November, this year, while looking for *D. lepidorhiza*, Judith Harvey and Lyn Alcock found the plants in flower. On 20th December, with Kevin and Kathy Collins, I re-visited all three locations and found the plants in flower albeit just finished. At the Banksia Farm, the plants still had fairly fresh flowers.

We looked at the only surviving but mostly dead plant inside the gravel pit and found that it, too was the aff. *fililoba*.

D. fililoba flowers in May – June.

We have speculated that, because Judith found a plant that is almost certainly a hybrid of *D. lepidorhiza* and *D. aff. fililoba* that the aff. *fililoba* might have arisen from just such a hybrid especially given the differences in the leaf lengths.

Or is it a new taxon?

D. fililoba occurs further north than aff. *fililoba* in seemingly disjunct populations, however, the plants at Patterson Road (not seen in flower) occurs about midway between them.

Margaret Pieroni 27/12/19

Notes from Kevin Collins (03.01.2020)

I have grown both *fililoba* and the variant (aff. *fililoba*) side by side for the past 14 years. Here are some of my observations. *D. fililoba* is a tighter, larger, mounding plant with wider lobes, greener foliage and the leaves fold downwards. It has broader more robust inflorescence bracts than aff. *fililoba* which has finer-longer-more tapered bracts.

Aff. fililoba has a pinkish tinge to the lower limbs of flowers in bud. It has a more silver/grey foliage and often pink to very red petioles whereas *D. filoloba* has very yellow petioles. *Aff. fililoba* leaves tend to spiral a little and lobes are often upright. unlike *fililoba* lobes which fold down.

A Mystery Solved?

After we received the news that in November, last year, Judith Harvey, Lyn Alcock and Jill Richardson had found *D. lepidorhiza*, a possible hybrid of *D. lepidhoriza* and *D. aff. fililoba* and the *aff. fililoba* in flower on Link Rd, south west of Woodanilling, Kevin and Kathy Collins and I couldn't wait to check out the plants we'd been visiting for many years but had never found in flower. We were pretty sure it was the 'mystery plant' that was growing at the Banksia Farm, which was also flowering.



***D. aff. fililoba*, Banksia Farm Nov 2006.**



***D. aff. fililoba*, Strathmore Hill, Lyn Alcock**



***D. lepidorhiza* X *aff. fililoba*? near Link Rd, Lyn Alcock**

The earliest that the Collins could go was 14th December but we cancelled the trip at the last moment because the forecast was for a temperature of 41 degrees. We went instead on 20th by which time the flowers were just about finished.



***D. aff. fililoba*, 20/12/19 The longest leaves from two different adjoining plants at Strathmore Hill Res.**

We collected specimens from Johns Well Reserve and Strathmore Hill Reserve and Judith has added them to those she collected at Link Road.

We met up again with Jill and Adrian Richardson and they showed us the *D. lepidorhiza* and *D. aff. fililoba* plants on Link Rd. We have now seen all

these “mystery” plants in flower and it appears that the Link Rd., Johns Well Reserve, Strathmore Hill Reserve and the Banksia Farm specimens are all *aff. fililoba*.

They also showed us other remnant vegetation on their property including beautiful, large plants of *D. stiposa*. We were just a bit too early for the flowers. Several other of Jill’s stunning photos are included later in the Newsletter.



Kathy Collins, Kevin Collins and Jill Richardson at *D. stiposa*

Many thanks to Kevin and Kathy, Judith, Lyn, Jill and Adrian for their help.

Dryandras and Climate Change

Here, in Denmark, on the south coast, we have had much more rain than most of the rest of the southern parts of the country. We had 1,070 mm – more than last year but less than the two previous years.

My plant of *D. nobilis* subsp. *nobilis*, with its terminal flowers which featured in the last newsletter, died suddenly without ever setting any seed.

At the Banksia Farm at Mount Barker, 50 km north of here and also at the *Dryandra* locations we visited in December, are plants that are apparently suffering from the lack of rain. One or two branches have died on the plants of several species at the Banksia Farm, including: *D. aff. fililoba*, *D. preissii*, *D. proteoides*, *D. nervosa* and *D. idiogenes*. It’s as though they are sacrificing some of their foliage in order to survive.

In the case of the mound-forming shrubs, pruning off the dead branches tends to spoil the appearance of the plants.

It could just be coincidence, but I noticed that there are fewer plants of *D. aff. fililoba* where I first found them at Johns Well Reserve and more of them several metres south.



***D. proteoides* has shed one branch due to dry**



***D. preissii* suffering from drought**

The photos were taken by Kevin at the Banksia Farm.

