

NEWSLETTER

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Some of our foundation members at our 25th Anniversary Celebrations, 2004

Keith Hutchison, Mary Frost, Garnet Frost, Ian Forte, Dorothy Forte, Chris Goudey, Lorraine Goudey, Barry White, Jean Boucher, Rod mc Conchie, Barry Stagoll, Gay Stagoll.

Vol. 27, Number 1.
JAN / FEB 2005

FERN SOCIETY OF VICTORIA Inc.

POSTAL ADDRESS:

P.O. Box 45, Heidelberg West, Victoria, 3081

E-mail: http://gardenbed.com/clubs/clubs_vicferns.cfm

Our Society's Objectives.

The objectives of the Society are:

- *to bring together persons interested in ferns and allied plants*
- *to promote the gathering and dissemination of information about ferns*
- *to stimulate public interest in ferns and*
- *to promote the conservation of ferns and their habitats.*

OFFICE BEARERS:

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SUBSCRIPTIONS:

- * Single.....\$15.00 * Pensioner/student\$12.00 * Family\$17.00
- * Pensioner Family...\$14.00 * Organisation.....\$17.00
- * Overseas\$22.00 (Payment by international bank cheque in \$A please. Sent by Airmail.)

Subscriptions fall due on 1st July each year.

MEETING VENUES: The Kevin Heinze Garden Centre at 39 Wetherby Road, Doncaster (Melway 47; H1).
Other meetings at members' gardens or as advertised on the following page.



Opinions expressed in this newsletter are the personal views of the authors and are not necessarily endorsed by the Society, nor does mention of a product constitute its endorsement.

TIMETABLE for EVENING GENERAL MEETINGS:

- 7.30 Pre-meeting activities - Sale of ferns, spore, books, merchandise and Special Effort tickets. Also library loans and lots of conversation.
- 8.00 General Meeting.
- 8.15 workshops and demonstrations.
- 9.15 Fern identification and pathology, Special Effort draw.
- 9.45 Supper and another good yarn.
- 10.00 Close.

CALENDAR OF EVENTS FOR 2005

February meeting

Thursday the 17th February, at the Kevin Heinze Centre, at
8.00pm

FERN ALLIES

This our first meeting for 2005, the night will be presented by Barry White giving us an in depth discussion on fern allies

Competition category - Fern Allies. Please bring along as many as possible.

Fern allies include Psilotum (Skeleton Fern), Equisetum (Horsetails), Lycopodium etc (Tassel Ferns) and Selaginella.

March Meeting

Thursday the 17th March, at the Kevin Heinze Centre, at 8.00pm

PREPARING FERNS FOR THE SHOW

This will take the form of a forum with a panel comprising of

Ray Harrison, Rex Gresham and Brenda Girdlestone

This will be a "not to miss" night for those members who are thinking about putting ferns in the show, or if you have ever wondered what it takes to produce a good fern.

Competition category for the night will be Adiantum (Maidenhair) ferns

=====

April 2005

It is proposed that we will be having another of our excursions, which there will be more information in the next newsletter the possible date for this will be Saturday the 30th, so pencil this date in to your dairies and keep a look out for the next newsletter.

PRESIDENTIAL PERORATION

Just as happened in each of the last few years, well before the end of Spring we experienced some daytime temperatures in Melbourne which we'd normally expect when Summer had well and truly arrived. Whether or not Global Warming is to blame, such conditions at that time of year, when many plants have not long before produced new growth which has yet to "harden off", can produce some stress in the garden (not to mention for their owners).

At least it's not so bad for the plants in a shade house, where many of us keep ferns, as in the open ground. But it's still a constant job to keep things green, what with the watering restrictions as well. I'm sure all our determined members are putting up a worthy effort in caring for their collections.

You'll all get the opportunity to give your prized ferns an outing at the Show in April - just to help make it all worthwhile.

Over 40 attended a most enjoyable lunch to celebrate Christmas early at the Kevin Heinze Centre on the first Sunday in December. This lunch has become a tradition for the Society, as an occasion to share fellowship and some laughs before our layoff from meetings until February comes around.

