

S.G.A.P. - Fern Study Group - Newsletter

Registered for postage as a publication Category "B"

ISSUE: NO. 12

DATE:

MARCH, 1981.

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John Lee has been asked about the availability of earlier Newsletters. He would like to advise, that he has condensed copies of Newsletters 1 to 8 and separate copies of Newsletters 9, 10, and 11. If you have lost, or did not receive back copies when joining the Group, John invites you to write to him at the above address.

ERRATUM: Page four (4) of Newsletter eleven, December 1980, carried an article by Elizabeth Baxter in which she described a method of propagating spore. In Item No.2, the quantity of household bleach used as a sterilising agent, should have read TEN PER CENT and not ONE PER CENT as printed. My apologies to Elizabeth and to any member who may have tried this method without success.

A revised Edition of "AUSTRALIAN FERNS AND FERN ALLIES" by D.L. Jones and S.C. Clemesha is now available. Retailing at \$19.95 it may be purchased at S.G.A.P. Regional Meetings for \$15.00, or mailed for \$15.00 plus postage. In this revised edition the nomenclature of Australian Ferns has been updated to the level of accuracy existing at the time of printing. The distribution of species has been amended where necessary, a few drawings have been modified for greater accuracy and FORTY SEVEN NEW SPECIES OF FERNS HAVE BEEN ADDED. A disappointment for first edition owners is that the original colour plates are repeated. Two minor criticisms are, that illustrations are not always close to the descriptive text and that page headings, for speedy location of species, have been deleted. Australian Ferns and Fern Allies is a book most likely to stimulate a keen interest in Native Ferns and a better understanding of their diverse characteristics.

KARL NOSSEK OF BORONIA, VICTORIA is very pleased to report that ten out of thirteen varieties of native spore obtained from the Spore Bank germinated and yielded from one to twenty plants each, all have grown on quite well to a height of one to two inches.

BRENTON NICHOLSON OF TEA TREE GULLY S.A. reports that his own attempts at spore propagation have not been very successful. Brenton continues, "maybe my failures would be of interest to other members. Some packets of spore contained large quantities of fertile material. When sown on a five inch pot of sterilised sand and peat, the prothallus were very crowded and tended to die off, the whole lot then went mouldy and fungicides had no effect. The "TRICK" thus appears to be - not to sow too much spore on a given area. I also tried adding a little osmocote to some mixes, however algae grew very quickly and no prothallus appeared, I suspect that sterilising with boiling water released all the osmocote at once. I tried osmocote in a seed mix for native plants, but this

broke down quickly in the hot summer sun and results were not good - what seedlings came up turned brown and quickly died. I tried nutrient agar with a few fern species and was surprised to find that it dried out rapidly with disastrous results for the prothallus, this drying was no doubt accelerated by my young son, who, thinking they were toys threw them around the yard!! Best germination has occurred with spore sparingly sown on a sterilised mixture of washed brick-layers sand and peat (approximately 2 : 1). However there is still a long way to go before I come up with plants. Adelaide summers are not very kind to ferns, the wind seems to do the most damage and it is difficult to keep the humidity up. A large number of spore grown plants are now available here, they tend to be small and relatively tender and need a lot of encouragement to adjust to shadehouse conditions, fortunately they are reasonably cheap. Good specimens of CYATHEA LEICHHARDTIANA, CUNNINGHAMII, ROBERTSIANA and AUSTRALIS are also available. I have planted CYATHEA COOPERI in shaded parts of the garden; with frequent watering these are growing well. My mouth waters to see in the Newsletters that people are getting self sown ferns in their gardens. Although I have had a few PTERIS TREMULA germinate and grow well in hanging baskets, the dryness of Adelaide's climate makes germination of spore in the open, difficult. Because of my young son I do not like to use Baysol snail or slug bait, with the results that snails and slugs become a problem as they like to eat the centre out of new ferns. By the way, earwigs are one of the more unusual pests, they cause damage to ferns by eating the young croziers."

The following paragraph suggests a way for Brenton to contain one of the insects that dine on his ferns. It is taken from an article titled "DEALING WITH PESTS" BY ROGER ELLIOT and was published in February's edition of "YOUR GARDEN" our thanks to the author and to that magazine.

