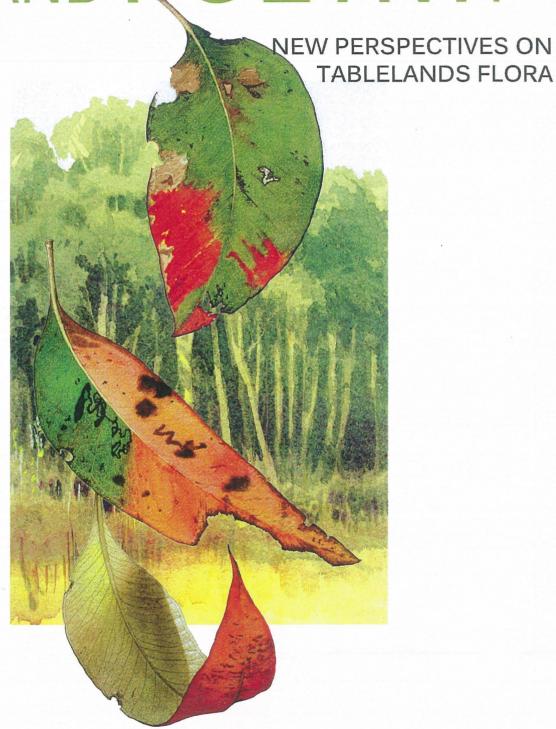
# BETWEEN ART

AND ROETRY:



Poetry by John Charles Ryan Drawings by David Mackay

# Between Art and Poetry:

New Perspectives on Tablelands Flora

**Exhibition Booklet** 

Poetry by John Ryan Drawings by David Mackay First published in 2017 by
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Between Art and Poetry. New Perspectives on Tablelands Flora

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Between Art and Poetry is a collaboration between botanical writer John Charles Ryan and botanical artist David Mackay on the diversity and beauty of the natural environments and, in particular, the flora of the New England Tablelands. Held at Reader's Companion in Armidale in November 2017, the main event included a reading of poetry, an art exhibition, brief talks by John and David, a musical performance by Alana Blackburn and the launch of two books, The Language of Plants and Plants in Contemporary Poetry.

The goal of Between Art and Poetry is to foster greater dialogue between the arts and sciences. The project aims to improve communication and enhance mutual understanding between the visual and literary arts, on the one hand, and between the arts and environmental science, on the other. The general purpose of the collaboration is to raise public awareness of the diversity and fragile beauty of the natural environments that surround us in the New England region.

The art-science collaboration centred on six plant species of the New England Tablelands: Antarctic beech (Nothofagus moorei), southern giant stinging tree (Dendrocnide excelsa), Ingram's wattle (Acacia ingramii), rock orchid (Dendrobium speciosum), river sheoak (Casuarina cunninghamiana) and Port Jackson fig (Ficus rubiginosa). While some species, such as Ingram's wattle, are highly localised endemics, others - for instance, river sheoak - are distributed more broadly across the Tablelands, coastal eastern Australia and, indeed, other parts of the globe.

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University of New England, School of Arts University of New England, School of Environmental and Rural Sciences (www.une.edu.au)



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### Works featured in Between Art and Poetry

#### Illustrations (David Mackay)

Cover: Eucalyptus calliginosa, New England Stringybark, Against Forest Background Where Have All the Bees Gone? Howell Shrubland After Fire Lithophyte, Ficus rubiginosa, the Rusty Fig, at Moonbi Living On the Edge - Acacia ingramii at Dangars Falls Casuarinaceae I and Casuarinaceae II

#### Musical Performance (Alana Blackburn)

Forestry of New England (bass recorder) composed by Benjamin Thorn Engels Nachtegaeltje (The English Nightingale) from *Der fluyten Lust-hof (The Flute's Garden of Delight*) by Jacob van Eyck

#### Poetry (John Ryan)

Digital Loop on iPad
What Would the Trees Say? A Poem in 24 Sonnets

A2 Size (420 x 594 mm)

River Sheoak

Variations on the Theme of Gorges

I Turned the Corner and Entered the Mind of the Forest

A3 Size (297 x 420 mm)

