

Society for Growing Australian Plants

Cairns Branch Inc.

Newsletter 226, November 2022

October Excursion: Jack Barnes Boardwalk, Cairns Airport

Rob Jago

A small but intrepid group of mangrove enthusiasts tackled the southern most of the boardwalks of the recently reopened Jack Barnes Boardwalk at the Cairns Airport. These boardwalks are named to honour the memory of Dr. John Handyside Barnes MBE (1922-1985) known to everyone as Jack.

Jack, along with Hugo Flecker, was a pioneer in the research into the Box Jellyfish (*Chironex fleckeri*). Jack continued his research and eventually discovered the Irukandji: a fingernail sized jellyfish named in his honour (*Carukia barnesi*). This tiny invertebrate caused the then mysterious "Irukandji Syndrome."







Both Bianca and I are honoured to have known Jack. His close friend Dr Graham Cossins described Jack as irritable, and belligerent, demanding, and critical, unsociable and rude but under that gruff exterior was a kindly and compassionate associate. Yes that was Jack.

We struck a good day, the weather fine, the sky blue and the day cooled by a pleasant breeze and most importantly both the mosquitoes and midges, except for a few belligerent individuals, had taken the day off.

The mangrove community along the southern boardwalk is dominated by *Ceriops australis* "Yellow Mangrove" close to the carpark but becomes dominated by *Rhizophora apiculata* within a short distance.

A paper on the occurrence of a population of Xeromys myoides the water mouse along the boardwalk can be found at the website of The North Queensland Natural History Group under "A new locality & range extension for the Water Mouse Xeromys myoides" by Tina Ball & Andrew Mitchell. Well worth a read as are many other papers on this website.

The following list of vascular plant species were recorded by members of the Cairns Branch of the Society for Growing Australian Plants Sunday 16th October 2022.

FERNS & ALLIES

POLYPODIACEAE

Platycerium hillii Northern Elkhorn Fern

FLOWERING PLANTS-MONOCOTYLEDONS

ORCHIDACEAE

Dendrobium discolor Golden Orchid

Dockrillia calamiformis Northern Pencil Orchid

FLOWERING PLANTS-EUDICOTS

ACANTHACEAE

Avicennia marina subsp. eucalyptifolia

APOCYNACEAE

Dischidia nummularia Button Orchid

COMBRETACEAE

Lumnitzera racemosa Black Mangrove

LYTHRACEAE

Sonneratia alba Pornupan Mangrove

MELIACEAE

Xylocarpus moluccensis Cedar Mangrove

PLUMBAGINACEAE

Aegialitis annulata Club Mangrove

RHIZOPHORACEAE

Bruguiera gymnorhiza Bruguiera parviflora

Ceriops australis Yellow Mangrove

Ceriops pseudodecandra

Ceriops tagal Rib-fruited Yellow Mangrove

Rhizophora apiculata

Rhizophora stylosa Stilt Mangrove

RUBIACEAE

V Myrmecodia beccarii Ant Plant

Further reading

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Ball T, and Mitchell A. (2018) A new locality and range extension for the Water Mouse *Xeromys myoides*. *North Queensland Naturalist*, 48: 39-45. <www.nqnat.org/_files/ugd/eb4488_c791317d4afa 478c9219d74c6836a97b.pdf> Accessed 14 November 2022.



This image: Flowers of Ceriops australis.

Previous page (top): The SGAP crew gathered for a photo opportunity.

Previous page (middle): Stand of Ceriops australis.

Previous page (bottom): Flower of Bruquiera parviflora.

Earlier this year, Don Lawie came across an odd vine, growing in the jungle not far from his home in East Russell. Its leafless stems bore strange and disturbing flowers, mottled with the colours of pale fat and rotting meat. The vine turned out to be Aristolochia australopithecurus, one of the Dutchman's Pipe family, and a food plant of the Cairns Birdwing butterfly. Although there are no known records of the species from the ranges to the east of the Bruce Highway, the species has been spotted in the area before, by none other than Garry Sankowsky. Nevertheless, the discovery prompted a flurry of interest, and here are some of the stories.



Pararistolochia australopithecurus

Don Lawie

The rainforest behind our house is a lowland vine forest, low altitude, granitic soil, high rainfall, in short Type 2B according to the classification of Len Webb and Jeff Tracey. The vines range in size from slender "trip you ups" to massive Mucuna gigantea, Burny Bean, thick as a man's waist. I recently (17 September 2022) found an insignificant vine, about 10 mm in diameter, running from the forest floor to disapear into the canopy. The vine had no leaves but it did have something that rivetted my attention. It was in full flower with one, two or three flowers protruding from the vine every 7 cm or so.

The flowers were unmistakeably of the Aristolochia family but their species was not familiar to me. A search in Jones and Gray's Climbing Plants in Australia suggested very strongly that I had a rare vine Aristolochia sp. Bartle Frere, which has only been reported from the eastern slopes of the Bartle Frere/Bellenden Ker Ranges, and then only a few times.

