- DRYANDRA STUDY GROUP -

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NEWSLETTER NO 8
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This newsletter is a little late to wish everyone a happy New Year but I trust 1982 will be a successful year for growing Dryandras. To this end, I have commenced a series dealing with some of the more common and/or hardy Dryandras, covering history, description (deliberately kept simple), cultivation, propagation and forms and varieties. If your favourite plant is not there, please let me know - also I welcome feedback and comments and, most importantly, correction of any errors. Identification is always a problem and to assist, at least as a screening procedure, I have incorporated leaf prints of the various species. Alf Salkin and Hartley Tobin started me off on this track, Alf with ink prints (as in printing) and Hartley with photocopies - the latter technique is very simple but you must have a good machine. I now have prints of all species except D.subpinnatifida and D.cynaroides - can anyone assist with mature leaves of these?

Our Cranbourne planting is doing well and I intend to plant this year, probably on Saturday or Sunday 1-2 or 29-30 May. If you can assist with plants or the planting itself please contact me or Alf Salkin, 38 Pinewood Drive, Mt Waverley before the end of April. In the last Newsletter, I gave a list of species we still require - if you can supply any, they can be railed to me or Alf, strongly boxed and freight collect. People who attended the Federal SGAP Conference in Melbourne in December were very impressed with what we had achieved so far and I look forward to making our planting the best in Australia.

Keith Alcock literally swamped me with material and seed during his recent trip to the West. I have sorted it and labelled (correctly I hope) what species I can. Many thanks, Keith, for your prodigious efforts. We now have seed of nearly all species so Cranbourne will really look good next year. If you would like seed of any species please forward a stamped, self-addressed envelope (30¢ or 40¢ stamp) and give me alternatives as seed of some of the rarer species is in short supply. As growing is a cooperative venture, please remember Cranbourne if you have spare plants, especially of the uncommon varieties. Elsewhere, I have talked about misnamed seed. I have probably been as guilty as anyone in wrongly identifying plants but I would ask that you check what you are growing and confirm any doubtful ones.

Now comes the bad news. As of 1983, I will be undertaking a full time course of study and will no longer be able to look after the Dryandra Study Group. So I'm asking for one or two volunteers to take over - we will require a Leader and perhaps a Newsletter Editor and they may perhaps share the task of answering enquiries, correspondence, etc. I will maintain my interest in the group and will certainly continue to contribute articles to the Newsletter but I don't think I can do the job of Leader justice in the future. So, are there any volunteers?

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It's not an onerous task but it can be time consuming on occasions. Please think about it and let me know - it is important that the group continues to function.

NAMING AND MIS-NAMING OF DRYANDRAS:

One of the biggest problems we face with the growing of Dryandras is the very small number of plants available from nurseries. Because the genus is still so little known, many of the plants that are available are either un-named or misnamed and this situation certainly does not help accurate record keeping. Over the last 18 months I have endeavoured to examine herbarium specimens (some of them TYPE specimens) of as many Dryandra species as possible and was quite shocked to find that several of the plants I have been happily growing as one thing turned out to be something else. I have also been keeping an eye on seed supplied by various seed companies and have found several examples of misnaming. These are listed below where I have been able to detect errors but if anyone else has examples of misnamed seed, could you please let me know. The problem is compounded by the difficulty of recognising some plants at the seedling and young plant stages - often the leaves of young plants are less than half their final size. If you have any doubts about the plants you are growing, could you please send me a pressed, flowering specimen and several mature leaves (not juvenile or new growth) which I hopefully can identify.

1. D.armata - Seed of D.carduaceae has been sold as this. D.armata is very prickly (see leaf prints) whereas D.carduaceae leaves are smooth, about 8-10cm long with very shallow lobes on the edge.

2. D.bipinnatifida - Seed of D.preissei has been sold as this. The two plants are superficially similar though D.preissii leaves are much larger, with coarser lobes which diverge only once or twice - unlike D.bipinnatifida which has 'multiple' divergences.

3. D.falcata - Seed of D.cuneata has been sold as this. D.falcata leaves are considerably more prickly and much less cuneate than is D.cuneata; also the D.falcata flowers are larger.

4. D.preissei - All specimens I have seen grown from seed thus named appear to be forms of D.pteridifilia - the foliage of D.preissei has long narrow, linear leaf segments (lobes) which are often bipinnate.

5. D.serratuloides - I believe all D.serratuloides seed is probably D.obtusa. The former has very short, flat leaves, deeply pinnatifid while D.obtusa has very long leaves (to 20-25cm) bright green, lobes with rolled margins and relatively broad sinuses.

ARE THERE ANY OTHER MIS-NAMINGS MEMBERS OF AWARE OF??

TONY CAVANAGH

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COLOUR PHOTOGRAPHS OF DRYANDRA FLOWERS:

In the first Newsletter, I compiled a list of colour photographs and paintings of flowering Dryandras as an aid to identification. I have now updated the list and it is reproduced below. Can anyone add to it, especially for species for which we have no colour illustrations?