EARWIGS: These creatures are well known for their nocturnal activities. Damage is done to young growth tips, especially in young plants. They also have a healthy appetite for flowers. Earwigs like to gather under suitable objects during the day, and one effective method of control is to place crumpled paper in the area of infestation, leaving it there overnight. The next morning, the paper can be collected and burnt, together with the contents. Lime and naphthalene flakes can help to control Earwigs, and are used in breeding areas. Stomach poisons as used for caterpillars are also effective.

PHYLL and VIV BROWN OF CONDELL PARK SYDNEY wrote:- "We thought members would be interested to know of some of the nurseries we visited during our tour of Victoria and South Australia. On the first night of our journey having the owners permission, we camped on private property by a creek at Carboor, south of Wangaratta. This was a beautiful area containing many different ferns including BLECHNUM FLUVIATILE. The highlight of our trip and a real treat, was to visit "NORMA'S FERNERY" at Carboor; as there were so many ferns to see and buy, we decided to make our purchases on the return journey, it was here that Viv bought my birthday present, a lovely basket of DRYNARIA RIGIDULA C.V. WHITEI. Near Mt. Gambier in South Australia, at the "BLUE LAKE NURSERY," we chose some PTERIS ferns from a good selection. Arriving in Adelaide we did quite a bit of travelling and can recommend the following nurseries which are in and about the City:- WONDERLAND GARDEN CENTRE 39 Moules Road, ROSTREVOR, THE FERN HUT 26 Paringa Avenue, SOMERTON, CELLAR FERNS Main Road, CLAREDON. Some of the ferns that we bought were exotics, but the majority were natives such as PYRROSIA DIELSII and LASTREOPSIS GRAYI. Altogether we returned home with more than one hundred ferns to add to our collection.

ROSE WALTERS, our only member in QUEANBEYAN sends us this message. I haven't been in touch with the Group for some time and sometimes haven't received Newsletters. I was burnt out of my home last year 17th & 18th December(1979) and the going has been pretty tough, as I am on a pension and now have an overdraft, it is difficult to meet all contingencies. I have rebuilt, but, my ferns, rhododendrons, azaleas and roses were all burnt and destroyed by demolition. I am slowly building up a section shaded with old sarlon cloth. Doesn't look bad either - and is a boon when the heat and humidity get one down. I have built up my garden areas - flower beds, veg. garden, even outside on the nature strip side and front, to 12" on a clay base, (heritage of the fire) as I couldn't get rid of it - I went to the tip and brought home old timber to sheer up sides, and then used paper, lucerne hay, manure, ordinary hay, more manure with blood and bone interspersed and am now up to top dressing with sand and compost. Things are growing like mad, even with no rain to speak of! I used the site of my former above ground swim pool to make compost all the winter, whilst the house was being rebuilt. It paid off too, as I am getting results with organic vegetables. I will get into ferns later when time permits. It is necessary at this stage to get the necessities on the go. Have to re-do all concrete paths as I don't fancy slippery clay for our 8 months of autumn and winter. Enjoy the Newsletter, loved the bit about John Blakeman "OLD TIMERS" and old Archie. Best wishes for this, the New Year of 81..... Rose Walters.

JOHN YOUNG OF BUNDABERG. QUEENSLAND reports that of thirty-nine varieties of spore planted on and within a few days of December, 16th 1980., twenty-two were showing good development of prothallus by February, 1981., he notes that older spore; CYATHEA DEALBATA JAN'79, BLECHNUM WATSII and B. GREGSONII JUNE, '79 and even DICKSONIA YOUNGIAE APRIL, 1980,. show little prothallus development. This information supports the general idea of sowing spore as soon as possible after collection.

LYNN HADDOW OF BEECHWORTH VICTORIA writes that she has small plants an inch high from all spore sent to her, with the exception of BLECHNUM GREGSONII which failed to germinate. Lynn goes on, "I have them in a wardian case on a stand in my bush house, before they go out into individual pots. A few days ago a goanna about 1½ feet long, found his way in and was walking around, across the tops of the pots catching insects, I left him alone and he did no damage! These past few months I've been madly growing trees, Eucalypts and Rainforest trees, 3,000 so far; I plan to grow a closed forest on our sixty acres in which I will then find places for ferns."

DURING 1980 HENRY APPELBAUM OF BROOKLYN NEW YORK wrote to S.G.A.P. asking for a TMESIPTERIS plant, he needed this to complete a tissue culture research project at the City University of New York; his letter was passed on to the Fern Study Group and the requested specimen was collected and despatched by Gerry and George Parker who obtained the necessary permission and quarantine papers to do so.

