



*Society for Growing Australian Plants  
Cairns Branch*

NEWSLETTER

*Newsletter No 234*

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*Landcare Nursery, The Bungara Heritage Trail and Greenpatch,  
Gordonvale*

All members were advised by email of 5 October of a small change to our usual timing for this month's excursion – meet at 11.45. At 12 noon Lisa O'Mara, Coordinator at Mulgrave Landcare, will guide us through their extensive nursery at the old Fire Station, Corner Norman and Church Streets, Gordonvale. Facilities are accessible at Norman Park. After lunch in the park we will amble down the The Bungara Heritage Trail to Greenpatch. Do email the Secretary so we can keep a look out for you.



*NPQ State Conference, 2023,  
14-18 September*

Helen Lawie

DAY 1 - CATTANA WETLANDS

Geoff McClure greeted our 50 delegates and locals and welcomed us to the Wetlands. Once a cane farm and even a gravel mine, approximately 20 years of planting and volunteering has resulted in a natural native tropical environment with much to offer. The pre-existing feather palm forest and remnant rainforest is indistinguishable from the revegetation. Long term management of the wetlands is now concerned with removal of exotic species that self-seed, and vine control. We had a spirited discussion about the origin of Coconut Palms, and their native? imported?

naturalised? status. Furthermore, any weed control method for various grasses must consider the impact on the bird and fish life which has now taken sanctuary in the wetlands. For example grass feeding birds find no seed under the expanding Leucadendron thickets where they fringe the lake: a layer of tea tree oiled leaves denies grasses (native or otherwise). To the early proponents of the Catanna Wetlands, such management issues surely indicate the success of the venture.

Plant of the day was the abundant bracken like *Stenochlaena palustris*, Climbing Swamp Fern. For those recently noticing Cordylines, the tall green *Cordyline manners-suttoniae* impressed with its fruit changing colour from green, through orange to red.

## DAY 2 - INNISFAIL

Our first stop was an unscheduled diversion from the highway near Babinda. Pauline messaged that a large saltwater crocodile was basking on a sand bank, and Don negotiated with our bus driver to head down to the Russell River. 'Clyde' the crocodile was posing with his mouth gaping open, and we all found him quite impressive whether we were from Brisbane, Sydney, New Zealand, or just down the road.

Our walk around Josephine Falls was as magnificent as expected, and it was truly a pleasure to share it with such interested and interesting members.

The lunch stop at Warrina Lakes allowed us to explore some plantings along the lakeside. Unfortunately, the bush tucker forest remained terra incognita as we somehow diverted right past it. For those wishing to visit it in the future, access via road is more direct - try Campbell Rd.



Adrian Hogg explains the plantings at Johnstone Region Landcare  
Photo: Helen Lawie

Adrian Hogg ushered us into the shade at Johnstone Region Landcare. He gave a brief history of the 40 year old rainforest re-veg behind us while birds sang over him. Such

birds were given kudos for planting the understory of the rainforest, and the pathways through it were surrounded with lush growth.

The potting shed, three shade houses and multiple rows of waist high benches of potted-on native plants, were all neat and well organised. With many staff and volunteers of the Johnstone Landcare group (including familiar faces from Innisfail SGAP) on hand to answer questions it was truly interactive. Delegates were offered clearly labelled sun hardened plants for sale and we couldn't resist the temptation, especially with ready info available on mature height, flowering time estimates and more.

Afternoon tea was provided by our hosts; it was a cornucopia of fruit and homemade goodies and very much appreciated. Roger Kitchen, NPQ President, chose this moment of mutual thanks to announce a donation of \$10,000 to Johnstone Landcare to continue their very successful programme of propagating and riparian plantings. The NPQ Council Meeting on 28 September confirmed this grant which will come from the Geoff Simmons Bequest.

Trees of the day were *Musa jackii* and *Musa banksii*, native bananas, planted side by side next to the 'Connie Francis' potting shed. Virtually impossible to see in the wild, they were placed ideally for the purpose of comparison.

