



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

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Program for South-east Queensland Region

Peter Bostock/Dan Johnston

Sunday, 1st November, 2015. Excursion to Mt Mee. Meet at 9:30 am near the old sawmill at the Gantry picnic area.

Sunday, 6th December, 2015. Meet at 9:30 am at Rod Pattison's residence,
Plant swap and Christmas party and view Rod's garden!

Sunday, 7th February, 2016. Meet at 9:30 am at Sue Dowrie's residence,
to be decided, although the usual planning for 2016 excursions is on the agenda!

Topic

Program for the Sydney Region

Peter Hind

Saturday 28 November. Note this is the fourth Saturday! Meet at Margaret and Peter Olde's Country Residence

No study, please bring a plate to share and as usual we will look around the fern collection and plantings.

December 2015 and January 2016 – No Meetings - MERRY CHRISTMAS

Saturday 20 February 2016. Meet from about 10:30am for 11am start at the home of Peter and Margret Hind.
Study to be decided, plus some more forward planning? Phone (02) 96258705

Please bring a plate to share for morning or afternoon tea.

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.

South-East Queensland Meeting Reports

Jolly's Lookout, 5th July, 2015

Claire Shackel

The Queensland members of the Fern Study Group met at Jollys Lookout on the 5th July for a walk along the Thylogale track to Boombana. Morning tea was taken at Jollys Lookout and the cars then taken down to the road where the track begins. This is one of the best fern walks in the area, having both a good variety as well as extensive areas of *Doodias* and *Adiantum hispidulum* in all its forms.

The track starts in a moist rainforest area and has patches of more open forest as the walk progresses and this provides a range of fern habitats. *Adiantum hispidulum* showed a big variation in size from the small harsh *A. hispidulum* var. *hispidulum* to the bigger softer looking silver-backed *A. hispidulum* var. *hypoglauca* and many that were in between.

Virtually all the ferns seen on two previous excursions were seen this time, but not always at the same location. The one exception this time was a juvenile plant of *Pityrogramma calomelanos* var. *austramericana* (gold dust fern) mistaken for *Cheilanthes sieberi* on the day.

Adiantum hispidulum, *Doodia australis*, *Doodia caudata*, *Pteridium esculentum*, *Platynerium bifurcatum*, *Adiantum formosum*, *Adiantum atroviride*, *Davallia pyxidata*, *Lastreopsis decomposita*, *Doodia aspera*, *Pyrrosia confluens* var. *confluens*, *Pellaea paradoxa*, *Arthropteris tenella*, *Pellaea nana*, *Lastreopsis marginans*, *Asplenium attenuatum*, *Pteris tremula*, *Drynaria rigidula*, *Pityrogramma calomelanos* var. *austramericana*, *Pyrrosia rupestris*, *Asplenium australasicum*, *Nephrolepis cordifolia*, *Platynerium superbum*, *Crepidomanes vitiense*, *Arachniodes aristata*, *Microsorium scandens*, *Adiantum silvaticum*, *Blechnum cartilagineum*, *Calochlaena dubia*, *Cheilanthes distans*, *Christella dentata*, *Hypolepis muelleri*

This list is mostly in the order species were first seen which has an advantage when revisiting the area.

Karawatha Forest Park, 8th September 2015

Claire Shackel

Karawatha Forest Park was the venue for the September outing. On arrival at the main gate off Acacia Street, it was discovered this entry was closed for maintenance. It was decided to try the southern entry off Garfield Street as the track starting there was called the Wallum track and sounded the most likely for ferns. In fact, the area was predominantly very dry open forest and the 1.2 km walk produced *Pteridium esculentum* scattered throughout, one clump of *Cheilanthes sieberi* subsp. *sieberi* and a plant of *Nephrolepis cordifolia* in a burnt tree trunk two meters above the ground. *Hypolepis muelleri* was seen at the entry to the track. A very unproductive morning fern wise but it was an enjoyable walk.

The party then went to the Illaweena Street Picnic Area for lunch. After lunch, a walk over the bridge crossing the nearby lagoon added to the fern list. *Cyclosorus interruptus*, *Christella dentata*, *Cyathea cooperi* and another patch of *Hypolepis muelleri* were located in a moist area beside the bridge. This made the day seem more like a fern outing!

Other Articles

Tropical Fern Key Development

Nada Sankowsky

Members of the Fern Study Group may not be aware of the various Identification Keys that have been developed or are being developed for the plants of Australia, especially those of the Tropics. Over the past few decades several keys have been developed or worked on and these include a Key to the Rainforest Plants ("Australian Tropical Rainforest Plants Key" <http://www.cpbr.gov.au/cpbr/cd-keys/rfk/> which is now available online.) And "Australian Tropical Rainforest Orchids" <http://www.anbg.gov.au/cpbr/cd-keys/orfk/index.html> which is also available online.

At the present time tropical ferns are being added to the Rainforest Key and is now at a well-developed stage and will be added to the online key in due course. This fern key is being worked on at CSIRO Australian Tropical Herbarium at James Cook University in Cairns.