**Figwarts** 

Rock Orchid Hyphae

After Visiting Beadle's Grevillea

The Blossoms Will Soon Fall

Stinging-Tree Leaf Mirror (For Readers On the Other Side, Who Were Nettled)

A4 Size (210 x 297 mm)

Rusty Ficus

Ingram's Wattle

The Churchill of New England

Gondwanan Beech Walk

Outstanding Dendrobium

Brush-Tailed Rock Wallaby

A5 Size (148 x 210 mm)

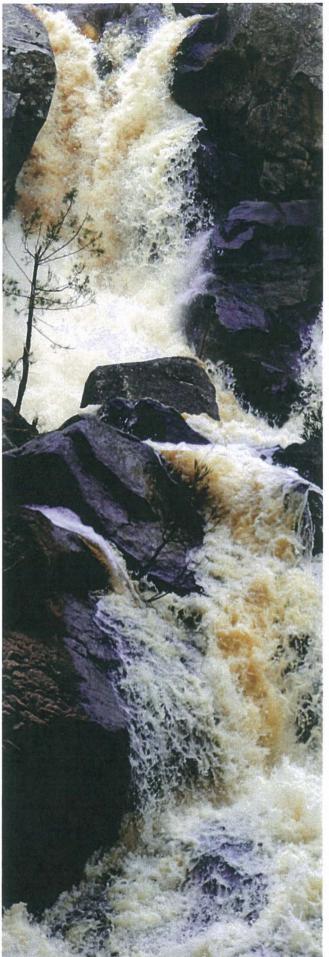
**Dorrigo Dialects** 

An Epiphyte Whinges

Two Old Cynical Trees

A Conference of Casuarina

Giant Stinging Tree Speaks



### Variations on the Theme of Gorges

At Wollomombi burning gorge-wattles borrow the spume of the falls.

2

Near Dangars lookout brush-tailed wallabies escape the gape of walkers.

3

Under coachwood a lyrebird struts with aplomb but forgets to greet us.

4

Clinging to the lip of a scenic vista herbs as fragrant as thyme.

5.

A mother possum claws the coarse skin of a tree, her dusk-eyes squinting.

6.

The kangaroo bounds across the water-logged track, a forest stream purls.

7.

Craving its quiet the rare grevillea bush wants no visitors.

8

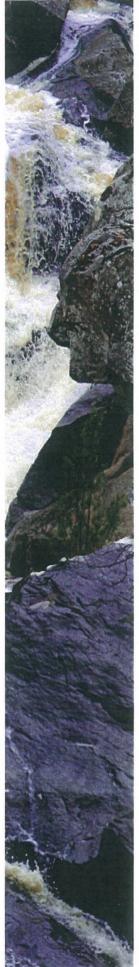
En route to Walcha memories of stone orchids laden with storm-drift.

9

Three-tiered waterfall where a tired nature poet once lost his footing.

10

Restless night in camp awoke to the earsplitting fever of gorge talk.

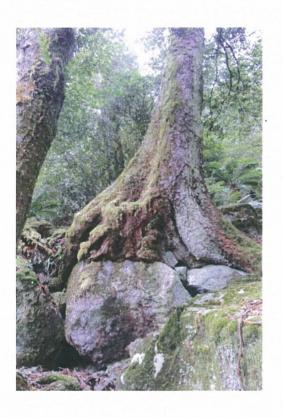




'Where Have All the Bees Gone?'
After Fire in the Howell Shrublands, a Threatened Ecological Community near Copeton Dam Chalk pastel and black ink on illustration film. 56 x 76 cm, David Mackay, 2014.

# **Antarctic Beech**

(Nothofagus moorei)



A member of the ancient Nothofagaceae family of the Southern Hemisphere, Antarctic beech is a cool-temperate rainforest tree endemic to north-east New South Wales and south-east Queensland. With a narrow and disjunct range, the species occurs from the Barrington Tops-Gloucester Tops area to the Border Ranges-Lamington Plateau at sites, on average, 1000 meters or more above sea level. A lesser-known population of 150 hectares is found at Mount Nothofagus in the western McPherson Range.