## DAY 3 – CAIRNS CITY

Jan McLucas and Bradley Smith were kind enough to open their garden to us and it did not disappoint. A species list/map hand-out allowed us to explore and play a game of treasure hunt as we crossed off plants we recognised. The house block is approx. 1500m<sup>2</sup> and was planted about 10 years earlier. The design of the garden included a great variety and number of interesting native trees working together in groups or alone. The purposeful zone planting achieves screening from neighbours and the road, negative space

to allow appreciation of the house design, and practical considerations for layering of plants and watering efficiently. *Syzygium wilsonii*, powder puff lilly pilly, graced us with flowers and superb new leaf. *Syzygium branderhostii*, Lockerbie satinash, surprised with buds on the trunk, and flowers from the *Phaleria clerodendrum*, Scented Daphne, shared their sweet fragrance.

Trees of the day were *Alloxylon flammeum*, Queensland tree waratah, for its large red flowers and *Idiospermum australiense* basically just for existing in a suburban garden. Honourable mention to the *Maniltoa lenticellata*, Silk handkerchief trees, for looking so attractive despite the absence of flamboyant new growth.

For a more complete review of the garden please refer to the Excursion report by Don Lawie in our November 2020 newsletter.

#### DAY 4 - TABLELANDS

An early start allowed us to board the Skyrail with ample time to walk the circuit tracks at both the Red Peak and Barron Gorge stops. The canopy view was spectacular: emergent *Alstonia scholaris*, Milky Pine, were covered with a myriad of familiar epiphytes, viewed from above, somehow looking fresh and new. The morning sun touched the fruit of *Cardwellia sublimis*, Silky Oak, colouring them a soft plum of dusty velvet. Often observed as hard woody open seed pods discarded on the rainforest floor, they seemed instead full of life potential.



*Hibiscus sankowskyorum*

Photo: Helen Lawie

Garry and Nada Sankowsky have hosted many visitors and friends to their garden of wonders near Tolga. However, their enthusiasm is as fresh and contagious as ever, and it was lovely to return to this incredible life's-work in garden form. Both Garry and Nada have drawn from a 40 year history in this place, planting, transplanting, losing and winning, observing and learning from and about their plants.

Nada's fern house is a classroom.

One fern growing partially in a pond rarely produces spore and grows from runners, *Ampelopteris prolifera*, Rainforest Jumping Fern, while another has distinct spore patterns in a V shape, *Diplazium proliferum*, Tick Fern. or another in a U shape (sorry species or even common names start to escape me here). The *Cyathea robertisana* prefers wet feet and its bald head in the sun, while a different tree fern clumps with suckers and prefers a sandstone gorge with an ephemeral creek (*Cyathea x?*).

The highlight of the visit was not a plant but rather the moment that Roger Kitchen presented Garry and Nada with individual achievements of Life Membership. This presentation recognised achievements within NPQ and also publications and contributions outside the organisation over many years.



Garry and Nada Sankowsky honoured with NPQ Life Membership

Photo: Helen Lawie



Peter Radke welcomed the delegates to his home and garden near Mareeba. Before we even walked through the gate we found so much to discuss and admire. Rows of trees fringing the property included many special and interesting species.

Peter and Renae’s approach to growing trees is sometimes experimental: answering a question on water required, or sunlight preferred for a species. Their depth of knowledge is an accumulation of questions already answered: the flush of pink new growth after a pruning timed perfectly for our visit. Or the intriguing, pretty *Dodonea polyandra*, Hop Bush.



Fruit on *Dodonea polyandra* Photo: Helen Lawie

This well fruiting healthy shrub has benefited from a sparing water regime to encourage a deep stable root base. To water it indulgently after its establishment would have disappointingly accelerated its life cycle.

For some members the comfort of the deep shade of the veranda beckoned, while others inspected tree trunks, picked up gumnuts and tapped out seeds. The provenance and propagation potential of each plant was well known to Peter and he happily shared his love of native plants.

Trees of the day were Garry’s *Hibiscus sankowskyorum* and Peter’s *Grevillea* Dorothy Gordon and *Grevillea* Peaches and Cream. The *Grevilleas* were stunning, covered in flowers

and glowing mauve for Dorothy, and rainbow stripes for the Peaches and Cream.



