

Fern Society of Victoria Inc.

NEWSLETTER



VOLUME 3 NUMBER 7 AUGUST, 1981

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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.*

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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.

2004 Calendar of Monthly Events

Thursday the 18th March, 2004

A night of Pteris Ferns: With Don Fuller.

This is sure to be informative and fun night with loads of useful information parting hands so be apart of this night.

Don asks anyone coming to the night please bring your Pteris Fern with you as his ferns have suffered with the moving.

Competition Fern:- Pteris

April 2004 No meeting

There will be no meeting as normal as it would have fallen on the Thursday before the show so come along to the show on the weekend and meet up with our members who attend, this gives everyone a good opportunity to attend and talk to our members about the ferns on display.

The 2004 Fern and Vireya Rhododendron Show
will be at the Mount Waverley Community Centre
on April 17th and 18th.

More information can be found on page 23

May 20th Meeting

Will be a night of fern identification, so if you have a fern growing in your shade house that your not quite sure what it is then make it a date to attend this meeting.

FRONT COVER:

The front cover of this issue was used from August, 1981 to October, 1983. It was at this time the cover was changed to green and has remained ever since.

\mathcal{RFX} [illegible]

ADIANTUM (MAIDENHAIR) FERNS

Speaker Chris Goudey

Most of the books that can be picked up on maidenhair ferns, will tell you that there are about 200 species in the genus and are distributed worldwide throughout the pan Tropics (warmer regions), with some species spreading to the cooler regions. Tryon and Tryon's book~ (1982) *Ferns & Allied plants, with Special Reference to tropical America*, is a very comprehensive treatise of ferns of tropical America and they treat maidenhairs very well in this publication. They estimate that there are about 150 species. Approximately, ten or eleven occur in Australia, one third of the genus occurring in tropical America and the next largest distribution occurs in China. Of our Australian species, *Adiantum capillus-veneris* is the only one distributed worldwide.

Tryon. and Tryon, split them into eight different groups, which are, as follows:-

1. **Adiantum Group** - A group of about twenty-five species which includes *Adiantum aethiopicum*, *A. formosum*, *A. concinnum*, *A. venustum* and others. They are up to four times pinnate, segments are usually cuneate-flabellate (fan-shaped)
2. **Adiantum Patens - Group** - A group of about ten species which includes *Adiantum diaphanum*, *A. pedatum*, *A. patens*. They are up to three times pinnate.
3. **Adiantum philippense Group** - A. group of about ten species which includes *Adiantum caudatum*, *A. philippense* and *A. edgeworthii*. They have very long fronds and usually terminate on the end with a little bud that takes root and grows into a plant. They are not seen in Victoria as they are all tropical.
4. **Adiantum reniforme Group** - A group of three species which includes *Adiantum reniforme*, *A. asarifolium*, plus one other species. They all have a simple frond which are, entire.
5. **Adiantum pectinatum Group** - A group of about twelve species which includes *Adiantum formosum*, *A. fulvum*, *A. hispidulum*, *A. trapeziforme*. They are species we are familiar with here and are three to six times pinnate.
6. **Adiantum tetraphyllum Group** - A group of about twenty species, which includes *Adiantum tetraphyllum* and *A. petiolatum*. Except for one, all these species are found in tropical South America.
7. **Adiantum Group** - A group of six species which includes *Adiantum anceps*, *A. seemannii* and *A. peruvianum* (Silver Dollar). They are one to four times pinnate and are all large-leaf species.
8. **Adiantum phyllitidis Group** - A group of about ten species which includes *Adiantum patens*, and *A. macrophyllum*. They have simple fronds.

Most maidenhair ferns are terrestrial and a majority of them like lime, particularly the *Adiantum raddianum* and *A. capillus-veneris* groups that must have lime. Without it they will be very difficult to grow. They grow in damp usually fairly well-lit positions not so much in rainforest, but on the margins of rainforests, where there is a lower rainfall and more light. Ninety-nine percent of maidenhair ferns are terrestrial, one was seen in Papua New Guinea growing like an epiphyte up a trunk of a tree fern.

