



Society for Growing Australian Plants (Queensland Region) Inc.

Cairns Branch
PO Box 199
Earlville Qld 4870

Newsletter No. 99
May 2010

Society Office Bearers

Chairperson	Tony Roberts	40 551 292
Vice Chairperson	Mary Gandini	40 542 190
Secretary	David Warmington	40 443 398
Treasurer	Robert Jago	40 552 266

Membership Subscriptions- Qld Region- Renewal \$30.00, New Members \$35, each additional member of household \$2.00 **Student** - Renewal \$20 New Members \$25.00, **Cairns Branch Fees** - \$10.00 Full Year

To access our Library for the loan of publications, please contact David Warmington
Newsletter Editor: Tony Roberts travelling_botanist@yahoo.com.au

Dates to remember

Cairns Branch Meetings and Excursions – third Saturday of each month.

NEXT MEETING AND EXCURSION 15 May 2010 at Herberton. We will meet at the Mining Museum and Visitor Information Centre, 1 Jacks Rd Herberton at 10am.

Tablelands Branch Excursion– Sunday following the meeting on the fourth Wednesday of the month. Any queries please contact Chris Jaminon 4095 2882 or hjaminon@bigpond.com

Townsville Branch

General Meeting Please contact John Elliot: jw-elliott@aapt.net.au for more information

Crystal Ball

May - Herberton
June - Cooktown
July - North Bramston Beach
Aug - Redden Island
Sept – Upper Harvey Ck
Oct - Barron Falls' boardwalk/Kuranda
Nov - Ellie Point

June – Cooktown

Mr Jim Doidge, Parks Supervisor of the Cook Shire Council “would be delighted” to welcome the Cairns and Tablelands Branches of SGAP to work in the Cooktown Botanic Gardens over the weekend of 19/20 June 2010. Arrangements have also been made with the Cooktown Racecourse Committee for us to camp at the racecourse as we have done in 2008 and 2009.
Pauline

May Meeting

We will meet at the Herberton Mining Museum and Visitor Information Centre, 1 Jacks Rd Herberton at 10am for a brief meeting and morning tea. The intention is then to hike the Mt Ida Fire Trail and enjoy lunch atop Mt Ida. More information on the hiking trails around Herberton is contained in the separate document; "Great Trails.pdf".



Lost Treasures of the Wet Tropics

Bob Jago

ORDER: GENTIANALES

Family: Rubiaceae

Oldenlandia tenelliflora* var. *papuana Valetton

Synonyms: *Hedyotis tenelliflora* var. *papuana*.

Type: Indonesia. Irian Jaya

Introduction: This species in Australia is known only from a collection by J.T. Pentzcke from the Daintree River in 1890.

Description

Procumbent herbs; branchlets tetragonous, glabrous, smooth or sometimes tuberculate (bearing tubercles or nodules) on ribs. Leaves linear, 15-40 mm. long, 1-2 mm. wide, glabrous or with scabrous hairs along margin and on lamina near apex, rounded or truncate at base, acute at apex with mucro; sessile or shortly petiolate; petiole 0.5 mm. long. Stipule-sheath 1.0-1.5 mm. long, glabrous or pubescent, truncate or rounded with 2-5 setae, 2-3 mm. long. Inflorescences axillary, 2-4 flowered subsessile cymes; pedicels about 1mm. long. Calyx tube subglobose, about 1mm. diameter, glabrous; lobes narrowly triangular, 1.5-2.0 mm. long, jointed at base into free tube, scabridulous on margin. Corolla white, infundibular (funnel-shaped; appearing like an inverted cone), glabrous outside; tube 1.5-2.0 mm. long, glabrous at throat; lobes linear-oblong, 1.5-2.0 mm. long, acute at apex. Stamens exerted; filaments filiform, 1.0-1.5 mm. long; anthers linear, 0.8-0.9 mm. long. Ovules numerous in each locule. Style terete, 3.0-3.5 mm. long, glabrous; stigma bifid; lobes linear, 0.3-0.6 mm. long. Capsule ovoid to subglobose, 2.0-2.5mm. diameter, glabrous; calyx lobes erect; beak narrow, about 0.8 mm. long, not protruding above calyx lobes. Seeds depressed obconic, laterally compressed, about 0.5 mm. wide; surface brown, reticulate-areolate (partitioned into small spaces). This description is largely taken from Halford, D.A; Review of the genus *Oldenlandia* L. (Rubiaceae) & related genera in Australia; *Austrobaileya* 3 (4) 697-698 (1992).