Classified alternately as *Lophozonia moorei*,<sup>4</sup> the wind-pollinated tree is considered a Gondwana taxon present in the

primordial supercontinent before it began drifting apart during the Mesozoic era.<sup>5</sup> Pollen analysis suggests that the genus is approximately 80-million-years old.<sup>6</sup> As a living relict of a primeval era, *N. moorei* furthermore is the most isolated member of its genus by geographical distance. In fact, its closest relative, myrtle beech (*N. cunninghamii*), inhabits forests over 1000 kilometres away in Tasmania and Victoria.<sup>7</sup>

Typical characteristics of Antarctic beech include a massive gnarled trunk and buttress roots cloaked in a rich-green layers of epiphytic mosses, liverworts and lichens.<sup>8</sup>

In the 1930s, the botanist A.D. Herbert described the stunted, multi-stemmed form of the beech tree, particularly on exposed sites, as *caespitose*. The knobby giant regenerates through mast seeding, root suckering and coppicing from the basal section of the trunk. The tree bears toothed, leathery evergreen leaves and small, winged nuts. It often forms associations, or assemblages, with sassafras (*Doryphora sassafras*) and coachwood (*Ceratopetalum apetalum*). What's more, the highly localised epiphyte, beech orchid (*Dendrobium falcorostrum*), is limited for the most part to *N. moorei* hosts. In

In 1850, the botanist Carl Ludwig Blume published the first scientific account of the beech, proposing the genus Nothofagus to denote "false beech" and observing its "leaves summer or winter green."12 Early taxonomists, such as Ferdinand von Mueller, assigned the tree to the genus Fagus and to the family Fagaceae along with the beeches of the Northern Hemisphere. The species name, moorei, commemorates Charles Moore who, in 1865, brought the tree to the attention of European botanists. 13 In recognition of the distinctiveness of these Gondwanan plants, in the 1960s, Soviet palynologist Lyudmila Kuprianova proposed a new family, Nothofagaceae,14 which presently comprises 43 species of trees and shrubs of Chile, Argentina, New Guinea, New Caledonia, New Zealand and Australia.

Early vernacular names for *N. moorei* include mountain, red, true and colonial beech as well as redwood.<sup>15</sup> The botanist and prolific writer Joseph Maiden effused that "no tree in the brush surpasses it in the quantity of epiphytal vegetation it supports. Many of the trees are bent and gnarled. The very dark-green foliage is striking, and

the shape and habit of the leaves is handsome. Altogether, it is one of the most interesting of our forest trees."<sup>16</sup> Documenting colonial-era interests in the beech, the forester Augustus Rudder wrote about the use of its wood in piano building and as a preferred medium generally for carving.<sup>17</sup>

As a relict taxon, Antarctic beech is often confined to topographically isolated sites, such as those along the scarp beneath Point Lookout in New England National Park about 80 kilometres east of Armidale. Indeed, this is where David and John visited the relict forest during the winter of 2017 for the collaboration, *Between Art and Poetry*.

Behind the poems is an urgent message. In coming years, climatic disturbance is expected to impact *N. moorei* more severely than other Australian species. Ecologists predict that, in response to carbon-induced climate change, the extent of cool-temperate rainforest in Australia will decline. Plant taxa constrained to high-altitude rainforest areas – and with limited distributions and inefficient seed dispersal mechanisms – are particularly vulnerable to long-term environmental patterns. <sup>20</sup>

As the example of *N. moorei* shows us, the loss of one tree species has numerous consequences for the array of biodiverse lifeforms that call it home.

"I turned the corner and I entered the mind Of the beech forest. The seen was not a scene But a psyche. The trees' old way of thinking Coppiced from within me. I walked inwardly A while towards eternity. It was no ordinary Overcast midday before Labour Day. Should-Ered by the Great Escarpment, I gaped east over Spinal ridges of the Bellinger River Valley. I heard The drawled and well-treed clauses of glacial speech. Through haziness beneath, prone figures of Cenozoic History sprawled towards the Tasman Sea: sacral Curves, lumbar hollows, those vertebral foramen Of time itself ever so expansive in its brevity. My body dropped through basalt strata of Other epochs as I rounded the elbow below Point Lookout and crashed face-first into the Very thought of the forest."