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As for cultivation, they need a well-drained, open soil with the addition of lime, good drainage and very good light. We grow our maidenhair ferns with a lot of light which makes them a little yellow in colour, but a stronger plant for the nursery trade. They like a draught-free position with humidity.

Pests that attack them are green or black aphids that are plentiful in the warmer months, mealy bug or woolly aphids, snails, slugs and also scale. Where there are an abundance of ants, there, will usually be an infestation of aphids or scale on your plants.

If your ferns are getting particularly untidy, has a lot of rot in the middle or diseased, cut it back and you get nice new growth. The new growth will initially come up more compact as it absorbs the nutrients stored up in the roots, but eventually it will end up at the desired height. This can be done at most times of the year, except in the middle of winter with the exception of tropical species or cultivars in our cool temperate climate.

Unfortunately, a lot of people let their ferns dry out, then they water to the extreme and drown them. When the foliage dies off, a lot of the roots die too and it becomes a grossly over-potted plant. These plants benefit most times by being potted back to a small-size pot. A nursery, potting mix is a basic mix of pine-bark, coarse sand with fertilisers and lime added to it. Maidenhair ferns can survive much better from neglect if a compost mix is used.



In the nursery during the winter months, we can leave the watering for up to ten days but in summer the watering is done almost every day depending on the type of house they are in. The 175mm (7") and 255mm (10") pots are watered by a drip-system, and the 125mm (5") pots and our personal collection are hand-watered.

There, are a lot of hybrids in cultivation, probably more than there are species. In my book, I treat nearly one hundred of them, as they hybridise very easily. Over the years, we have grown many different maidenhair ferns, and found different hybrids popping up in our fern nursery just by chance.

Two that came up in the nursery were from the *Adiantum raddianum* group. My wife, Lorraine was watering the ferns one day and noticed a *A. fragrans* plant with an unusual frond amongst them, The plant was set aside until it sent up a fertile frond and the spore from this reproduced true, and we soon had hundreds of plants. This cultivar was new and I named it *A. raddianum* cv. *Lorraine*.

The other one my mother (Gladys) found. She often came and dug up all the maidenhair ferns that came up on the nursery benches, took them home and potted them up for family and friends. One day, I was visiting her and asked where she had got this unusual maidenhair fern from, and told me it had come from our nursery. Again, it was a new cultivar and I named it *A. raddianum* cv. *Gladys*, Glory after her. To experiment with hybridising, pick the cultivars you want to cross and sow one cultivar over the other one. We had a lot of success using this method with Aspleniums.

There were not many specialist books on this subject, when my book *Maidenhair Ferns in cultivation* was written. The only literature available was Barbara Joe Hoshizaki's papers (1970) *The Genus Adiantum in Cultivation*, and they had a wealth of information in them, covering the species, cultivars and cultivation in the United States of America. It took me two years of research to Prepare my book.

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FERN AND VIREYA RHODODENDRON SHOW 2004

Saturday 17th April - Sunday 18th April

By the time you receive this newsletter the Show will only be 4-5 weeks away so I hope that you have selected and started to groom your ferns for the show. Please make a special effort to contribute to both the display and competition.

A reminder of the Fern Competition categories (full details in the Jan/Feb newsletter).

- Cat.1. **ADIANTUM**
 2. **ASPLENIUM**
 3. **DAVALLIACEAE** (restricted)
 4. **A NEW ZEALAND FERN**
 5. **POLYPODIACEAE** (restricted)
 6. **FERN IN CONTAINER 150mm OR LESS**
 7. **ANY OTHER FERN** (not covered by Categories 1-5)

Category 6 is especially provided for members who do not, or can not, have larger ferns.

ALL MEMBERS ARE URGED TO ENTER THIS CATEGORY.

Our feature display will be NEW ZEALAND FERNS and we are aiming to display as larger range as possible. A list of these will be made available if required.

If you wish to contribute to the show but have a problem getting your ferns there please talk to any member of the Show Committee (listed in the last newsletter). Please ensure that your ferns are free of pests, correctly labelled and have some form of personal identification as this will help ensure that your ferns are returned to you.

