

DRYANDRA STUDY GROUP
NEWSLETTER NO. 60



Dryandra ferruginea
subsp. *flavescens*

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Dryandra ferruginea subsp. *flavescens* is a prostrate species which flowers at the ends of the underground stems. It occurs east of Lake King in sandy loam with some gravel. The leaves have consistently short lobes. A form of *D. ferruginea* subsp. *chelomacarpa* which grows north of Hyden also has leaves with shorter than normal lobes and can be confused with this one. They both flower in spring.

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 2011.

I have had several major projects on the go in recent months including a complete reorganisation of the Library at the Queenscliffe Maritime Museum where I am the Honorary Librarian, and these have conspired to delay this Newsletter. Anyway it's finally ready and I hope that you enjoy it. I am always looking for articles and other material so please consider writing something for the next one. I still haven't had any takers, apart from Margaret's excellent and informative description of the "mound" group, for the topic of "My favourite *Dryandra*" and I'm sure that you all must have a favourite you can tell us about.

I'm sure that everyone is aware of the topsy-turvy weather we have experienced in eastern Australia and not surprisingly, there seems to be a connection between unexpected plant deaths and too much rain (after too little for so many years). Hartlley, David and I have commented on deaths or at least concerns about wet feet. Does anyone else have any observations about how their plants have fared this year?

Thanks to all who contributed to Member's News. I am pleased that Catriona and Phil seemingly have conquered some of the problems with grafting dryandras (onto banksias no less, perhaps they really are banksias??) and I look forward to hearing of further progress on the new block. Liesbeth in the Netherlands shows us how really tough Australian plants can be in severe winter conditions and it always amazes me that she can grow so many different species.

As mentioned above, Margaret has written a very useful article on the attractive group of small mound dryandras and given us some tips from her experiences in raising some recalcitrant seeds – her motto could well be "Never give up". She also continues her "Looking back" series, which I always find intriguing in showing the complexity of the group and in showing how relatively recently we have come to understand and name them. I finish off with a brief account of the progress of my dryandras at Ocean Grove and a discussion of the merits of various ways of watering young plants.

Over the years, I have put together several lists and illustrated "finding aids" to help me with identifying dryandras and for consolidating into a few pages such features as the variety of seed shapes and sizes or the general wild locations of the various dryandra species. One of these aids is what I call "A simple leaf key to *Dryandra*". I must stress that this is not a true key, rather it consists of groupings of similar leaf shapes and leaf characteristics and I have found it useful in trying to narrow down identification of an unknown taxon. This is followed up by cross checking of the Illustrated Key (N/L 30) or of course, the book. The drawings are those used by Margaret in the Illustrated Key. It occurred to me that others may find the leaf key useful and I am happy to make them available at cost of photocopying plus postage. It is about 20 pages long so with postage should cost about \$5.00 to \$7.00. I have included a sample page in the newsletter. If you are interested, please let me know by email, phone or writing and I can give you a more accurate costing.

Happy *Dryandra* growing.

Tom

Some Propagation notes

Marianthus (or should it be *Billardiera*) *floribunda* is a beautiful climber with smooth, dark green ovate leaves and large white flowers in summer. It is growing in Jarrah forest near my home in Denmark, WA. Because I coveted my neighbour's billardiera, I collected some ripe fruits from a friend's bush garden, several years ago.

I rinsed the seeds in a sieve as you would a tomato and sowed them the next day, in a tray with various other seeds. They didn't germinate and the tray was left undisturbed after I'd pricked out the dryandra and davesia seedlings and removed the labels.

The following year, 12 months after sowing the seeds, I noticed some seedlings appearing. A few had grass-like, cotyledons about 1.5cm long, followed by a pair of lobed leaves and finally, leaves that I recognised as those of *Marianthus floribunda*.

I now have a lovely, healthy plant that I'm training to climb on a Jarrah.

Another seedling which took 12 months to germinate, that I couldn't identify until much later, turned out to be *Isopogon formosus*. David Lightfoot, leader of the Isopogon and Petrophile Study Group was visiting when I was about to plant out an *Isopogon formosus*, purchased from a local nursery. He advised me to take some cuttings of the new growth before planting it out. I did this and they struck very quickly and had a good root system when I potted them up. Then they sat and sulked and one I was sure, was dead. I gave up on them and left them on the bench. However, after almost 12 months they started to grow. Even the 'dead' one put on good growth and they all survived to be planted out.