Margaret Pieroni 11/1/20

Notes from Members

From Hartley Tobin

We haven't managed to get away this year. Some medical 'follow-ups' and the unusual weather patterns upset our planning.

With such a dry winter I thought I might succeed with plants that don't like 'wet-feet', but then we had six or seven heavy frosts. A single light frost in four or five years is a rarity. THEN August, by far the wettest in the 36 years we have been here. Rainfall patterns are changing, in the last 17 years we have had four exceptionally wet Augusts where the monthly rainfall has exceeded that of any other month.

Although I keep trying to establish Dryandras I only have three surviving, two *Dryandra polycephala* and one *Dryandra nivea*. The *D. nivea* is two years old and is partly shaded and protected from the worst of our weather. The two *D. polycephala* are over twenty years old, one showing signs of several encounters with a tractor, but it still survives. I keep trying to propagate Dryandras from seed but the quality of the seed from the commercial seed suppliers varies greatly.



D. nivea

Hartley Tobin



D. polycephala

Hartley Tobin

A wholesale nurseryman friend I have usually propagates some Dryandras each year and I try to get any spares he might have, but there were none this last year. I'm hoping this year might be better.

Well that's it for the time being,

From Tim Darrington

We saw Keith (Alcock) in his new home in Reading in the Thames valley on Monday: Nearly all the work is done and he seems quite comfortable. I took him a *Banksia robur* cutting and a *D praemorsa* var. *praemorsa* for him to try out. No Aussie plants in his garden yet as far as I could see.

Pleased to see that you found *Dryandra* aff. *fililoba*, although Kevin told me he has been growing it for years at Mt Barker. So on the basis that it flowers 6 months out of syn with its supposed "cousin", we give it new species status? Could this not just be due to climate change, as it is well known that some *Banksia/ Dryandra* do not flower in "correct" season when we try to grow them in UK, Holland or France Perhaps with Liesbeth we should start some more systematic records of "European" flowering periods ...

The fires in NSW have been extensively reported on the BBC and indeed on France24 (in English) and Keith told me that the Stirlings were burning. In

the south of UK has been one of the wettest autumn on record and even in Lyon we have had a "wet" autumn.

Light was good this morning and I took these pictures which I am very pleased with.



D. porrecta, eastern form Tim Darrington



D. speciosa subsp. *macrocarpa* Tim

Dryandra praemorsa Pygmy, a new form?

Dryandra praemorsa has always been a very popular *Dryandra* to grow because it is hardy and has large flower heads. There are two varieties, var. *praemorsa* and var. *splendens*, the latter having a pink flowering form which is sought after in the cut flower trade. They are usually large, bushy shrubs to two or three metres and as noted in our book, they can produce large amounts of viable seed which results in seedlings appearing under old shrubs in the garden. Several years ago, one such seedling in my garden flowered and I noticed that the bush was much smaller than usual with fewer branches and much smaller leaves but most noticeable, smaller flower heads to about 5-6 cms. across instead of the usual 10 cm. I have



D. praemorsa, normal and Pygmy head Tony

subsequently propagated it by cuttings but have also noticed several more plants in the garden with similar smaller flower heads. I have included pictures to show it in comparison with the normal form. It would probably be suitable if you have a small garden or insufficient room for the larger form. I will report on its reliability as a garden plant and also try to grow it from seed from my plants to see if it comes true.



D. praemorsa Pygmy plant Tony

Dryandra nervosa seed

Some of you may be familiar with the first picture below. It is of my plant of *D. nervosa* from our book, taken in around 2005 when the plant was probably around five years old. The second is of the same plant taken in late 2019 and you will notice it is much older looking and appears to have a gap in the foliage. As the plant grew older, it became more sprawling and eventually one of the major branches died. Much to my delight, when I checked the dead sections I found that many of the old flower heads had set seed and I eventually collected a margarine container of seed capsules which I have sent to Margaret. What interested me most was that I do not have another plant of *D. nervosa* so this species must be self fertile. This is in stark contrast to another proteaceous specimen I have, a 40 year old *Banksia media* which has never set a single seed. Confusing isn't it?



D. nervosa plant in 2006. Tony Cavanagh



D. nervosa plant after loss of large branch

Tony Cavanagh Feb 2020



D. acanthopoda with pink bracts



D. fraseri var. *fraseri* with pink bracts



D. fraseri var. *fraseri* with black bracts

Jill Richardson took these three lovely pictures on their property near Woodanilling and we are pleased to include them as they show once again the beauty and variety of Dryandras. Thanks, Jill.