We will commence setting up for the show on **Friday 16th April at approximately 11 -00am** and should be in a position to start accepting ferns for the competition, display and sales by 1 -00pm. If you are only able to bring in ferns after 6-00pm, or early Saturday morning, please contact Don Fuller (9354 2656). We need the participation of a large number of members to make the Show function effectively, so please let the Show Committee members know **when you can help**. We need people to staff the door, sales area and display area stewards.

We especially need people to help with the setting up on Friday and the packing up after the Show on Sunday.

Another area where we need assistance is with transport of our props needed to stage the Show. If you have a normal trailer, or are able to tow a hire trailer, and are available on the Friday and Sunday, please contact Don Fuller (9354-2656).

Those wishing to sell ferns are reminded that they must contribute to the competition/display and that you must obtain a "booking form" from Bernadette Thomson (93991587) or myself. We also need a number of cardboard boxes suitable for fern sales. If you can help please bring them along.

The Fern Show is a great social occasion as well as an important activity of our Society, so please give it your full support. Please publicise the Show where ever possible and Fern Show flyers are included with this newsletter for this purpose. Perhaps you can arrange for them to be displayed at such places as garden centres, libraries and community notice boards. If you belong to a garden club please promote it there. We would especially like to see those members unable to attend our regular meetings so come along and participate.

Hoping to see you all at the Show
 Don Fuller

For more information turn to page 25

Continued from page 22

My goal was to record the origin as far as I could of the Australian cultivars before this information was lost, new cultivars have since been developed. I could not have completed this book without the assistance given to me by Barbara Joe Hoshizaki.

Chris then showed slides that he had brought along to the meeting, what a display they made! Thank you Chris for this in depth talk on probably the most grown of all ferns. I am sure we will see the benefit of his talk in the coming months.

Competition winners

February: Norma Hodges

- 1st. *Athyrium filix—femina*
Barry White
2nd *Diplazium dilatatum*
Barry White
3rd *Diplazium assymile*
Barry White

Raffle winners

Fran Harrison
Brenda Girdlestone
Margaret Radley
Judy White

Apology In the last issue of the newsletter in the member profile for Chris Goudey I stated that he located a new species of *Asplenium*, a Malayan fern which was named *Asplenium gaudeyi* this was infact incorrect. It should have read:- Chris located a Malayan fern *Asplenium pellucidum* growing in North Queensland.

In more recent times Chris recognised a new species of Bird's nest fern growing on Lord Howe Island which David Jones then named it *Asplenium gaudeyi* after Chris.

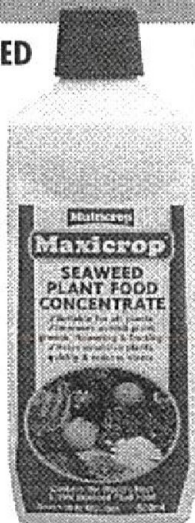
My apology to Chris and my thanks for bringing it to my attention



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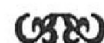


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For full list and photos; www.fernacres.com.au also; www.ferns.com.au

PREPARING YOUR FERNS FOR THE SHOW

The show

The importance of the Fern show to the Society. As this is a combined Show with the Rhododendron Society our costs are The door admissions refreshments and door raffles which go towards our joint expenses which are for the publicity and the hiring of the venue, our aim is to get enough people through the door to cover these costs which we generally do. We rely on the commission from the fern sales to cover the expenses which are directly related to the show that we put on, that comes into the fern competition and the staging of equipment and hiring of vehicles, hopefully with a profit at the end of the show. As the show is a vital part of our activity we the members of the show committee put the challenge to all our members, each member contribute the best that they can to the show we have been seeking new contributors by way of display and sales The show requires the best effort of our members to make the show the success that we know it can be.

How can we all help firstly one part of the display is the competition please try to contribute to at least a couple of the sections

Our second section is the general display if you don't think your ferns are good enough for the competition they probably are good enough for the display we are after being able to display the common ferns as well as the more unusual ferns

Third area is fern sales what has been happening over the last few years is the number of people contributing to the fern sales has been dropping off to now being 4 or 5 people so those that have surplus ferns think about putting them up for sale we are happy for members to come in with three or four ferns for sale you don't need to come in with 50 If you need some assistance in identification or pricing then you need only to ask and the help will be forthcoming.