I was given a 'mini greenhouse', a metal – framed structure with shelves and a zip-up polythene cover. In 2009, while I was away, there were several hailstorms in one day and I arrived home to find most of my seedlings battered and the roof of the greenhouse ripped to shreds. I moved it to the sunny side of a rammed earth wall and made a new roof for it with shade cloth. From then on, I have been putting my cuttings, in pots with inverted milk bottles over them, into it on the top shelf so that rain can water the plants through the shade cloth.

I've never had much success with cuttings before but this arrangement is working extremely well and I now have some plants of *Dampiera hederacea* (which I had previously tried and failed with, several times) and *Poranthera huegelii* to plant out, to replace some that were lost during the building of my house.

I also put some dryandra and davesia seedlings in the (now) mini **shade** house and they are doing much better there than in the open.

Margaret Pieroni 17/1/11

Looking Back (Continued)

Continuing excerpts from the correspondence from Margaret Pieroni, then living in Perth to Keith Alcock, Study Group leader, in Victoria. Updates of Dryandra names and other comments are in italics, in brackets.

From a letter dated 26/4/86 with specimens:

Here is an account of my dryandra collecting trip 21st – 23rd April: (*The specimen numbers in brackets are my collection numbers*)

On Monday, we (*I was accompanied by my friend Shirley Loney*) drove down Albany Highway to Woodanilling West Road and, at 21 km east of the highway, where you indicated, we found *D. preissii* (no.1) growing among *D. sessilis*. There were about 10 plants in the vicinity and I photographed part of one to show the upright leaves and (*prostrate*) habit of growth.

Immediately opposite, across the road, Shirley found a different plant (no.2) (*D. lepidorhiza*) which looked very similar to *D. preissii* but without the bipinnate leaves. I would guess it is a form of *D. pteridifolia*. It is a miniature form – the specimen is of full-sized leaves. To collect it, I had to pull up some of the underground stems, the new growth of which looked like rhizomes but not fleshy. The buds and fruits were completely covered with soil and the bracts around the seed heads opened within two or three days to release the follicles. The follicles are large compared to the size of the receptacle. They have fallen out and you will find them in the bottom of the bag. I wonder if the looseness of the follicles has to do with the fact that the whole fruiting body is under the ground? The colour of the leaves is a slightly bluer and lighter green than those of *D. preissii* and the plants more open and slightly taller. New leaves, emerging from the ground are a velvety purplish-red – quite attractive. I wondered whether this could be one of the species mistaken for *D. preissii* but the plant in my garden grown from seeds purchased from the Wildflower Society, (probable source, Nindethana) is definitely not this one but looks more like the typical mound *D. pteridifolia* (*D. nervosa*), with triangular leaf lobes (*D. shanklandiorum*). Incidentally, my *D. pteridifolia* (Stirlings mound) (*D. nervosa*), is flowering at present as are the ones we saw in the Fitzgerald River National Park.

We continued on through Mt. Barker and cut across to the Hassell Highway through Kalgan. After the Cheynes Beach turnoff, we began to look for the spot where I had photographed the two plants – one I thought was *D. arctotidis* but which Alex (*George*) thinks is *D. brownii* and the other I thought was var. *tortifolia* which I now believe to be *D. arctotidis*. I hope I've got it right, this time! (*I had*). We found the spot, 17.5 km east of the Cheynes Beach turnoff, near the top of a hill, where the power lines cross the highway. Specimen no.3, *D. arctotidis*? shows the full height. (*It is prostrate*). Specimen no.4, *D. brownii*? was from a plant about 25cm X 25cm.

We continued on towards Jerramungup to where the *D. plumosa* is thick and where I'd seen the plant that I thought was different from specimen no.4. Not having collected any specimens, I couldn't compare it at the time. We found the place again and, looking at it again, I decided it is the same species but the plants were much bigger owing to soil disturbance for road works. (*D. brownii*).

We spent the night at Jerramungup and left early on Tuesday morning to retrace our route as far as Devils Creek Road and headed for West Mt. Barren. I had seen *D. cirsioides* flowering south of the turnoff, the day before but the plants north of Jerramungup were not in flower so we decided to photograph and collect it for Alex, on the way back. Incredibly, it was sunny almost all day on Tuesday. On Monday afternoon it had been very overcast – so dark that I had to use a flash for the plants on Hassell Highway.