Applies the extended of industrial and displaced and solution of the process of the control of t

"We store a men the six sporing planes of prime. We leave the limit plane of the leave that the leave the leave the service of the leave the leave

the kings. Undernound for kings tradge where its Versi's core obloogled a probable that had a manetor. "Governge count too." It amend the server rate armod. The model of the forest To execute and a second list assessment in 12 ctoos! old may of server been sugged accels within my soung. I Turned the Corner and Entered the Mind of the

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Other services with the control of t

### Two Old Cynical Trees

A conjoined duo tethered at sternum, filmy fern fur, fused feet and femora in clique of cryptograms etcetera;
We concede not having nerve to stir them;
We agree 'twould be a risk to spurn them, those fellow Late Cretaceous genera crisping old muscles like thick tempura;
Towards one other we, therefore, turn in, halfdressed, chest to chest, stomach to stomach,

locked in eons of terse conversation, fantasising of some younger hummock, free from the effects of glaciation, perhaps filled with the tune of a dunnock, something other than this speciation.

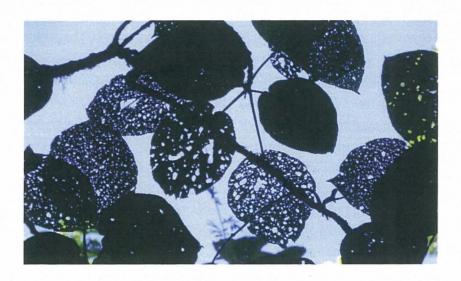


"When I first stepped into the Antarctic beech forest, I felt consumed by an infinite variety of shapes, forms, textures, smells and perspectives, in part resulting from the complex associations between the tree hosts and their epiphytes. My large-format poem 'I Turned the Corner and Entered the Mind of the Forest', 14-line Petrarchan sonnet 'Two Old Cynical Trees' and visual poem 'Gondwanan Beech Walk' attempt to convey the physical experience of deep time when walking in the forest. The magnetic presence of the beech in its visually-arresting environment provides a living point of access into the Gondwana era, glinting at the edge of human consciousness."

~JR

# Southern Giant Stinging Tree

(Dendrocnide excelsa)



The giant stinging tree is a warm-rainforest species endemic to eastern Australia and occupying a range from Tathra on the South Coast of New South Wales to Imbil in the Gympie Region of coastal south-east Queensland. The medium to large tree with spongy, brownish wood has a buttressed base and fluted trunk as well as large, toothed and cordate (or heart-shaped) leaves.

Flowering in summer and fruiting in autumn, the species is common to Dorrigo National Park, about 60 kilometres west of Coffs Harbour, and Mount Keira Reserve near Wollongong. In the 1890s, Joseph Maiden reported a specimen, at the Bellinger River near Dorrigo Forest Reserve, fifty-nine feet in girth growing among red cedars (*Toona australis*).<sup>1</sup>

The genus was known previously as *Laportea* (in honour of the French naturalist

François Laporte) and, the species, as *gigas* (for its large size). Observing morphological commonalities with the European nettle (*Urtica dioica*), the botanist Allan Cunningham used the nomenclature, *Urtica gigas*.<sup>2</sup> Aboriginal Australian names include *goomaomah*, *irtaie* and *burrie*.

Rapid regeneration and opportunistic growth enable the stinging tree to colonise rainforest gaps and clearings.<sup>3</sup> Exploiting the sunlight afforded by disturbed areas, the species can establish quickly and become abundant.<sup>4</sup> In addition to rainforest openings, stinging trees inhabit moist woodland gullies, areas along small tracks and creek edges, and properties adjacent to rainforest reserves.<sup>5</sup> It prefers rich, dark and moist soil.<sup>6</sup>

Australia's six stinging trees – of which *D. excelsa* is one – are some of the most dangerous plants on earth to touch and can

be found from Cape York Peninsula to the wet-temperate rainforests of south-east Australia. True to form, the giant stinging tree is infamous for its extremely painful hairs. This feature is an evolutionary characteristic acquired as a defense against predators. Covering all parts of the tree except for its roots – and especially profuse on large juvenile leaves – the tiny silicon bristles contain a neurotoxin highly irritating to the skin.<sup>7</sup>

Of the Australian species, however, only two appear as trees: *D. excelsa* and the shiny-leaf stinging tree (*D. photinophylla*) of Northern Queensland. While the southern giant stinging tree of Dorrigo packs a whopping punch, gympie gympie (*D. moroides*) of Queensland has the most excruciating sting of them all.<sup>8</sup>

Notwithstanding their formidable armoury, *D. excelsa* and its relatives are predated on by shiny green-black beetles (*Prasyptera mastersi*), chrysomelid beetles (*Hoplostines viridipennis*), the Swinhoe moth (*Prorodes mimica*) and the red-legged pademelon (*Thylogale stigmatica*). Regent bowerbirds (*Sericulus chrysocephalus*) and green catbirds (*Ailuroedus crassirostris*) savour the black-purplish or pink fruits.