Habitat: Unknown

Distribution: *Oldenlandia tennelliflora* is widespread in Asia from India to Japan and the Philippines. The variety *papuana* is only known in Australia from the Daintree River and from New Guinea and Irian Jaya.

Phenology: Unknown

Conservation Status: Extinct in the Wild Wildlife under the *Nature Conservation Act* 1992.

Etymology: The species epithet is derived from *tenellus* (delicate) and *flora* (flowers).

Pronunciation: old-en-LAND-ee-a te-NELL-i-flor-RA

Notes: Little to nothing is known of the ecology or biology of *Oldenlandia tennelliflora* var. *papuana* and it is possible that this taxon still occurs, as no systematic search for this taxon has been undertaken. Botanical collectors should be aware of the possible existence of this plant when working in this region.

References

Halford, D.A; (1992) Review of the genus *Oldenlandia* L. (Rubiaceae) & related genera in Australia; *Austrobaileya* 3 (4) 697-698.

Valeton, T.; (1925) Rubiaceae; *Nova Guinea* 14; 234

April Excursion Report

Following the general meeting held at the Botanic gardens (Minutes forwarded separately). David escorted us to several preferred sites for the establishment of the proposed Banks and Solander Garden.

The first and most preferred site was along the path between the Saltwater Creek Foot Bridge and Greenslopes Street. This site had several advantages including:

- being a high profile area,
- containing mature specimens of species destined for the display and
- ease of access.

The second site was further along the path close to Greenslopes Street.

The naturally occurring species in both areas were recorded and the list is attached below.



David explains his vision

Following our inspection of the proposed sites for the Banks and Solander Garden, we visited the remains of the R&T garden, adjacent the Red Arrow Trail car park. Sadly progress has taken its toll on the garden with many of the R&Ts planted there over the past 15 years or so, gone. The plan for the area requires the removal of most of the remaining specimens to make way for the new Botanic Gardens/Tanks buildings. The loss of this important collection of plants was discussed. The point was made that this loss created an opportunity for SGAP and another display project at the Botanic Gardens.

Finally we visited the Gondwana garden. The majority of plants there were interred around 14 years ago. It was interesting to see how well these species survived in captivity. Bob even picked up on a mistakenly labelled tree that had gone unnoticed since 1996.