D.arborea - 6(138); 13(161)

D.arctotidis - C.B.M. 69, 1843(No 4035)

D.armata - C.B.M. 60, 1833 (No 3236)

D.bipinnatifida - 19 ( )

C.carduaceae - 6(42)

D.cirsioides - 12(37)

D.cuneata - 6(72)

D.drummondii - 20(Plate 134), 21(19)

D.falcata - 6(82), 11(104), 22(T1455)

D.ferruginea - 13(197); 23(9) - as D.runcinata

D.formosa - 5(27); 10(3); 11(97); 12(39); 17(63); 21(18); 23(13); 24(30); C.B.M. 70, 1844. (No 4102).

D.fraseri - 21(18).

D.hewardiana - 10(41)

D.kippistiana - 25(No 68)

D.longifolia - C.B.M. 38, 1813(No 1582); 26(t3); 27(171)

D.nivea - 6(39); 9(57); 21(18)

D.nobilis - 6(121); 10(18); 21(18); C.B.M. 78, 1852 (No 4633), 23(70)

D.obtusa - 6(82)

D.polycephala - 5(27); 7(109); 13(163); 16(45); 17(63); 21(18); 23(78)

D.praemorsa - 5(27); 6(45); 9(56); 17(63); 21(19); 24(30) (pink form)

D.proteoides - 6(115); 7(110); 11(100, 108); 23(17)

D.pteridifolia - 6(75); C.B.M. 63, 1836(No 3455); C.B.M. 58 1831, (No 3063)

D.quercifolia - 6(91); 18(Vol 6,52), 21(19).

D.runcinata - 11(106); 23(9)

D.sessilis - 6(15); 7(110); 16(17); 24(30); 21(19); 28(22); C.B.M. 38, 1813, (No 1581)

D.speciosa - 6(112); 9(58); 11(98,106); 16(46); 23(33) 29(208)

D.stuposa - 9(59); 11(100); 23(71)

D.subulata - 6(101)

D.tenuifolia - 13(239); 21(18); C.B.M. 63, 1836 (No 3513)

D.tridentata - 6(100)

NOTE: C.B.M. = Curtis' Botanical Magazine

No = Article number

6(138) = Reference number 6, page 138.

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LIST OF REFERENCES FOR DRYANDRA DESCRIPTIONS AND ILLUSTRATIONS:

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3. A.M. Blombery "A Guide to Native Australian Plants" Angus and Robertson, Sydney 1973.

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5. R. Elliot "Dryandras Join the Parade" Your Garden 26 (5), May 1973, pps. 27-29.

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17. R.E. Harrison and C.R. Harrison "Trees and Shrubs" A.H. and A.W. Reed, Sydney 1975.

18. Australian Plants, Various. Society forGrowing Australian Plants, Sydney.

19. I. Holliday "Australian Shrubs" Rigby Adelaide, 1973.

20. B. Everard and B. Morley "Wildflowers of the World" Rainbird Reference Books London 2970.

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22. Edward's Botanical Register, 17, 1831. (as Hemiclidia Baxteri)

23. M. Morcombe "Native Trees and Shrubs for Australian Gardens" Hodder and Stoughton, Sydney, 1979.

24. C.A. Gardner "Wildflowers of Western Australia" W.A. Newspapers, Perth 1973.

25. Australian Wildflowers (Postcards) South Australian Museum.

26. R. Sweet "Flora Australasica" London 1827.

27. Paxtons Magazine of Botany 3, 1837.

28. F.J.C. Rodgers "Growing More Australian Native Plants" Nelson, Melbourne 1975.

29. J.W. Wrigley and M. Fagg "Australian Native Plants" Collins, Sydney, 1979.

Dryandra Flowering Times.

When I was preparing notes for the article on common or hardy Dryandras, I found that my records were incomplete or contradictory regarding flowering times for various species. It seems that times in Southern Victoria are up to several months behind Western Australia but this may not be the case for all species. Could all members with flowering Dryandras take particular note of their flowering times (and also age to flowering if known) in 1982 and let me have the information. I will endeavour to produce a flowering chart when I have assembled sufficient records.

Tony Cavanagh

SOME COMMON DRYANDRAS:

Over the next few Newsletters, I hope to describe briefly some of the more common and/or hardy Dryandras. I will endeavour to cover cultivation details and would welcome further information from members regarding their experiences, eg., expected garden life, ultimate size, flowering and fruiting behaviour. With Alf Salkins help, I have also made leaf prints of some species and will use these as one of the guides to identification. However, it is important to remember that Dryandra leaves, especially of some species, are very variable in size and shape and such prints should only be used for preliminary screening.

One final point. As noted elsewhere in the Newsletter, a lot of confusion is caused by the mis-naming of plants and, regrettably, we see evidence of this even with seed supplied by generally reputable seed merchants. If you have any doubt about the naming of your Dryandras, please send a pressed, flowering specimen to me, together with a brief description of the bush. If I can't do it myself, I will endeavour to have it named by the herbarium but in any case it is important if we are to record information that we know what plants we are talking about.

Dryandra arctotidis R.Br

History: Collected originally by William Baxter in 1829 near King George Sound, it was described by Robert Brown in his Supplement to the Prodromus in 1830. Grown from seed at Kew Botanic Gardens in the 1830's (also Cambridge Botanical Gardens) it was popular as a bushy greenhouse plant. Flowered at Kew in May 1842 - see Curtis' Botanical Magazine of 1843, article No 4035.