Publicity we need to publicise the show to help us to pay our way we do need to get more people through the doors.

Things to do to prepare your ferns for the show:-

The same general principals apply to the fern whether it is entered into the display or the competition This is the ideal time to clean up each plant pick up each pot check for slugs or pests remove all dead or broken fronds remove weeds then top up the pots with potting mix put in some fertiliser and in the case of hanging baskets, they will generally improve with a soak in a tub of water and maxicrop

What are the judging requirements:-

Mary Frost is our Fern Judge, she is person who judges competitions nationally, the three main points she looks for when judging are:-

1. **The container** no matter whether it is wooden, plastic or tree fern it must be clean. Plastic pots can be cleaned with soapy water, allowed to dry then rub with baby oil. Putting a dirty or ugly pot inside a good one is a no no, this is not permitted.
2. **Potting mix** if its visible it must be clean no weeds, algae, mosses, or snail pellets and no roots protruding the bottom of the pots.
3. **Plant must be clean** with no diseases or broken fronds (including no dead, dying or damage fronds), take particular notice of the centre making sure no dead fronds are hiding there.

Other equally important points are

New growth ferns should be showing signs of new growth

Centred Ferns should be centrally positioned

Visual balance planting container should have balance (not over or under potted)

Shape all plants should be circular in shape unless habit dictates otherwise, fronds should be even and not leaning to one side as this indicates poor growing conditions or not enough light

Label plants should be labelled with a very neat and clear lettering unobtrusively placed and orientated so its easier to read (do not use a nursery label). In the case of hanging ferns the labels can be attached to the hanger if desired.

Davellias must be checked for dead ends on the rhizomes this happens when they run down around a basket and hang down and eventually die, cut them back to a healthy shoot.

Elks and stags should have not other plants mosses etc growing behind them when possible all signs of how they are attached to a slab or tree fern should be hidden.

One fern per pot

This may seem to be complicated, but put the first few years down to a learning experience. Each time you enter you gain more information and experience, and soon that will pay off by claiming a prize for your fern.

GROWING XEROPHYTIC FERNS

Martin Grantham

I have a special fondness for ferns. They are masters of form and foliage. Morphologists have questioned the relationship between the fronds of ferns and the leaves of flowering plants (hence the parallel terminology of stipe/frond and petiole/leaf). But if fronds are not leaves, then leaves have been outdone! The range of color and form is spectacular. The elegant combination of black lacquer stipes with new blades of flamingo pink found in the tropical *Adiantum macrophyllum*, or the fiery iridescence of the temperate *Doodia aspera*, hacksaw fern, approach the excesses of flowering plants. Form varies from the frothy, impressionistic *Adiantum raddianum* 'Gracillimum,' with ultra-fine dissection, through the bold integrity of *Asplenium nidus*, the birds-nest fern to the modernist asymmetries of *Platycterium*, the genus of staghorn ferns.

Ferns have greater potential for horticultural use and grow in a wider range of situations than most gardeners would believe. Many exceptional ferns "put to the test" have shown can perform well in difficult garden situations. *Blechnum penna-marina* has been a successful edging plant and ground cover, tolerating occasional foot traffic and producing mats thick enough to inhibit weeds. Some, like *Microlepia platyphylla*, have shown a tolerance for the heavy root competition of large trees. Others, like *Mildella intramarginalis*, can perform beautifully in dry shade. Still others, like the elegant *Aleuritopteris argentea*, are perfectly content growing between the stones of a vertical face of a rock wall.

BREAKING THE STEREOTYPES

Especially intriguing among ferns are those from drier environments, the ferns called variously rock, desert,

or xerophytic ferns (for their habitat) or cheilantoid ferns (for an appearance like, or relationship to the genus *Cheilanthes*, the lip ferns). These names refer to several related genera in the family Pteridaceae, a family containing the wet-growing maidenhair ferns as well. The xerophytic ferns have representatives widely distributed over the globe, but are particularly diverse in the American Southwest and Mexico. Upon learning of these ferns I thought: Why do they bother? Don't flowering plants do much better at this sort of thing? These ferns do show only a limited range of adaptations for dry habitats. None, for instance, have developed succulence in any of their parts. The rhizome is generally thin and wiry, with no capacity to store water, although it may contain more sophisticated water-conducting cells or even vessels as in flowering plants. The roots remain, as in most ferns, delicate threads laid down by a single meristemetic apical cell.

