S.G.A.P. FERN STUDY GROUP - NEWSLETTER ISSN

"Registered by Australia Post - Publication No. NBH3809"

ISSN 0706-151X

ISSUE: NO. 14	DATE: SEPTEMBER 1981.
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In our June Newsletter I used the name <u>SCHELLOLEPIS</u> in place of <u>GONIOPHLEBIUM</u>, because I had noted its use in two works published last year. The change was queried by one of our members so advice was sought from the Royal Botanic Gardens. Dr. Mary Tindale suggested that we (amateurs) should not be too concerned about changes in the nomenclature; nor should we be in a hurry to use them; but rather await the result of a revision of the <u>POLYPODIACEAE</u> presently being conducted by <u>HENNITMAN</u> of <u>UTRECHT</u> and estimated to be finished within three years. Until such time and as a general guide, Dr. Tindale considers it preferable to retain the use of the oldest name in the literature. <u>SO - GONIOPHLEBIUM IT IS</u>! The following article seems rather apt.

# AN ORIGINAL NAME: By RAY BEST. PTERIS VITTATA:

"Amongst the works in my Fern library I found an early mention of this fern under the name of <u>PTERIS IONGIFOLIA LINNAEUS</u>. It was thus recorded in a publication dated April, 1857 (almost one and a quarter centuries ago), titled "<u>FERNS BRITISH</u> <u>AND EXOTIC</u>" Volume No. 3 "<u>PTERIS</u>"; this work was written by Edward Joseph Lowe and beautifully illustrated in full colour from Woodcuts by Francis Lydon. Professor Lowe always includes previous names with his fern descriptions, imagine my amazement when checking through these even earlier titles to find the following:-QUOTE:- "PTERIS VITTATA SCHKUHR (NOT OF BORY) WILLDENOW.

> FILIX LATIFOLIA PLUMIER PTERIS ENSIFOLIA SWARTZ PTERIS COSTATA BORY, LINK PTERIS LONGIFOLIA LINNAEUS."

The descriptive text tells us:-

QUOTE:- " An evergreen stove fern native of Nepal, The Philippines, The West Indies, Jamaica and Manilla. Introduced into England in the year 1770" end of quote. Eighteen years before Australia was claimed as part of the British Empire!!

Next Mention comes in "SELECT FERNS & LYCOPODS BRITISH & EXOTIC" by Samuel Williams 1893; with a description under the title PTERIS LONGIFOLIA LINNAEUS.

The "<u>SOUTHERN SCIENCE RECORD</u>" of April 1881 Part 4 by C. French is possibly the earliest Australian recording we have under the title <u>PTERIS IONGIFOLIA LINNAEUS</u>. He states in conclusion. "It has been found by Sir Ferdinand Jokob Henrich Von Mueller (Baron) on the Mitchell and Buchan rivers East Gippsland; it is also found in Queensland and New South Wales and is widely spread over the tropical and temperate regions of the world."

The next Australian record comes from the journal of the Royal Society of Western Australia, "<u>A CENSUS OF THE PTERIDOPHYTA OF WESTERN AUSTRALIA</u>" by G.G. Smith.

QUOTE:-"(in part) <u>PTERIS VITTATA LINNAEUS</u> widely distributed in the tropics and sub-tropics of the Old World (Holt 1954). Tropical Australia extending into New South Wales and Victoria on the east coast and to the south west of Western Australia. As <u>PTERIS LONGIFOLIA LINNAEUS DEEPDENE</u> near Augusta." end of quote. Bringing our records up to date we have the "<u>LAIFS</u>" lesson for 1968 by Dr. W.C. Drummond (Research Director) Location Quote:-

"<u>PTERIS VITTATA</u> is found in Nepal, Philippines, West Indies, Southern Europe, Jamaica, Florida, Spain, Italy, Mediterranean Basin and Subtropical Australia."

Recent publications have suggested that <u>PTERIS LONGIFOLIA</u> is a tropical American species; the author would welcome a full Botanical description of the type if such is available.