Plant List

AMARYLLIDACEAE

Crinum angustifolium Field Lily

APOCYNACEAE

Tabernaemontana orientalis Eastern Gondola Bush

Wrightia laevis

ARECACEAE

Calamus australis Hairy Mary Lawyer Cane

BURSERACEAE

Canarium acutifolium

CELASTRACEAE

Salacia disepala

COMBRETACEAE

Terminalia muelleri

CONVOLVULACEAE

Operculina – weed

DILLENIACEAE

Dillenia alata Red Beech

EUPHORBIACEAE

Claoxylon hillii

HEMEROCALLIDACEAE

Dianella bambusifolia

Dianella caerulea

MIMOSACEAE

Acacia crassicarpa

MORACEAE

Ficus copiosa

MYRSINACEAE

Ardisia elliptica

MYRTACEAE

Eucalyptus pellita Daintree Stringybark; Red Mahogany

Melaleuca dealbata Red Tea Tree

Melaleuca leucadendra Tea Tree

Syzygium sharoniae

Tristaniopsis exiliflora

ORCHIDACEAE

Dienia Montana

PITTOSPORACEAE

Pittosporum ferrugineum subsp. *linifolium* Rusty

Pittosporum

PROTEACEAE

Persoonia falcata Northern Geebung

RHAMNACEAE

Alphitonia excelsa Red Ash

Rhamnella vitiensis

RUBIACEAE

Psychotria coelospermum

SANTALACEAE

Exocarpos latifolius Native Cherry

SAPINDACEAE

Cupaniopsis diploglottoides

Mischocarpus grandissimus Giant leaf Tamarind

Plants Collected by Banks & Solander in 1770 from North Queensland

Bob Jago

Introduction

A recent search of the internet failed to find a compressive list of plants collected by Banks and Solander in 1770 during their visit to North Queensland. The lists available from several sites appear to be based only on specimens illustrated. It seems surprising that after some 240 years a complete list of plants collected in North Queensland by Banks and Solander is not readily available. The following list is not exhaustive. It contains species illustrated as well as specimens cited in various botanical journals and revisions and duplicates held at the Queensland Herbarium (BRI). A full list of all references will be included. This first instalment covers Ferns and Fern Allies and Monocotyledons. Most of the plants collected by Banks and Solander in 1770 are of common occurrence around Cairns and the northern beaches.

Ferns & Fern Allies

Adiantaceae

Cheilanthes caudata R.Br.

Loc: Endeavour River. This species occurs in the Cairns Region.

Cheilanthes pumilio (R.Br.) F. Muell.

Holotype Loc: Endeavour River. This species occurs in the Cairns Region.

Blechnaceae

Doodia media R.Br.

Type Loc: Endeavour River. This species is common in the Cairns Region.

Davalliaceae *Davallia denticulata* (Burm.f.) Mett.

Loc: Endeavour River. This species is common in the Cairns Region.

Dennstaedtiaceae

Microlepia speluncae (L.) T. Moore

Loc: Endeavour River. This species is common in the Cairns Region.

Lindsaeaceae

Lindsaea obtusa J.Sm.

Loc: Endeavour River. This species is common in the Cairns Region.

Polypodiaceae

Pyrrosia longifolia (Burm.f.) C.V. Morton

Loc: Endeavour River. This species is common in the Cairns Region.

Pteridaceae

Pteris ensiformis Burm.f.

Loc: Endeavour River. This species is common in the Cairns Region.

Selaginellaceae

Selaginella ciliaris (Retz.) Spring

Loc: Endeavour River. This species occurs in the Cairns Region.

Thelypteridaceae

Cyclosorus interruptus (wild) H. Ito.

Loc: Endeavour River. This species is common in the Cairns Region.

Monocotyledons

Araceae

**Colocasia esculenta* (L.) Schott

Loc: Endeavour River. Taro is commonly naturalised in the Cairns Region.

This species is regarded as a pre-European introduction in Australia.

Burmanniaceae

Burmannia juncea Sol. ex R.Br.

Loc: Endeavour River.

Centrolepidaceae

Centrolepis banksii (R.Br.) Roem. & Schult.

Type Loc: Endeavour River. This species occurs in the Cairns Region.

Centrolepis exserta (R.Br.) Roem. & Schult.

Loc: Endeavour River.

Colchicaceae

Schelhammera multiflora R.Br.

Loc: Endeavour River. This species is common in the Cairns Region.

Commelinaceae

Aneilema acuminatum R.Br.

Loc: Endeavour River. This species occurs in the Cairns Region.

Cartonema spicatum (R.Br.

Loc: Endeavour River. This species occurs in the Cairns Region.

Pollia macrophylla (R.Br.) Benth.

Loc: Endeavour River. This species is common in the Cairns Region.

Cyperaceae

Arthrostylis aphylla R.Br.

Loc: Endeavour River.