*Grevillea* “Dorothy Gordon”

Photo: Helen Lawie



*Grevillea* “Peaches and Cream”

Photo: Helen Lawie

#### DAY 5 – MOSSMAN GORGE

Your faithful reporter did not attend the final day. If you can imagine another successful day of ‘tree looking and plant talking’ insert it here. This time add a sprinkle of rain, well prepared delegates and even more collegiate bonhomie of like-minded people enjoying each other’s company.

A heartfelt thanks was given to Roger and his beautiful wife, Lesley, for pulling together such a memorable programme of events.

Time does not permit me to describe the evening lecture series in detail. Suffice to say each was excellent, inspiring, and informative. Dr Rob Jago and Stuart Worboys introduced the Wet Tropics and species to expect, and Peter Radke outlined the value of our local native plants and propagation.

The Bill Tulloch Lecture given by Professor Darren Crayn gave an account of the achievements of Banks and Solander and their contribution to botanical science. For those interested in the Coconut Palm debate: Darren also noted that Captain Cook and his team of scientists did not observe any as they sailed along the coastline in 1770.

**A Big Thankyou** to all the members from our local Cairns and Tablelands SGAP who came along to the State Conference. Special thanks to the guides, guest speakers, and those who provided botanical interpretation. Thank you also to our hosts in the private gardens we visited. Everyone's contribution elevated the delegate experience and allowed our region, our plants and our local hospitality to shine. Thank you too to those delegates for making it all so worth while.

One participant was heard to say he found it exhilarating to spend so much time conversing with people who spoke and understood "plant language".

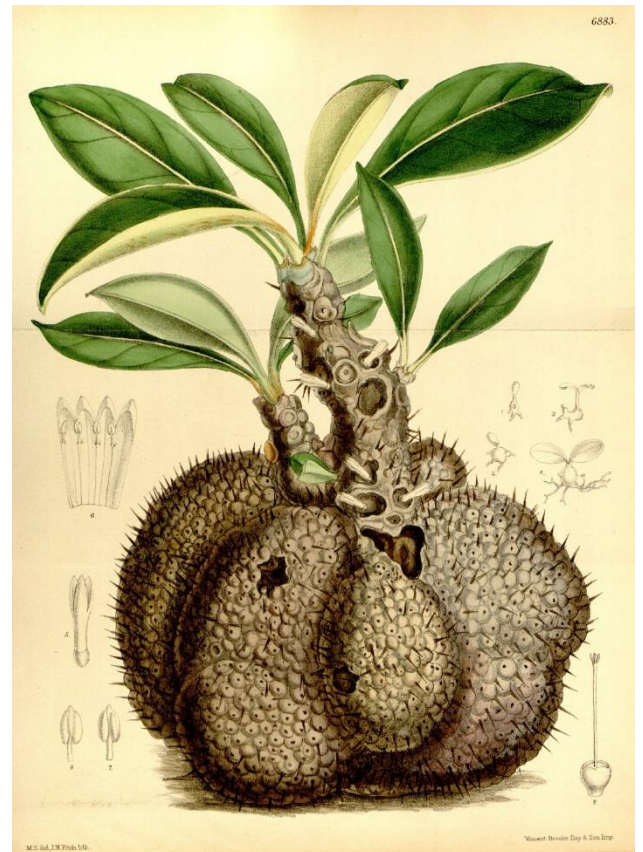


L-R Helen Lawie, Donald Lawie, Roger Kitchen, Darren Crayn, Robert Jago, Stuart Worboys  
 Photo: Lois Hayes

## Ant Plants

This month, we move from ground dwelling, parasitic plants, up a little higher in the forest canopy, to plants that do not suck the lifeblood from their neighbours but live in harmony with their hosts. Not only that, they also enjoy numerous beneficial relationships with species from several kingdoms. Ant Plants.

Two species of ant plant, also known as ant house plants, are found in our region. If you are willing to travel a little further north, to Cape York Peninsula, you will find another three species. Our ant plants belong to the Rubiaceae or coffee family that also includes the gardenias and ixoras.