Description: A bushy, erect dwarf shrub to perhaps 0.5 x 0.5m. Leaves crowded along the stem, either blue-green or dark green, 10-25cm long X up to 2cm wide, divided into nummerous acute lobes up to 8mm long and extending nearly to the mid rib. Lobes separated by narrow to broad sinuses (up to 2mm) with margins rolled under. Leaves white underneath with prominent brown-yellow mid-rib, the ribs of the numerous floral leaves covered in their lower port by very fine white hairs. Flower heads terminal, to 3-4cm diameter, surrounded by floral leaves and brown bracts. Colour is generally greenish-yellow, sometimes suffused with pink; base of individual flowers glabrous (without hairs) remainder with fine, soft hairs, styles to 5cm.

Cultivation D.arctotidis is generally reliable in cultivation and does well in near full sun on slightly raised beds. It makes an excellent rockery plant though it does not relish a very dry spot in the garden. Until recently, very few members were growing this species though it is now becoming more common and seed is readily available. Oldest recorded known plants are about 4 years old. It is in cultivation at Cranbourne.

Varieties and Forms: There appear to be two distinct forms which may eventually be given species status - D.arctotidis R.Br and D.arctotidis R.Br var tortifolia (Kipp. ex Meissn.) Benth. The latter (sometimes simply referred to as D.tortifolia) has short, narrow lobes separated by broad sinuses, the lobes turned in giving the leaves a distinctive "V" appearance. It is also a very compact shrub, the leaves rigid, crowded together, growing vertically and generally dark green.

The 'true' D.arctotidis has much longer leaves which are a distinctive blue-green, with longer lobes broader and separated by narrow sinuses, flat and not "V" shaped. The leaves also tend to arch more and are far more flexible. Refer to attached leaf prints for these characteristics.

Dryandra armata R.Br

History: One of the original species collected by Robert Brown at King George Sound in 1801 when he was botanist on Matthew Flinder's Investigator. It was described by Brown in Trans. Linn. Soc. and the Prodromus of 1810. Seed was collected by Peter Good (foreman-gardener from Kew Gardens) and transmitted to London where it was one of eight species introduced to Kew in 1803. It was also grown in the Cambridge and Glasgow Botanic Gardens (the latter from seed collected by Fraser in ≈1829) and a plant flowered at Glasgow in February 1833 (See Curtis' Botanical Magazine of 1834 article No 3236).

Description: A small, prickly, bushy often untidy-looking shrub to perhaps 1 x 1.5m. Relatively common in the south west including the Stirling Ranges. The stems are smooth, hairless with grey-brown bark. Leaves are very variable, crowded on short branches, rigid, deeply pinnatifid, triangular with curves points, dark green on top, paler below with numerous veins. Leaves are usually 5-8 cm long by 1.5-2cm wide, sometimes similar to leaves of D.falcata but noticeably much leas cuneate, lobes much shorter and sinuses smaller. Flower heads small, terminal, yellow-green, appearing in spring often low down in the bush, usually surrounded by floral leaves longer than the flowers. Heads sometimes show short, dark scaly bracts at the base. Style up to 3cm long.

Cultivation: There are few reports of this species in cultivation despite its commonness, the oldest plant being about 8 years old. It appears hardy though is said to be unnattractive horticulturally. English reports of last century speak of it flowering throughout the year though this is not confirmed in Australia. Grows easily from seed, not tried from cuttings. NB. Seed of D? carduaceae has been sold as D.armata but the leaves of the two are very different and the two species can be easily separated even at the seedling stage. Plants of 'genuine' D.armata are being grown at Cranbourne.

D.baxteri R.Br

History: Collected by William Baxter in 1823 and 1829 in the vicinity of King George Sound, it was described by Robert Brown in the Supplement to his Prodromus in 1830. Baxter apparently also collected seed which was supplied at least to Cambridge Botanic Gardens (and probably also Kew) and plants were grown at Cambridge from 1824 though apparently not flowered.

Description: A graceful, densely foliaged shrub to 1.5 X 1.5m, branches covered with very fine hairs, very attractive as leaves are soft and flexible, not prickly. Leaves very narrow, usually less than 6-8mm, but length to 30-40cm. Leaves are divided to the mid-rib into numerous small triangular, rigid lobes, each 3-5mm long and broad with margins rolled under, underneath white. Flowerheads squat, to 3-4cm diameter, numerous in the leaf axils and often hidden in the foliage, a disappointing brown in colour. Heads are surrounded by numerous floral leaves, with dark brown involucral bracts at the base. Styles to 3cm.

Cultivation: Again not commonly cultivated but one of the most graceful Dryandras. The bushes in garden cultivation have a soft 'inviting' look about them and foliage though stiff is not prickly. Relatively hardy in an open well drained site, some plants are more than 14 years old though I lost two plants at about 3 years and 6 years during a dry summer. It is slow to flower even from cuttings grown plants.

Propagation: Relatively easy from seed, though resultant seedlings are prone to yellowing (corrected by iron chelate sprays) and are not as hardy as some other species. Can be grown with difficulty from cuttings, most success being had with side shoots taken in May-June, which rooted in October-November. Specimens at Cranbourne on deep sand have made rapid growth and are very healthy.

Dryandra calophylla R.Br.