It is the aerial portions of these ferns that show many adaptations characteristic of plants suited to dry habitats. In *Pellaea* the fronds may be finely dissected, with small leaflets, or pinnules, as in *P. mucronata* and a few others. This reduces heating in bright sun, but also gives these tough ferns a delicate appearance. The leaflets are of heavy substance with a waxy cuticle and strongly recurved margins designed to conserve water and protect developing sporangia. *Notholaena* shows heavy wax production on the underside of the fronds, thus reducing transpiration and adding a striking chalky-white or yellow coloration beneath. *Cheilanthes* and *Astrolepis* are masters of pelage, or hairiness; protective hairs (one cell in width) or scales (more than one cell in width) may cover all portions of the fronds, giving them a silvery or tawney appearance. The scales on the underside of the fronds may be a different colour from those above, yielding contrasts between silver and cinnamon or chocolate. Young fronds lose greater amounts of water and are more vulnerable to damage during dry periods; many xerophytic ferns avoid this problem by entering a heat-induced summer dormancy. Some xerophytic ferns, like *Mildella intramarginalis* are desiccation tolerant, with a special physiology allowing for survival during extremely dry periods. At such times the fronds of *Midella* curl up tightly as they dry, their fresh green color turning to a dull olive. They appear to pass the permanent wilting point, beyond which foliage cannot be revived. But in this case, if water becomes available in a reasonable length of time, fronds that appear lifeless may revive completely over two or three days.

the bush house nursery
wholesale and retail

Visitors welcome

Lorraine Deppeler
Phone (03) 5565 1665
18 Hermitage Drive,
Allansford 3277



MEMBER PROFILE:

Keith Hutchison

By Mirini Lang and Brenda Girdlestone

Keith was raised in Rosanna with his parents, after leaving school he completed his apprenticeship in Carpentry and Joinery, and had a good Government job. He then moved to another job dealing mainly with shop fittings, but after only one month he suffered with bad health which the Doctors put down to the dust, although he loved his work it was with regret that he needed to find other employment, for the benefit of his health. With no jobs on offer he enrolled at Burnley Horticulture College and completed his diploma in Horticulture, after which he very quickly realised that this industry was closed to outsiders as the nurseries were mostly being run by family and their members.

It didn't take Keith long to realise that if he wanted to work in this industry he would need to start up his own nursery, so with the help of his Father, and scepticism from some family members they located a block of land in Rosanna which his Dad bought for him, and that was the start of a business which was to flourish and continue for the next 30 years. At this time Rosanna was considered by the suppliers to be the back blocks of nowhere. No deliveries were made to Keith. His only way of getting supplies was to use his Ute to go to the suppliers and collect his stock. This made for some very long days as Keith would leave home at 6.00am and need to be back at the nursery to open up at 9.00am. After working all day he would then need to do any deliveries after he closed the nursery for the night. This struggle went on for two years and at times believed he would have to close up the nursery. Things did improve one day when a Representative from a company wandered into the nursery and unexpectedly found that he and Keith knew each other. After Keith telling this rep about the problems of deliveries he suggested to Keith that he go talk to his competitor Dave Geddis who ran a nursery/florist in Heidelberg, (it was said you could trust Dave with your soul).

Keith took up the challenge and approached Dave. This was a turning point for Keith. Arrangements were soon in place for all of Keith's deliveries to be dropped off at Dave's, where Keith could drive a short distance to collect them. This quickly relieved some of the pressure of the long days.

Keith built up a good friendship with Dave that has stood the test of time. Dave had a great influence on Keith. He not only showed him where to buy the best quality of plants but also modelled treating customers with integrity, which Keith also strived to do. Keith tells the story of when he was visiting Dave one day. Dave served a lady who gave him a 10 pound note. When change was given back to her she claimed that she had given him a 20 pound note. Dave opened the till with an apology and gave her a 10 pound note. After she left the shop Keith said to Dave that she really did only give him a 10 pound note. Dave opened the till and showed Keith that he did not have any 20 pound notes, but said, "She is a regular customer and if I had opened the till to show her that she was wrong she would have been embarrassed and would never have returned."