We drove along Devils Creek Road towards where it becomes Colletts Road and enters the National Park. As we turned a right-angled corner to the left, I reminded Shirley that it was where we'd seen *D. quercifolia* for the first time on our February trip. As the sun was shining, I stopped to photograph them because I didn't have any slides of the normal, yellow form. (*I had the pink-flowering form, purchased*

from a local nursery, for several years in my Perth garden) You can imagine how excited I was to discover that most of them were pink. We did a count and found that there were 14 pink and 9 yellow. I collected a specimen (no.5),

We got to West Mt. Barren and started up the track. It was delightful to be there in such beautiful weather. I found the plants I photographed in '85. (*D. cuneata*; because of the habit of the plant on the exposed slopes, I was not sure of its identity and wanted a specimen to send to Alex). There were several small, straggly plants hard to distinguish among the stunted *D. quercifolia* and *Banksia baueri*. The flowers are a paler yellow and it is flowering later than the plants of *D. cuneata* that we saw at several places on the trip but otherwise it looks the same.(no.6). We looked at all of the *D. quercifolia* flowers on the way and they were all yellow.

After photographing the flowering *D. cirsioides*, (no.7) we headed for the Cugley's, (Rosemary and Geoff who farm south west of Newdegate) via Ongerup.

We turned of into Newdegate Road before Pingrup and I remarked to Shirley that it was a pity that we didn't have a more precise location for John Cullen's dryandra that you'd spent so much time searching for, and I didn't know whether you'd been in touch with Ken Newbey, in the meantime. (Study Group member, John Cullen, then living in Victoria had reported a dryandra 'near Pingrup' and had collected a distinctive, long, papery bract and a leaf which Keith had sent me and which I took with me hoping to find a match. Ken Newbey who lived in Ongerup had made a vast collection of plants in the area and we wondered whether he might have known of it).

On Newdegate Road, 3km south of the Hassett Road turnoff, we stopped to look at a dryandra patch where I collected another form of *D. cirsioides* (no.8) with fine leaves but not flowering. (*D. xylothemelia*) There were lots of *D. erythrocephala* there but I didn't find a late flowering one to photograph.

When we got to the Cugley's, Rosemary drove us to their farm where I'd photographed the *D. ferruginea* plant, previously but we found it dead. (no.9A). Other plants in the vicinity looked different but I'm convinced they are the same species even though the leaves vary quite a lot, between plants and also on the same plant. (nos. 9 - 11 - all *D. ferruginea* subsp. *chelomacarpa*). I have noticed that many dryandras can have plants in the same population with variations in leaf colour as well as shape, eg the length of the leaf lobes.

We spent the night at the Cugley's and the next morning we went to see your *Grevillea involucrata* location. As we headed towards Lake Grace on Burngup South Road, I said to Shirley that if we managed to find *D. foliosissima* from Alex's map and instructions to where he had found it in the 1960's, it would cap off a very enjoyable and successful trip. Alex wasn't exactly sure of the spot and I wasn't over-confident of finding it. Then I saw the plants that looked like *D. calophylla* but taller and somehow different. It was enough that they were dryandras for me to stop and investigate and you can imagine my excitement when I realised we had discovered IT! (no. 12) (*D. idiogenes*). There are lots of plants on both sides of the road, dense clumps about 0.5 -1m across and easy to spot. (See picture page). There are shrub forms of *D. ferruginea* there and the *D. cirsioides* form, in flower. (*D. xylothemelia*).

After I rang you, or rather, after you rang me, I thought of sending a bit of no. 12 to Rosemary who might pass through there occasionally and I'm sure wouldn't mind checking for flowers.(As soon as I got home, I rang Keith. He was out so I left a message for him to ring me, which he did first thing the next morning. He told me he couldn't sleep, wondering whether I'd found IT. The dryandra automatically was 'nicknamed' IT until it was named *D. idiogenes*, by Alex in 1996). We stopped at Tarin Rock Reserve, where I found a beautiful 'mound' *D. nivea*. (*D. nivea* subsp. *nivea*). It would make a good garden plant. We found *D. drummondii*, in bud, further along the road. (*D. octotriginta*). The perianth is pale yellow, not purple like the Stirling Range form that I have in my garden.

