



S.G.A.P. Fern Study Group

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LEADER:

SECRETARY: Moreen Woollett, 3 Currawang Plce, Como West
2266

HON TREASURER: Margaret Olde, 138 Fowler Rd., Illawong. 2234

SPORE BANK: Jenny Thompson 2A Albion Place, Engadine 2233

Dear Members,

Group Leader retires - Wanted a Leader.

Phyll Brown has resigned from the position of Leader of the Fern Study Group.

This Newsletter has been prepared by a number of Sydney members with advice and support from Phyll pending the emergence of someone willing to accept the position as Group Leader. Any member interested and willing to consider nominating as Leader is earnestly requested to contact Barbara Daly, Group Study Coordinator, 8 Russell Cr. Cook. A.C.T. 2814. If you require more information about the position do not heistate to contact our Group Secretary Moreen Woollett on (02) 5284881.

Phyll has been a popular Leader since taking over from Molly Murray towards the end of 1983. Phyll is a practical grower of ferns who successfully raises large numbers from spore. Her collection of ferns is a legend among members and it covers almost the entire outdoor area of the front, side and back yards surrounding her Sydney suburban cottage. Inside the house are many potted ferns.

During the period of her leadership of the Group, Phyll with the assistance of her late husband, was largely responsible for organising and arranging fern sales at the Regional Wildflower Exhibitions and for the displays of ferns that were invariably one of the features of the Exhibitions.

Phyll has toured extensively in her camper van and there would be few ferny localities in all of Eastern Australia that she hasn't explored. Fern collectors and nursery persons in the Eastern States know Phyll as a frequent visitor.

A keen supporter of the development of the Shade Area at the Burrendong Arboretum, Phyll has been associated with the establishment of more than 90 different species of ferns there. The collection is maintained partly due to the significant financial support and voluntary labour input of the Fern Study Group, many of the working bees having been led by Phyll.

Thank you Phyll for the time and effort which you have contributed during your period as Leader.

AUSTRALIAN FERNS.

Article by Lyn Millington originally published by SGAF Newcastle Group.

Ferns go back many millions of years, well before development of seed plants. The Lycopods which are classed as fern allies, in some instances were large and tree-like. This group formed an important element of our coal deposits. The seed plants began to increase in large numbers and the ferns then became a less important part of the vegetation except in tropical and subtropical forests.

We still find about the same number of species in existence numbering more than 9,000 species in the world but are now not as widespread as was the case 100 to 200 million years ago.

The ferns still reproduce much the same as those early ferns did in the Carboniferous period with some, still retaining more primitive sporangia ie the structure that contains the spore that the ferns reproduce from.

STRUCTURE.

Ferns are green non-seed bearing plants. The stem or rhizome which bears fronds can be short-creeping, medium-creeping, long-creeping or erect and tufted. Rhizomes may also climb and frequently grow underground. Some ferns are terrestrial others epiphytic or may grow on rocks. (Lithophytes.)

The visible part of the fern that is seen consists of the leaves or fronds. The characteristic part of the fern is seen in the new fronds which is a useful field guide in identification of ferns. New fronds are tightly coiled and are called crozier or fiddlehead and as they mature slowly unroll.

On the undersurface or sometimes on the edges of the fronds are found yellow or round dots or lines. These are called sporangia or spore-sacs and contain powder-like spores which once released from the spore-sac eventually produce new ferns.

HABITAT.

Ferns are generally found growing in wet or damp places such as creek beds and interiors of forests needing water for part of their reproductive phase of their life cycle.

Most prefer shade rather than in exposed parts but there are a few of the more hardy species that can withstand the sun and some dryness.

Australian ferns are mostly found on the coastal fringes being more prolific in the damp Rainforests of Queensland.

CULTIVATION.

Ferns are easy to grow provided a few requirements are followed, such as a cool root system and enough water during hot dry periods and shade provided and protection from wind.

IN THE GROUND.

Choose an area which provides shade and some shelter with protection in the summer from midday and afternoon sun and the hot winds of the summer.

An open porous soil with a heavy mulch around the ferns to keep roots cool and reduce evaporation is generally acceptable. Ferns being shallow rooting plants and with

most of the root system being found near the soil surface this mulch stops the soil surface from drying out and also provides nutrients for these feeder roots as the mulch breaks down. Light sandy soils can be used but needs to be regularly mulched and kept well watered.

