

A.N.P.S.A. Fern Study Group

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TREASURER: Dan Johnston,

NEWSLETTER EDITOR: Dan Johnston, contact as above.

SPORE BANK: Barry White,

Barry has resigned from this position but has supplied a final spore list for this newsletter so get your requests in quickly. We are grateful to Barry for performing this service for many years.

Thanks also to former member Graham Nosworthy for providing books and some very well-grown ferns that were distributed at the SE Qld December meeting.

Program for South-east Queensland Region

Peter Bostock/Dan Johnston

Sunday, 6th March, 2016. Excursion to Manorina, between Mt Nebo and Mt Glorious in Brisbane Forest Park (reference G16 on map 105 in the UBD Brisbane Street Directory). Meet at 9:30 am in the picnic area.

Sunday, 3rd April, 2016. Meet at 9:30am at Claire Shackel's place,

Friday, 29th April, 2016 to Monday, 2nd May. We intend to make another excursion to Tenterfield to further investigate Girraween and the area around Tenterfield. Some members intend to once again stay at the Tenterfield Bowling Club Motor Inn in Molesworth St, Tenterfield (corner of Scott St, one block west from the New England Highway). We will probably visit one or two locations on the way home on Monday. Please let Peter Bostock know if you are planning to attend this excursion.

Sunday, 5th June, 2016. Excursion to Tullawallal, near Binna Burra in Lamington National Park. Meet at 9:30am at the carpark at the end of the road at Binna Burra. This walk climbs gently through rainforest for about 2.5km to a peak with Antarctic beech forest on the top. The return is partly by a different route (the main border track), is again about 2.5km, and is a gentle descent all the way.

Sunday, 3rd July, 2016. Excursion to Ian and Chrissie McMasters property at Mellum, in the Sunshine Coast hinterland. The McMasters is quite a large property with a diverse range of habitats. We will meet at their green shed at 9:30 am.

Continue a few hundred metres to the large green shed (this section is quite steep and narrow but is in quite good condition).

Sunday, 7th August, 2016. Excursion to Fran Middleton's property This is quite close to the NSW / Qld border in the Gold Coast hinterland and about 20 minutes drive from Exit 95 (Currumbin) on the Pacific Motorway. Meet there at 9:30 am.

Program for the Sydney Region

Peter Hind

Saturday 19th March, 2016 (& Sunday 20th?). Meet from 12 noon at the home of Kylie & Dwayne Stocks at Verdigris Nursery, Western Distributer Road, Currowan Creek (25 km inland from Batemans Bay).

Travelling from Sydney, go into **Goulburn** & take the turn-off to **Braidwood**. Continue through Braidwood & travel for about 23 km. onto the **Kings Highway**, head down Clyde Mountain until just after you cross **Cabbage Tree Creek**. You will enter a 70km speed zone & watch out for the 23 km marker to Batemans Bay. **Western Distributor Road** is just over the rise on the left. Turn down Western Distributer Road & travel for about 2.6 km. At the corner of Western Distributer & Pig Road you will see Kylie & Dwayne's new house with a green roof on the right. Phone Kylie & Dwayne on 02 4478 1311 closer to the event.

Saturday 16th April, 2016. Meet from about 11 am at the home of Natalie & John

Study to be decided (probably *Platycerium*).

Saturday 21st May, 2016. Meet from about 10.30 am for 11 am start at Steve Lamont's new residence at

Study subject: Where to plant different ferns, environmental preferences, picking the right spot? If lost or need further directions or info phone Steve

Saturday 18th June, 2016. Meet from about 10.30 am at Stoney Range Flora Reserve at Dee Why. Bring packed lunch. Short walking trails in a small planted Bushy Reserve. Rainforestry area close to entrance. Leader Peter Hind phone 96258705.

Expressions of interest, several days before any of the bushwalks should be given to whoever is leading the walk, by phone, email etc. If no positive indications are received, at least two days, where possible, before the event by the walk leader, the event will be cancelled.

Of course if the weather is bad or there is any possibility of danger, such as bushfire, please do not turn up. If personal events change your plans, please let the leader know or send apologies via someone who is planning to go, so that we don't wait for you.

All outings are subject to weather conditions being favourable.