History: Dryandra calophylla was described by Robert Brown in the supplement to his Prodromus in 1830 from specimens collected near King George Sound by William Baxter in ≈1829. It was introduced to England at about this time and grown at Cambridge Botanic Gardens and probably also at Kew. It was reintroduced to Kew in 1893, plants being grown from seed presented by the nurserymen Messrs Veitch and flowered in May 1898. See Curtis' Botanical Magazine 1898, article No 7642. (However, see note under D.drummondii).

Description: A spreading, prostrate plant with lateral, subterranean shoots, the leaves growing almost vertically out of the ground, the flowers being found in large numbers at the edges of the plant and also appearing to grow out of the ground. Plants are usually 25-30cm high by 1-2m spread. Leaves are rather similar to those of D.drummondii but the lobes are often twisted and are more noticable triangular with pungent tips and reach almost to the mid-rib, being separated by relatively large obtuse or acute sinuses. The upper surface is dark green, the under surface pale whitish-green with 3-5 prominent nerves and a prominent dull yellow mid-rib. Young growth is covered on both sides with fine, matted brownish hairs. Flower heads are terminal, small, about 2cm diameter, numerous, whitish-brown and at ground level, the brownish outer bracts giving a striped appearance to the flower-heads. Basal bracts are chocolate brown, densely hairy, the fine hairs on the perianth parts being white and contrasting strongly with the bracts. Style about 3.5cm.

Cultivation: This species has often been confused with D.drummondii Meissn. so at least some of our cultivation records are dubious. The plant described above is reliable and a relatively strong grower, two known records giving lives in excess of 5 and 8 years respectively. It does very well in sandy soils or on raised beds and the numerous small brown-white flowers, though not outstanding, give it a novelty effect in the garden.

Propagation: Grows well from seed (supplied as D.calophylla) but as I have no large plants from this source I cannot comment further as to whether they are correctly named. I grew my plant from a cutting/root division supplied from Western Australia but it has stubbornly resisted my further attempts to propagate it by this means. Some plants are doing well at Cranbourne.

Dryandra drummondii Meissn.

History: This species was described by Meissner in Volume II of "Plantae Preissianae" in 1847 from a specimen in James Drummond's 3rd collection (iii No 299). Though the locality is not known, it may have been the Stirlings or the South Coast area towards Cape Riche and Mt Manypeaks as Drummond collected there in 1843-1844. It is not listed as having been grown in England or Europe, though I believe the plant illustrated in Curtis' Botanical magazine of 1898 (article No 7642) as D.calophylla is, in fact, D.drummondii. A rather nice picture of a cultivated specimen of D.drummondii is given on Plate 134 of Dr Brian Morley's book "Wildflowers of the World".

Description: A short-stemmed, little branched, mounded, leafy, dense shrub, similar in appearance to the large form of D.pteridifolia and eventually reaching about 1m x 1m. Leaves are numerous, 25-30cm long by up to 5cm broad, divided to the mid-rib into very approximately triangular segments. The lobes are stiff, relatively flat, separated by relatively broad sinuses and sometimes bent inwards, the two lobes forming a shallow "V". The upper surface is a dull blue green showing a trace of the three to six prominent nerves underneath; the underside pale green, reticulated with three main nerves, these and the yellow brown mid-rib being less prominent than in D.calophylla. (See leaf prints for comparison of two species). Flower heads are relatively large, up to 50mm across, terminal, numerous, surrounded by leaves and sometimes appearing in 'layers' within the mass of foliage. They are brownish-yellow (sometimes reddish) the inside of the individual flowers and the style and stigma being yellow, the hairs on the perianth tube being brown or gingery. Styles up to 50cm long.

Cultivation: This is still relatively uncommon but becoming more readily available. Does particularly well in deep sand, plants at Cranbourne having flowered in less than 18 months, though it also grows well, though more slowly, in raised beds of clay-loam in full sun. It is able to tolerate dryness. It's leaf colour and general habit make it an attractive and pleasing garden shrub. However, its leaves are sometimes attacked by a type of fungal disease (Colletotrichum sp) which appears initially as brown-yellow 'rust' spots which spread and eventually kills off the leaves. If left untreated, the disease can kill the plant. The simplest remedy is to remove all infected leaves and burn them. New growth is fairly rapid and unless it is unhealthy, the plant usually recovers quickly. Benlate sprays at 10 day intervals may also be effective.

Propagation: So far has only been propagated from seed or transplanted seedlings and grows well with few problems.

Dryandra cuneata R.Br

History: Also from the original 12 species collected by Brown near King George Sound in 1801, D.cuneata was described by Brown in 1810. Seeds collected by Peter Good were distributed to Kew Botanic Gardens (and probably also to Cambridge) in 1803 and plants had flowered by 1810, apparently over the months November to February.

Description: A much-branched shrub to 1.5 x 1m, branches often pendulous, from the Stirling and Eyre districts of Western Australia, common on the south coast. Leaves are noticeably cuneate, 5-10cm

by up to 4cm wide, wedge shaped at the base, deeply prickly-toothed with spines up to 2mm. They are stiff and prickly, generally flat or slightly curled, underside green, reticulate with noticeable veins. Flowerheads are terminal on short branches, closely surrounded by long floral leaves, attractive silky yellow in bud stage. Lower part of flower surrounded by brownish bracts, sometimes almost leafy, style to 4cm.