Ferns can be ideal subjects for wet patches or soakage areas in the garden, providing the soil water is moving. Ferns don't like stagnant conditions, preferring a situation where there is adequate drainage and the water can move freely through the soil.

Some ferns found growing in deep wet gullies or in rain forests that are of the more tender variety can be more difficult to grow than those found in open forests. Ferns with vigorous creeping rhizomes can be a nuisance and may tend to take over the garden.

Maintenance required is minimal apart from watering, pruning and addition of some fertiliser such as blood and bone or a suitable liquid fertiliser and addition of mulch from time to time e.g. bark, peatmoss, compost of leaf-mould. When watering your fern garden it is better to give a good soaking rather than short frequent sprinklings.

IN CONTAINERS .

When growing ferns in containers the medium should be open and well drained, contain plenty of organic material with nutrients added for healthy growth.

The pot should be just large enough to contain the roots with soil packed firmly around them. When potting on to a larger size apply the same rule. More attention is needed with watering of ferns in containers particularly during the summer months.

When potting epiphytic ferns or those found on rocks a much coarser, well drained mixture should be used eg. pine bark, tree-fern fibre, charcoal, leafmould, coarse gravel and some peatmoss. Some epiphytic ferns grow better on slabs.

The use of hanging baskets or pots are ideal to display some ferns. A useful guide to follow when choosing the right container is that for bulky upright species pots are more suitable, while pendulous species look better in baskets or on slabs.

Some ferns suitable for Hanging Baskets.

Pyrosia spp.
Davallia spp.
Microsorium diversifolium
Microsorium scandens
Schelopezis subauriculata
Asplenium aethiopicum
Asplenium falcatum (polyodon)

INDOORS.

When growing ferns indoors they should be placed where there is adequate light but not direct sunlight. Bathrooms or near skylights are ideal. Care should be taken when heaters are used particularly with the ducted system as this creates dry air. Adequate water should be applied in these conditions. Placing ferns outside in light rain occasionally helps to wash off dust and refreshes the plants.

Some ferns suitable for growing indoors.

Nephrolepis cordifolia
Asplenium nidus
Asplenium bulbiferum
Adiantum aethiopicum
Pteris umbrosa
Doodia aspera
Doodia caudata
Scheloplepis subauriculata

Tree Fern Skirts: A Defence against Climbers and Large Epiphytes.

(Extracts from article by C.N. Page and P.J. Brownsey
Published in the "Journal of Ecology, 1986.)

The natural retention of old, dying and dead fronds as a fringing, pendulous 'skirt' just below the crown is characteristic of many tree-ferns. Skirts are a feature of species in both main tree-fern families, Dicksoniaceae and Cyatheaceae, and vary in form from a thin fringe to a thick layer of many fronds, and from decaying stipes and rachides to entire dead fronds. The integrity of the skirt is maintained by the continuous addition of new dead fronds on the outside that replace the slowly decaying older ones next to the trunk. In some species, skirts persist throughout the life of the plant, but in others they are present only when the tree-fern is young and are shed when the plant becomes taller and often emergent.

Tree-ferns differ from most dicotyledonous trees in having their sensitive growing points confined to a small area at the apex of the trunk. In this they resemble cycads and such arborescent monocotyledons as Cordyline (Agavaceae) and many palms, although those taxa generally have much tougher leaves. Dicotyledonous trees, on the other hand, have their growing points spread over a large area, and if damage through smothering by climbers is sustained in one part of the tree, it is not necessarily fatal to the whole. Tree-ferns not only have their young fronds (croziers) confined to one area, but tend to produce them synchronously, at which stage they are particularly delicate. At this time especially, tree-ferns are peculiarly vulnerable to physical damage in the region of their crowns.

Our observations both in the field and in cultivation demonstrate that tree-ferns can tolerate a wide variety of epiphytes and climbers dwelling on their trunks, but that when conditions conspire to enable climbers to enter the crown, substantial damage and probably ultimate death of the tree-fern is likely to follow. Any adaptations preventing climbers from entering the crown are likely to confer a significant advantage on tree-fern species growing in any vegetation type in which climbers are abundant. The presence of a skirt of dead fronds, having a 'lobster-pot' effect upon climbers, seems to be one particularly effective device for keeping the tree-fern crowns free from this type of invasion.