I sent photos to Stuart Worboys and Dr Rob Jago and they confirmed my I.D., but pointed out that my 1988 book was out of date. The vine is now known as either Aristolochia australopithecurus, or

Pararistolochia australopithecurus. The flowers were the shape and size of a peanut shell, white with a network of purple veins which protruded at the tip of the flower, twined around one another and formed a sort of narwhal's horn.

I had to go away for a few days and on returning on 24 September most of the flowers had opened at the top to reveal a deep mauve and yellow colour in the throat. I was away again fron 26 to 30 September. On 1 October I found that almost all the flowers had shrivelled and dropped, except for two or three at ground level. One of those is still persisting at 6 October.

At no time did I see any creatures that could be pollinators – no ants, moths, beetles, spiders or any insects at all, but the mosquitoes were in biting hordes. The weather has been hot and dry except for light showers in the last two days.

Notes on plants of the Cairns Region

Rob Jago

ARISTOLOCHIACEAE

The plant family Aristolochiaceae (Dutchman's Pipe or Birthwort Family) along with Piperaceae (Pepper Family) are the only families in the Order Piperales (an ancient plant lineage) that occur within the Cairns Region. The Aristolochiaceae within the Cairns Region is represented by eleven species, nine native and two exotic. The local species have until recently been placed within *Aristolochia* with five native and two introduced naturalized species and the closely related *Pararistolochia* with four native species. This arrangement is still maintained by the Queensland Herbarium in the 2021 Census of the Queensland Flora but many other authorities have followed Buchwalder *et al.* and place all local species both native and exotic within *Aristolochia*, which is the arrangement used in Edition 8 of Australian Tropical Rainforest Plants.

Aristolochia

The genus *Aristolochia* was created by the Swedish physician and botanist Carl Linnaeus (1707-1778) in his Species Plantarum in 1753. The name is derived from the Greek *aristos* for best and the Latin *lochia* for childbirth in reference to the curved form of the flower of *A. clematitis* which resembles a human foetus in the normal position prior to birth. The genus consists of around 475 species worldwide with 15 species native to Australia and 2 naturalised exotic species. The first scientific collections of the genus from Australia were made by the English botanist Sir Joseph Banks (1743-1820) and the Swedish botanist Dr. Daniel Carlsson Solander (1733-1782) from the Endeavour River area in 1770. The genus is characterised by the calyx being fused into a tube often forming an S-shaped structure reminiscent of a pitcher with one enlarged lobe or with three more or less equal lobes.

Aristolochia australopithecurus (Mich.J.Parsons) Buchwalder & Wanke

Synonyms: *Pararistolochia australopithecurus* Mich.J.Parsons; *Aristolochia* sp. (Woopen Creek, G. & N. Sankowsky 685); *Aristolochia* sp. (Bartle Frere)

Type: Australia: Queensland, State Forest Reserve 310, Rainforest, 780 m, 8 Nov. 1977, 17°13'S, 145°42'E, B. Gray 784 (QRS017289).

Etymology: The species epithet is derived from Australia and the species epithet of the closely related New Guinean species *A. pithecurus* to emphasize the importance of this species as the nearest relative to A. *australopithecurus*.

Common Names: Cairns Birdwing Butterfly Plant. Christie Palmerston the first European to collect specimens of this vine records the native name as Woonloo.



Unopened flower buds

Introduction: The large unusual flowers are a remarkable sight never forgotten, especially when encountered growing in its dense rainforest home. They are borne on the stem at or near ground level with their perianth lobes fused together by filament-like appendages that protrude above the apex of the perianth tube. The first scientific collections of Aristolochia australopithecurus were made by the explorer, track finder and gold prospector Christie Palmerston (1851-1897) in 1888 "50 miles from the coast." Palmerston's distance from the coast is an estimate of the distance travelled from the coast along the walking track between Innisfail and the diggings on the Russell River Terraces at Boonjie. His is estimates of distances contained within his diary that covers this area, that can be measured accurately on modern maps usually equates to Palmerston's mile being close to a kilometre. The distance from Innisfail along the old pack track to Boonjie via the Russell River Valley is approximately 50 kilometres.

It is therefore highly likely that Palmerston's collection was made somewhere in the Boonjie area close to the eastern edge of the Atherton Tableland where this vine is relatively common.

Palmerston described this vine in his notes attached to the specimen MEL1553308A forwarded to Baron Ferdinand von Mueller as; "Is of a bluish-grey in colour streaked with many beautiful veins-artery like and all [?] lines attendant. it is hollow and when in puff-like two reptiles heads of different shapes conjoined when bursted. Its inner side of a dark reddish colour." For reasons unknown this vine was not described by Baron von Mueller and 86 years were to pass before this vine was re-collected. It was over a century before it was formally named and described by Michael J. Parsons in the Botanical Journal of the Linnean Society in 1996 based on material collected by Bruce Gray from Gadgarra in 1977.