2004 is nearly over. We look forward to lots of interesting fern nights and excursions in 2005. I'd like to think that there are some new things we might do to reach, and help, some non-members too. Perhaps if we do a good job of this, we may find new members for the Society - which would be all to the good.

One such new encounter with others interested in ferns is in the planning stages - this being to assist the Friends of Warrandyte State Park to learn about propagating ferns. Already the Friends group are involved in helping the small Parks Victoria staff at the park in propagating and growing on a very large number of local indigenous plants every year for park revegetation and sale to landholders in the district. It would be a coup to see future propagation efforts include ferns, a group of plants which occur in limited numbers in most of our metropolitan parks - without doubt they are much less in evidence today in many of the park localities than they would have been in pre-settlement times.

I, and the Committee, hope all members have a safe and joyful Christmas, and the best of luck for the new year 2005 (although you won't get to read this until it is under way!). Some members - including just recently Jack Barrett who has undergone heart surgery - have not been in the best of health, and we wish them in particular all our best.

BARRY



Notice of change of address

Don Fuller had moved his new address is:-

55 Park St,
Pascoe Vale, 3044
Ph. 9306 5570

Fern Show Display - "Ferns of Queensland"

The Annual Fern Show this year will feature the ferns of Queensland as the main display..

The strong support of members will be necessary if the usual impressive display is to be mounted.

Listed below are some ferns of Queensland which are likely to be in members' collections. It is but a small selection of Queensland ferns. If members have ferns of which they are unsure they could give Barry White a ring on 9740 2724,

Adiantum aethiopicum, capillus-veneris, diaphanum, formosum, hispidulum, silvaticum
Angiopteris evecta
Arachniodes aristata
Asplenium australasicum, bulbiferum, flabellifolium, flaccidum, obtusatum, polyodon
Blechnum articulatum, camfieldii, cartilagineum, minus, nudum, patersonii, wattsii
Christella dentata,
Calochlaena(Culcita) dubia
Cyathea australis, baileyana, cooperi, cunninghamii, leichhardtiana, robertsiana
Cyclosorus interruptus,
Davallia pyxidata, solida,
Dennstaedtia davallioides
Dicksonia antarctica, youngiae, herbertii,
Dictymia brownii
Diplazium australe, assimile, dilatatum
Doodia aspera, caudata, heterophylla, maxima, australis, media
Dryanaria rigidula,
Goniophlebium subauriculatum cv knightii,
Histiopteris incisa,
Huperzia squarrose, phlegmaria
Hypolepis glandulifera, rugosula,
Lasteopsis acuminata, decomposita, microsora, munita, rufescens, smithiana, tinarooensis
Lygodium microphyllum,
Macrothelypteris torresiana, polypodioides
Marsilea drummondii, mutica
Microlepis speluncae
Microsorium pustulatum (diversifolium), scandens, punctatum
Oleandra neriiformis,
Pellaea falcata, paradoxa
Platyterium superbum, bifurcatum, veitchii, hillii
Pneumatopteris pennigera,
Polystichum formosum, fallax,
Psilotum nudum
Pteris comans, ensiformis, tremula, umbrosa, vittata,
Pyrrosia confluens, rupestris
Stenochlaena palustris,
Todea barbara

Please bring along as many ferns as possible for the show.

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THE FOLLOWING ITEM APPEARED IN THE QUEENSLAND COURIER-MAIL

BREAKING NEWS

This story is from our news.com.au network

Fern find bowls botanist over

By Lloyd Jones 20oct04

A BOTANIST'S relentless search of north Queensland's rainforests has paid off with the rediscovery of a fern species that could help in the treatment of Alzheimer's disease.

On a rainy day in January this year, James Cook University researcher Ashley Field fell over in amazement when he looked up into the rainforest canopy to see the fern that was believed to be extinct.

Mr Field and his wife Holly had been systematically hunting for the blue tassel fern (*Huperzia dalhousieana*) for two years on expeditions into the rainforest lasting up to two weeks. "I knew what it was straight away," Mr Field, a PhD student in Townsville, said. "We'd been following lots of leads and came to an area where we were walking waist deep in water in pouring rain and found it. "I was ecstatic. I was wobbly at the knees, we had just about lost heart when we came across it."