So far as we are aware, no biological significance has ever been attributed to these tree-fern skirts. We suggest that they may be advantageous in protecting the tree-fern crown from invasion by climbing plants which could damage the uncurling fronds, and in preventing the establishment of large epiphytes on the trunk. The ideas expressed here are derived from ten years of observations of individual tree-ferns in cultivation at Edinburgh Botanic Garden, and of several native species mainly in New Zealand. Although based on only a tiny fraction of the world's tree-ferns, these observations are put forward in the hope that they may stimulate further investigation of the architecture of these plants.

Such architectural features are not only of ecological importance, but a greater awareness of them may provide a useful background towards the cultivation and conservation of these handsome as well as sometimes rare and local ferns.

(We are indebted to our member John Seebeck of Heidelberg, Victoria, for supplying a copy of the article by C.N. Page and P.J. Brownsey of Royal Botanic Garden, Edinburgh and National Museum of New Zealand, Wellington. John wonders if anyone has considered this issue in Australian species as it would be simple enough to do and might prove to be a quite valuable contribution. John suggests that a study of Cyathea marcescens, C. australis and C. cunninghamii would be interesting)

A Problem in Identification - Cyathea cooperi.

Some of our Sydney members of the older type have been heard to remark that they are not willing to try to identify filmy ferns and they mention arthritis and say that they are really interested in ferns that are above knee height. However, it seems that some of the larger ferns in our gardens are among the hardest to identify and even though the identification of these may be less taxing on our joints the recognition of some of the distinguishing features of even large tree ferns places quite a strain on old eyes.

Often of particular concern is the positive identification of Cyathea cooperi and Cyathea brownii and to those who have pondered this matter the following extracts from "The Cyatheaceae of Australia" by Mary Tindale, M.Sc. in contributions from the N.S.W. National Herbarium Vol 12 No. 4, may be helpful.

CYATHEA cooperi

Key to species:-

Mature fronds 2-pinnate-pinnatifid to 3-pinnate-pinnatifid. (If 2-pinnate-pinnatifid the secondary pinnae dissected more than halfway to the costa (a rib, used especially of the midrib or mid-vein of pinna or pinnule). Costules (midvein of a pinnule or segment) branched pinnately throughout their length, the branchlets not parallel to the costule. Sori indusiate.

Indusium of the mature sori incomplete, composed either of a basal persistent (evergreen) hemispherical scale subtending the sorus, or of long appressed (lying flat), silky strands or scales surrounding or partly surrounding the sorus.

Lower surface of the pinnae and costa clothed with scales and occasionally also with a few stellate (star shape) or unbranched hairs.

"Indusium" of the mature sori composed of long, silky strands and - or dendriform or substellate scales.

Lower surface of the secondary rachises fawn, yellow-brown, light stramineous (straw like, straw colored) or brown covered with numerous obtuse (blunt, rounded at the apex) protuberances, the squamules (broad papery scales) not visible without a lens. Scales of the bases of the stipes of two types, i.e. broad, white or pale stramineous paleae (chaffy scale) and narrower, dark red scales. Old bases of the stipes not persistent on the caudex (tree fern trunk).

The differences between Cyathea cooperi and Cyathea brownii.

Cyathea cooperi occurs on mainland Australia in Queensland and New South Wales.

Cyathea brownii appears to be confined to Norfolk Island.

Cyathea brownii is a larger, more robust tree-fern than Cyathea cooperi.

Both are characterised by trunks covered with oval scars left by the deciduous bases of the stipes, also by two types of scales on the bases of the stipes. Cyathea brownii - larger scales light brown. Cyathea cooperi larger scales dull white. Cyathea brownii - smaller red-brown scales have stronger, more closely spaced bristles.

In Cyathea brownii the scales of the costules (midvein of pinnule) are more mealy than in C. cooperi, the dark red star shaped scales being matted together with weaker transparent or almost colorless aubstellate chaffy scale.

The fronds of C. brownii are more thickly coriaceous (leathery) than those of C. cooperi, so that the minor veinlets are less noticeable. The spores of C. cooperi are more papillose (warty) than those of C. brownii.

FERNS AND FERN ALLIES OF THE UPPER YARRA VALLEY AND DANDENONG RANGES.

Our attention has been drawn to a booklet published under the above title by the Department of Conservation of Forests and Lands and the National Herbarium of Victoria.