Contrary to their toxic notoriety, stinging trees have been used as fibres and medicines. The inner bark, for instance, can be processed into coarse cloth comparable to tapa produced from paper mulberry (*Broussonetia papyrifera*) in Polynesia. The bark also possesses medicinal properties, notably for treating rheumatism and skin disorders. The leaves are rich in nitrogen and calcium.

The historical record is replete with encoun-

ters with stinging tree, often resulting in human and nonhuman madness. In 1866, road surveyor A.C. Macmillan recalled when his horse "was stung, got mad, and died within two hours." Naturalist Carl Lumholtz observed that the tree "will make a dog howl with all his might; but it has an especially violent effect on horses. They roll themselves as if mad from pain." Maiden, moreover, wrote of the sting as "exceedingly virulent, producing great suffering" not only in people but also in cattle becoming "furious when they come in contact with the leaves." 13

In 1884, the explorer Christie Palmerston, between Herberton and the Barron Falls, observed stinging trees:

...12 feet in height, having a stock similar to the sunflower. Its leaf in size resembles that of a pumpkin, but it is of a much darker green. It is shaped somewhat like a heart but rather more pointed, with a sour wrinkled-looking bearded surface. Its power of pricking is so keen that the slightest contact with those airy heated tongues forces its poisonous notice on one's feelings, and this cannot be erased for weeks, sometimes for months, and from the memory never.<sup>14</sup>

Those afflicted – or "nettled" – experience intense burning pain, a rapid heart rate and glandular swelling.<sup>15</sup> Palmerston recalled "having lumps in my groin as big as my fist which arose from the poison of the stinging-tree."<sup>16</sup> He chose to walk through a bush fire rather than risk being stung: "After getting stung I took to

the fire, preferring it to the stinging-tree."17

The sensation of being nettled can be both acute and long-lasting. In the 1880s, the medical naturalist D.L. Bancroft commented that "the fracture of the points of the stinging hairs is quite audible, and one feels a prick when the point enters the skin; in a second or two afterwards, he is conscious of having been nettled." Collected in 1910, dried specimens at a CSIRO herbarium in Brisbane will cause pain if touched. The leading expert on Australian stinging trees, Dr Marina Hurley, used welding gloves to work with the plant but, nevertheless, ended up in hospital after being nettled by a dry leaf on the rainforest floor.

Early settlers put their faith in the milky juice of an arum known as *cunjevoi* (*Alocasia macrorrhizos*, formerly *Colocasia macorrhiza*) to provide relief from the sting.<sup>21</sup> Palmerston and others, however, report-

ed, with some disappointment, a lack of success with the arum as a bush remedy: "A plant grows alongside which is said to be an antidote but we did not find it so."<sup>22</sup>

Today, habitat fragmenation is one of the greatest threats to biodiversity. Dorrigo National Park, where David and John visited the stinging tree for this collaboration, is a warm-temperate rainforest remnant of the broader Dorrigo Plateau area. Since settlement, large rainforest tracts around Australia have been cleared for agriculture. Those that remain support endemic plants and animals, such as the fawn-footed mosaic-tailed rat (*Melomys cervinpes*) and the brown antechinus (*Antechinus stuartii*).<sup>23</sup>

Despite its ornery disposition, the southern giant stinging nettle tree is an indispensable member of this remnant ecosystem.





#### Dendrocnide excelsa, Giant Stinging Tree, Dorrigo National Park.

The giant stinging tree is a pioneer species - one that invades open spaces early in the succession-al-regrowth process. As such, it is a common member of trackside communities and other disturbed areas in Dorrigo National park. When John and I went to Dorrigo for a walk in this forest we both found ourselves getting sore necks from gazing upwards into the heights of the canopy above us. I felt it appropriate to portray *Dendrocnide* from this same viewpoint, gazing upwards through its much-munched leaves into the forest canopy far above.