I pulled up where we estimated Alex's mark was on the map and I found 6 plants of *D. foliosissima*. Alex had told me that he photographed it on 30th May and by the look of the buds, that would be about right for this year – another trip! On the top of a hill, there are a couple of wireless masts and the plants are exactly 1km west of them. There are plants of *Grevillea excelsior* on both sides of the road and the *D. foliosissima* are about 30 m south of the road, near a small, gravelly ridge.

Altogether we counted up to 30 species of *Dryandra* seen on the trip and in flower were: *D. sessilis*, *D. cuneata*, *D. quercifolia*, *D. plumosa*, *D. cirsioides* (two forms), (*D. cirsioides* and *D. xylothemelia*), *D. pteridifolia* (*D. nervosa*) and, (almost) *D. drummondii* (*D. octotriginta*) and *D. foliosissima*.

From a letter to Keith dated 5/5/86

I have just received my slides (*from the processor*) and a letter from Alex (*in Canberra*). I was disappointed with the photos that I had to use the flash for, i.e. the Hassell Highway ones, the bud of *D. foliosissima* and my plant of *D. mucronulata*. I hope to be able to photograph *D. foliosissima* in flower next time. I'm planning another trip to Tarin Rock Reserve via Woodanilling on 3rd June.

Here are Alex's comments on the specimens I sent him:

- Specimen no. 1 *D. preissii*
- 2 *D. aff. preissii* or *aff. calophylla* – because of its prostrate, underground stems, unlike those of *D. pteridifolia* (*D. nervosa*)
I hope we can get flowers later. (I'll check it out on 3rd June, M)
 - 3 *D. arctotidis* – I think.
 - 4 *D. brownii* - ditto
 - 4a Similar to 4 but somewhat larger.
 - 5 *D. quercifolia*. The flowers were yellow in the upper half when the specimen arrived and pink only in the lower half.
 - 6 *D. cuneata*
 - 7 *D. cirsioides*
 - 8 *Aff. cirsioides* Leaf lobes are much narrower than *cirsioides*, involucre bracts and flowers somewhat different and the follicles are very narrow. (*D. xylothemelia*)
 - 9 to 11 *D. ferruginea* (*subsp. chelomacarpa*)
 - 12 *D. aff. ferruginea*. I don't think I've seen this one before, either.
Flowers and fruit needed. (Oh dear, it seems there weren't any old flowers in the pieces I sent to Alex. Could you send him some or should I ask Rosemary to look for some?)
(*D. idiogenes*)
 - 13 *D. aff. nivea* (*D. nivea* subsp. *nivea*)

News from Members

(From Catriona and Phil Bate, Ulladulla, NSW)

We have been very busy with our new garden - or jungle should we say. As soon as we moved from Canberra the drought broke. We are not used to plenty of rain and rich soil. The exotic plants (and weeds) here are going bananas as is the kikuyu grass which takes up several acres. We acquired an old ride-on mower from a friend but it seems to spend most of its time being repaired, so mowing is a priority at the moment. So far we've managed to clear some of it near the house and start a new native garden. Just about everything we have put in is loving it and putting on plenty of new growth, especially the isopogons and banksias. We haven't put in too many dryandras so far - *D. cirsioides*, *D. foliolata*, *D. longifolia* ssp *longifolia*, and *D. longifolia* ssp *calcicola* (all grafted on *B. integrifolia*), are doing very well. They were well established and about two years old when planted. We don't think that much will survive on its own roots here - a very healthy *D. formosa* lasted about 2 weeks, but *D. nivea* ssp *nivea* and *D. nobilis* ssp *fragrans* are hanging in there.

We managed to dig up a number of special grafted plants from our Canberra garden which were a reasonable size (a few feet high), and which seem to have settled in well (banksias mainly). Wish we had taken some of the dryandras!

(Good to hear that the grafted plants are doing so well, Catriona and Phil, but it is a pity that you probably won't be able to grow many dryandras on their own roots. Keep us posted of progress in the new garden – Ed.).