The booklet is well illustrated and presents a guide to the identification of the ferns and fern allies of the hilly region north-east of Melbourne. It contains a section describing a means of distinguishing different types of ferns and fern allies from each other using a simple key which narrows the possibilities down to a few genera and a more complex key which allows identification to the level of individual species. Among other information, notes on cultivation are included.

Although specifically dealing with ferns and fern allies of the area near Melbourne, the booklet would be of interest to the keen observer of native ferns generally in South Eastern Australia. The booklet may be obtained from Department of Conservation of Forests and Lands, 240-250 Victoria Parade, East Melbourne, Victoria 3002 for \$8.95 per copy plus postage weight 213 gm.

LETTER CARDS FOR "FERNIES".

Following publication of the book "Ferns and Allied Plants of Victoria, Tasmania and South Australia", by Betty Duncan and Golda Isaac (reported in our December, 1986 Newsletter) letter cards have been made from the two water colours painted by Celia Rosser for the dust jacket.

Card and envelope together weigh less than 20gm so are suitable for Airmail. They are retailing in several outlets at 80 cents to \$1.05 each and are reportedly selling well, as plain cards of taste and quality are hard to find.

Arrangements have been made with SGAP Book Service for sale of cards to our members in packets of 6 cards (3 of each design). Orders may be placed with Margaret Baker, P.O. Box 104, Winmalee 2777 (Phone 047 541196.)

REPORT ON SYDNEY MEETING 14th December, 1986.

Our final function in 1986 was held at the house of Tess and Les Taylor in Blacktown. A total of 23 members attended and thanks are extended to our hosts for their hospitality.

The day included an inspection of the Taylor's many interesting and some rare Australian native plants including of course their extensive collection of ferns. Adiantum aethiopicum covered a large area near the front of the property while the fern house situated at the side of the house was floor to ceiling chock-a-block full of ferns. Lunathyrium japonicum proliferated and young Asplenium australasicum were popping up in many places. The only criticism heard was of the vegetable patch which did show obvious signs of neglect. Two outstanding specimens in the Taylor fern collection that were much admired were a large Drynaria rigidula and a Davallia pyxidata with its hares foot rhizome tightly entwined and layer on layer.

A short meeting was held at which Phyll Brown advised members of her decision to relinquish her position as Leader thus introducing the only sad note on what was a very happy occasion. The opportunity was taken to wish Phyll a fond farewell from the position of Group Leader and to thank her for the effort she has expended for the Group's welfare. We were pleased to have Phyll's assurance that she intends to continue to take an active interest in the Group's activities.

PROGRAMME - SYDNEY AREA.

Sunday 29th March, 1987.

Visit to a ferny area in the Watagan State Forest located south west of Newcastle. Meet at 9.30am at the home of Bea and Roy Duncan 167 Freemans Drive, Morisset; then by convoy to location. Travelling from Sydney by car should take approximately one and a quarter hours drive from toll gates at Berowra. Follow Freemans Drive past the two caravan parks, over a bridge, No. 167 is the second drive way on the left. Bring own lunch and afternoon tea. Any enquiries phone (049) 77 1482.

Carry a light lunch as it is proposed to eat away from where our cars will be parked.

For those planning to stay in the area over-night there are two caravan-parks in the vicinity. The Duncans have offered to allow anyone bringing own van to park on their property.

Meeting: SUNDAY 26th April, 1987.

To be held at the home of Betty & Eric Rymer, 48 Annangrove Road, Kenthurst. The study section which will be on the genus Arthropteris will be led by Peter Hind. Bring lunch and a plate for afternoon tea. Meet from 10am, meeting to commence at 11 sharp. Any enquiries for directions phone the Rymers 6541831.

Outing: SUNDAY, 24th May, 1987.

A visit to Fairy Falls, North Lawson. If travelling from Sydney on Great Western Highway turn right and cross bridge over railway just before Lawson Station (San Jose Ave). After crossing railway turn left, then first right and then first left leads directly to Picnic Area just opposite Fairy Falls. Meet in Picnic Area at 10am.

Meeting: Sunday 21st June, 1987.

To be held at the home of Rosa Bach, 33 Third Ave., Epping (cnr. Audine Ave.) Peter Hind will lead the study section which will be on the family Athryriaceae. Meet from 10am, meeting to commence at 11am sharp. Bring lunch and afternoon tea. Any enquiries for directions, phone Rosa, 8691692.

Report on Meeting 15th February, 1987.