Holly Field, who also has a degree in botany, said her husband fell over when he saw the fern, overwhelmed that his long search for it had finally paid off.

It would be a bit like seeing a dodo or something else that you thought was extinct, and there it is," she said. The bluish-grey epiphyte grows at the tops of rainforest trees and was last recorded 26 years ago.

It was widely believed to be extinct, with forest clearance seen as a major factor in its demise. Its rediscovery could lead to medicinal benefits.

In China, another member of the species is cultivated to extract the compound Huperzine, believed to help in the treatment of Alzheimer's disease.

Mr Field said a major pharmaceutical company had contacted him about the potential production of Huperzine from Queensland's nine rare species of tassel fern.

That potential had yet to be investigated, he said, but as a step towards that he was determined to focus his research on conserving the ferns.

In the meantime he was keeping the locality of the blue tassel ferns secret, knowing collectors would be keen to take them from the wild.

He likens the need for secrecy to that surrounding the Wollemi Pine found near Sydney 10 years ago, after only being known from the fossil record.

Wollemi Pines are due to go on sale in nurseries next year and Mr Field hopes the blue tassel fern can also be cultivated for sale in nurseries to take pressure off those in the wild.

"People do not go into the wild to try to collect them when they can buy them at the corner nursery."

Mr Field plans to study the DNA of Queensland's tassel ferns to determine their varieties and links with species overseas.

Thank you to Mary Frost for sending this article for inclusion in the newsletter.

If you find something of possible interest comes to your attention please send it in for information of our members.

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Ferns -trays to ad

TREE FERNS OF AUSTRALIA AND NEW ZEALAND

Speaker Don Fuller

July, 2004

Although there are many ferns which can develop a trunk (or caudex) with age the common term "Tree Fern" in Australia is generally applied to the ferns of two genera -

Cyathea of which there are over 600 worldwide.

Dicksonia of which there are approx. 30 worldwide

The genus Cyathea has been, and still is, the subject of discussion and debate by botanists. There has been varying proposals that Cyathea be broken up into Alsophila, Cyathea and Spharopteris. This topic is well beyond me and is well covered in the recently published book "Tree Ferns" by Large & Braggin. In Australia the general position taken is to lump together in one genus "Cyathea" with several sub-genus. Tonight we will look at slides of the Cyatheas and Dicksonias of Australia (including Lord Howe Island & Norfolk Island) and New Zealand.

	Cyathea	Dicksonia
Australia	12	3
Lord Howe Island	4	-
Norfolk Island	1 & 1ssp	-
New Zealand	5	3

The basic difference between Cyathea and Dicksonia is that

- Dicksonia group have hairs on their stipes and trunk apex. Their sori with their indusia are found at the ends of veins at the pinnule margins and the edge of the frond simply curls over to enclose it.
- Cyatheas have scales and in some cases also hairs. The sporangia are not at the edge of the pinnules but more or less central.

The identification of Tree Ferns can be difficult. To be accurate a portion of fertile frond, together with the lower 150cm of stipe from where it joins the trunk is needed. The most important characteristics are the presence or absence of spines/protuberances on the stipe bases, spore patterns, the type of scales/hairs on the stipe bases and upper trunk and apex, and the persistence or not of old fronds on the trunk and whether they fall leaving a clean scar. (This latter feature can be masked by the rate at which aerial fibrous roots grow up the trunk). The height of tree ferns can make these features difficult to see.

Tree Ferns generally have an upright habit of growth with a woody caudex or trunk. This is hard on the outside with a soft pithy centre. In most cases at least a part of the trunk is covered with masses of tough fibrous aerial roots.

1. *Cyathea australis* - Rough Tree Fern.

This fern is found on the south east coast of Australia from Tasmania to South East Queensland from sea level to 1200m. It has a massive trunk which can grow 12 - 20m high with a crown of 3m. Fronds grow 2 - 4m and are dark green above and light green below. Stipe bases are persistent with rough spines.