#### FROM THE N.S.W. DEPARTMENT OF AGRICULTURE

FEEDING: Ferns and fern allies don't require an overfertile soil but they do respond to feeding. For this purpose use cow manure as a mulch or top dressing. Apply it to plants in containers and those in the ground as a mulch during spring and summer. Avoid excessive amounts, otherwise the crown of the plant may be buried too deeply. Liquid animal manure is also satisfactory but its preparation is somewhat objectionable. Fish emulsion applied once or twice a month during the warmer months gives excellent results. It can be used safely on terrestrials or epiphytes as a foliage spray or to the soil. Highly concentrated liquid fertilizers should be used with caution. Gardeners often apply fruit peelings and spent tea leaves to staghorns and elkhorns with the aim of feeding the plants, but these materials are practically valueless as a source of nutrients. Fish emulsion applied to the plants would give better results.

<u>RE-POTTING:</u> Ferns or fern allies in containers do better when they are slightly root bound. But re-potting is usually necessary when there is a dense mass of roots or rhizomes on the outside of the root ball. Reduced vigour, also, may indicate a need for re-potting. The most suitable time to re-pot is in spring.

To remove a plant from a pot, place the fingers of one hand through the fern stems, invert the pot and sharply rap the rim on a firm object.

Unless more plants are required or lack of space dictates, don't divide the plant, but simply transfer it to a slightly larger container. Barely cover the drainage holes with charcoal or broken pots, then add a shallow layer of dead leaves or grass. Remove old drainage material from the base of the root ball. Avoid excessive disturbance of the roots or rhizomes except where the plant is badly root bound, when division or root pruning may be necessary. Add enough soil to the container to bring the base of the leaf stalks to within about 1 cm of the rim. Centre the plant

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and firmly pack the medium around the root ball and the wall of the container. Cut off damaged or dead leaves. Water well immediately after re-potting but thereafter water sparingly until new growth develops.

Yet another Fern Society is to be launched, this time in Tasmania by Michael Garrett who is a member of our Study Group. The annual fee is to be \$10.00 and those interested in joining should contact <u>MICHAEL GARRETT 3 MIMOSA CRESC</u>. BERRIEDALE TASMANIA 7011.

I hope the venture is successful and that Michael will continue to send us information on Ferny Affairs in the Apple Isle. It seems to me that there is a need for Group members in different Regions to meet occasionally for walks or discussions or to show their favourite ferns, it only takes one person to contact another; much can be gained by an interest shared and our entire Group would benefit from the feedback.

# THE ANNUAL WILDFLOWER EXHIBITION:

For some of our Sydney members there has been a touch too much activity. We were asked by those arranging the Wildflower Exhibition to take part in the Plant Sales, namely Sporlings. We purchased in excess of 1500 young ferns and for a month before the event these potted ferns dominated three households - we learnt to walk like ballet dancers between the pots in our small gardens, we re-potted some seven hundred (700) sold to us in a soil substitute, fretted over those that fell by the wayside, watered and fed the survivors, sand and grit underfoot was the norm and suburban cats the nocturnal enemy. They then had to be transported in conventional vehicles to the Exhibition, set up on tables and further nourished. (who would run a fern nursery, not I!) Then camethe public and we discovered that those who DID like ferns wanted to buy the beautiful specimens on show in the DISPLAY AREA. They didn't want to buy a sporling for \$2.50 and wait two years for the mature plant, they would have paid any price for the instant decoration. So then came the dropping of prices, which entailed some four members lifting every pot, erasing one price and substituting another, meanwhile soliciting passers by to "BUY A FERN." We sold about 1025 out of 1500, the remaining 475 pots when last heard of were being hawked around other Flower Shows and Fetes by our Treasurer. We learnt a lot, namely, that if we do it again it will be with selective ferns. Region have awarded the Fern Study Group something in the vicinity of \$500.00 for our effort.

This years <u>WILDFLOWER EXHIBITION</u> was of high standard. The Fern Study Group now has a structure on which to exhibit our ferns, designed and built by two of

our members specifically for use on polished floors; constructed of lightweight, treated pine logs, fully bolted, it is functional and aesthetically pleasing. Members lent their ferns as did S.G.A.P. people from Sutherland. They were artistically arranged into a most attractive display by our Treasurer, <u>FAYE LDW</u> who is a Consultant Garden Designer of some renown. A local resident <u>MR.RON NEWTON</u> arrived laden with beautiful specimens of <u>ADIANTUM</u>, (perhaps Capillus-veneris) to add to our exhibit and another in a hanging terra-cotta basket to be raffled in aid of the Group. This fern was so attractive that people were clamouring to take part in the raffle after ticket sales were closed. It was most rewarding, as a small token of our appreciation we presented Ron with a book "<u>BIRDSCAPING</u> <u>YOUR GARDEN</u>." I would like to thank all who assisted with time and effort in making our part of the Exhibit such a success.