Twenty members attended the first of our 1987 gatherings held at Phyll Brown's home in Condell Park. Prior to and after the meeting, members inspected Phyll's large fern collection and her propagation section where there was a large number of various varieties of ferns being raised from spore. Thank you Phyll for allowing us to visit and your hospitality in general.

During the meeting on behalf of all members, Margaret Olde gave Phyll a small gift and expressed appreciation for her years as Study Group Leader during which she made numerous visits to members and District Groups and was instrumental in raising considerable sums for projects supported by our Group.

All present were delighted that Peter Hind had agreed to offer to be the new leader of our Group and it was resolved to write to the Study Group Co-Ordinator and seek approval of Peter's nomination.

A part of the meeting was devoted to the study of Arachniodes and how it differs from Dryopteris and Polystichum species. Les Taylor conducted the session and used sample ferns to illustrate various features.

Les indicated that there are two Arachniodes, A. aristata and A. aristata var. variegata and showed us the two ferns. The name Arachniodes was derived from "arachnid" meaning spider, apparently a reference to the cobweb-like covering of long filamentous hairs. Arista means own or bearded, referring in this fern to the fine hair-like point at the end of each pinnule.

According to Les, Dryopteris sparsa is now regarded as the sole Australian member of that genus so members would seldom have the problem of separating it from Arachniodes in the field. Arachniodes have harsh green fronds and sharp toothed pinnules. Lastreopsis have species which are generally similar but unlike Arachniodes, all of these have rhachis ridges which are continuous with the leaf margins thickened. Some Polystichum species have somewhat similar characteristics to Arachniodes notably the margins of the pinnules and the ven pattern. Certain Polystichum species have gemmiferous buds but these are not present in Arachniodes or Dryopteris.

In Arachniodes the basal acroscopic (i.e. pointing towards the apex) pinnule of the middle pinnae is much closer to the main rhachis than the basal basisopic (i.e. pointing towards the base) pinnule than in Dryopteris and Polystichum.

Finally while examination of this feature in the field may damage one's finger nails if not suitably equipped, the rhizome in Arachniodes is usually long creeping whereas Arachniodes is usually long creeping whereas the rhizomes in Dryopteris and Polystichum are short and erect.

In introducing the study Les told us of his discussions with Ray Best on this subject. Ray had supplied Les with information which introduced another conundrum, are we correct in applying the name Arachniodes to this fern. Extracts from material prepared by Ray follow.

"The Code of Nomenclature!"
"The Law of Nomenclature."

contributed by Ray Best.

In the case of a new name being given to a fern a search of past titles must be conducted to determine previous names in order to decide on a Basynym or its original botanical title, if such exists. (Generally a recorded specimen)

If after establishing this basic title it is found to be in the wrong group or genus then it is possible to change the name. But the original botanists name must be placed immediately after the title in brackets followed by the name of the botanist making the change. Otherwise the basic name if correct must remain as is.

TO INSTANCE OUR FERN CONCERNED.

ARACHNIDES ARISTATA (FORST) TINDALE.
POLYSTICHOPSIS ARISTATA (FORST) HOLTTUM

From the above it can be seen that both Tindale and Holttum have accepted the Basynym of Forster. Other titles given to this fern are:

POLYPODIUM ARISTATUM	FOSTER	1786
POLYSTICHUM ARISTATUM	PRESL.	1836
LASTREA ARISTATA	MOORE	1858
DRYOPTERIS ARISTATA	O.KUNTZE	1891

According to Holttum the correct name is Polystichopsis aristata. Writing about Polystichopsis Holttum has stated:

This is a rather unsatisfactory genus, distinct from both Polystichum and Dryopteris only in its leaf architecture (relation of basal leaflets of pinnae to rachis). It contains some species of tough texture with spiny leaflets like Poly-stichum and some thinner with no stiff teeth, as in Dryopteris; the indusia are reniforme as in Dryopteris. Polystichopsis always has broad fronds of more or less triangular outline, thus differing from the narrow fronds of Polystichum, and never bears buds on the rachis. Most species occur in the Himalayan China region, few in Malaysia.

After this distinct description he states - Quote:-

"Ching proposed to unite this genus with Rumohra, using the name Rumohra for the combined genus. Copeland in 1947 follows Ching in this, the type species of Rumohra is however very different, closely similar to Davallia in most characters except its indusium and in my opinion more nearly related to Davallia than to Dryopteris. I would therefore maintain Rumohra as a distinct species, and the name Polystichopsis is accordingly here adopted for the Dryopteroid ferns included in Rumohra by Ching." End of Quote

Polystichopsis aristata (Forst) Holtt. from which the variegated variety has developed was called in Australia Arachnoides aristata (Forst)Tindale. Recorded as an Australian native species. The variegated variety has been known as Arachnoides aristata variegata or Polystichum

aristatum variegatum.