At this time in the nursery trade they were being supplied with a few Maidenhair Ferns. When time permitted, Keith would go into the bush and study the ferns that were growing in the wild. When a friend, Ian Buckmaster, told Keith of the starting up of the Fern Society of Victoria in 1979 he thought it would be a way of learning more about ferns and gaining the information required to pass onto his customers. They went to the first meeting together in August 1979 where Keith was nominated on to the Committee. An editor was called for and as Keith was doing a newsletter for his local church, he became Co-Editor of the fern society newsletter. He had a team of ladies typing the newsletter for him. He photocopied the newsletter in a shop selling photocopiers. It was time consuming but the cost was just a few dollars donation into their staff fund. In July 1981 the newsletter was sent out to Judy Bielicki's executive services for printing. In the August edition, Judy suggested that the front cover be changed from white to green which was done and it has remained the same ever since.

As newsletter editor Keith contacted some of the overseas fern societies requesting copies of their newsletters and for permission to republish any articles that they printed.

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Continued previous page

Keith served on the committee for many years and over that time held the position of:

Editor from 1979 until 1985.

He was also Vice President from 1979 till 1985.

He then served as President from 1985 till 1988.

In 1990's Keith was made a life member of the Society.

While Keith was running the nursery he did some propagating from spore and had some success with Tree Ferns, Pteris Ferns and Maidenhairs Ferns. Due to ill health Keith sold the nursery in 1984. He stayed on for one month to assist the new owners, but his interest was still with plants. He has continued to propagate and grow plants and still has around 2000 plants, although he is trying to reduce the numbers and workload.

Keith's interest over the years has turned to the sterile ferns which he still loves to talk about.

He says a lot of his knowledge he has learned by talking to people like Chris Goudey, and going on the fern trips where other members like Doug Thomas, Ellie,

Barry Staggoll, would impart their knowledge, on overnight trips there would be nightly discussions on what they had seen and where they had been during the day.

Betty Duncan was a frequent member on these trips armed with her magnifying glass around her neck she would always be willing to reveal the hiding spots of the local fauna as well as the ferns.

Keith was a constant member on these trips and they took him to some far away places. Some of the places he has been with the Society and trips that he has undergone himself include The Otways, Dandenong ranges, Marysville, Tarra Bulga National Park in Gippsland, Tasmania, New Zealand, New Guinea, Fiji, Samoa and Lord Howe Island.

One of his most memorable trips was to Tasmania which he fondly remembers.

Keith has spent decades in the horticulture industry and has been an active member of the Fern Society fulfilling a number of rolls on the committee. He is now a life member. He continues to share his love of ferns with us.

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Table 1.

Effect on water penetration and runoff of wetting agents applied to a water-repellent sand. The sand was treated with the wetting agents at the rate of 5 mL/m². Water was applied at a rate of 2.5 L/0.1 m² plot for 10 minutes (a total of 25 mm). (From McGhie, D.A. and Tipping PI Proc. Natl. Soils Conf. Aust. Soc. Soil Sci., Brisbane, 1984).

Treatment	Time to runoff (min)	Runoff volume (mL)	Depth of penetration (mm)
Water only	0.45	1342	3.1
Aquasoil wetter*	9.30	2.5	20
Wetta Soil	no runoff	nil	25
Aquagro	2.30	720	8
Terrawet 100	1.15	1205	15
Pro Am	1.00	1513	2
Nonion C04	1.15	1377	5
Gardiquat	1.00	1197	2
Detergent (domestic)	1.00	1123	5

* Manufactured by W.A. Chemical Manufacturers Pty Ltd, Perth, Western Australia.

Manufactured by Wetta Chem Products, Bunbury, Western Australia.

Aquasoil Wetter and Wetta Soil have been shown by Australian research to be outstandingly effective, but other recently developed products may be as good.

Unfortunately I have no record of the source of this information.