Cyperus aquatilis R.Br.

Loc: Endeavour River. This species is common in the Cairns Region.

Cyperus pedunculatus (R.Br.) J. Kern

Loc: Endeavour River. This species is common in the Cairns Region.

Cyperus polystachyos Rottb.

Loc: Endeavour River. This species is common in the Cairns Region.

Cyperus squarrosus L.

Loc: Endeavour River.

Eleocharis geniculata (L.) Roem. & Schult.

Loc: Endeavour River. This species is common in the Cairns Region.

Eleocharis spiralis (Rottb.) Roem & Schult.

Loc: Endeavour River. This species is common in the Cairns Region.

Fimbristylis acicularis R.Br.

Loc: Endeavour River. This species is common in the Cairns Region.

Fimbristylis furva R. Br.

Loc: Endeavour River & Booby Island. This species occurs in the Cairns Region.

Fuirena arenosa R.Br.

Loc: Lookout Point.

Fuirena ciliaris (L.) Roxb.

Loc: Endeavour River. This species is common in the Cairns Region.

Fuirena umbellata Rottb.

Loc: Endeavour River. This species is common in the Cairns Region.

Lepironia articulata (Retz.) Domin

Loc: Endeavour River. This species is common in the Cairns Region.

Rhynchospora brownii Roem. & Schult.

Loc: Endeavour River. This species is common in the Cairns Region.

Rhynchospora corymbosa (L.) Britton

Loc: Endeavour River. This species is common in the Cairns Region.

Schoenus calostachyus (R.Br.) Roem. & Schult.

Loc: Endeavour River. This species is common in the Cairns Region.

Scleria caricina (R.Br.) Benth.

Loc: Endeavour River. This species is common in the Cairns Region.

Scleria polycarpa Boeck.

Loc: Endeavour River. This species is common in the Cairns Region.

Scleria pygmaea (R.Br.)
Loc: Endeavour River. This species occurs in the Cairns Region.
Scleria rugosa R.Br.
Loc: Endeavour River. This species occurs in the Cairns Region.

Eriocaulaceae

Eriocaulon depressum R.Br. ex Sm.
Type Loc: Endeavour River. This species occurs in the Cairns Region.
Eriocaulon fistulosum R.Br. ex Sm.
Loc: Endeavour River.
Eriocaulon pusillum R. Br.
Loc: Endeavour River.

Haemodoraceae

Haemodorum coccineum R.Br.
Loc: Endeavour River. This species is common in the Cairns Region.

Hemerocallidaceae

Dianella caerulea Sims
Loc: Endeavour River. This species is common in the Cairns Region.

Laxmanniaceae

Lomandra banksii (R.Br.) Lauterb.
Type Loc: Endeavour River. This species occurs in the Cairns Region.
Lomandra multiflora (R.Br.) Britten
Loc: Endeavour River. This species occurs in the Cairns Region.
Thysanotus banksii R.Br.
Loc: Endeavour River. This species occurs in the Cairns Region.

Orchidaceae

Dendrobium canaliculatum R.Br.
Loc: Endeavour River.
Dendrobium discolor Lindl.
Loc: Endeavour River. This species is common in the Cairns Region.
Dockrilla rigida (R.Br.) Rauschert
Loc: Endeavour River. This species occurs in the Cairns Region.

Philidraceae

Philydrum lanuginosum Banks & Sol. ex Gaertn.
Loc: Endeavour River. This species is common in the Cairns Region.