Holttum considers it to be halfway between a Polystichum and a Dryopteris hence the title Polystichopsis, which I have chosen to use. Tryon & Tryon in their latest work use only POLYSTICHOPSIS as a subfamily of Dryopteridaceae of about 50 species three of them in Tropical America.

HAVE WE A NEW LEADER?

Since commencing preparation of this Newsletter and as indicated elsewhere, Peter Hind has agreed to his name being put forward as Leader of the Fern Study Group. Peter is The Botanical Assistant at the National Herbarium, Sydney and would already be well known to many members. Appointment of course requires approval of the Group Study Co-ordinator who has recently been approached in this regard. We are probably not being presumptuous in anticipating that Peter's nomination will be accepted. Accordingly we take this opportunity to thank Peter and congratulate him as our new leader.

A number of members who also belong to the Sutherland Group of S.G.A.P. have agreed to provide administrative support to Peter in the preparation of Newsletters but it is confidently expected that future issues will be under Peter's direction.

SPORE BANK CURATOR.

Members were previously advised that Sylvia Carlick who has been in charge of the Spore Bank of a number of years is moving from Sydney to Western Australia.

The Spore Bank Curator is now Jenny Thompson and Jenny's name and address appear for the first time at the beginning of this Newsletter. Thank you Jenny for agreeing to undertake what at times can be a rather onerous task.

Subscriptions Reminder.

Subscriptions for 1987 are now due. If you have already renewed your subscription please disregard this reminder. If your subscriptions have not been received by the end of May, 1987, we will assume you no longer wish to remain a member of the Fern Study Group.

S.E. Q'LD NOTES.

Irene Cullen.

Programme. Excursion - Scrub Rd. Crossing of Enoggera Crk. Sunday 29th March - Meet 9am at Brisbane Forest Park Headquarters, Mt. Nebo Rd. In case of heavy rain ring Peter Bostock(2026983) before 8am. Alternative venue. Moggill State Forest - meet Peter Bostock residence, 59 Limosa St., Bellbournie.

Study - Sunday 24th May, 9.30am at Pat and Harvey Shaw's residence - Subject the genera Davallia, Rumohra and Pyrrosia.

February Study report.

A group of eighteen including study members and visitors met at Rod Pattison's fernery for the study of the genus Rlechnum and to view Rod's extensive collection of ferns including his extensive collection of Drynaria cultivars. As with our previous studies, we were amazed to find the wide diversity of a single species. This in the B. cartilaginum we looked at. A problem common to all growers was the disfiguring blackening of fronds, caused by leaf nematode.

Lindseas for Burrendong.

Our group has organised a collection of the Lindseas of S.E. Q'ld for planting at Burrendong. Russell and I hope to deliver them next month. The collection will include Lindsea ensifolia var ensifolia, L. ensifolia ssp agatii and L. fraseri. A full list next news letter. Sylvia Peach and Peter Bostock are completing the collection.

RED CARPET.

A warm welcome is extended to the following new members:



Newsletter reference was made to the Simpson as Curator of our Spore Bank.

enny's task a little easier and more donating spore,

ted and location le including species possible after collection ore viability.

l only spore and not the fronds ve the spore.

on is uncertain provide as much including location if collected a sterile as well as a fertile frond

nk are quite low and members are ore to build up the bank. The le; when spore is ripe (usually nd from plant and place in a large d keep in a warm dry place. After ee if the spore has been shed if so r instructions above. Never feel mon", to collect the spore from them. verseas eager to add our Australian collections.

ne List of Spore for the next

le Woods, Ray Best and Phyll Brown t in.

DEADLINE FOR NEWSLETTER

We would welcome articles from our members for our newsletter. If you have hints or have been a successful fern grower and propagator, share your knowledge with us by sending your ideas and methods, or you may have been on an outing to a fern glade that would be of interest. Any inquiries connected with the next issue can be made to the Secretary 'phone 5284881.

Deadline for the copy for the June Newsletter is 15th May, 1987.

PLATYCERIUM SUPERBUM