This fern is very hardy, able to withstand frost and full sun if given adequate moisture.

Protection from wind is necessary.

2. *Cyathea baileyana* - Wig Tree Fern.

A rare fern found in North East Queensland from approx. 850 - 1200m. The trunk can grow to a height of 4m with a diameter of approx. 10cm and a crown of 4m. Fronds are dark green above, paler below and can grow to 2 - 3m. This fern is difficult to grow as it is slow growing, frost tender, and requires shelter, shade, moisture and humidity.

A feature of this fern is the wig which develops around the trunk apex and stipe bases.

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3. *Cyathea celebica*.

This fern is found from North East Queensland to New Guinea and Indonesia. It can grow to a trunk height of 6m, a diameter of 30cm, a crown of 5m and frond length up to 5m. Fronds are dark green above and whitish green below due to a covering of hairs. A feature of this fern is the sharp long spines on the stipe.

This fern is very slow growing, frost tolerant and prefers light shade.

4. *Cyathea cooperi* Scaly tree fern / Coin Spot tree Tree Fern.

This fern is found in NSW, Qld & WA, from sea level to 1400m. It is a very large tree fern with the trunk growing to 12m, in diameter of 15cm, a crown of 2m and fronds 2 - 4m length. Fronds are dark-medium green above and pale green under.

The stipe bases do not persist and on separation leave oval scars on the trunk. However under some favourable conditions such as ample moisture the aerial roots grow very rapidly up the trunk covering the scars.

It is a very hardy fern that likes full sun to light shade and will tolerate light frost. It is very fast growing.

5. *Cyathea cunninghamii* Slender Tree Fern.

This fern is found in Australia in Tasmania, Victoria, South East Queensland & Norfolk Island. It has a very tall trunk to 20m and a diameter of 6 - 15 cm. Fronds can be 2 - 5 m in length, dark green above and light green below. Stipes persist on the upper part of the trunk.

This is a very tall, slow growing tree fern which is very sensitive to wind, direct sunlight and lack of moisture.

6. *Cyathea exilis*.

Only known from one rainforest site on the Cape York peninsula - Far North Queensland. It has a trunk that grows to 4m and 4 - 8cm in diameter. The fronds are pale green and grow to 1.5m. It grows on limestone close to water.

The stipe and rachis are brown to black brown and have blunt spines and dull brown scales.

7. *Cyathea felina*

This is a rare tree fern found only on the lowland rainforests of North East Queensland, New Guinea and Malaysia. It has a trunk that can grow to 8m and 20cm in diameter. The light green fronds can grow to 4m. The stipe and rachis are pale and warty and have pale thin scales towards the base. The stipe bases do not persist and leave a woody and scar pattern on the trunk.

8. *Cyathea leichhardtiana* Prickly Tree Fern

This fern grows from Eastern Victoria to Queensland growing from sea level to 1200m. It has a trunk that can grow to 8m high, a diameter of 10cm and a crown to 4m. The fronds grow to 2 - 3 m and are dark green above and pale green below. The stipe bases are dark brown with long sharp spines and persist on the trunk. The stipe bases and trunk apex are covered with pale straw colored scales.

This fern is slow growing, frost sensitive and must be protected from full sun and windy conditions.

9. *Cyathea marcesens* Skirted Tree Fern

This fern, which is thought to be a natural hybrid between *C. australis* and *C. cunninghamii*, is found in Tasmania and Victoria. It has a very thick trunk which can grow to a height of up to 10m. Fronds can grow to approx. 4m and are dark green above and paler below. The stipe is thick, black and warty with scales which are glossy dark brown. The dead fronds are very persistent. The spore is sterile.

This fern is slow growing and needs protection from sun, wind and drying out.

10. *Cyathea rebecca*

This fern is found in North East Queensland from sea level to 1500m. The slender woody trunk can grow to 6 - 7m with a diameter of 10cm and a crown of 5m. Fronds are shiny dark green and grow to 2 - 3m. Stipe bases are rough, warty and persist on the upper trunk. Scales are dark purple-brown.