Poaceae

Capillipedium parviflorum (r.Br.) Stapf
Loc: Endeavour River. This species occurs in the Cairns Region.
Coelachne pulchella R.Br.
Loc: Endeavour River. This species occurs in the Cairns Region.
Dimeria acinaciformis R.Br.
Loc: Endeavour River.
Eragrostis stenostachya (R.Br.) Steud.
Loc: Endeavour River. This species occurs in the Cairns Region.
Eriachne mucronata R.Br.
Loc: Endeavour River.
Eriachne pallescens var. *pallescens* R.Br.
Loc: Endeavour River. This species occurs in the Cairns Region.
Eriachne squarrosa R.Br.
Loc: Endeavour River.
Heteropogon contortus (L.) P.Beauv. ex Roem. & Schult.
Loc: Endeavour River. This species occurs in the Cairns Region.
Ischaemum fragile R.Br.
Loc: Endeavour River. This species occurs in the Cairns Region.

Leptaspis banksii R.Br.

Loc: Endeavour River. This species is common in the Cairns Region.

Sacciolepis myosuroides (R.Br.) A. Camus

Loc: Endeavour River. This species occurs in the Cairns Region.

Schizachyrium fragile (R.Br.) A. Camus

Loc: Endeavour River. This species occurs in the Cairns Region.

Sporobolus pulchellus R.Br.

Loc: Endeavour River.

Thuarea involuta (G.Forst.) R.Br. ex Roem & Schult.

Loc: Endeavour River. This species is common in the Cairns Region.

Restionaceae

Dapsilanthus ramosus (R.Br.) B.G. Briggs & L.A.S. Johnson

Loc: Endeavour River. This species occurs in the Cairns Region.

Stemonaceae

Stemona Australiana (Benth.) C.H. Wright

Loc: Endeavour River.

Xyridaceae

Xyris indica L.

Loc: Endeavour River.

Xyris pauciflora Willd.

Loc: Endeavour River.

A NEW PROJECT FOR SGAP CAIRNS BRANCH

Mary Gandini

Some years ago we established a BANKS and SOLANDER garden in the Cooktown Botanic Gardens. In fact, it was in 1986, the year we held the Queensland Regional Conference in Cairns and the Tablelands. Our post conference trip was to McIvor River, Cape Flattery and Isabella Falls areas around Cooktown and the establishing of the B&S garden was our tribute to them and to Cooktown. The beaching of Captain Cook's Endeavour in the river of this name and the botanical collections of Joseph Banks and Dr. Daniel Solander are well known and, indeed, celebrated each year near the anniversary of the event.

What is not well known is that Banks and Solander also collected at Cape Grafton near the present township of Yarrabah. The need for fresh water compelled our good captain to anchor in the lee of the cape, sheltered from the south easterly wind. The intrepid biologists never missed a chance to examine the strange and exotic flora and fauna of the southern continent so they were probably first on the water boat. Here they collected plants in the littoral zone with time and tide the limiting factors. In Cooktown they had lots of time.

Our Cairns branch together with the Cairns Botanic Gardens (ex Flecker) hope to establish a garden in the Centenary Lakes with the species of plants collected at Cape Grafton. We want to collect from the site of the original collections (if we can find it) not only for the plants but also to ascertain if they still exist there.

Two hundred and forty years have passed and wind and tide may have altered the landscape considerably. Also Captain Cook had just a sexton and chronometer to mark the spot. Whereas today we have very accurate GPS mapping, Captain Cook recorded latitude and longitude without the decimal points thus leaving room for considerable error.

Several years ago, one of our members Robin Hinxman set out to find the location. As he was a schoolteacher at Yarrabah he had access to the lands and believed he had found the site. I know he took Tony Irvine with him to help with identification. We have the map and the name of the site but, as yet, I have been unable to contact Rob. Tony has Cook's journal and may be in a position to find the exact location of where the Endeavour dropped anchor.

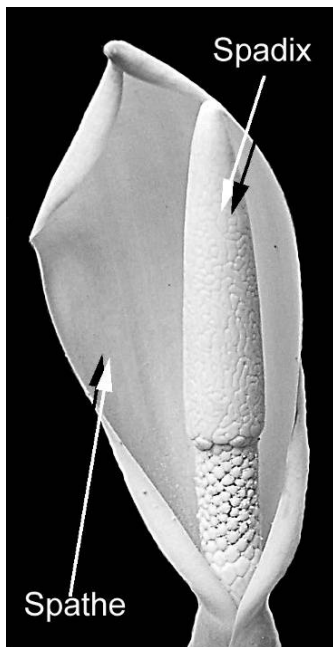
PS.