COLLECTORS CORNER: Since taking over as editor I have had the opportunity of looking through the old newsletters that were passed onto me from Lyn Gresham, having been going through them I realise that there is a lot of history of the society in them. The society does not have a copy of the newsletters which I believe that there should be a copy held by the society for any members who wish to take the time and opportunity to peruse them, they would need to be bound in away they could be lent out without getting lost.

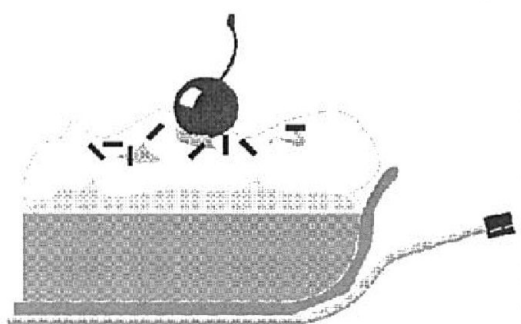
This is our only source of history of the society and it is valuable information compiled over 25 years it would be a shame to loose it So before it gets to late, we need to locate and obtain the newsletters for prosperity.

How do we get these newsletters : existing members who have an extra copy
: existing members who no longer require them
: previous members who no longer require them

If you know anyone in the above category could you please let me know on 9390 7073.

25th SILVER ANNIVERSARY CELEBRATION

Sunday the 20th June, 2004.



As this is our 25th anniversary of the Fern Society of Victoria it is proposed to celebrate with an afternoon tea. The intended venue for this is still awaiting confirmation but it is proposed that it will be held at the North Blackburn Bowls Club located on Springfield Rd, Nth Blackburn. The venue will be confirmed for the next newsletter.

This will be funded by the society so we will need numbers of attendances, there will be invitations sent out to those members who have left the society in recent years but those members who receive the newsletter will be required to respond to the next newsletter as confirmation of numbers will be required for catering purposes.

We will have a guest speaker for the occasion who is always very interesting and it is anticipated that this time will be no exception.

In the next newsletter there will be further information and a contact number to place your name on the attendance list.



TASSEL FERNS - LYCOPODIUMS - HUPERZIAS

by Ron Robbins

Whatever we know these ferns as, they are a remarkable and attractive species, one of the fern allies, as we know them, dating back to the carboniferous age of approximately 350 million years plus.

There was no documentation on these ferns then and I'm afraid not much more today, references are very limited on this subject, one finds that most information today results from word of mouth, hand downs, the propagators, or from inquisitive people prepared to delve into the complexities that mother nature has bestowed upon us. Basically, I feel that this perhaps has stifled the interest in this unique group of ferns.

Tassel ferns are epiphytic, grown on trees and in platycerium pads, or as a lithophyte on rocks, totally independent and not parasitic. They can in nature grow to be very large and pendulous, becoming an object of beauty seen in its natural habitat, this being usually in rainforest locations.

They are becoming increasingly rare in Australia, probably overseas as well, caused mainly by logging in rainforest areas, man's greed to obtain and profit by them, regulations that make it virtually impossible to collect from their natural habitat, therefore making us reliant on the dwindling number of propagators of today, to own one.

As previously mentioned, tassel ferns are epiphytic or lithophytic, and according to literature they are seldom, if ever, grown from spore, this therefore raises a big question. Years ago colonies of these ferns were found in different areas some distances from each other, so if, as we are told, that they do not germinate from spore, the question being raised is how do these colonies form, is it from natural propagation, i.e. from spores that are shed and settle on a suitable surface, or are they transported by castings, or are the fertile spikes eaten and deposited, both by birds? Interesting.

Contrary to what has been documented in publications by various authors, regarding propagation from spore being nigh on impossible,

I have been told by "old time" growers that they can, so who or what do we believe, what we read or what someone knows to be fact.

The terminology for tassel ferns differs slightly from other species they have leaves, stems, and strobilus or tassel, and quite often referred to as plants. On the lighter side a grower once referred to them "as sticks with leaves"!