Description: A vine with stems from a few metres to 30 metres in length, 10-15 mm diameter; root tubers small. Leaves simple, alternate; lamina 100-260 mm long x 25-100 mm wide, upper surface of lamina glabrous to minutely hairy, undersurface clothed with minute pale hairs; petioles, pubescent, 20-45 mm long, often curved and acting like tendrils. Inflorescence cauliflorous, usually a panicle of 2-3 flowers or solitary flower; usually borne from ground level to a few metres or more along the stem. Flowers 50-60 mm long; perianth 3-

lobed; outer surface grey to cream with purplish markings; inner surface deep purple near the apex and bright yellow with purplish brown or maroon markings or purple below; each perianth lobe fused together by a maroon filament-like appendage 30-40 mm long x 1.5 mm wide that are spirally twisted together. Fruit orange, soft and fleshy, 50-80 mm long x 25-35 mm wide with 6 longitudinal ribs; seeds numerous, brown, 8-9 mm long, stacked in 6 vertical rows. Flowers are usually produced from September to October with mature fruit having been collected in February, June and October.

Distribution: A seldom collected vine in rainforests from the Mulgrave River south to the Johnstone River extending west to the margins of rainforest and wet sclerophyll forest on the Atherton and Evelyn Tablelands as far west as Ravenshoe from near seal level to 1200 m alt.

Notes: Specimens of this vine can be seen along the walk to The Boulders on Babinda Creek or along the Goldfields Walking Track between the Boulders and the East Mulgrave River or you could visit Don Lawie's place at East Russell. This vine is one of the host plants for the larvae (caterpillars) of the Cairns Birdwing Butterfly *Ornithoptera euphorion* but is difficult to grow in many garden situations given its very wet rainforest habitat. The flowers are believed to be pollinated by small flies that are attracted to the flower. These flies and perhaps other insects become trapped in the perianth by downward pointing hairs that line the inside of the upper part of the tube. These hairs relax once the flower has been pollinated allowing the insects to escape.

References

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Ptoechima pterocarpum



Ptoechima pterocarpum (Sapindaceae) is a pretty little tree. In the wild its known only from the area bounded by Julatten, Mossman and Wangetti. But its compact attractive form, shiny leaves and brightly coloured fruit have been recognised well-informed council landscapers, and it has been planted in a few places around Cairns. This one was spotted and photographed by Barbara Collins outside Machans Beach Community Hall. More can be seen across the road from the Cairns Art Gallery.

SGAP Cairns Branch 2022-2023 Committee

President: Patsy Penny

Vice President: Dr Rob Jago

Secretary: Helen Lawie (secretary@sgapcairns.org.au, cairns@npq.org.au)

Treasurer: Val Carnie

Webmaster: Tony Roberts

Newsletter Editor: Stuart Worboys (worboys1968@yahoo.com.au



Cairns

20 November 2022. Davies Creek. We usually meet at midday, but we'll meet at 11 a.m. special time!! at the main picnic area/campground car park near the toilets, below the falls. Once assembled we'll continue up the road to where the forest is cool and shady, and a broad easy track follows the old forestry road. Details to follow in the newsletter.

Please RSVP attendance so that we know if we are waiting for anyone to arrive. RSVP secretary@sqapcairns.org.au

Sunday 11 December 2022. End of year Christmas lunch. Home of Helen Lawie and Mark Olsen, 18 Manilla Close Mount Sheridan. Bring a plate or something for the BBQ. Bring something for the Christmas raffle. It doesn't have to be a native plant (although they're great) - if you like you could bring a cake, some mango chutney or a new car. Helen's phone number if you get lost (no judgement I promise!) is 0403 946 809.

Sunday 19 February 2023. Indoors (in the airconditioning and out of the rain), once again at the home of Helen Lawie in Mount Sheridan. Presentation from guest speaker, Dr David Tng. David directs The School for Field Studies on the Atherton Tablelands, and will deliver an informal info session we have dubbed 'Bryophytes for Beginners'.

In 2023 we would love the person who suggests a location to tell us a little bit about the attractions of the walk and also keep in mind access to toilets, somewhere shady/rain protected. All ideas welcome!

Townsville

NPQ Townsville normally meets at 7 p.m. on the second Wednesday of the month, February to November. The meeting venue is the Oonoonba Community Hall, Shannon Street, Oonoonba.

Sunday 11th December 2022. Christmas Breakup at 2 Hoya Court from 2.30pm on. Members will receive full details by email.

Tablelands

SGAP Tablelands Branch holds its meetings on the fourth Wednesday of the month at the C.W.A. Hall, Tolga, commencing 7.30. Excursions occur on the following Sunday. Contact: Peter Radke pandaradke@gmail.com