This fern is very frost tender but will tolerate full sun.

continued next page

11. *Cyathea robertsiana*

This fern is found in North East Queensland from 500m - 1500m. The slender woody trunk can grow to 5 -7m and a diameter of 10cm, usually less. Fronds are up to 3m long and are soft mid-green on top and darker below. Stipe bases are rough, brown and separate to leave oval scars. There are a very few thin shiny brown scales. A feature of this very attractive fern is that it does not form a crown but fronds develop in a spiral.

This fern is a pioneer fern that requires a high level of sunlight and protection from frost. It must not be allowed to dry out. Damage to the growing tip by pest or abrasion is fatal.

12. *Cyathea woollsiana*

This fern is found in North East Queensland in coastal ranges to 1500m. It has a trunk to 6m high, diameter to 15cm and a crown of 4m. The fronds are shiny dark green above and paler below and grow to 2 - 5m. The trunk apex and stipe are covered with reddish brown scales. Stipes are pale brown with warts and spines and persist on the trunk.

This hardy fern will tolerate a wide range of conditions from shade to full sun light frost to heat and periods of dryness.

13. *Dicksonia antarctica* Soft Tree Fern .

This popular tree fern grows from Tasmania to South East Queensland. it has a massive trunk which can grow to a height of 10 - 15m, a diameter of 2m and a crown of 6m. The fronds are leathery dark green above and paler below. The trunk apex and stipe bases are covered with dense bright brown hairs. The stipe is short, brown and smooth.

This fern is hardy in a wide range of conditions but best in a moist position in filtered sun.

14. *Dicksonia herbertii*

This fern is found in North East Queensland in rainforests above 800m. The slender trunk grows to a height of 5m with a crown of 1.5m. Fronds are leathery, dark green and shiny above and dull below. The apex and stipes are covered with grey brown bristly hairs. Stipe bases persist on the trunk.

It is a fast growing hardy fern which does well in a moist sheltered position with protection from heavy frosts. It will tolerate high light to moderate shade.

15. *Dicksonia youngiae* Bristly Tree Fern

This fern is found in North East NSW and Queensland. It has a trunk which grows 3 -5m diameter to 20cm, with a crown to 1.5m and fronds to 3m. The upper trunk and the stipe bases are covered with coarse, stiff, reddish brown hairs which may extend up the rachis. It is very similar to *D. herbertii* but readily forms offshoots.

Growing conditions are as for *D. herbertii*.

LORD HOWE ISLAND

16. *Cyathea brevipinna*

This rare fern is endemic to the top of the mountains of Lord Howe Island. It has a trunk which can grow to approx. 3m with fronds to 3m. The stipe is brown and the scales are long glossy dark brown.

It is a small very attractive tree fern that can be grown in a cool moist sheltered position.

17. *Cyathea howeana*

This fern is only found on the upper slopes of the mountains of Lord Howe Island. It has a trunk which can grow to 8m with fronds to 2 - 3m. The stipe and rachis are dark brown and have scales and some hairs. Fronds do not persist and leave oval scars on the trunk.

It is a fast growing fern once established but needs the protection of a sheltered fernery in temperate areas.

18. *Cyathea macarthurii*

Another fern which is endemic to Lord Howe Island growing from sea level to 600m. It has a trunk that can grow to 5m with a crown of 1 m. Fronds are 1 -2m in length, dark green above and paler below. Stipes are prickly with sharp woody spines and have long brown scales. Fronds can persist but can also leave oval scars on the trunk.

A fast growing hardy fern which prefers medium to light shade but requires protection from frost.

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19. *Cyathea robusta*

This fern is endemic to Lord Howe Island, growing from sea level to 400m. It has a trunk that can grow to a height of 5m and a crown of 3m. Fronds can grow to approx. 4m and are dark - mid green above and pale green below. The stipe and rachis are glaucous and covered with long whitish scales.

This tree fern is hardy, fast growing and prefers partial shade and protection from frost.

NORFOLK ISLAND

20. *Cyathea australis* ssp. *Norfolkiensis*

This fern is confined to Norfolk Island. It resembles *C. australis* but the scales at the base of the fronds are shorter and darker.