Cultivation: One of the easier species to grow, it tolerates dryness and for me is a good windbreak. At Cranbourne, it has grown rapidly and flowered at less than 2 years. We have several rocords from Victoria and South Australia which indicate it is long lived in cultivation, oldest plants being 16 years old with several at 5 - 8 years. It is not especially attractive but the numerous silky-yellow buds which appear from March onwards make it worthwhile growing.

Propagation: Grows easily from seed, taking about 4-5 weeks to germinate. Cuttings have also been successful from side-shoots taken in May, though some losses have occurred after potting-on. Cutting grown plants will often flower in the pot in less than 12 months.

Dryandra erythrocephala C.A. Gardner

History: Specimens of this plant were collected in December 1926 in the vicinity of Pingrup in the Stirling District by Charles Gardner, formerly Government Botanist of Western Australia and described in 1927. It is however, very uncommon in cultivation though the novelty of its flower and its hardiness make it worthwhile growing.

Description: A many-stemmed, compact, upright leafy and dense shrub (though sometimes in cultivation sprawling and open) to perhaps 1-1.5 x 1m. The lower parts of the branches are often bare or carry the persistent remains of the old dead leaves. Leaves are dull-green, 5-10cm long, 2-3mm wide with scattered or opposite lobes 5-8mm long, rigid, pungent and separated by wide sinuses. The margins are strongly revolute, the underside reddish-tomentose on the mid-rib, the remainder covered with scattered exceedingly fine curled white hairs. Individual leaves are usually recurved. The leaves tend to be crowded in whorls around the stem and closely surround the flower heads. Flowerheads are 2.5-5cm across by about 4cm long, very open, cream and dull purplish-brown in colour, terminal or on short lateral branches and numerous, buried in long floral leaves. The lower sections of the perianth parts are swollen and covered with dense white felt while the limb is a red-brown, the two contrasting strongly to produce a most unusual Dryandra flower. Style about 3.5-4cm.

Cultivation: Very seldom grown but definately worth a place in any garden because of its numerous and unusual flowers, it's hardiness and the fact that it is to my knowledge the only summer flowering Dryandra, my plant flowering from early December until well into autumn. The oldest plant in my records is some 6 years old and has flowered for the last three - it was grown for 2 years as a tub plant. Grows and flowers well in a lightly shaded raised bed among other shrubs and is in my experience one of the hardiest once established. Because of the difficulty of obtaining seed, we have yet to obtain plants for Cranbourne.

Propagation: Seed is occasionally available but seemingly has a low viability and few plants have been raised at this stage. It can be

propagated with considerable difficulty from cuttings taken in May but suitable material (non-flowering side shoots) is seldom available. The roots formed are weak and rooted cuttings have a high mortality in the first months after potting up.

Dryandra formosa R.Br

History: Another species collected by Brown and described in 1810, D. formosa is probably one of the best known Dryandras on account of its outstanding flowers and ready availability. It was introduced to Kew in 1803 and also Cambridge at about this time and was popular as a greenhouse plant, being grown at Woburn Abbey by the Duke of Bedford, in the gardens of Prince A. de Demidoff at San Donato near Florence, Italy and by several nurserymen or gentleman gardeners such as Mr Mackay of Clapton Nursery and Mr A. Baring at the Grange, London. Flowering specimens were illustrated by Street in 'Flora Australasica' of 1828 and in Curtis' Botanical Magazine of 1842, article number 4102, the latter from a (pot) plant described as 'a tree about fourteen feet high!' Plants are currently being grown and flowered in Southern California, USA, and at Tresco Abbey Gardens, Isles of Scilly, UK.

Description: A large bushy shrub or small tree, 3-5 x 2m, common in the Albany and Stirling Range areas of Western Australia where it sometimes grows in damp conditions. Leaves numerous and dense along the branches, particularly around the flower heads, 12-20cm long x 1cm wide, stiff but not rigid and relatively soft, pinnatifid to the mid-rib, the lobes acute, triangular, with the upper side nearly at right angles to the mid-rib. Leaves are dull green above, white with fine down beneath. Flower heads are large and spectacular, 5-8cm in diameter, a bright yellow-orange in colour, terminal on short branches and nestled among numerous floral leaves, much longer than the head. The numerous bracts are covered with short, wooly hairs. Styles to about 3-4cm. Flower heads are often variable in size, even on the one bush.

Cultivation: One of the best known Dryandras, D.formosa is a rapid grower in good conditions, reaching 2m in less than two years and flowering at about 3 years, the flowers appearing in spring and early summer. They are excellent as cut or dried flowers. I have had a number of reports of sudden deaths of apparently healthy plants, possibly brought about by root rot in the winter, as the deaths usually occur in spring or late summer in short spells of hot or humid weather. They need a well drained, warm site in near full sun for best flowering and appreciate some summer watering. D.formosa is long lived in cultivation, some records indicating lives in excess of 25 years. Plants are growing well at Cranbourne.

Propagation: Easy from seed which takes 4-5 weeks to germinate; also grows well from transplanted seedlings. Relatively easy from cuttings taken at various times of the year but again April-June seems the best period.