ALSO DURING 1980 we were pleased to meet fellow members from Country and Interstate. In October - Pat and Don McTavish from Tamworth N.S.W. who were in Sydney to visit their daughter. In December - Wendy and Michael Garret from Berriedale Tasmania who where here holidaying with family.

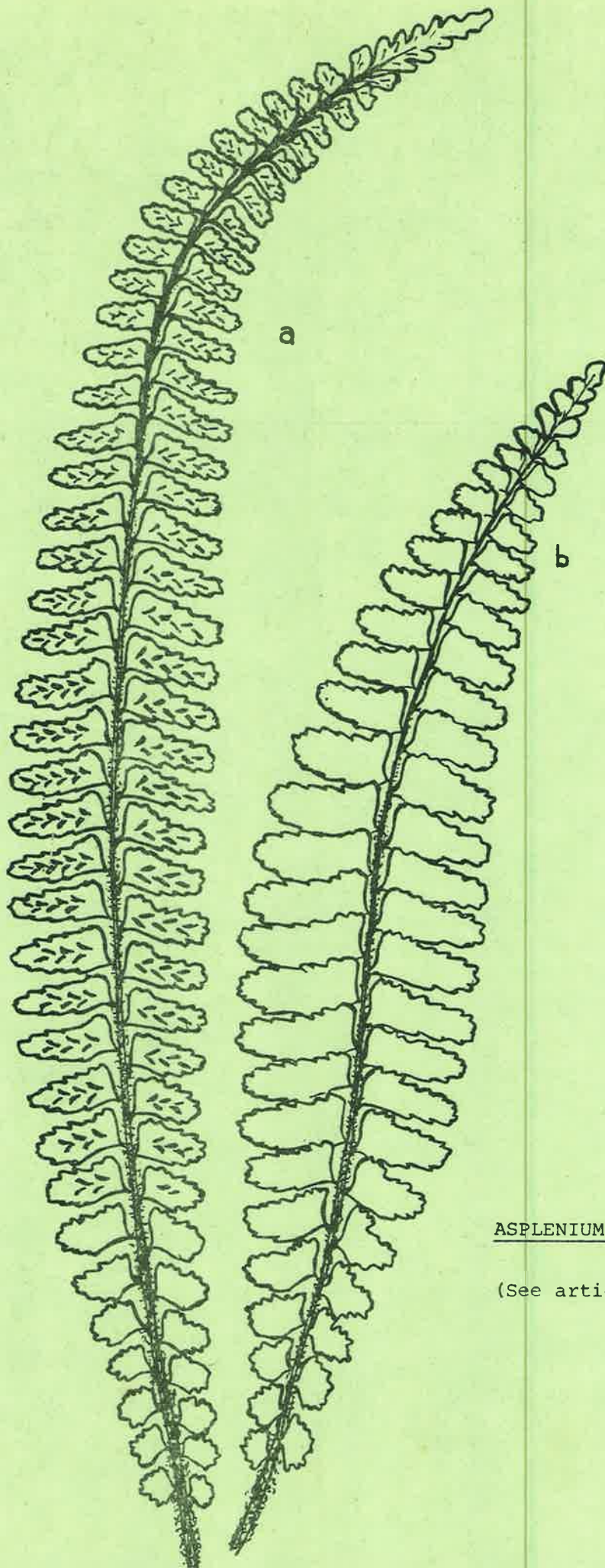
DO STUDY GROUPS STUDY?

At an informal meeting in November, Peter Olde queried the Title given to S.G.A.P. Groups, he noted that few members have academic training or suitable equipment with which to pursue inspection of material. I was pleasantly relieved to find that others wondered about this and must confess that at times I am haunted by the spectre of Jeanette Closs waiting expectantly in Tasmania for a Report from our group. If one takes a few of the many interpretations of the word "STUDY" from the dictionary; such as "DEVOTION OF TIME AND THOUGHT TO ACQUIRING INFORMATION" - "TAKING PAINS TO INVESTIGATE OR ACQUIRE KNOWLEDGE OF (SUBJECT)", and particularly "SCRUTINIZE OR EARNESTLY CONTEMPLATE (VISIBLE OBJECT)" then we do qualify as students, for, we visit areas where ferns grow, to observe their needs, we exchange notes on how and where we grow ferns and the industrious report on their ventures into spore propagation. If members continue to share with us any details that they consider of interest, I'm sure that we can compile a report for our Study Group Coordinator.