21. *Cyathea brownii*

This very large tree fern is endemic to Norfolk Island. It has a trunk that can grow to a height of up to 20m and the fronds can grow to 3 - 5m. The stipe and rachis are brown with warty protrusions and have both pale brown and dark brown scales. The stipes are not persistent and brake off to leave oval scars.

This tree fern is fast growing and hardy. It will tolerate light frost and full sun if kept moist. However it will look best if given protection from hot sun.

NEW ZEALAND

22. *Cyathea colensoi* Creeping Tree Fern

This tree fern from New Zealand is unusual in that the trunk is usually prostrate but occasionally upright to 1 m. It occurs throughout the moist areas of the inland mountains. The fronds which can grow to 1.5m are a soft pale green with brown stipes and scales.

This fern requires a cool, moist, shady and sheltered position.

23. *Cyathea cunningharnii* Slender Tree Fern

Already covered. This is the only tree fern to be found in both Australia and New Zealand.

24. *Cyathea dealbata* Silver Tree Fern

This medium sized tree fern, which is the floral emblem of New Zealand, is found in the more open areas throughout New Zealand. The trunk can grow to 10m and the fronds to 4m. A distinguishing feature of this fern is the silvery white bloom on the underside of the fronds. The stipe and rachis are pale brown with a silvery bloom and have glossy brown scales. The fronds persist on the trunk.

Once established it will tolerate some dryness and light frost. It does best with moderate shelter and shade.

25. *Cyathea medullaris* Black Tree Fern

Another very large tree fern which is found throughout most of New Zealand and many of the Pacific Islands. It is a lowland fern (sea level to 100m.) which can grow to a height of 20m with a diameter of 20cm. The fronds can grow to 6m in length. The stipe and rachis are greenish to black, may have blunt rough protrusions and covered with dark brown - black scales. The frond bases do not persist and can leave hexagonal scar patterns. This quick growing fern is quite hardy and sun tolerant but requires some protection from frost and a sheltered position.

26. *Cyathea smithii*

This fern is the most southerly occurring tree fern being found on the Auckland Islands. It has a trunk that can grow to 8m and soft green fronds to 2.5m. The stipe and rachis are slender, pale to dark brown with pale straw coloured scales towards the stipe base and trunk apex. The mid-rib of the fronds persist on the trunk. This tree fern is frost and cold tolerant if kept moist and sheltered from hot drying winds.

27. *Dicksonia fibrosa*

This fern is endemic to New Zealand where it grows from sea level to high mountain forest. It has a stout fibrous, reddish brown trunk which can grow to 6m. The fronds, which can grow to 1-3m, are mid - dark green above, paler below and have a prickly harsh feel. They persist on the trunk and form an orange-brown skirt.

continued next page

FERN and VIREYA RHODODENDRON SHOW

Saturday 16th - Sunday 17th April 2005

Our Show in 2005 will again be a joint venture with the Australian Rhododendron Society (our 8th) and will be held on the weekend of the 16th and 17th of April 2005. Please put this date in your diary. It will again be held at the Mount Waverley Community Centre (cm. Miller Cres and Stephenson Road opposite the Mount Waverley Railway Station).

The Show will be open from 10-00am to 5-00pm on Saturday and 10-00am to 4-00pm on Sunday. The admission charge is unchanged at Adults \$4-00, Concession \$3-00, and Children under 15 free. Members of both societies who contribute to either the competition or display, plus those acting in an official capacity for the day, will be admitted free. For other members the admission charge will be the concession rate of \$3-00.

The Show is important to the Society as it provides us with the opportunity to attract new members which are so important to the Society. However as our active membership is aging and reducing in numbers the Show provides us with a significant challenge. We urgently need the help of more members, particularly those unable to attend the monthly meetings, with the setting up and the clearing up after the Show.

Other ways of assisting with the Show are -

1. Contribute to the fern competition and display
2. Grow ferns (or sell your excess ferns) for the sales bench
3. Publicise the Show

We especially request those members unable to attend the monthly meetings to come along and contribute to the fern competition and display. Advertising flyers will be available at the February meeting and will also be included with the March/April newsletter.

