Society for Growing Australian Plants Cairns Branch

NEWSLETTER

Newsletter No 238 March, 2024

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Goomboora Park, Brinsmead Sunday, 17 March

Our next outing is to be at Goomboora Park. Access is via Shale Street off the Western Arterial as the web map plainly shows. As usual we will meet at 12 noon. Whoever arrives first will have the opportunity of choosing where we seat ourselves. Please make sure it is not in the "dog off leash" area which we found not quite to our taste when we unwittingly chose that a few years ago. After lunch we will get down to the business of the AGM.

Apart from the obvious, this is when we discuss such things as Branch finances and set out our program for the year, so come armed with your suggestions of where you would like to explore and why.

February Incursion – Matthew McIntosh: Plant Detective

From Helen Lawie

Gathering in the welcome aircon, Cairns Branch became armchair adventurers as Matthew McIntosh shared a fascinating slideshow. His work in the consulting sector includes ecological surveys and environmental impact studies, amongst other things.

His weekends involve more of the same, passionately seeking to discover and identify plants that interest him. A well-known mountain goat, and previous Secretary of SGAP Cairns, Matt's photography skills and botanical knowledge were paired to great effect.

The endemic ground orchids of the Cardwell region might be familiar to those who have read Matt's article in Native Plants Queensland Journal in June, 2023, *Orchid hunting in Cardwell.* Saving us the slog through seasonally inundated Melaleuca grassland, Matt shared the enjoyment of his discoveries without the humidity, mozzies, or leaches.

Photographed in their January flowering season the aubergine shaded Cardwell Midge Orchid, *Corunastylis tecta*, snow white Common Rein Orchid, *Peceilis*

propinquior, and happy Yellow Grass Orchid, Apostasia stylidioides each had a moment on the big screen. The Elbow Orchid, *Arthrochilus stenophyllus* flower however inspired gasps of fascination and admiration. This flower is bent at the angles of a miniature hurdler-alien insect-Japanese Hiragana. Truly a wonder.

Sundews, aka *Drosera*, are another passion project; something our highly esteemed President, Stuart Worboys, is very familiar with. Wet Tropics endemic Trailing Sundew, *Drosera prolifera*, was painstakingly photographed on Thornton's Peak: capturing tiny magenta flower stalks, globes of sticky exudate, and little round leaves roughly about the size of a 5 cent coin. Reproducing exuberantly in its niche environment on rocks by a creek, this clump of *prolifera* would be the envy of any terrarium enthusiast.

Next Matt introduced us to *Drosera adelae* with its long sword shaped leaves, and also the term mucilage, which I intend to wind into dinner conversation at my next available opportunity.

Notched Sundew, *Drosera schizandra,* completed the three endemics. Large lettuce sized leaves and pretty little flowers were reminiscent of wild African Violets, the kind my Godmother grew with great success in her house in Babinda. Keep an eye out of Drosera schizandra next time you are up Mt Bartle Frere or Bellenden Kerr.

Other delights of the day included Jewel Orchids, photographed exquisitely, cake consumed voraciously, and highly scented show and tell inhaled gratefully. A big thank you to Matt McIntosh who generously shared his time and expertise in the warm and humble way we have come to know and appreciate.

Ed. A member of Patsy Penny's family has now discovered a rather large patch of the Apostasia stylidioides, so we had to do some research. We who stick with *Dockrill* call the "Yellow Grass Orchid" Apostasia wallachi. An appeal to Matt revealed they are one and the same. See photos at end.

Utricularia The Bladderworts

I cannot leave the world of carnivorous plants without mentioning the often-overlooked genus, *Utricularia*, says our valued contributor.