Meeting Reports

Ferns of Mt Elimbah, October 2015

Claire Shackel

The October excursion was to Mt Elimbah, also known as The Saddleback. This is one of the southernmost Glasshouse Mountains but at about 125 metres altitude at the summit, one of the lowest. The eleven members met at the locked National Park gate for morning tea and then set off down the fire trail in open Eucalyptus forest with a dense grass understory. We followed the trail in an easterly direction beside Five Mile Creek and later Six Mile Creek and the following ferns were seen: *Calochlaena dubia*, *Christella dentata*, *Adiantum hispidulum* var. *hispidulum* and *Doodia caudata*. A number of side trips were made down the sometimes steep bank to the creek but only *Asplenium australasicum* was added to the list. Along the side of the road a small patch of *Cheilanthes sieberi* subsp. *sieberi* was seen.

Not far from where Five Mile Creek joins Six Mile Creek, near the northeast corner of the park, the moist environment allowed *Adiantum diaphanum* and *Sticherus flabellatus* var. *flabellatus* to be added to the list. Bracken fern, *Pteridium esculentum*, was also seen in this area. One fit member of the party went to the summit of Mt Elimbah and reported quite a lot of *Drynaria rigidula* and *Davallia pyxidata* among the rocks. One fern recorded by Queensland Herbarium from this section of Glasshouse Mountains National Park, *Schizaea bifida*, was not seen on this trip.

Ferns seen: *Calochlaena dubia*, *Christella dentata*, *Doodia caudata*, *Adiantum hispidulum* var. *hispidulum*, *Cheilanthes sieberi*, *Asplenium australasicum*, *Adiantum diaphanum*, *Sticherus flabellatus* var. *flabellatus*, *Pteridium esculentum*, *Davallia pyxidata*, *Drynaria rigidula*.

Mt Mee outing on 1st November 2015

Claire Shackel

Six members met at the Gantry Picnic Area for morning tea, before driving to the Bull Falls Lookout and Track. The track went down through open vine forest and was a very dry environment with few ferns, only some isolated *Pellaea nana*, *Pyrrosia confluens* var. *confluens* and *P. rupestris*. At the lookout, *Drynaria rigidula* and a patch of a large form of *Pyrrosia confluens* var. *confluens* were seen on top of a rock.

At the lower lookout the rocks were covered with *Dictymia brownii*. This area was moist with a creek flowing through the rocks and the following ferns were seen – *Asplenium australasicum*, *Calochlaena dubia*, *Christella dentata*, *Davallia pyxidata*, *Doodia aspera*, *Lastreopsis microsora*, *Pellaea paradoxa*, *Platynerium bifurcatum* and *P. superbum*.

The party then drove to the entrance to the Mill Rainforest Track. As the name suggests, this was a moister area with a number of ferns and fungi. *Lastreopsis marginans* was common in the area with patches of *L. microsora* and *L. munita* seen only near the creek. There were massive specimens of *Asplenium australasicum*, *Platynerium bifurcatum* and *P. superbum*. One of the latter plants had *Asplenium polyodon* growing from its base. *Deparia petersenii* subsp. *congrua* was seen in a wet area on the bank of a small creek. Other ferns seen were *Adiantum atroviride*, *A. formosum*, *Arthropteris tenella*, *Christella dentata*, *Cyathea cooperi*, *Davallia pyxidata*, *Diplazium assimile*, *D. australe*, *Doodia aspera*, *D. caudata*, *Pellaea nana*, *P. paradoxa*, and *Pyrrosia confluens* var. *confluens*. This was not as long a list as was recorded in 2003 but there were enough ferns and fungi for everyone to enjoy. Another highlight of the day was a pair of Richmond Birdwing Butterflies flitting through the rainforest trees, although the host plant was not evident.

Sydney Area Fern Study Meeting, 17th October, 2015

Dot Camp

Our October meeting was held at my place. There was lots of ‘chatting’ as we had missed 2 months of meetings, with bush walks cancelled because of the rain. The group looked around my garden and as usual Peter was most helpful in naming the mystery plants. The garden is slowly coming back after it was badly hit by the high winds experienced here in April, with large trees blown over and many shrubs also destroyed. We escaped the very high temperatures forecast for the day, but decided not to do the proposed bushwalk at Wyoming. After lunch, some of the group shopped at nearby nurseries and others joined Joan on an easy walk at Kariong Gardens.