"At Dorrigo, I glanced skyward to see a welkin of giant stinging nettle leaves, holey as Swiss cheese moth-gnawn, beetle-bitten, pademelon-nibbled firmament, riddled with gastronomic iconographies, threadbare cosmography of rhomboids, ovoids, pterygoids, assorted masticated abnormalities, suffused with sky blue, with bleu celeste, that celestial hue of blue pouring through precisely chewed portals in chlorophyll linking humusy rainforest understory chomped canopy." to a muchly

> At Dorrigo I glanced skyward to se a welkin of giant stinging nettle leaves. holey as Swiss cheese moth-gnawn, beetle-bitten, pademelonnibbled firmament, riddled with gastronomic iconographies. rhemboids, ovoids. cosmography of pterygoids, assorted masticated abnormalities, suffused with sky blue, with pouring through precisely chewed portals in chlorophyll linking humus understory rainforest some leaves lobed and heart-like. pointed at apices. toothed around edges in shade, others: growing more ovate. floppy as butcher paper, punctuated by poison bristles what epistles lie in leaves of Dendrocnide excelsu? a black-and-white photo by stands beside specimen a leaf

Stinging-Tree Leaf Mirror (For Readers On the Other Side, Who Were Nettled)

-ze of him only history testifies to what of nettle trees, known then as Laportea gigus in a second image: an eerie mouthlike for scale. an axehead planted above the stape in considering these details. pangs set in acarophobia. unfounded fear of itching. yellowing pages. Maiden says: "the poisonous fluid secreted from the foliage is very powerful, particularly in the younger leaves, and their sting is exceedingly virulent \* silicon quills if not extracted with burn for years after this bailtwick of in one others palm fruits th them molds sheaf



"The stinging nettle tree (Dendrocnide excelsa) is, by all accounts, a fiercely contradictory plant. Although brandishing painful stingers laced with a neurotoxin, the tree is also a source of nutriment for insects, birds and mammals. My A3-sized mirror-poem 'Nettle Tree Leaf Mirror' and Petrarchan sonnet 'Giant Stinging Tree Speaks' aim to bring to life the Dorrigo rainforest habitat. Through the process of writing about this species, I realised that, although sensory contact with nature is vital, a poet or other artist needs to learn as much as possible about the botanical world beforehand, in this case, to avoid being nettled".

 $\sim JR$ 

# Ingram's Wattle

(Acacia ingramii)



There are about 1,000 wattle species in Australia.¹ The rare wattle, *A. ingramii* (alternately *Racosperma ingramii*), is restricted to the steep, rocky clifftop habitats of the New England escarpment. The species is endemic to the Apsley-Macleay gorge system of Oxley Wild Rivers National Park and Guy Fawkes National Park east of Armidale.² Known by its vernacular name Ingram's wattle, the acacia prefers shallow soils with slate (finegrained metamorphic rock) or greywacke (coarse-grained sandstone) in tall scrub or low eucalypt woodlands on gorge edges along the Upper Macleay River catchment.³

A member of the legume family (Fabaceae or Leguminosae, subfamily Mimosoideae), Ingram's wattle grows either as a spread-

ing shrub or small tree between 5 to 6 metres in height.<sup>4</sup> Its principal characteristics include dark branchlets with whitish hairs, silky-hairy-yellowish new shoots, irregularly-twisted seed pods and blackish-brown seeds. The long, narrow phyllodes – resembling needles but actually flattened petioles functioning as leaves – display a pointed tip and pronounced midrib with two glands usually on the margins. The midribs of the phyllodes often have persistent, short, stiff, pale-yellow or whitish hairs.<sup>5</sup>

The bark of *A. ingramii* is typically smooth, grey or dark-grey and slightly corrugated towards the base in older trees.<sup>6</sup> Small, globular, bright-yellow flowers emerge between August and October in fine sprays

on short stalks.<sup>7</sup> Plant enthusiasts regard Ingram's wattle as "one of the most spectacular floral displays in northern New South Wales." Fruiting occurs between November and December each year.<sup>9</sup>