(From Liesbeth Uijtewaal, The Netherlands)

We are 'enjoying' yet another very cold winter. It started very early last year, early December, and even though the temps go up a little now (it's even sunny at the moment!!!!) there's still at least 10 cm of snow in the garden. We had 30 cm though so it's not too bad anymore. The road in front of our place is still covered in ice and snow -veeery slippery- but the major roads are fine. Cross fingers the plants will survive but I suppose they will - probably not the Aussies ones I planted out in the garden last summer though. The weaker ones in pots will have succumbed last winter so the surviving ones will be the stronger selection and besides, they're one year older now. Because of the cold the temperature inside the greenhouses have been just above zero for a long period during daytime too and because of the thick layer of snow it has been very dark inside for weeks. It must be hard for the plants to cope with that, survival of the fittest!

Surprisingly I lost more banksias than dryandras last winter. The one *D. carlinoides* I'm growing is doing very well, it even budded up last summer but the one bud aborted when I didn't water the plant in time when it was very hot. There's another bud coming up now though, cross fingers this one will survive. The seed was sown in January 2009, germinated in February and the first bud was formed in June 2010, so, within 1.5 year! Three *D. obtusa* from seed from Margaret are also looking good.

Chamelaucium uncinatum 'Seaton's Form' from Tony's garden is having quite a few buds, I'm looking forward to the flowers. I've got a couple more plants now. Maybe you need to take cuttings from a shadier part of the bush or leave them in the fridge for a couple of weeks, it might improve the strike rate. There's lots of buds in the *Chamelaucium* plants originating from the bunch of flowers I was given after my talk in Geelong too, such a lovely reminder. The *Grevillea* from Tony's garden, *G. umbellulata* ssp. *acerosa* is doing well but hasn't produced any flowers yet.

I've got one *B. rosserae*, it survived last winter and is still doing well! I'm very pleased with it. Apparently the banksias with pendulous flowers do well in a pot, *aculeata*, *caleyi*, *elderiana* and *lemanniana* are thriving. Hardly any losses since germination unlike with species like *B. cuneata*, *meisneri* and *pulchella*.

(I always marvel at what our Australian plants can put up with, Liesbeth, and your tales of the "horrors" of a Netherlands' winter! Glad that the cuttings you took back have mostly done well – Ed.).

(From Hartley Tobin, The Gurdies, Vic.)

Re: "Conflicting names: what do you do when your plant has alternative names?", Newsletter 59, what Alex George wrote is, to put it simply, just "common sense". Recently I found it useful to be able to quote from the article when I wrote to the Australian Horticultural Judge's Association Inc. pointing out problems their judges, exhibitors and others will have (if they haven't already) when different people will follow different lines of thought. A few years ago, I had quite some involvement in drawing up their guidelines for the judging of exhibits in the Australian Native Plant sections and these latest "changes" ("clumping" as against "splitting") could be almost impossible to deal with. I am still waiting for their reply, it should be interesting.

My Dryandras at The Gurdies

We have suddenly gone into a wet period, something we haven't had since 1996. At the moment, there is water lying everywhere and even a family of ducks and ducklings seem to have established themselves where the water has been lying 30+cm for a month. Unless we become dry fairly soon, this water will have a disastrous effect on my Dryandras (and other plants). A number of *D. speciosa* and *D. quercifolia*, that I planted out earlier this year, were all looking good up to about a month ago, but with this wet, some are in danger of becoming waterlogged. Apart from the two *D. polycephala* and eight *D. formosa* that I use for cut flowers, I have a number of others, *D. fraseri*, *D. drummondii*, *D. nivea* and three *D. cuneata* which I grew from seed, that I'll leave for further comment if they survive this wet.

(Thanks for the update, Hartley, and glad that Alex's article was so useful. You raise an interesting point about the potential problems for plant show organisers with the current instability in plant naming – Ed.)

(From Ian Anderson, Hughes, ACT)

D. praemorsa is looking healthy with minimal attention so I purchased another one recently. Unfortunately, none of the other species survived, being planted out on the rural block. (Do you know if it was dryness or insufficient attention or what that caused the problem? – Ed.)

(From Elizabeth George, Alexander Heights, WA).

My *D. catoglypta* excelled itself this year with so many flowers I couldn't count them! Others are in various stages of budding up and are looking good and should flower well.

(Seems like the drought in WA hasn't adversely affected your dryandras, Elizabeth. Did the others perform just as well? –Ed.)

(From David Lightfoot, Surrey Hills, Vic.)