We will again be holding a Fern Competition and it would be great to see even more members enter the competition.

Please remember that to enter a fern you must have owned it for 6 months.

The categories are as follows,

1. Adiantum
2. Asplenium
3. Davalliaceae - restricted to Arthropteris, Davallia, Humata, Rumohra, Scyphularia.
4. Queensland Fern (inc. cultivars)
5. Polypodiaceae - Goniophlebium, Microsorium, Phlebodium, Polypodium, Pyrrosia.
6. Fern in Container 150mm or Less.
7. Any Other Fern - not covered by categories 1 - 5.

Our feature fern display will be Queensland Ferns and we would like to have a large number and variety of these ferns. The committee is most interested to hear any ideas on how we might display these ferns.

Our Show is a good opportunity to display your best and most interesting ferns so please start selecting and grooming them now. Please make sure that your ferns are free of pests and are clearly labelled with their botanical name. If you are unsure of the name you may be able to get help at our monthly meetings.

Members who enter ferns in the competition or display are able to bring in ferns for sale on a 15% commission basis. We are most interested in having some of the rarer and more unusual ferns for sale.

The members of the Show Committee are,

Jack Barrett 93753670,
Brenda Girdlestone 9390 7073, Fran and Ray Harrison 9337 7573,
Norma and John Hodges 9878 9584,
Bernadette Thomson 9399 9793,
Barry White 9740 2724,
Don Fuller (Chairman) 9306 5570.

More details in the March/April 2005 Newsletter.

Continued from previous page

The stipe is short, smooth with dense soft brown hairs near the base.

This hardy fern will grow in a wide range of conditions from high light to medium shade. It will tolerate light frosts.

28. *Dicksonia lanata*

A small generally prostrate New Zealand tree fern which forms clumps in swampy ground from sea level to approx 100m. A form with a slender upright trunk to 2m occurs in northern New Zealand. The fronds are between 75cm - 2m long. The fertile fronds are yellow green to apple green above and paler below and stand up above the rosette of sterile fronds. They are short lived and persist on the trunk. The stipe is slender, pale brown with dense hairs at the base.

The upright form is difficult to grow but the prostrate form can be grown in a shaded, sheltered, moist position.

29. *Dicksonia squarrosa*

A medium sized tree fern endemic to New Zealand. It has a slender trunk, or multiple trunks with brown hairs and it can grow to 2 - 7m. The 1-3m. long fronds are harsh to feel, dark green above but paler below. The stipe and rachis are slender, prickly rough and dark brown with dense hairs at the base. Stipe bases are almost black and persistent. This fern is very prone to produce offsets from dormant buds on the trunk and underground stolens (stoloniferous).

It is a very hardy species that will tolerate moderate frost and grow in a wide range of sheltered moist conditions. It will grow right down to the edge of salt water.

References

Australian Ferns Calder H Chaffy,

Australian Ferns & Fern Allies D L Jones & S C Clemesha.

A Handbook Of Australian & New Zealand Ferns C J Goudey.

Common Ferns & Fern Allies In New Zealand R J Chinnock.

Tree Ferns Mark F Large & John E Braggins.



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The following article is taken, with thanks to "Western Australian " Fern Society December, 2003

Pests and Diseases,

by John Banasiewicz, with participation by the members present

Diseases

Luckily major diseases are not a common problem in fern houses around Perth.

However, it should be remembered that the best disease control is prevention, and there are some basic principles to apply in this respect.

Vigorous, healthy ferns are more likely to resist disease, provided that they are fertilised on a regular basis, and that their potting mix is well drained.

Ferns preferably should be watered in the early morning to avoid plants being damp when temperatures fall in the evening.

Do not overcrowd pots - allow for air movement between the plants.

Some disease forms and their control

Moulds are caused by overcrowding, poor ventilation and watering when temperatures fall. They may be controlled by allowing more space between plants, by providing adequate ventilation, and by watering in the early morning. Moulds may be killed by use of a fungicide.