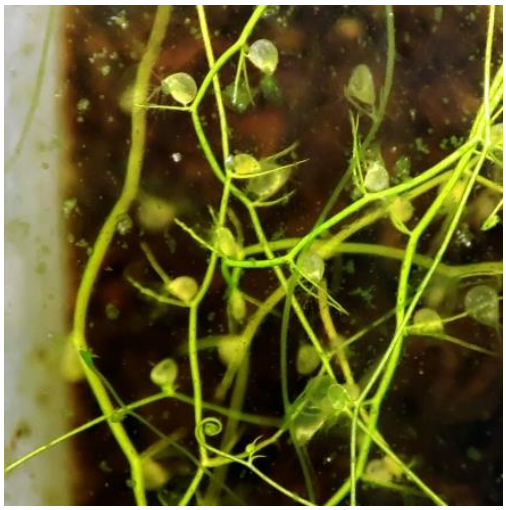
Utricularia bifida

Bladderworts are found in most countries around the world. There are more than 200 species in the family Lentibulariaceae , ranging in size from only a few centimetres to about a metre in height. They inhabit freshwater bodies and wet soil. Their flowers resemble those of snapdragons and are produced in an array of colours.

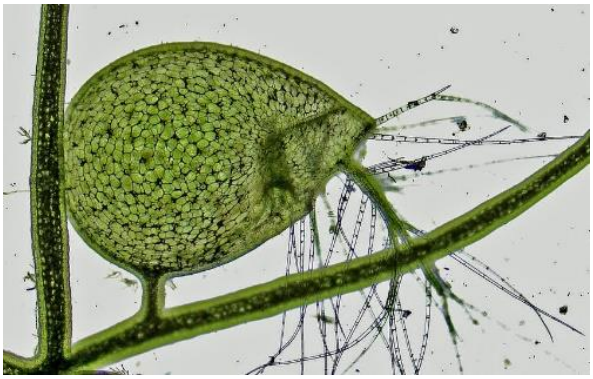
U. caerulea,
http://www.northqueenslandplants.com/

Utricularia gibba Alex Popovkin

Bladderworts do not have roots. Below the soil or water surface they produce branches of leaves that are modified to form small bladder-like sacks (traps). These sacks vary in size from about .2mm wide in some terrestrial species to over 10mm wide in aquatic species. At one end of each bladder is an opening and a trapdoor surrounded by numerous bristles. These bladders are the stomachs of the plant.



Utricularia gibba traps (Victoria)



Trap of *Utricularia gibba*,
trigger bristles visible near the trapdoor

Water is pumped out of the bladder by osmotic action. This creates a negative pressure or vacuum within it. If an unsuspecting bug happens to touch one of the bristles around the trapdoor mouth, the trapdoor opens inwards, water and prey are sucked into the bladder, then the trapdoor closes, preventing escape.
The prey is slowly dissolved and digested as the bladder commences pumping out water again.

The movement of the trapdoor is regarded as the fastest movement in the plant kingdom and in some cases the entire open/close sequence can take less than .01 (one, one hundredth) of a second.

Like other carnivorous plants, bladderworts enlist the aid of other species to help dissolve their prey. Inside the bladders are found microbes, often bacteria, that aid in the break down and digestion of their meal.

Cairns is home to at least four bladderwort species; *Utricularia bifida*,
Utricularia caerulea,
Utricularia gibba,
Utricularia uliginosa.

(Photography by C. Bugden, D. Clark & T. Whiteway. Image used with the permission of the Western Australian Herbarium, Department of Biodiversity, Conservation and Attractions (https://florabase.dbca.wa.gov.au/help/copyright). Accessed on 10 December 2023.)

AN ITEM OF INTEREST

A recent paper in the *North Queensland Naturalist* titled "Restoring an arboretum of Lauraceae at Lake Eacham, Crater Lakes National Park, Queensland" may be of interest to some readers.

This paper by David Tng *et al.* who most will remember from his talk on Bryophytes and from our visit to the School for Field Studies near Yungaburra, details the history, current state and future of the Lauraceae Arboretum. This paper can be accessed at https://www.nqnat.org/

It is also suggested that it would be of interest to visit this arboretum.

Pholidota imbricata

Now flowering at East Russell

Don Lawie

This an orchid of the Wet Tropics rainforest growing usually on trees and occasionally on rocks. The *Pholidota* genus comprises about 50 species that occur from Sri Lanka to Australia and the Pacific islands. They require semi shade and plenty of water to grow them at home and they do well in a 5 inch pot. The pseudobulbs are reminiscent of *Bulbophyllum species* with the stem bases crowding close together with one large leaf per stem. The inflorescence arises at the same time and they develop together.