Other Articles

The Maidenheads

Nada Sankowsky

Photos by Garry Sankowsky

Ferns in the genus *Adiantum* have long been favorites with gardeners. The species *aethiopicum* and *capillus-veneris* have given rise to a plethora of hybrids for pot plant culture. With their soft, intricate foliage they delight the eye and they urge the gardener to give them lots of tender loving care. However, all is not as it seems as these delicate looking plants have a sturdy strength entirely belied by their apparent fragility.

Adiantum aethiopicum

Adiantum (ad ee ann tum) *aethiopicum* (eth ee oh pee cum) is an easy to grow fern that adapts to a wide range of situations. It spreads by thin wiry rhizomes and can develop into a good-sized colony. This habit makes it a great fern for a hanging container, especially a wire one, as the rhizomes will push through the lining, and fronds will eventually surround the whole basket.

It likes an open, moist situation with filtered light; heavy shade is death to it. Do not over-water. It is a vigorous grower and does not do well in small containers, so it is best in the ground or in a large basket.

To maintain a perfect appearance and good health, a yearly pruning does wonders. At the beginning of spring just as it begins to produce new fronds, cut off all the old growth to ground level. Water the plant well for several days and you will be rewarded with the most delightful flush of soft green foliage.

A. aethiopicum can handle full sun with adequate water. In a pot or hanging basket water is critical. Roots in these containers can become an impenetrable mass so regular, deep watering must be maintained.



Adiantum atroviride



Adiantum atroviride (at ro vir id) is similar to *A. aethiopicum* and can be treated in much the same way in the garden. Bright light under trees is a suitable place for this fern. It does not spread as readily as *A. aethiopicum* as it maintains a more discrete habit. The fronds emerge as a soft green but become dark green as they age. Although *A. atroviride* can be grown in a good sized container, it will do better in the ground.

At the beginning of spring cut all the fronds to ground level, water well for a couple of days, and you will soon be rewarded with a gorgeous display of pristine spring green fronds.



Adiantum capillus-veneris

Adiantum capillus-veneris (ka pill us - ve ner iss) is rare in Australia but wide-spread throughout the rest of the world. It favours wet rocks and rock walls, and is often found on limestone.

A terrestrial fern with a short-creeping rhizome, *Adiantum capillus-veneris* spreads to form a small clump. The rhizome is visible on the surface of the ground and this feature helps in its identification as other similarly fronded maidenhairs have their rhizomes underground.

In spite of its delicate appearance it is reasonably easy to grow if given adequate water. Drying out will kill it. Air movement, some shade, warmth and humidity are necessary for its successful cultivation. A fern house is the best situation for this fern rather than in the garden. It self propagates in suitable conditions.



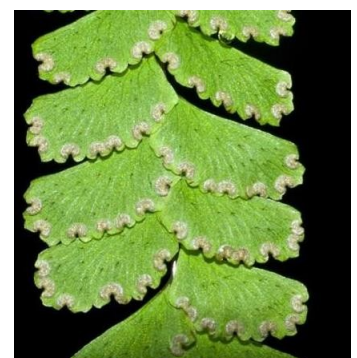
Adiantum diaphanum

Adiantum (ad ee ann tum) *diaphanum* (die aff a num); *adiantum* from the Greek *adiantos*, "not wetted", referring to the shiny fronds which shed water easily; *diaphanum* from the Latin *diaphanus*, "almost transparent", in reference to the fine filmy pinnules - hence the common name.

Adiantum diaphanum (Filmy Maidenhair Fern) is a common rainforest fern. A small fern, it grows to a height of 30 cm but is often much smaller. Terrestrial or lithophytic, it is found in rainforests on stream banks and on wet rock faces near waterfalls, usually in deep shade and in sheltered spots. *Adiantum diaphanum* grows in tufts from a short-creeping rhizome and develops into small clumps. Small proliferous buds are produced on its roots. It can be identified by its once- or twice-divided lamina; its thin, dark brown to black stipes; its tufted,

pendulous fronds; and by its semi-membranous, dark green, diamond-shaped pinnules lobed on the outer margins.