My garden is sitting up +++ with the rain although I'm having to mow the lawn every 10 days or so! Some things aren't liking the rain though with deaths of established *Isopogon cuneatus*, *Dryandra drummondii* and *Banksia coccinea*.

(Sorry to hear about the losses, David but your experience mirrors mine to some extent, see my article, - Ed.)

My Favourite Dryandra (Group)

I am often asked which is my favourite dryandra and I've always been unable to decide. However, I do love the 'mound' dryandras. Several years ago, Tony was asking for suggestions as to plants that would stay small and neat and not need pruning and I think that these plants are ideal. Some, like *D. drummondii* subsp. *macrorufa* grow to quite large shrubs as the leaves can be up to 1m long. Others, such as the lovely *D. subpinnatifida* var. *imberbis* are quite small.

These 'mound' plants are without lignotubers and are killed by fire. They start with one flowering stem and each year, branches grow from around each flower head to build up into the neat mounded shape. The densely packed flower heads, on very short stems are usually well hidden and are, unfortunately, not suitable for picking. The foliage, though, is always very attractive. The only other plant that I know of that shares this habit of growth is a Petrophile, *P. longifolia* subsp. *longifolia*. I have a lovely specimen of this, growing in my garden and, because the long, terete leaves are so slender, the flower heads are conspicuous.

D. drummondii subsp. *drummondii* forms a mound to about 1m. It was one of the first dryandras to be grown in Europe and is one of the hardiest. Its flowers, yellow or pink with pale brown or copper coloured hairs on the buds (limbs), appear in late spring to early summer.

D. drummondii subsp. *hiemalis* is smaller, to about .75m and has faintly scented, golden flowers. It occurs further north than subsp. *drummondii* and in cold areas of the south west of WA and flowers in winter. It is proving hardy, in cultivation and is good for cold climates.

D. drummondii subsp. *macrorufa* (pictured) is a large shrub to 2m. Its flowers have red styles and very pale hairs on the limb. Its leaves, to almost 1m long, are much longer than the other two subspecies.

D. fililoba is similar to the more widespread *D. nervosa* but the blue-green leaves have narrower lobes and the pale yellow/brown flower heads are surrounded by small leaves. It forms a mound to 2m and flowers in winter.

Kevin Collins has what appears to be a form of *D. filifolia* growing at the Banksia Farm at Mt. Barker, (WA). Kevin has propagated several plants – all identical. It has smaller leaves and flowers in summer. The flowers have a pink tinge. The seeds may have come from a collection I made east of Woodanilling, many years ago. At the time I wondered whether it was a hybrid of *D. fililoba* and *D. preissii*. On recent visits to the site, I have failed to find any plants. (See picture page).

D. nervosa was also cultivated in Europe from an early time, (1820s) and is one of the easiest to grow. It grows to 2m or more. Its long, deeply lobed leaves become very tangled and the soft, hairy, purple-pink or orange-pink new growth is very attractive. Flowering times vary and, in cultivation it sometimes flowers twice a year. The straight-styled pale yellow/brown flower heads are well hidden inside the bush.

D. nivea subsp. *nivea* is probably the most widespread dryandra, growing in a variety of soil types. It forms a mound to just over 1m. The width of the leaves varies and a form with very narrow leaves shows the flowers to advantage. Flowers vary in colour combinations, often within the same population. Styles can be yellow to deep red and the hairs on the limbs can be white, pale brown or a rich, copper colour.

D. nivea subsp. *uliginosa* is similar to subsp. *nivea* but is a larger shrub, with longer leaves. It grows in winter-wet clay pans in a restricted areas but is very adaptable in cultivation. It is growing very well at the Cranbourne gardens, in Victoria and in Kings Park, Perth, in pure sand. Both of these subspecies flower in spring.

D. nivea sp. *Morangup* is restricted to a small area east of Perth. It has broader, bright green leaves and the flower colours appear to be consistent, with deep pink styles and white, sometimes green-tinged hairs on the limb. It also differs in flowering in April.