At flowering time it droops downward to present an attractive sight. Flowers are quite small at about 5 mm wide and what they lack in size they make up for with their abundance. The inflorescence consists of two rows of flowers joined together down the length of the rachis looking, to my eyes, like a zip closure. The colour is creamy white with a yellow labellum. As the long lasting flowers age the bracts over the pedicels gradually turn brown.

Pauline has two P *Imbricata* currently flowering in pots. One was to have been taken to our last meeting for a raffle prize but our flooding bridge kept us at home.

Photo. Pauline Lawie

ANOTHER ITEM OF INTEREST

The Gullivers

A recent paper in *Swainsona*, the Journal of the Adelaide Botanic Gardens, may also be of interest to some readers. This paper by John Dowe of Cairns, well known to many readers, and Philip Short of Adelaide covers the life of the Gulliver siblings, Thomas, Benjamin and Susannah.

The Gullivers' collected extensively in the Northern Territory, New South Wales, Tasmania and Queensland in the later part of the nineteenth century, collecting both botanical and zoological specimens. All three eventually came to reside in Townsville where they lived out the remainder of their lives.

Locally the Gullivers' collected botanical specimens from Port Douglas, Trinity Bay and from the base of Mount Bartle Frere. They appear to have been recruited as botanical collectors by Baron von Mueller and collected extensively up until Mueller's death in 1896.

However they continued to pursue their botanical and horticultural interests in the Townsville area up until their deaths in 1931 and 1938. An interesting fact not mentioned in this article is that Thomas Gulliver was the first to compile a list of plants from Mt Bartle Frere, based on specimens collected by the Queensland Government Geologist, Robert Logan Jack, and the well-known explorer Christie Palmerston in February 1888.

This list of plants from Mt. Bartle Frere by T A Gulliver is attached to Jack's reporton the Geology of the Russell River in 1888.

The paper "The Gullivers' travels" Thomas Allen Gulliver (1848-1931), Benjamin John Gulliver (1851-1938) and Susannah Gulliver (1857-1938): their contribution to Australian natural history and horticulture: *Swainsona* 38: 45-72 (2024)

ONE MORE ITEM OF INTEREST
Lumpers and Splitters
Eucalypts

Recent papers on the classification of the Eucalypts have been published in *Swainsona* and online by Dean Nicolle which support the view that *Angrophora* and *Corymbia* should be included within *Eucalyptus*. On the other hand Crisp *et al.* in a recent paper have retained *Angrophora* and split all but the Red Bloodwoods from *Corymbia* into the new genus *Blakella.* The following papers can be read online or downloaded.

Nicolle, D.: Transfer of residual species & subspecies from *Angrophora* & *Corymbia* to *Eucalyptus* (Myrtaceae): *Swainsona* 38: 125-126 (2024) at Swainsona All Volumes (environment.sa.gov.au)
Nicolle, D.: *Classification of the eucalypts*, genus Eucalyptus, Version 7 at http://www.dn.com.au/Classification-Of-The-Eucalypts.pdf
Crisp, M.D. *et al.:* Perianth evolution & implications for generic delimitation in the eucalypts (Myrtaceae), including the description of the new genus, *Blakella*: *Journal of Systematics & Evolution*: 1-21 (2024) at Perianth evolution and implications for generic delimitation in the eucalypts (Myrtaceae), including the description of the new genus, Blakella (wiley.com)

Checklist of Eucalypts of the Cairns Region
with *Angrophora & Corymbia* Included within *Eucalyptus*

New Combination	Current Name
Eucalyptus abergiana F.Muell.	*Corymbia abergiana*
Eucalyptus atrata L.A.S.Johnson & K.Hill	*Eucalyptus atrata*
Eucalyptus bella (K.D.Hill & L.A.S.Johnson) Brooker	*Corymbia bella*
Eucalyptus camaldulensis subsp. acuta Brooker & M.W.McDonald	*Eucalyptus camaldulensis*
Eucalyptus chartaboma D.Nicolle	*Eucalyptus chartaboma*
Eucalyptus chlorophylla Brooker & Done	*Eucalyptus chlorophylla*
Eucalyptus citriodora Hook.	*Corymbia citriodora*
Eucalyptus clarksoniana D.J.Carr & S.G.M.Carr	*Corymbia clarksoniana*
Eucalyptus cloeziana F.Muell.	*Eucalyptus cloeziana*
Eucalyptus confertiflora Kippist	*Corymbia confertiflora*
Eucalyptus crebra F.Muell.	*Eucalyptus crebra*
Eucalyptus cullenii Cambage	*Eucalyptus cullenii*
Eucalyptus dallachiana Benth.	*Corymbia dallachiana*
Eucalyptus drepanophylla F.Muell ex Benth.	*Eucalyptus drepanophylla*
Eucalyptus ellipsoidea D.J.Carr & S.G.M.Carr	*Corymbia ellipsoidea*
Eucalyptus erythrophloia Blakely	*Corymbia erythrophloia*