As a second thought, I wonder if we should include Alan Cunningham's collections. In 1819 and 1820 he collected at Fitzroy Island and probably the same area as B&S near Yarrabah. I know Rob Hinxman investigated these sites and took the club to a large *Calophyllum inophyllum* he believed was the one Cunningham recorded. Rob Jago can confirm this as I was not present.

Mary.

Meet the Locals

The next family I would like to look at is another of the monocot families, **Araceae**, the aroids.



General

The **Araceae** are hairless, herbs, climbers, shrubs or free floating aquatic plants that are easily distinguished by their inflorescence; a spathe and spadix.

The spadix is a spike of flowers which is subtended or surrounded by a leafy bract the spathe.

The family contains many horticulturally important plants including genera with edible corms, *Colocasia*, *Xanthosoma*, *Alocasia*, *Cyrtosperma* and *Amorphophallus* (the taros), edible fruit; *Monstera*, and the ornamentals; *Philodendron*, *Dracunculus*, *Zantedeschia* (Arum Lily), *Anthurium*, *Aglaonema*, *Caladium*, *Diffenbachia* and *Spathiphyllum*.

The aroids of Mt Whitfield

Four species of aroid occur on Mt. Whitfield; they occur in four genera. One is a large herb and the other three are climbers. They are all fleshy and widely distributed across the mountain.

Alocasia brisbanensis, Cunjevoi is a large herb usually growing to between 600mm and 900mm in height. The heart shaped leaves are held erect by long, deeply channelled and winged petioles which are borne on a thick, sometimes erect rhizome. All parts of this plant are poisonous, containing calcium oxalate crystals. This species is difficult to tell apart from the introduced *Alocasia macrorrhizos*, the most obvious differences being that *A. brisbanensis* is generally a smaller plant, has pointed basal lobes on the leaf (as opposed to rounded on *A. macrorrhizos*) and the shape of their inflorescences.



Rhaphidophora australasica is a root climber (climbing plant that uses adventitious roots to attach itself to the host and climb upwards) with glossy, simple (undivided), entire (smooth margin) leaves. The leaf blades measure 250mm – 550mm x 70mm – 140mm and are supported on a channelled petiole measuring 100mm – 300mm long. The stem is narrow; rarely exceeding 20mm in diameter.

The leaves were used in traditional medicine.

Epipremnum pinnatum Native Monstera is a root climber with large (400mm – 500mm x 200mm – 250mm), deeply lobed leaves. The petioles (250mm – 300mm long) are channelled on the upper side and sheath the fleshy stem (to 40mm wide) when young. The sheathing tissue disintegrates as the leaves age, leaving an obvious scar on the stem.

The leaves were used in traditional medicine.

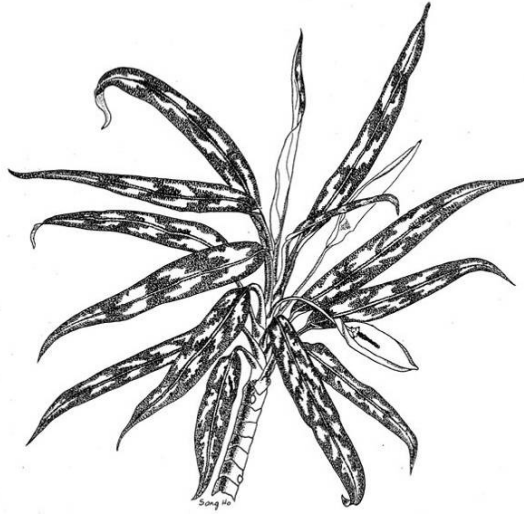


Pothos longipes Pothos is a scrambling, root climber with a narrow (to 20mm wide) stem. The small (30mm – 50mm x 10 – 20mm) leaves are attached to the stem by broad, flattened petioles to 25mm- 80mm x 10mm – 15mm. The combination of the leaf and petiole give the plant a distinctive look, easily recognisable in the forest.