Clockwise from left:

D. drummondii subsp. *macrorufa*
Type location, Nyabing, Jan. 1992

D. ferruginea subsp. *flavescens*
Banksia Farm, Aug. 10

D. idiogenes Banksia Farm, Aug. 08

The "mystery" plant at the Banksia Farm,
Dec. 06



D. subpinnatifida var. *imberbis* is unusual in that it is a mound-forming variety.

D. subpinnatifida var. *subpinnatifida* is an upright plant to 1.5m. Intermediate forms occur in the wild and I had one in my Perth garden. It had both an upright branch and a mound and looked somewhat like a green emu squatting in the garden. The foliage was very dense and it flowered profusely. It was the pride of my garden until it suddenly died after only a few years. *D. subpinnatifida* var. *imberbis* grows to less than 1m but the long, dark green leaves, entire except for narrow, prickly lobes on the extreme lower half, tend to spread to make the mound wider than it is tall. The flowers are pale yellow with red bracts. New leaf growth is also red. Unfortunately, this stunning plant is proving to be difficult to propagate and short-lived in cultivation. It is becoming (or already is) extinct, in the wild because of hybridisation with *D. squarrosa*. I hope there is a population somewhere, where there hasn't been fire or other disturbance to cause hybridisation to occur.

Margaret Pieroni 28/1/11

Some Observations on Dryandras at Ocean Grove

You may be wondering how the unseasonal heavy rain over summer has affected my dryandras. So far so good but I have lost plants that I didn't expect to (especially recently planted eremophilas) and several large *D. formosa* in one area just died while others are still thriving. I put some of the problems down to a change in planting habit to overcome the drought. In the past, we have usually tried to ensure that our native plants (of all genera) have good drainage so we haven't planted "in a hole" ie with a well around each plant to enable easy watering. Because the drought was so prolonged, we were finding it almost impossible to establish new plants. My theory is that with the ground so dry through lack of natural rainfall watering, small plants just could not establish a decent root system and either died in hot or dry weather or just hung on and never thrived, eg were still less than 15 to 20 cm high after several years. To try to give them more water, we began to plant with a 0.5 m diameter well around them and/or sunk open ended pieces of 50 mm slotted drainage pipe vertically into the ground on two sides which we filled regularly with water (the theory being that this would ensure that water reached the root zone). After some five years of this practice, I cannot say with any certainty that it has "worked" any better than normal methods and I also conclude after heavy spring rains in October and November (160 mm and 100 mm) that there is simply no substitute for natural rainfall. My young plants from the last two years of autumn and spring planting are looking better than they have ever looked and follow up rain right through to now (in Feb. 2010 we had 10 mm, Feb. 2011, 100mm, following 110 mm in January) has ensured that they have a flying start and should be well established before next summer. The unseasonal rain has also had its downside, both for new plantings and established plants. The young eremophilas planted last spring simply could not stand the wet feet with such rain and I probably lost more than half, and established *Gastrolobium bilobum* and *Lambertia echinata* have both died – you win some, you lose some.

On the dryandra front, the well established plants mainly have loved the return to the "normal" rainfall conditions under which many were established, some now being more than 25 years old. These include *D. nobilis*, *D. longifolia* subsp. *longifolia*, *D. nivea*, *D. drummondii* subsp. *drummondii*, *D. plumosa*, *D. quercifolia*, *D. foliosissima*, *D. calophylla*, *D. lindleyana*, *D. nervosa*, *D. brownii*, *D. porrecta*, *D. praemorsa* var. *splendens*, *D. sessilis* (several types), *D. fraseri* (several types), *D. lepidhoriza*, *D. carlinoides*, several *D. formosa*. I have also lost several *D. formosa* in the same area of the garden and I suspect that there is a soil problem. My biggest disappointment was the loss of my only *D. subulata*, over 15 years old, but I think the wet got it. I also lost a 2 year old *D. drummondii* subsp. *hiemalis*, for no apparent reason, one I'd grown from seed, but young plants of *D. obtusa*, *D. cuneata* (prostrate form), *D. baxteri* (compact), *D. catoglypta*, *D. shanklandiorum*, *D. ideogenes*, *D. praemorsa* (a form with tiny flower heads which I am trialling) are all thriving. Will report again this time next year.

Tony Cavanagh Feb 2011.

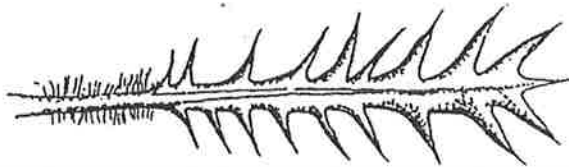
Species with predominantly lanceolate-triangular lobes, leaf length less than 20 cm.

bracts 15-17 mm long (Stirling Ra.)