Dryandra fraseri R.Br

History: Specimens were collected by Charles Fraser in the vicinity of the Swan River in 1827 and the species was named by Brown in the supplement to the Prodromus of 1830. The plant was introduced to Europe in 1840, probably from seed sent by James Drummond, and was grown, but not apparently flowered, at Cambridge Botanic Gardens and

also at the San Donato gardens of Prince de Demidoff near Florence.

Description: A sprawling, prostrate sometimes slightly erect shrub usually up to 1.5m across and from 20 to 50cm high. Leaves are narrow, 5-10cm long by about 1.5cm wide, divided to the mid-rib into widely spaced lobes which are rigid and pungent pointed to about 5-8mm, margins revolute. Upper surface is either bright or dull green, under surface shows a prominent yellow-brown mid-rib while lobes are whitish-green with very fine white 'down' present. Flowerheads are variable in size, 2-4cm in diameter, terminal or on very short side branches, closely surrounded by floral leaves longer than the flowers. Colour orange-yellow or bright yellow, contrasting attractively with the dark brown or black felted bracts at the base of the flower head; style to 3.5-4cm. Flowers in autumn-winter.

Cultivation: Once established, this is one of the hardiest Dryandras and does well in full sun or semi-shade locations. In common with some other Dryandra species, it sometimes tends to die out in the centre of the bush so that older plants may look untidy. Pruning may assist in maintaining the plants shape and appearance otherwise it can be replaced.

Propagation: Grows easily from seed, germinating in about 5 weeks and gives few troubles. It is also one of the species which is relatively easy to propagate from cuttings taken between March and June.

Varieties and Forms: D.fraseri is widespread in Western Australia and several forms exist, some apparently tending to grade into the closely allied D.ashbyi. The common form has fine, dull blue-green leaves with orange-yellow flowerheads. A particularly attractive variant has larger bright green leaves, yellow stems and larger, bright yellow flowerheads with strongly contrasting black bracts at the base. Both plants, however, are quite prickly on account of the stiff, sharp pointed leaves.

(CONTINUED NEXT NEWSLETTER...) TONY CAVANAGH

SUBSCRIPTIONS FOR 1982

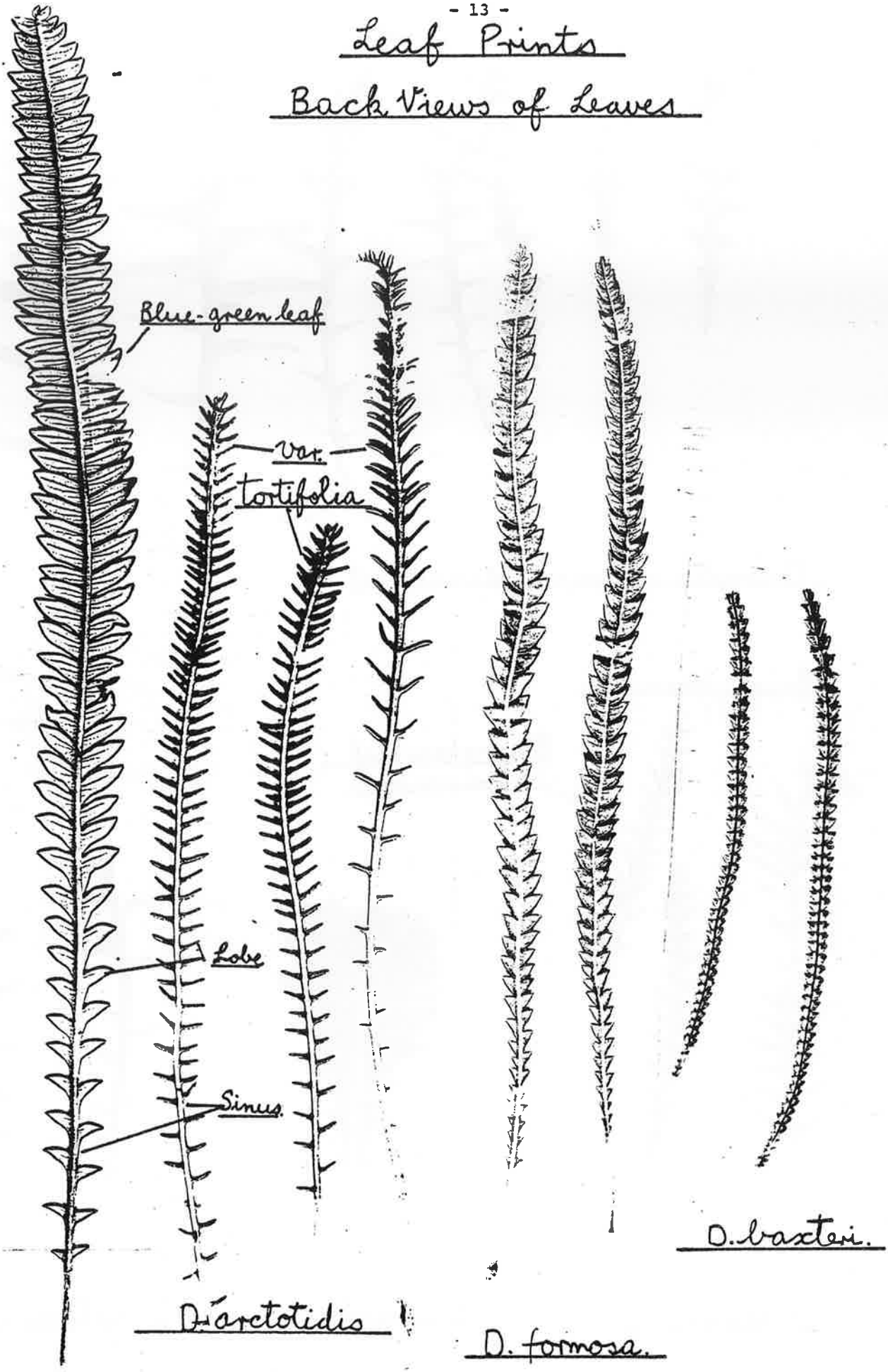
Despite a pending increase in postage costs in the near future, membership subscriptions have been held at $2.00 for 1982. Could you please send your $2.00 by return mail to me as soon as is convenient. Because of the very high cost of Newsletter publication, no further newsletters will be sent to unfinancial members.