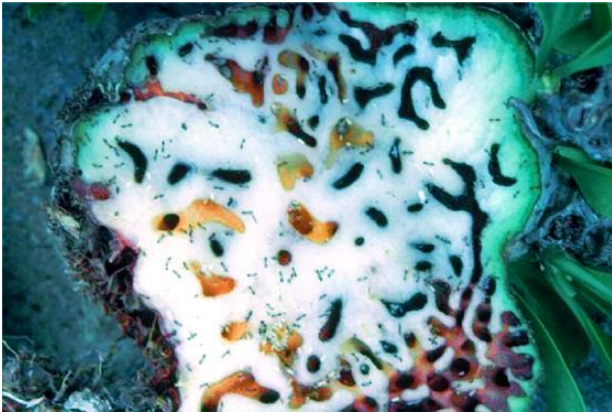
*Myrmecodia beccarii*, J.D.Hooker - Bot. Mag. 112: t. 6883.

The locally common ant plant, *Myrmecodia beccarii* is an epiphyte, usually found growing on *Melaleuca* trees in wetter areas, including mangroves but not in the rainforest. As the common name suggests, it lives symbiotically with ants.

As the ant plant seedling develops, it attaches itself to its host and the basal portion, called the



domatium, begins to swell. Stems develop atop the domatium and leaves upon them. As the plant matures, chambers develop within the domatium, differentiating into areas with different characteristics. These chambers are usually inhabited by ants (*Phielidris cordatus*) who use the chambers for different functions; ventilation, nursery and waste disposal.



*Myrmecodia beccarii*, domatium dissected, showing the three chamber types, P. Forster, *Old Herbarium, DES*

The relationship between the ant plant and the inhabiting ants is regarded as mutualistic. The plant provides a home for the ants and they in return protect the plant from marauding herbivores and provide nutrient to it by depositing their waste in the waste chambers. These chambers have a warty surface that absorbs nutrients from the ants' waste. Studies have shown that inhabited ant plants grow better than uninhabited ones.

Another mutualistic relationship has been found within these ant plants. The Apollo Jewel butterfly lays its eggs exclusively on ant plants. The ants carry newly hatched butterfly larvae into their nests and protect them in exchange for a sugary secretion exuded from the larvae's backs. The larvae of the butterfly graze on the inside walls of the ant plant and sometimes on the leaves at night.



Apollo Jewel Butterfly

The story used to stop here; however recent studies have shed light on other symbioses. It has been known for quite some time that ant plant chambers are home to fungal colonies. It is now thought that the fungi in the waste chambers assist the plant by breaking down the waste and releasing nutrients from it. There is even evidence that the resident ants may consume the fungi and possibly even cultivate it.

Further reading:

Melinda J. Greenfield et al (2021) Consistent patterns of fungal communities within ant-plants across a large geographic range strongly suggests a multipartite mutualism

*Mycol Progress* 20:681-699

<https://link.springer.com/article/10.1007/s11557-021-01690-z>

Flowering and fruiting at East Russell



*Dendrobium mirbelianum*  
Photo: Patsy Penny

## The Ant Plant - *Myrmecodia Beccarii*

A small illustrated book on the natural history of the endemic ant plant, *Myrmecodia beccarii*, has been self published recently by Paul Simmons, a retired school teacher.

## CRATEVA RELIGIOSA TEMPLE TREE

Don Lawie



*Crateva religiosa*

Photo: Don Lawie

At the Cairns Branch SGAP's end of year break-up held at Rick and Sharon Wong's home four years ago, Tony Roberts gave me a potted tree about 30 cm high, and said that it was a pantropic native that grew in Cape York north of Princess Charlotte Bay. It can also be found in wet tropical areas from North Africa to the Indomalaya area and the Pacific.

It is called Temple Tree because its flowers have a rich perfume which complements the ambience of the Buddhist temples of Thailand and other South-east Asian countries. The flowers are a clear yellow colour with pendulous strings of stamen which give rise to the tree's alternate name of "Spider Tree".