Reading references from our books tell us that we can propagate from cuttings, here is where controversy and misinformation is belied, the interpretation by a layman would be the selection of what appears to be an appropriate stem, such as taken from a fuchsia or similar, cutting off the required piece and planting the same in his own potting mix hopefully to take root, and eventually potting on. This is what I would interpret a layman would assume as a procedure for the removal of a cutting. If we do as I have described, what one would eventually get is a stem or tip in a pot that appeared to be growing. In actual fact one would have a stem that did not make roots, but a stem that was slowly developing ajellified gunk at its base and very slowly dying.

A procedure that does give results is where we can take a "cutting" or an appropriate section of the stem that terminates with stroboli or tassels, laying it horizontally on a propagating mixture or coarse sand, after a period of time this may produce lateral growths that eventually become separate plantlets. It must be emphasized however, that experienced propagators can tell which stem and when they can be layered, at times one will find that small plantlets will grow on tassel ends. These can be treated as above, eventually taking root and forming new ferns.

Another method of stem propagation is technique whereby taking an apical section that has turned at an angle likened to a bent elbow", and having a minute root, this can be pegged to the surface, and given time could take root and become another fern, if this happens I would suggest one leaves it to become self supporting from parent plant prior to potting on.

continued next page

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Tassel ferns will not survive in soil they must be grown in a coarse well-drained epiphyte mix that at the same time retains moisture. This coarse mix will ensure that the fine roots of this fern have a free run allowing them to cling to the surfaces of the open mix thus giving enough aeration around their roots for successful growing.

Materials for the mix could be from tree fern fibre - chunky pine bark - charcoal - styrene foam - elk peat - peat moss - all suitable, to be mixed to your individual requirements.

These ferns can be tolerant of heat, cold (but not frosts), damp and dry conditions, therefore making them a quite versatile fern for the enthusiast. They evidently can survive the temperature range of 3' - 38' Celsius, but a crucial aspect in growing these ferns appears to be air circulation, this is a must. Too much water can cause root rot to develop, also a dying off at the base of the stems, therefore one must calculate the amount of moisture that they require to simulate their natural requirements and conditions.

Fertilizing appears to be essential, it would seem that an ideal frequency could be every two to three weeks during their growing period, but not during their dormancy, through the winter.

Tassel ferns as a group have simple leaves termed microphylls, which may be born in whorls, or in a spiral pattern on the stem. The sporangia are modified and consist of a simple shaped sac, which contain the spores, all of which are a single type.

Each sporangium is borne singularly and is subtended by a special leaf termed sporophyll. The sporophylls may be borne on non-specialized parts of a stem, or grouped in cones or tassels, called stroboli. These may be simple or dichotomously branched. Roots can be of interest also, as they descend through the cortex of the stem for some distance before emerging.

Controversy is rampant, due to growers with whom I have made contact, being adamant that their potting mix is the best one to use. I have found that what suits conditions in one area, does not suit the climatic conditions of another, therefore trial and error until you find the best mix that suits your requirements and climatic conditions.

All of this may appear to some to be one hell of a drag, why bother, but at least we can try to gain some satisfaction in the creative side of things, be it a recipe, dress design, or another way of growing vegetables. We can only persevere to achieve what we believe in.

We owe it to ourselves to succeed in our efforts to propagate ferns, particularly tassels, because once the rainforests and natural habitats of this fern are denuded, hopefully never, by man or nature, no more tassels or epiphytes. Then it will be too late. I sincerely hope this article is self-explanatory enough to induce someone somewhere to receive the same sense of achievement that I have experienced by coming into contact with this special fern.

QUOTES ~of Gardens and Gardening

Collected by David Gunston

The Gardener's Prayer: Lord, grant that in some way it may rain every day, say from about midnight until three O'clock in the morning, but you see, it must be gentle and warm so that it can soak in ...

Grant that at the same time it would not rain on campion, alyssum, helianthemum, lavender, and the others which 'You in Your infinite wisdom know are drought-loving plants - I will write their names on a bit of paper if you like...

And grant that the sun may shine the whole day long, but not everywhere (not, for instance, on spiraea, or on gentian, plantain lily, and rhododendron), and not too much...

That there may be plenty of dew and little wind, enough worms, no plant-lice and snails, no mildew, and that once a week thin liquid manure may fall from heaven.
Amen.

NEWSLETTER

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