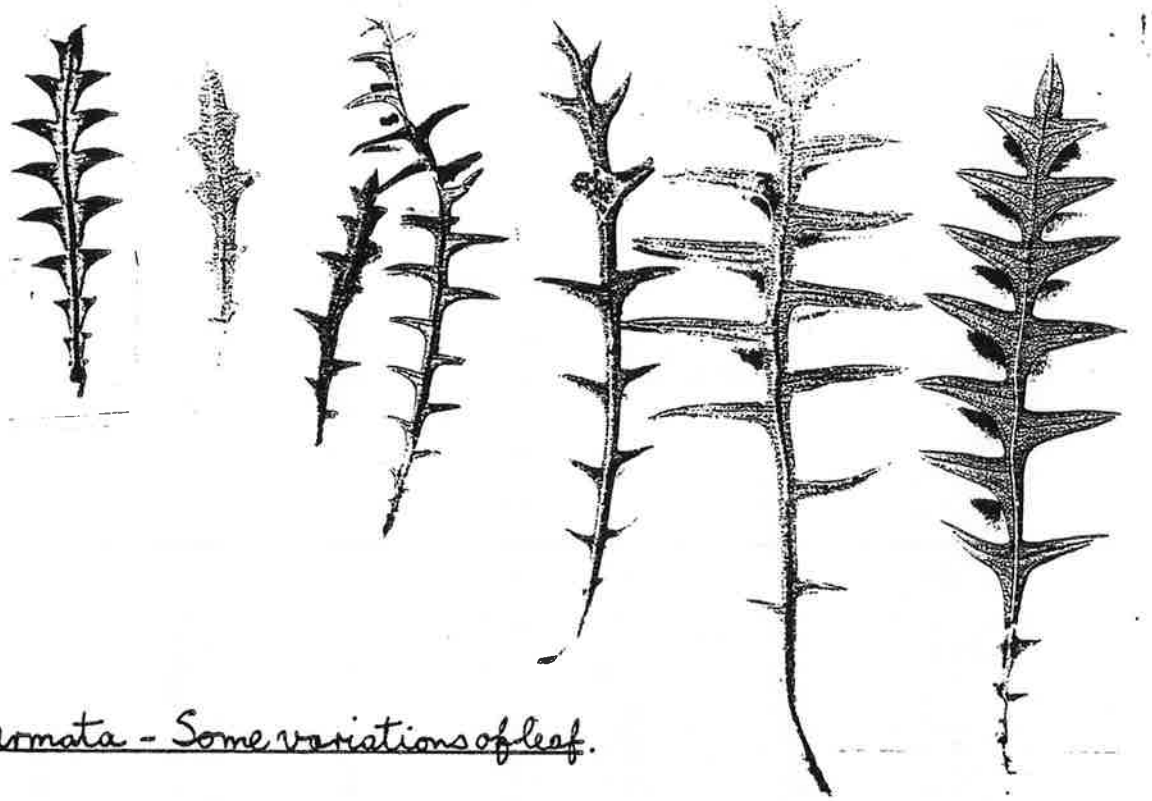
Until next time.....happy Dryandra Growing....