### BURRENDONG ARBORETUM:

Our visit in September to continue planting coincided with an open weekend and we were fortunate in having assistance from members of the <u>HARBOURSIDE GROUP</u> who spent their Saturday weeding the site. Weeds appear to be the main problem, Peter Althofer has abandoned the grass cuttings and seed pod mulch because of the Rye-grass and other weeds it contains and has temporarily resorted to sand, <u>ANY SUGGESTIONS</u>? The area is gradually being planted and Faye is designing a wall planting which we hope to implement before the year ends. More about this in our December Newsletter.

#### STAG-HORN BEETLE:

Mr.A. Wilton from Austinmer asked if we had any advice to offer on how to eradicate a bad infestation of Stag-horn beetle. Several Stag-horns growing in his garden have been badly attacked and his largest fern almost stripped of fronds. Nearby residents are also having plants damaged by this insect. I telephoned the Biological and Chemical Research Institute and their spokesman told me that in past years the beetle was controlled by D.D.T., now unfavourably regarded. He suggested using the <u>POISON</u>, <u>ENDOSULFAN</u>, readily available under the Trade name "<u>THIODAN</u>" or in a preparation retailed as <u>"HIBISCUS SPRAY</u>." He thought that the Stag-horn beetle was native and so should have a local predator, whose occasional absence from the scene resulted in these sporadic but harmfully severe infestations. He regretted that no work has taken place recently on the beetle, but kindly sent us a copy of the Departments relevant leaflet which is reprinted on Page 5.

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NEW SOUTH WALES DEPARTMENT OF AGRICULTURE ENTOMOLOGICAL BRANCH, DIVISION OF SCIENCE SERVICES

INSECT PEST LEAFLET NO. 62

# THE STAGHORN FERN BEETLE

(Halticorcus platycerii)

Both the larvae and adults of the staghorn fern beetle seriously injure staghorn and elkhorn ferns, the insect usually being particularly abundant in the late summer and early autumn.

The adult beetles, which are more or less hemispherical in shape and measure approximately one-eighth of an inch in length are black with four orange spots on their wing covers. These beetles superficially resemble the beneficial steely-blue ladybirds of the genus ORCUS, and are therefore frequently left undisturbed when damage is occurring. The adults eat out regular oval cavities, usually in the upper surfaces of the fronds, but the more serious injury is caused by the larvae.

The eggs are inserted in the fronds and the beetle larvae tunnel with them. The outlines of the mining larvae can be clearly seen by holding the fronds up to the light. The tunnels of the larvae soon meet, and the insects then feed side by side, and eventually the greater part of the internal tissues may be devoured. The injured tissues become infected with rot organisms, and the fronds turn brown and fall prematurely. Eggs of the staghorn

The larva, when fully-fed, measures approximately one-third of an inch in length, fern Beetle and is orange in colour, with the head and legs black.

The fully-fed larva constructs an oval cell in the broad sheath-like sterile fronds and there pupates. The life cycle averages about ten weeks and a number of overlapping generations occur during the year. Larva & Adult Staghorn fern Beetle





Pupa of the Staghorn fern Beetle

# REMAINING PROGRAMME FOR 1981:

#### OCTOBER 17TH - 25 NOWILL ST. RYDALMERE:

A final meeting at about 1.30 p.m. to have a post-mortem on events during the year and possibly to work out something for 1982.

Because Saturday is an unusual day for us to meet, do feel welcome to arrive any time after 10.00 a.m. Bring a plate.

#### NOVEMBER 20th & 21st - A WEEKEND IN CANBERRA:

It is envisaged that most members will travel down on friday and a walk in the <u>BOTANIC GARDENS</u> incorporating the <u>RAINFOREST AREA</u> could be arranged for the cooler late afternoon hours.

This would leave Saturday free for a visit to <u>TIDBINBILLA NATURE RESERVE</u>. <u>CANBERRA MOTOR VILLAGE</u> has caravan sites, cabins and on-site vans, gas fired barbecue and a shop restaurant where one may "EAT-IN" or take away. Members will have to make their own bookings, we can discuss this further in October or ring me on 6381084.

I regret that this Newsletter has so much local content and little to do with Ferns.

We have had little correspondence from members and hope for greater participation in the coming months.

LEADER - S.E.A.P. FERN STUDY GROUP.