It is now at the stage when it needs to be tested and arrangements have been made to come here on our fern study day (see previous newsletter article) in November so that the ladies in this group can test the key. This should prove an interesting event. Some members may know Ashley Fields who is working on this key.

“Australian” *Adiantum* Cultivars¹

Peter Hind

(Ed. I accidentally left off the second page of Peter’s article “*Australian*” *Adiantum* Cultivars in the June newsletter. Please accept my apologies for this omission. I have included the whole article here.)

Some of these are not necessarily of Australian origin; however they involve species that are native to Australia including its islands.

***Adiantum aethiopicum* ‘Foxtail’** of unknown horticultural origin (ref. Goudey 1985).

A. aethiopicum “A” discovered by Mrs Mary Frost of Wangaratta at the site of old gold mining camps near Beechworth, N.E. Victoria. (ref. Goudey 1985)

A. aethiopicum “B” of origin unknown, a suspected hybrid between *A. aethiopicum* and *A. raddianum* ‘Fritz Luth’. This form is reputed to be sterile (ref. Goudey 1985)

A. aethiopicum “crested form”, like the previous two, is unnamed. Found in Tasmania, and introduced into cultivation by Mrs Lorna Monson of Stanley, Tasmania (ref. Goudey 1985).

Adiantum atroviride* forma *variegatum (named by F.M.Bailey in 1913) [**Leader:** not published as a cultivar name as reported in previous version of Peter’s article in Newsletter 133] was collected 20 April 1884 at Bundaberg, Qld by I. H. Burkill (ref. Fl. Austr. Vol. 48, 1998). A plant of this was presented at the meeting, grown by our hosts Tamara and Ian. With a lot of searching “nodosities” were seen at some of the secondary stipe junctions—they were dark, hardly discernible from the black of the stipes. The more consistent character was of *A. atroviride* not producing the myriad of stolons that are distinctive of *A. aethiopicum*. The plant presented consisted of a couple of sparingly branching tufts. The variegation was not all that spectacular.

Adiantum capillus-veneris extends from Europe to Africa, India, China, Japan and east through the Pacific Islands and North and South America and south to Australia where it occurs sporadically as far south as the Mornington Peninsula in Victoria and near Renmark in South Australia. Seven cultivars are described in “Maidenhair Ferns in Cultivation” (Goudey 1985). One of these is recognised as a botanical variety. These seven are listed below. Most of these originated from the Northern Hemisphere. Most if not all prefer alkaline conditions. A search of northern hemisphere literature would reveal many more cultivars.

A. capillus-veneris var. ***incisum*** collected in the wild several times in Ireland and England. Propagates true from spore.

A. capillus-veneris ‘**Banksianum**’ propagates true from spore and is easily divided. The most commonly grown cultivar of this species in cool temperate parts of Australia.

A. capillus-veneris ‘**Fimbriatum**’ propagates true from the very little spore it produces.

A. capillus-veneris ‘**Imbricatum**’ propagates true from spores; cultivars ‘Hardy Farley’ and ‘Cornie Bensii’ are slight variations of this cultivar according to Goudey (loc. cit.).

A. capillus-veneris ‘**Mairisii**’ propagates true from spore. Originated at the nursery of Mairis and Co., England in the 1880’s. Reported in early literature as a hybrid between *A. capillus-veneris* and *A. cuneatum*.

A. capillus-veneris ‘**Pointonii**’ propagates true from spore that it occasionally produces. Origin unknown.

A. capillus-veneris ‘**Scintilla**’ produces very little spore as most of the pinnules are depauperate, but it does propagate true from them. Reported to have originated in Australia, exact origin unknown. Introduced into America in the mid 1960’s.

Adiantum caudatum—only recently confirmed for Australia (see Peter Bostock in A.N.P.S.A. Fern Study Group Newsletter #131, August 2014)—my possible collection of this species from near Coen in June 1982 did not make it into the Herbarium at NSW; it was probably discarded as being inadequate. Two forms of this species are mentioned in Goudey; one with deeply incised pinnules and the other with almost entire pinnules. This latter form is often wrongly known as *A. edgeworthii* in the Nursery trade according to Goudey 1995.

¹ **Leader:** I have re-worked Peter’s cultivar names to conform to the format proposed in recent versions of the *International Code of Nomenclature of Cultivated Plants*. The **cv.** format is now replaced by single apostrophes around the cultivar name. Text in double quotes is not considered to conform to proper format.

Adiantum diaphanum possibly has two cultivars, not formally named as such. One is a small simply pinnate form described as **A. diaphanum** var. **polymorphum**—this form is cultivated in New Zealand. The second one is thought to be a hybrid between *A. diaphanum* and *A. formosum* by growers. According to Goudey (loc. cit.) it fits the description of **Adiantum ‘Birkenheadii’** (of garden origin) in early fern literature and is reported to have originated from *A. diaphanum*.

Adiantum formosum According to Goudey there is a small form known to horticulturists as *Adiantum* “variegated formosum”; it has a pale lamina contrasting with dark veins within the pinnules. Goudey loc. cit. page 82 proposes, thereby effectively publishing, the combination **Adiantum formosum ‘Variegatum’** for this entity. Unfortunately no date or place of origin is cited. [**Leader:** this name may be invalid, as it is a Latin word, and as such, excluded from the rules of cultivar naming].