Eucalyptus exserta F.Muell.	*Eucalyptus exserta*
Eucalyptus florida Brooker	*Angophora floribunda*
Eucalyptus grandis W.Hill	*Eucalyptus grandis*
Eucalyptus granitica L.A.S.Johnson & K.D.Hill	*Eucalyptus granitica*
Eucalyptus hylandii D.J.Carr & S.G.M.Carr	*Corymbia hylandii*
Eucalyptus intermedia R.T.Baker	*Corymbia intermedia*
Eucalyptus leichhardtii F.M.Bailey	*Corymbia leichhardtii*
Eucalyptus leptophleba F.Muell.	*Eucalyptus leptophleba*
Eucalyptus lockyeri subsp. lockyeri Blaxell & K.D.Hill	*Eucalyptus lockyeri subsp. lockyeri*
Eucalyptus lockyeri subsp. exuta Brooker & Kleinig	*Eucalyptus lockyeri subsp. exuta*
Eucalyptus mediocris L.A.S.Johnson & K.D.Hill	*Eucalyptus mediocris*
Eucalyptus megasepala A.R.Bean	*Eucalyptus megasepala*
Eucalyptus melanophloia F.Muell.	*Eucalyptus melanophloia*
Eucalyptus microneura Maiden & Blakely	*Eucalyptus microneura*
Eucalyptus moluccana Roxb.	*Eucalyptus moluccana*
Eucalyptus nesophila Blakely	*Corymbia nesophila*
Eucalyptus pachycalyx Maiden & Blakely	*Eucalyptus pachycalyx*
Eucalyptus pellita F.Muell	*Eucalyptus pellita*
Eucalyptus peltata subsp. dimorpha Brooker & A.R.Bean	*Corymbia dimorpha*
Eucalyptus persistens L.A.S.Johnson & K.D.Hill	*Eucalyptus persistens*
Eucalyptus platyphylla F.Muell.	*Eucalyptus platyphylla*
Eucalyptus pocillum D.J.Carr & S.G.M.Carr	*Corymbia pocillum*
Eucalyptus polycarpa (F.Muell.)	*Corymbia polycarpa*
Eucalyptus portuensis K.D.Hill	*Eucalyptus portuensis*
Eucalyptus reducta L.A.S.Johnson & K.D.Hill	*Eucalyptus reducta*
Eucalyptus resinifera Sm.	*Eucalyptus resinifera*
Eucalyptus rhodops D.J.Carr & S.G.M.Carr	*Corymbia rhodops*
Eucalyptus setosa subsp.pedicellaris(KDHill&LASJohnson)DNicolle	*Corymbia setosa*
Eucalyptus shirleyi Maiden	*Eucalyptus shirleyi*
Eucalyptus similis Maiden	*Eucalyptus similis*
Eucalyptus staigeriana F.Muell ex F.M.Bailey	*Eucalyptus staigeriana*
Eucalyptus stockeri subsp.peninsularis(DJCarr&SGMCarr)DNicolle	*Corymbia stockeri*
Eucalyptus tardecidens (L.A.S.Johnson & K.D.Hill) A.R.Bean	*Eucalyptus tardecidens*
Eucalyptus tereticornis Sm.	*Eucalyptus tereticornis*
Eucalyptus terminalis (F.Muell.)	*Corymbia terminalis*
Eucalyptus tetrodonta F.Muell.	*Eucalyptus tetrodonta*
Eucalyptus tessellaris F.Muell.	*Corymbia tessellaris*
Eucalyptus torelliana F.Muell.	*Corymbia torelliana*
Eucalyptus trachyphloia F.Muell.	*Corymbia trachyphloia*