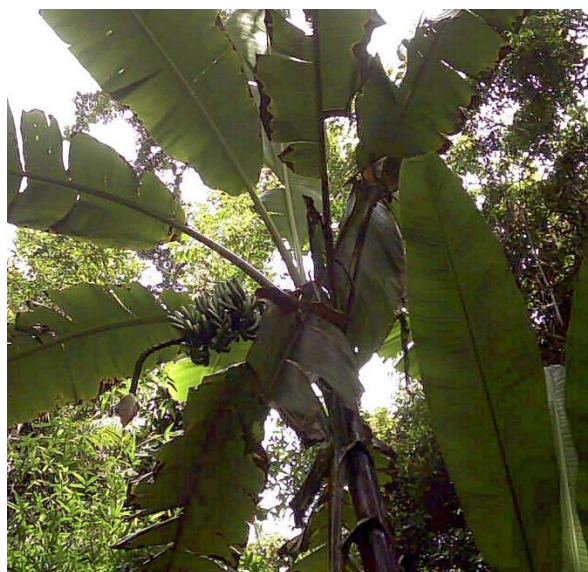
The Temple Tree's botanical name is *Crateva religiosa*, a member of the Caper Family, *Capparaceae*, with greenish ovoid fruits the size of a small passionfruit. The fruit are responsible for an alternate common name of "Sacred Garlic Pear Tree".

A decoction made by boiling the outer bark is used for various medicinal purposes which range from treatment for kidney stones to lowering the body temperature in fevers, such as malaria, and also for control of urinary incontinence.

My tree is now 1.5 metres tall. It has suffered complete defoliation by grasshoppers several times and also has deciduous periods. The current leaf flush is its best yet and it has managed to retain all the new leaves. I am confident that we will have some perfumed flowers in time for Christmas.

## MUSA BANKSII

Don Lawie



Yesterday, I was surprised to find a large, mature specimen of our native banana, *Musa banksii*, in the rainforest only a few minutes from home. The tree was about five metres tall and had a sucker about half of its height plus a fairly large bunch of fruit.

When we moved to East Russell in 1976 there were many banana plants in or near the forest. We planted the legally allowable species known as Sugar Banana'; they are tall plants with short, very sweet fruit.





Weather affected sugar bananas. On the left are perhaps a few cross-pollinated fruit.



After some time we found that our bananas often contained hard black seed about 5mm in size. We assumed that they were a result of cross-pollination with the wild bananas but, as they arose only occasionally, we regarded them as just another gift of the rainforest gods and ignored them.

Fast forward to 2023: my daughters Helen and Marion and I were doing recce trips for the forthcoming Native Plants Queensland Regional conference. We visited the Johnstone River Landcare Group in Innisfail and had a fascinating discussion with their leader, Adrian Hogg, about native bananas. Adrian is an expert on these plants and he has grown a specimen each of *Musa banksii* and *Musa jackeyi*, about three meters apart so that the differences can easily be seen. I rushed home to inspect our native plants and there were none to be seen. Adrian had said that the species *Musa jackeyi* was vector for some exotic banana disease and the Queensland Government had destroyed them all. It seems that they had also killed the Banksii species.

Identifying features for *Musa banksii* are brown/black colouring on the trunk which is about four meters high, a pendulous bunch of fruit, each about six cm long and 1.5 cm

diameter. The end of each leaf is blunt as though it has been cut across. The flower “bell” is pale yellow and the leaves curl back to expose pearl-white flowers .



We cut a fruit from the bunch. It is still quite immature, hard and green with the centre part filled with seeds about two mm in diameter. I expect the fruit to ripen to a yellow colour and soften, becoming desirable food for ?? We will monitor the plant and perhaps report next month.

## COMING UP

19 November excursion: Cairns Art Gallery. Ellis Rowan - botanical artwork exhibition

December: Christmas lunch - date TBC early December. At Helen and Mark's house in Mount Sheridan. Bring a plate to share AND something yummy, plantable, or collectable for the raffle. ALSO gold coins!!

December and January: no excursions - Summer hiatus.