Adiantum hispidulum var. **whitei** is mentioned by Goudey under *A. formosum* as a possible natural hybrid. We saw a large plant of this in the ground here, it certainly does look like a hybrid of *A. hispidulum* var. *hispidulum* (the indumentum under the pinnules matches this variety) with *A. formosum*. The frond structure is closer to that of *A. formosum* in being erect and more or less in one plane, not helicoid as in *A. hispidulum* whose stipe seems to articulate from vertical (bare portion) to more or less horizontal for the leafy portion. [**Leader’s note:** I beg to differ! I believe it is not of hybrid origin, but rather a natural form of *Adiantum hispidulum*—see my paper in *Austrobaileya* 2(4), 1987. This paper, titled *Rediscovery and status of Adiantum whitei* Bailey, was also reproduced in Fern Study Newsletter #100, March 2003. While the helicoid origin of var. *whitei* is not immediately obvious, it originates from the normal *hispidulum* frond by having pinnate pinnae in place of simple segments at crucial points on the frond, leading to an appearance of a fully pinnate frond.].

Surprisingly no cultivars seem to have been described of the widespread and variable **Adiantum hispidulum**. I grow a form of *A. hispidulum* var. *hispidulum* that has more finely divided fronds than normal. It doesn’t look good enough to become a desirable horticultural subject. There is a variegated form recorded by Goudey (photo plate only) under the New Zealand *Adiantum pubescens*—now reduced to a variety of *A. hispidulum*. According to P.S. Green in vol. 49 of *Flora of Australia*, *A. pubescens* is present on Lord Howe Island. The correct name is now *A. hispidulum* var. *pubescens*.

This attempt at a listing of “Australian” *Adiantum* cultivars was the basis of our study/discussion at The Sydney Group Meeting held 16 May 2015 at the home of Tamara and Ian Cox.

References

Goudey, C.J. (1985). *Maidenhair ferns in Cultivation*. Lothian Publishing Company Pty Ltd, Port Melbourne, Victoria.

Rules for naming Cultivars

Peter Bostock

This has been reproduced from the 8th edition of the International Code of Nomenclature for Cultivated Plants, published in *Scriptura Horticulturae* in October 2009. There are about four pages devoted to the naming of cultivars in the sense of Peter Hind’s article in this newsletter; the following points are arguably the most relevant parts of this.

“Composing an epithet requires a bit of thought. An ideal epithet is both easy to spell and pronounce in the various countries in which the epithet might be distributed. The rules for composing the epithet allow you to use or make up any word or words you want but the epithet will not be allowed as a cultivar epithet if it is likely to cause confusion with an existing epithet in the *denomination class* [Leader: my emphasis—denomination class is usually the genus, but may differ in certain circumstances]. This Code governs the reasons why a proposed epithet might not be allowed; disallowed epithets are to be “rejected”.

1. make sure your proposed epithet is unique in the denomination class;
2. make sure your epithet cannot be confused either in spelling or pronunciation with another existing one;
3. make sure that your epithet could not be interpreted as being likely to exaggerate the merits of the cultivar (i.e. do not use superlatives such as ‘Best Ever’, ‘The Greatest’ and ‘Tastiest of All’);
4. make sure your epithet has no more than 30 characters, excluding spaces and the single quotation marks;

5. avoid the use of Latin words;
6. do not use any of the following banned words or their equivalents in any language in your epithet: “hybrid”, “cultivar”, “grex”, “group”, “form”, “maintenance”, “mixture”, “selection”, “sport”, “strain”, “series”, “variety” (or the plural form of these words in any language) or the words “improved” or “transformed”;
7. do not use fractions or symbols;
8. do not use single letters or single numerals, or combinations of a single letter or a single numeral with a punctuation mark;
9. do not use any punctuation marks except for apostrophe [e.g. Smith’s], the comma, the hyphen and the full-stop; a maximum of two explanation marks may be included but they must not be adjacent;
10. make sure your epithet does not contain the Latin, common or vernacular name of the genus to which it is assigned;
11. make sure your epithet is not the name of a genus or the common or vernacular name of a species or other denomination class if this would lead to confusion.”

Anon. 2009. *International Code of Nomenclature for Cultivated Plants*. International Society for Horticultural Science. *Scripta Horticulturae* 10.

Annual ANPSA Fern Study Group Financial Statement July 1, 2014 to June 30, 2015

*Dan Johnston,
Treasurer*

(An additional \$5 subscription was received in the few days remaining after the draft printed in the June newsletter.)

Initial balance	9819.70
Plus Membership fees	535.00
Term deposit interest	214.58
Donations	120.00
Subtotal	10689.28
Less Newsletter costs	170.45
Materials for Qld Flower Show display	252.84
Final balance	10265.99

\$9164.23 is held as a term deposit and the remaining \$1101.76 is in a Society Cheque Account, both with the Commonwealth Bank.

The 2014-2015 accounts have now been audited. Thanks to Noreen Baxter for doing this.

Spore list October 2015

Barry White

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

Thank you to regular spore donor Nada Sankowsky.