To separate it quickly from the similar *Adiantum hispidulum* (his pid you lum), use a hand lens and check both surfaces of the pinnules for scattered black setae (single-celled bristles). *Adiantum diaphanum* has no white hairs as has *Adiantum hispidulum*. Other ways to determine one from the other are: new growth, texture, and frond division. *A. diaphanum* never has pink or red new growth



which is a delightful feature of *A. hispidulum*. With regard to texture, the common names of these two species should say it all. *A. hispidulum* (Rough Maidenhair Fern) has a heavier and rougher texture to the fronds and on the stipe than does the Filmy Maidenhair. Looking at the frond division shows *A. hispidulum* with 2-3 pinnate fronds forming a hand-shaped (palmate) effect - hence its other common name, Five-finger Jack. *A. diaphanum* has a much simpler frond structure and is pinnate or divided at the base.

Adiantum diaphanum grows easily in a damp, shaded position. Although it will grow in bright light if it is kept moist, it is happier in darker situations, and unlike most ferns, it will happily grow tucked in under closely overhanging foliage. It spreads prolifically by root buds and soon becomes a delightful ground cover. The new growth is a very pale (almost white) green which contrasts beautifully with the more mature dark green fronds.

Filmy Maidenhair grows well in pots and like *A. aethiopicum* it is a good subject for a hanging basket. As it is not as large as *A. aethiopicum* it does not need such a large container.

Adiantum formosum



Adiantum formosum is a beautiful fern best grown in the ground in a situation where it can spread. It has a long-creeping rhizome that penetrates well down into the soil, unlike many other ferns which have shallow rhizomes. The fronds are much-branched and very broad with dark green pinnules.

Adiantum formosum (for moh sum) is a vigorous and easily grown fern that tolerates a range of light positions from full sun (if kept moist) to shaded areas. Give it plenty of compost and fertilize regularly.



Adiantum philippense



Adiantum philippense (fill ip pen see) is a fern of the tropics and resents cold. However, if the temperature does not drop below about 10 degrees C, it will probably survive.

This gorgeous, delicate plant is a fern of monsoonal areas and in response to the "dry" season its fronds die off and it becomes dormant until the "wet" season begins. With the advent of the rains, it sends up bright green, new fronds that lengthen and arch over until they touch the ground. When the frond tip comes into contact with the ground a new plant is produced; the process is repeated continuously, and in this manner the plant spreads across the ground and over rocks (which it loves) so long as it finds suitable conditions. It likes a shaded, open situation. Despite its delicate appearance, it is quite hardy in its preferred habitat.

As a basket specimen *A. philippense* is very suitable for a fernery.



Adiantum silvaticum



Adiantum silvaticum (sill vat ee cum) is a tall maidenhair fern with erect fronds of very dark green. It is not fast-growing, but will eventually make a clump if given the right conditions. It needs good light to fairly deep shade, and it should be kept moist for optimum growth. Usually, fronds do not develop their full height until the plant is a couple of years old.

An interesting feature of this plant is the colour of the new growth. The tiny pinnules on the new frond are almost black, becoming deep purple as the pinnules develop a little, then a breath-taking pink as the frond reaches its full spread. Depending on

conditions, it can remain in this latter stage for several days before gradually developing the dark green of its mature phase.

Grow this plant in a fernery, or under trees in the garden as it is quite hardy. It can also be grown in a large pot.



Adiantum hispidulum



Adiantum hispidulum (his pid you lum) is an extremely easy fern to grow. It tolerates a wide range of situations and soils and can adapt to periods of dry. A most suitable plant for container culture. *A. hispidulum* adapts well to life in the house or the fernery. In the garden, it will grow in full sun, dappled shade or full shade. If it is planted in full sun, it should be given regular waterings. It thrives among rocks or along pathways. Although it copes with adverse conditions, it does best with regular watering, good composted soils and fertilizing.

When the growing season begins in the spring months, this fern produces fronds of a stunning pink which can cover the whole plant. As the fronds age they gradually turn green from the centres out towards the tips and eventually change from light to dark green. During the wet season, plants can produce continual flushes of pink in response to the rains. The fronds have a metallic sheen. In all their different colour phases the fronds of this hardy fern are visually delightful.

The many variations in the size and texture of this fern can be confusing for the novice. However, a couple of easily identifiable features can help in recognizing it. It is called Rough Maidenhair because the stipes feel rough when rubbed while the fronds are stiff and coarse. New growth is usually pink. With a hand lens small white hairs can be seen on the undersides of the fronds.



Adiantum aethiopicum "Walsh River"



This is a striking form of *Adiantum aethiopicum*. A very dense grower in the garden it produces masses of soothing, soft green fronds. It is quite hardy and can cope with less water than other maidenhairs provided it is grown in shade.