Growing in the ground in one of my ferneries I have three BLECHNUM PATERSONII plants, two have simple fronds and one is lobed. During two years growth the plants with simple fronds have more than tripled their size and could be divided many times, whereas the plant with lobed fronds remains obviously tufted and singular. Is this the usual difference between the growth pattern in the two forms?

BURRENDONG ABORETUM:

We returned to the Rainforest area for further planting and weeding on Saturday 14th March and we were pleased to see how well the ferns planted in November had survived the hot summer. They had noticeably matured, bore no evidence of insect damage and were a good healthy colour, such as one would expect to see under greenhouse conditions. A local Swamp Wallaby has taken a great fancy to a clump of MARSILEA DRUMMONDI which he regularly savours, pruning the plant quite severely, Peter Althofer is considering ways of changing the wallabys address! We planted in excess of three hundred ferns, most of which were again donated by Keith Ingram; George Sonter kindly donated a box of DOODIA CAUDATAS and Mrs. Leckie of Frenchs Forest made a cash donation with which we bought a DICKSONIA ANTARCTICA, several BLECHNUMS and a PELLAEA FALCATA. Other donations included six CYATHEA COOPERI and six KENTIA PALMS. Mostly we are planting into a meagre amount of light dusty soil, using picks to get under the abundant shale, we then mulch with leaves, empty seed pods and whatever else is available. Garden worms are already working in sections thus treated in November. To improve the soil over a maximum area, we have spread ferns such as LUNATHYRIUM JAPONICUM into sections from which they can be removed as more interesting ferns come to hand. We need a quantity of BLECHNUMS, any species, but particularly CARTILAGINEUM, WATTSII or INDICUM to enhance the entrance to the Gully - we also need PTERIS UMBROSA; every plant counts in trying to create a Rainforest environment over this sizeable expanse. If you have a fern to donate please ring 6381084. Travelling members would be most welcome to call at the Arboretum Nursery with plants and / or spend a day or so weeding etc. on the site. The nearby Caravan Park offers excellent accommodation, an average of two hundred (200) people are shown through the area each week. It is envisaged that later, some of the less common ferns can be introduced; DRYNARIA RIGIDULA has adapted well, with several plants thriving on rocks; a small clump of BLECHNUM PENNA-MARINA is spreading slowly and on Saturday we planted one STENOCHLAENA PALUSTRIS which will be watched with interest. A weekend bus trip to Burrendong will be arranged for this spring, in conjunction with one of the District Groups, details will be in our June Newsletter.



ASPLENIUM PELLUCIDUM Lam.

(See article)

SPORE BANK REPORT:

by Gwen Hardwick.

Listed below is the current Spore in the Bank. Thankyou for all the donations received, it helps to keep the Bank viable.

Please send a self addressed envelope with your request.

ACROSTICHUM	SPECIOSUM	(6/80)	HYPOLEPSIS	AUSTRALIS	(1/81)
ADIANTUM	FORMOSUM	(7/80)	LASTREOPSIS	ACCUMINATA	(12/80)
ASPLENIUM	NIDUS	(10/80)	"	DECOMPOSITA	(7/80)
"	BULBIFERIUM	(12/80)	"	HISPIDA	(4/80)
BLECHNUM	CARTILAGINEUM	(5/80)	"	MARGINANS	(4/80)
"	FLUVIATILE	(4/80)	"	NEPHRODIODES	(7/80)
"	NUDUM	(10/80)	"	(LORD HOWE ISLAND)	
"	PROCERUM	(4/80)	"	SMITHIANA	(7/80)
"	VULCANICUM	(7/80)	MACROTHELYPTERIS	TORRESIANA	(4/80)
BOLBITIS	QUANYANA	(3/81)	MICROLEPIA	SPELUNCAE	(2/81)
CHEILANTHES	DISTANS	(4/80)	PELLAEA	FALCATA	(1/81)
CRISTELLA	DENTATA	(4/80)	"	VIRIDIS	(4/80)
CYATHEA	BROWNII	(4/80)	"	VITTATA	(1/81)
"	CELEBICA	(7/80)	POLYSTICHUM	AUSTRALIENSE	(5/80)
"	COOPERI	(2/80)	"	FORMOSUM	(7/80)
"	ROBERTSIANA	(12/80)	PTERIS	TRIPARTITA	(2/81)
"	CUNNINGHAMII	(2/80)	"	UMBROSA	(12/80)
ULCITA	DUBIA	(1/81)	PLATYCERIUM	SUPERBUM	(5/80)
CYCLOSORUS	INTERRUPTUS	(2/81)	"	VEITCHII	(6/80)
DICKSONIA	ANTARCTICA	(5/80)	STENOCHLAENA	PALUSIRIS	(2/81)
"	YOUNGIAE	(12/80)	TREE FERN	SPECIES?	(12/79)
DIPLAZIUM	CORDIFOLIUM	(3/81)			

THE OCCURRENCE OF ASPLENIUM PELLUCIDUM Lam. IN NORTH QUEENSLAND

By Christopher J. Goudey

(REPRINTED FROM THE MARCH NEWSLETTER OF THE FERN SOCIETY OF VICTORIA.)