Traditionally the ripe red fruit were eaten, mostly cooked but sometimes fresh

Other indigenous aroids of the greater Cairns area

Aglaonema commutatum



Amorphophallus galbra Sweet
Snakeskin Lily

Epipremnum amplissimum





Gymnostachys anceps Settler's Flax

Lemna aequinoctialis, Duck Weed, a tiny, free-floating plant, consisting of a thallus-like plant body with a single root below emerging from the centre of the plant body. Found in warm, still water.

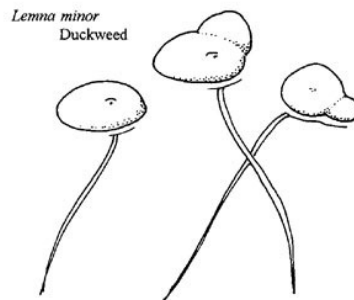


illustration provided by:
IFAS, Center for Aquatic Plants
University of Florida, Gainesville, 1990



Fig. 40. *Pothos brassii*. a, fertile shoot; b, spathe detail; c, fertile shoot, mature stage of infructescence; a-b, Brass 2311; c, Brass 6 White 278. Scale bar: a, c = 2 cm; b = 2.7 mm.

Pothos brassii

Boyce, PC and Hay, A 2001 'A taxonomic revision of Araceae tribe Potheae (*Pothos*, *Pothoidium* and *Pedicellarium*) for Malesia, Australia and the tropical Western Pacific' *Telopea* 9(3)

Rhaphidophora hayi

P.C. Boyce & Bogner

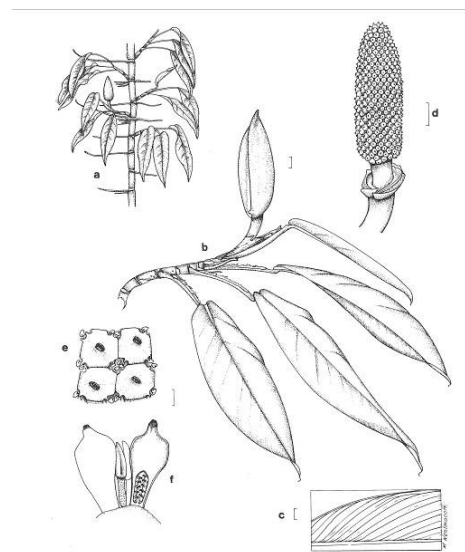


Figure 1. *Rhaphidophora petrieana* A. Hay. a, habit; b, flowering lateral shoot; c, venation; d, spadic; e, flowers from above; f, pistil in longitudinal section. From a plant growing in the Royal Botanic Gardens Sydney vegetatively propagated from Wrigley & Telford 43 (CBG). Scale: a, much reduced; b,c,d, bar = 1 cm; e,f, bar = 1 mm.

Rhaphidophora petrieana

Spirodela punctata Thin
Duckweed



Typhonium blumei

W. Curtis, 1796

Typhonium angustilobum

Typhonium wilbertii

Not Illustrated

Naturalised, exotic aroids of the greater Cairns area.

*

Alocasia macrorrhizos Elephant Ear



Caladium bicolour Cladium

PlantSense, Inc

Colocasia esculenta Taro



Dieffenbachia leoniae Dumb Cane

***Epipremnum pinnatum*. "Aureum"**
Golden Pothos



Philodendron lacerum



Philodendron scandens

Pistia stratiotes Water Lettuce





Syngonium podophyllum, Goosefoot