32. *D. anatonna*



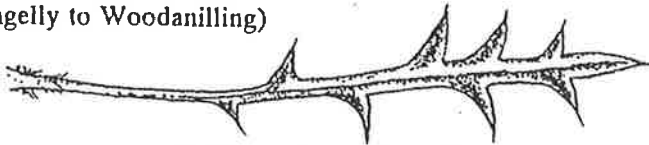
Juvenile leaf.



Tall, narrow shrub. Seed capsules very large, hairy and woody.

teeth each side (Pingelly to Woodanilling)

61. *D. cynaroides* L

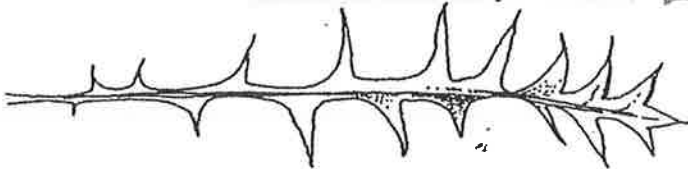


Upright shrub to 1.75 m tall

55: Pistil 22-31 mm long

21a. *D. borealis* subsp. *borealis*

21b. *D. borealis* subsp. *elatior*



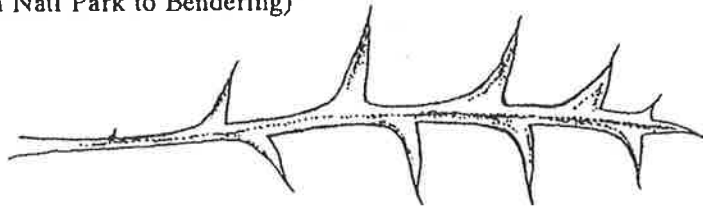
Sprawling shrub to 1 m tall. Involucral bracts 30-35 mm long, rust-coloured inside. Leaves twisted, Kalbarri area.



Bushy shrub to 2.5 m tall. Involucral bracts greenish-yellow inside. Three Springs-Arrino area.

hirsute at base (Tathra Natl Park to Bendering)

8. *D. purdieana*



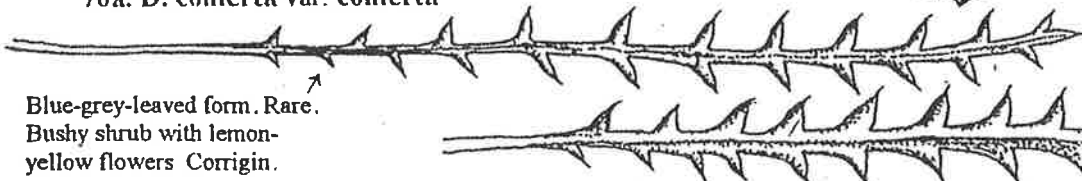
Bushy or column-like shrub, variable. Widespread. Involucral bracts with very dark brown hairs.

South Stirling)

76a. *D. conferta* var. *conferta*

76. *D. conferta*

A variable plant Usually column-like



Blue-grey-leaved form. Rare. Bushy shrub with lemon-yellow flowers Corrigin.

Green-leaved form. Widespread

76b. *D. conferta* var. *parva*

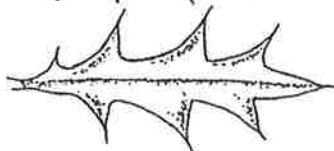
Flowers smaller, golden-yellow with more-or-less straight styles. Nyabing-Stirling Ra.-Ongerup



each side (N of Southern Cross)

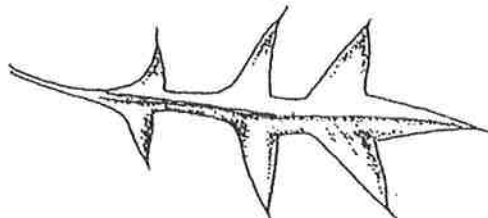
5. *D. arborea* ?

Tree to 6 m tall



Hann Natl Park)

7. *D. pallida*



Erect shrub to 2 m tall Leaves and flowers pale

Sample page from "Leaf Key"