Checklist of Eucalypts of the Cairns Region with *Angrophora, Blakella & Corymbia* separated from *Eucalyptus*

New Combination	Current Name
Angophora floribunda (Sm.) Sweet	*Angophora floribunda*
Blakella bella (K.D.Hill & L.A.S.Johnson) Crisp & L.G.Cook	*Corymbia bella*
Blakella citriodora (Hook.) Crisp & L.G.Cook	*Corymbia citriodora*
Blakella confertiflora (Kippist) Crisp & L.G.Cook	*Corymbia confertiflora*
Blakella dallachiana (Benth.) Crisp & L.G.Cook	*Corymbia dallachiana*
Blakella leichhardtii (F.M.Bailey) Crisp & L.G.Cook	*Corymbia leichhardtii*

Balkella peltata (Benth.) Crisp & L.G.Cook	*Corymbia peltata*
Blakella tessellaris (F.Muell.) Crisp & L.G.Cook	*Corymbia tessellaris*
Blakella torelliana (F.Muell.) Crisp & L.G.Cook	*Corymbia torelliana*
Corymbia abergiana (F.Muell.) L.A.S.Johnson & K.Hill	*Corymbia abergiana*
Corymbia clarksoniana (D.J.Carr & S.G.M.Carr) L.A.S.Johnson & K.Hill	*Corymbia clarksoniana*
Corymbia ellipsoidea (D.J.Carr & S.G.M.Carr) L.A.S.Johnson & K.Hill	*Corymbia ellipsoidea*
Corymbia erythrophloia (Blakely) L.A.S.Johnson & K.Hill	*Corymbia erythrophloia*
Corymbia hylandii (D.J.Carr & S.G.M.Carr) L.A.S.Johnson & K.Hill	*Corymbia hylandii*
Corymbia intermedia (R.T.Baker) L.A.S.Johnson & K.Hill	*Corymbia intermedia*
Corymbia nesophila (Blakely) L.A.S.Johnson & K.Hill	*Corymbia nesophila*
Corymbia pocillum (D.J.Carr & S.G.M.Carr) L.A.S.Johnson & K.Hill	*Corymbia pocillum*
Corymbia polycarpa (F.Muell.) L.A.S.Johnson & K.Hill	*Corymbia polycarpa*
Corymbia rhodops (D.J.Carr & S.G.M.Carr) L.A.S.Johnson & K.Hill	*Corymbia rhodops*
Corymbia setosa subsp. pedicellaris K.D.Hill &L.A.S.Johnson	*Corymbia setosa*
Corymbia stockeri subsp. peninsularis (KDHill&LASJohnson)A.R.Bean	*Corymbia stockeri*
Corymbia terminalis (F.Muell.) L.A.S.Johnson & K.Hill	*Corymbia terminalis*
Corymbia trachyphloia (F.Muell.) L.A.S.Johnson & K.Hill	*Corymbia trachyphloia*
Eucalyptus atrata L.A.S.Johnson & K.Hill	*Eucalyptus atrata*
Eucalyptus camaldulensis subsp. acuta Brooker & M.W.McDonald	*Eucalyptus camaldulensis*
Eucalyptus chartaboma D.Nicolle	*Eucalyptus chartaboma*
Eucalyptus chlorophylla Brooker & Done	*Eucalyptus chlorophylla*
Eucalyptus cloeziana F.Muell.	*Eucalyptus cloeziana*
Eucalyptus crebra F.Muell.	*Eucalyptus crebra*
Eucalyptus cullenii Cambage	*Eucalyptus cullenii*
Eucalyptus drepanophylla F.Muell ex Benth.	*Eucalyptus drepanophylla*
Eucalyptus exserta F.Muell.	*Eucalyptus exserta*
Eucalyptus grandis W.Hill	*Eucalyptus grandis*
Eucalyptus granitica L.A.S.Johnson & K.D.Hill	*Eucalyptus granitica*
Eucalyptus leptophleba F.Muell.	*Eucalyptus leptophleba*
Eucalyptus lockyeri subsp. lockyeri Blaxell & K.D.Hill	*Eucalyptus lockyeri subsp. lockyeri*
Eucalyptus lockyeri subsp. exuta Brooker & Kleinig	*Eucalyptus lockyeri subsp. exuta*
Eucalyptus mediocris L.A.S.Johnson & K.D.Hill	*Eucalyptus mediocris*
Eucalyptus megasepala A.R.Bean	*Eucalyptus megasepala*
Eucalyptus melanophloia F.Muell.	*Eucalyptus melanophloia*
Eucalyptus microneura Maiden & Blakely	*Eucalyptus microneura*
Eucalyptus moluccana Roxb.	*Eucalyptus moluccana*
Eucalyptus pachycalyx Maiden & Blakely	*Eucalyptus pachycalyx*
Eucalyptus pellita F.Muell	*Eucalyptus pellita*
Eucalyptus persistens L.A.S.Johnson & K.D.Hill	*Eucalyptus persistens*
Eucalyptus platyphylla F.Muell.	*Eucalyptus platyphylla*
Eucalyptus portuensis K.D.Hill	*Eucalyptus portuensis*
Eucalyptus reducta L.A.S.Johnson & K.D.Hill	*Eucalyptus reducta*
Eucalyptus resinifera Sm.	*Eucalyptus resinifera*
Eucalyptus shirleyi Maiden	*Eucalyptus shirleyi*
Eucalyptus similis Maiden	*Eucalyptus similis*
Eucalyptus staigeriana F.Muell ex F.M.Bailey	*Eucalyptus staigeriana*
Eucalyptus tardecidens (L.A.S.Johnson & K.D.Hill) A.R.Bean	*Eucalyptus tardecidens*
Eucalyptus tereticornis Sm.	*Eucalyptus tereticornis*
Eucalyptus tetrodonta F.Muell.	*Eucalyptus tetrodonta*