A widespread tropical fern, whose south-eastern limit was thought to be New Guinea, has recently been discovered in the rainforests of north-eastern Queensland.

Asplenium pellucidum Lam. is native to Madagascar, India, Indo-China, Malaysia and New Guinea, and has recently been discovered along the Palmerston Valley in the far north.

This fern is a lowland species, that usually grows on the mossy branches of trees, and also on rocks in continuously moist situations.

A. Pellucidum is an erect fern with pinnate, lanceolate fronds normally up to 100 cm. long; however, Australian material is much smaller. It has a short-creeping rhizome, densely clothed with dark brown to black scales. The sori on the fronds are recessed into small cups, that appear as pimples on the upper surface of the frond. This species occasionally proliferates at the tip of the frond to form a new plant, much the same as *Asplenium attenuatum* R. Br.

I first discovered this fern in August of 1976, growing in the company of several other less common *Asplenium* species of the north. *A. affine* Sw.. *A. baileyana* (Domin) Watts. These ferns, together with many others were growing in a steep valley, where they would normally receive plenty of moisture from the ever present mist rising from the large waterfalls in that area.

A visit to the same site, a year later, revealed that many of the plants had withered and died, because of an extremely dry winter. Several plants were noted to be still alive, and I have no doubt that this species will not vanish.

Pressed specimens were sent to the Brisbane Herbarium for identification.

SYDNEY GROUP MEMBERS enjoyed afternoon tea at a meeting in the garden of Geof and Moriet Edwards' home at Glenhaven. Here it was decided to use a structure fabricated from one inch water pipe and downey fittings, to mount our Fern Exhibit at the Annual Flower Show. It will measure approximately seven metres long by three metres wide and high. This medium, although not as attractive as timber, will be quicker and lighter to erect and can be painted to make it aesthetically pleasing. If approved by the Exhibition Committee the estimated cost of \$145 will be met by the Society. Addie Lee suggested that members who wished to help by lending ferns, could specify the fern and how it is to be presented i.e. potted, hanging etc., we would then be able to plan our display in advance, we will canvas this in more detail in our June Newsletter. Please do give special thought to cultivating at least one fern for our Show. A raffle was conducted; this time the prizes were several Native Plants in excellent condition which were grown and donated by Betty Jacks, these raffles usually add about Twenty Dollars to our funds, and provide some levity for the twenty people that we average at meetings. We have fixed the following programme for the year and cordially invite you to join us on one of our excursions or come to a House Meeting.

- APRIL 26th. A ride on the Zig-Zag Railway alighting for a picnic and walk. Meet at the Zig-Zag Railway at 10.00 a.m.
*(refer diagram at end of page)
- MAY 31st. Meet at 11 a.m. at Sue and Phyl Montgomerys',
84 Porters Road, Kenthurst, for a Field Excursion,
(identifying plants on their five acre property)
followed by a Barbeque. Nearest cross Street is
Marieba Road.
- JUNE 21st. Minamurra Falls. Meet at the Rangers' Hut at 10.00 a.m.
- JULY 19th. Meet at the Home of Phyll and Viv Brown, 254 Edgar
Street, Condell Park, to identify ferns in their
collection, arrival time after 10.00 a.m., bring
your own lunch.
- AUGUST 23rd. A walk in the Blue Mountains.
(Details in June Newsletter.)
- SEPTEMBER BURRENDONG ARBORETUM VISIT.
19th & 20th. (Details in June Newsletter.)
- OCTOBER 17th. "A KIND OF XMAS PARTY" from 10.00 a.m. on, at
(Saturday) 25 Nowill Street, Rydalmere, bring a plate.
- NOVEMBER A trip to CANBERRA.
21st & 22nd. (Details in June Newsletter.)

Molly Murray...LEADER.
FERN STUDY GROUP.