Like *A. aethiopicum* it spreads by running rhizomes and can be invasive in a bush house situation where regular watering causes it to colonise rapidly. Use it in shaded areas in the garden, and do not over-water it.

As a basket specimen Walsh River Maidenhair is a delight. Use a wire basket lined with coconut fibre and the rhizomes will find their way through the fibre and soon will surround the basket, creating a ball of gorgeous, soft green pinnules.

Spore list, February 2016

Barry White

Ed. Barry has now resigned as manager of the spore bank. However, as he has supplied a new spore list, he is no doubt prepared to accommodate last minute/month requests. Thanks Barry, for your efforts. Dan.

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| <i>Adiantum formosum</i> 1/12 | <i>Diplazium dameriae</i> 8/13 |
| <i>Adiantum hispidulum</i> 6/12 | <i>Diplazium queenslandicum</i> 11/15 |
| <i>Amphineuron opulentum</i> 5/15 | <i>Doodia australis</i> 3/15 |
| <i>Amphineuron queenslandicum</i> 4/12 | <i>Doodia media</i> 6/13 |
| <i>Amphineuron terminans</i> 8/13 | <i>Dryopteris wattsi</i> 9/14 |
| <i>Arachniodes aristata</i> 8/13 | <i>Hypolepis glandulifera</i> 12/14 |
| <i>Asplenium aethiopicum</i> 10/12 | <i>Hypolepis muelleri</i> 3/12 |
| <i>Blechnum articulatum</i> 5/15 | <i>Lastreopsis acuminata</i> 10/12 |
| <i>Blechnum chambersii</i> 4/12 | <i>Lastreopsis decomposita</i> 10/15 |
| <i>Blechnum minus</i> 3/12 | <i>Lastreopsis grayi</i> 12/14 |
| <i>Blechnum wattsi</i> 3/13 | <i>Lastreopsis marginans</i> 3/15 |
| <i>Blechnum wurunuran</i> 6/14 | <i>Lastreopsis microsora</i> 8/13 |
| <i>Bolbitis quoyana</i> 5/13 | <i>Lastreopsis nephrodioides</i> 7/14 |
| <i>Chingia australis</i> 11/12 | <i>Lastreopsis rufescens</i> 12/14 |
| <i>Christella dentata</i> 3/12 | <i>Lastreopsis tenera</i> 6/13 |
| <i>Christella subpubescens</i> 4/12 | <i>Lastreopsis</i> × <i>Coveniella</i> 5/13 |
| <i>Cyathea australis</i> 1/12 | <i>Lygodium reticulatum</i> 11/12 |
| <i>Cyathea baileyana</i> 11/12 | <i>Macrothelypteris torresiana</i> 3/15 |
| <i>Cyathea brownii</i> 10/12 | <i>Pellaea nana</i> 11/15 |
| <i>Cyathea cooperi</i> 3/15 | <i>Plesioneuron tuberculatum</i> 9/14 |
| <i>Cyathea cooperi</i> (glaucous) 3/15 | <i>Platycterium superbum</i> 8/13 |
| <i>Cyathea cooperi</i> (Highland Lace) 3/15 | <i>Pneumatopteris sogerensis</i> 5/15 |
| <i>Cyathea cooperi</i> 'Cinnamon' 3/15 | <i>Pneumatopteris costata</i> 5/15 |
| <i>Cyathea exilis</i> 4/14 | <i>Polystichum australiense</i> 3/15 |
| <i>Cyathea leichhardtiana</i> 8/12 | <i>Polystichum formosanum</i> 12/14 |
| <i>Cyathea medullaris</i> 10/12 | <i>Pronephrium asperum</i> 8/13 |
| <i>Cyathea rebecca</i> crested 11/15 | <i>Psilotum nudum</i> 6/13 |
| <i>Dicksonia antarctica</i> 3/15 | <i>Pteris biaurita</i> 3/12 |
| <i>Diplazium australe</i> 12/14 | <i>Pteris umbrosa</i> 3/15 |
| <i>Diplazium assimile</i> 7/12 | <i>Rumohra adiantiformis</i> 4/12 |
| <i>Diplazium dilatatum</i> 3/15 | <i>Sphaerostephanos heterocarpus</i> 5/15 |

Thank you to spore donors Nada Sankowsky and Wendy Johnston.