Root Rot usually results from inadequate drainage, which in turn is caused by incorrect potting mixes, earthworms, and overwatering. The problem can be controlled by repotting in a free-draining mix and by using correct watering methods.

Acid Rot occurs when plants which prefer an alkaline soil are placed in acid soil, or when an alkaline soil turns acidic. Species of *Adiantum* are particularly susceptible to acid rot. To control it, repot ferns after removal of all of the old soil. Lime may be added to maintain alkalinity.

Pests

A number of Pests were exhibited during the discussion, to enable members not familiar with these nasties to identify them.

Ferns are subject to attacks by a wide range of pests. However, this should not deter the fern enthusiast. Ferns grown in the ground or garden are less prone to pests and diseases than those grown in containers. In a fern house ferns are subject to sporadic attacks from various pests from time to time, as this is an artificial environment, and natural predators are less likely to be present. However, good management of your fern house will keep these problems to a minimum. Check your ferns on a regular basis, and if an attack occurs, assess whether manual removal would be suitable, or, alternatively, use a

pesticide suitable for curing the problem. If possible, quarantine the plants.

It is very important that you use extreme caution when handling any chemicals. Wear a hat, goggles, gloves, mask, long-sleeved shirt and long trousers when spraying. Do not spray when conditions are windy, nor should you spray during extreme heat. Cloudy conditions are preferable, and it is recommended that you spray during the early to mid morning period for best results.

Note: Pesticides containing Pyrethrum are often touted as being "biological", "organic", "safe", "natural", and even "harmless to humans". However, Pyrethrum, which is extracted from plants of the *Chrysanthemum* family, is extremely toxic to all animals and humans if it enters the bloodstream. Therefore, be particularly careful if you have any skin injuries or diseases, or if you suffer from allergies. Always wear gloves, and never inhale the spray mist. Don't use agents containing Pyrethrum near aviaries, ponds etc., or if they are likely to contact children or pets.

Some pests known to be present in fern houses in the Perth area are -

Earthworms

They break down organic materials, causing fine particles to clog up drainage holes, and aeration of the roots. Signs of infestation include a drop in the soil level, and wilting followed by death of the plant. Prevention of worm problems is aided by keeping potted ferns on benches rather than on the ground. Control is by application of Condyl's Crystals (Permanganate of Potash) at the rate of a capful to 2 litres of water, or Carbaryl.

To be continued in next issue

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Acrostichum sp. 6/04	Dryopteris affinis 'Cristata' 12/04
Adiantum concinnum 3/02	Dryopteris athamantica 12/04
Adiantum formosum 6/04	Dryopteris cycadina 4/04
Adiantum pubescens 'Rosy Ruffles' 1/03	Dryopteris dilatata 'Crispa Whiteside' 12/04
Adiantum raddianum 'Legrand Morgan' 3/03	Dryopteris erythrosora 2/04
Adiantum raddianum 'Pacific Maid' 8/02	Dryopteris erythrosora 12/04
Arachniodes aristata 12/03	Dryopteris guanchica 12/04
Arachniodes simplicior 7/03	Dryopteris gymnosora 4/02
Asplenium aethiopicum 11/04	Dryopteris sieboldii 4/02
Athyrium filix-femina 12/04	Dryopteris tokyoensis 12/04
Athyrium niponicum 'Pictum' 3/03	Dryopteris wallichiana 6/04
Athyrium otophorum 12/04	Elaphoglossum sp. 1/02
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Blechnum wattsi 5/02	Polystichum fallax 4/02
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Cheilanthes tomentosa 4/04	Polystichum proliferum 12/04
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Coniogramme intermedia 3/03	Polystichum xiphophyllum 3/04
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Deparia petersenii 12/04	Rumohra adiantiformis (Cape form) 3/03
Dicksonia antarctica 2/04	Woodwardia fimbriata 3/03
Dicksonia sellowiana /03	
Diplazium assimile 12/04	
Diplazium melanochlamys 12/04	
Doodia australis 12/04	

Thankyou to the following spore donors:
Crosby Chase, Naud Burnett and Dorothy Forte

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