AND ANOTHER ITEM OF INTEREST

WORTH THE WAIT
Hibbertia

In a recent paper published in *Swainsona,* the Journal of the Adelaide Botanic Gardens, Hellmut Toelken of the State Herbarium of South Australia, named and described a shrub collected by the Melbourne based nurseryman, horticulturalist and botanical collector Stephen Johnson from Mt. Bellenden Ker and the Mulgrave River in 1891. This new species named and described as *Hibbertia taeniophylla* Toelken is currently known only from Johnson's collections and collections made by Betsy Jackes from the Ben Lomond Mining lease approximately 50 kilometers to the west of Townsville, and from an historical collection by M A Thozet from the Expedition Range to the southwest of Rockhampton. Johnson collected extensively for Baron von Mueller in the area around Mt. Bartle Frere and Mt. Bellenden Ker between 1889 and 1891. The description of this new species can be read online or downloaded at Swainsona All Volumes (environment.sa.gov.au)
Toelken, H R: Notes on *Hibbertia* subgen. *Hemistemma* (Dilleniaceae) -13. The eastern Australian *H acicularis and H perhamata* groups: *Swainsona* 38: 120-121 (2024)

Checklist of *Hibbertia* of the Cairns Region

Hibbertia araneolifera Toelken
Hibbertia aspera subsp. aspera DC.
Hibbertia aspera subsp. pilosifolia Toelken
Hibbertia banksii subsp. banksii (R.Br. ex DC.) Benth.
Hibbertia banksii subsp. sparsidentata Toelken
Hibbertia bicarpellata Toelken
Hibbertia cistoidea (Hook.) C.T.White
Hibbertia concinna F.M.Bailey
Hibbertia lepidota R.Br. ex DC.
Hibbertia longifolia F.Muell.
Hibbertia melhanioides F.Muell. *var. melhanioides*
Hibbertia melhanioides var. baileyana Domin
Hibbertia mulligana S.T.Reynolds
Hibbertia scandens (Willd.) Gilg
Hibbertia stelligera (C.T.White) Toelken
Hibbertia stirlingii C.T.White
Hibbertia synandra F.Muell.
Hibbertia taeniophylla Toelken

Thanks to Rob Jago for sharing all those items of interest.

Patsy Penny' photos of *Apostacia wallachii*