TONY CAVANAGH

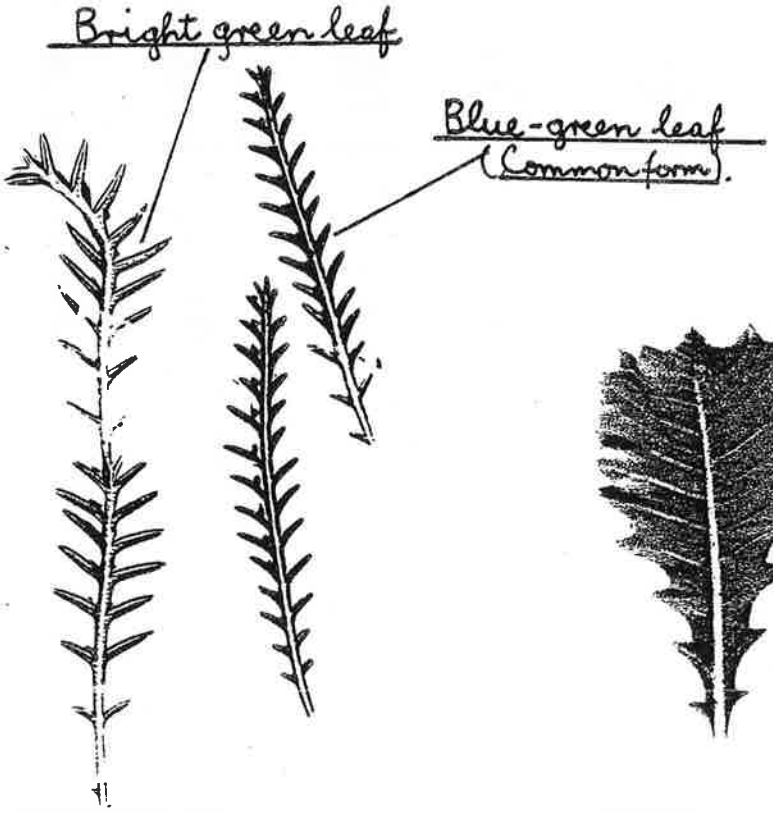
Leaf Prints

Back Views of Leaves





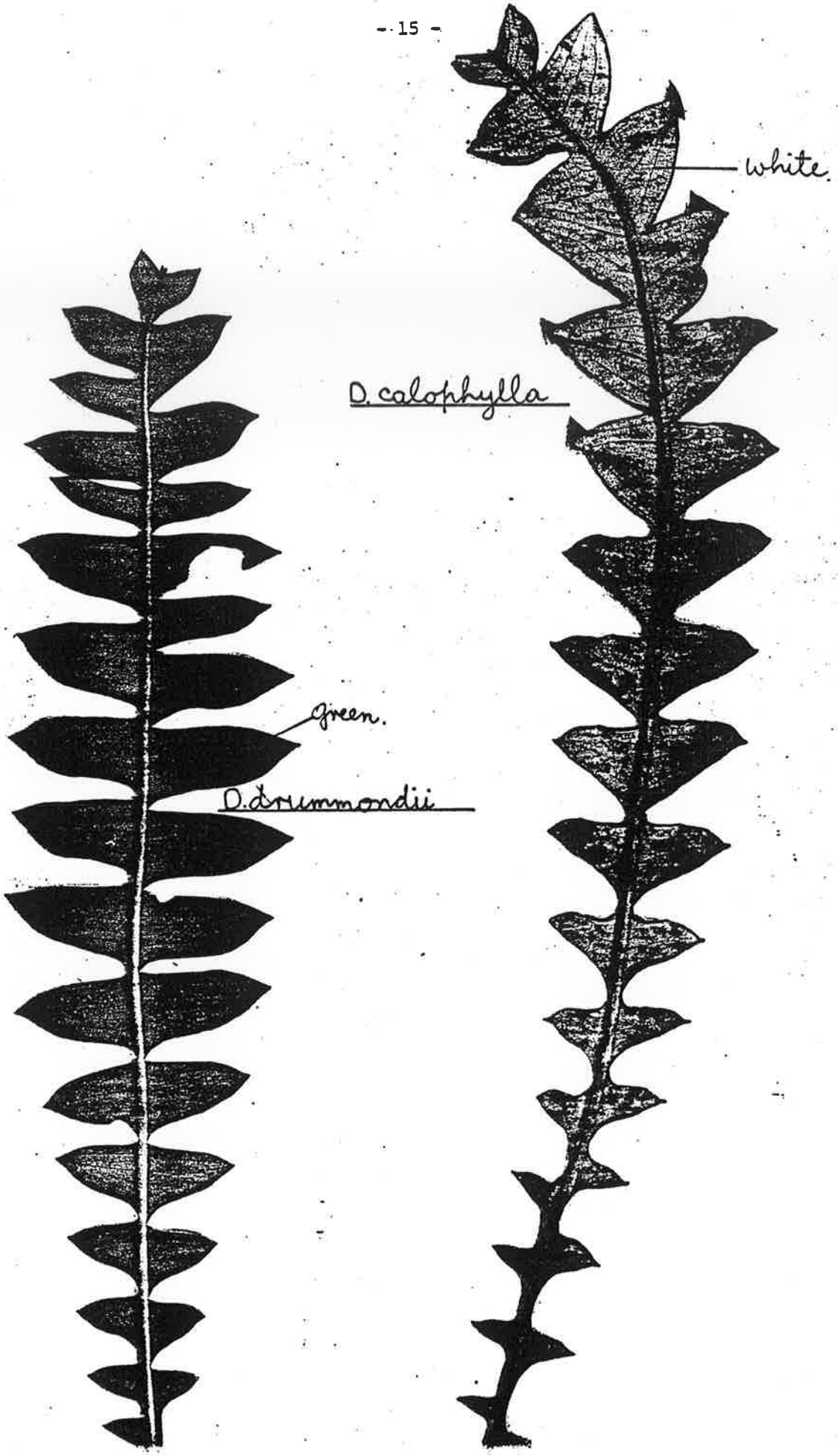
D. armata - Some variations of leaf.



D. fraseri

D. cuneata

D. erythrocephala


white.
D. calophylla
green.
D. Drummondii