Acacia ingramii is named in honour of the educator and botanist Cyril Keith Ingram (1912–2002) of Mount Tomah, NSW, who first recognised the wattle as a separate species. <sup>10</sup> A specimen collected by Ingram at Wollomombi Falls was used in 1978 by botanist Mary Douglas Tindale to characterise the plant as taxonomically distinct from other wattles. <sup>11</sup> A possible variant of *A. ingramii* – differing in its longer phyllodes and placement of the basal gland – occurs in the Mann River Nature Reserve, approximately 150 kilometres north-east of Armidale. <sup>12</sup>

Acacia ingramii grows in association with gorge wattle (Acacia blakei subsp. diphylla), river bottlebrush (Melaleuca paludicola), clematis (Clematis spp.) and other Tablelands taxa.13 The common parasite, grey mistletoe (Amyema quandang), frequently attaches to its stems.14 Ingram's wattle, moreover, is genetically close to the oleander wattle (A. nerifolia), distributed broadly throughout Queensland and New South Wales, including the Mid North Coast, Northern Tablelands and North West Slopes regions. Oleander wattle is an erect shrub on rocky hillsides and ridge tops among granite boulders and outcrops of porphyry (largegrained crystal in fine-grained silicate).15

Colonising disturbed areas, *A. ingramii* is an effective choice for mine site rehabilitation.<sup>16</sup> The endemic acacia can be propagated from seeds and cuttings, but seeds should be boiled in water beforehand.<sup>17</sup> Although classified as rare or

threatened, nearly all wild populations of Ingram's wattle exist in national parks.<sup>18</sup>

For their collaboration, David and John visited Dangars Falls, a prominent site for Ingram's wattle. 19 Located about 25 kilometres from Armidale and especially popular among picnickers, holidayers and bushwalkers, Dangars plays a vital role in educating people about botanical conservation in New England and providing opportunities for the public to appreciate local plants, animals, fungi and reptiles. By the end of August 2017, the wattles at Dangars had already completed their brilliant flowering.



## 'Living on the Edge'

Acacia ingramii, Keith Ingram's Wattle, at Dangars Falls - Graphite, charcoal and acrylic paints on paper,  $46 \times 34$  cm, by David Mackay

One of three plants named in honour of plant collector Keith Ingram OAM, Acacia ingramii is a listed threatened species, found only at the edges of a few gorges including at Dangars Falls near Armidale, NSW. In spring this plant is in full bloom and its heady scent fills the air at the edge of the gorge. Many visitors to Dangars Falls appreciate this plant's beauty but not everyone realises it is living on the edge in more ways than one.

### Ingram's Wattle

in full abandon ingramii at Danlucid aureate
bees with elixir
forward to witness
over glorious brim
to Salisbury Waters
wattles gilded
fire language
with quiet singswallows flitting near
head of falls
as eels migrate
inmost essence

flowering gars Falls pom poms of early sun dangling haloes of vertiginous underneath are adroitly are combusting eing radiance blossoms ever honeyeaters to distant seas of gorge glowing Acacia
bursting
seducing
springing
blazing
plunging
cartwheeling
acquiring
chasming
consuming
goldening
trilling
multiplying
in full abandon.

"When I first saw Ingram's wattle in flower at Dangars Falls in August, I thought of the hemiparasitic Christmas tree (*Nuytsia floribunda*) of Western Australia where I lived for 7 years. Many Australian trees have impressive floral displays that emblazon the bushland during spring. Walking through the golden tunnel of wattle to the lookout above Dangars Falls was sensorially immersive. I felt part of the ecosystem, like a bee preparing for pollination. My short, three-column poem 'Ingram's Wattle' calls forth the feeling of seasonal abandon shared by trees, writers and artists. The poem can be read from left to right or from top to bottom, column-by-column. Each reading orientation produces different meanings, much like the unscripted experience of a place like Dangars over time. A second poem, 'Brush-Tailed Rock Wallaby', is written as a ghazal, a traditional Persian poetic form, in which a gorge-dwelling wallaby of Dangars communicates to the reader about the changing of the seasons".

~JR

### Brush-Tailed Rock Wallaby

Since you were here last, the wattle fervour has begun fading. The luminous bijoux are drying, drifting into the unseen, fading.

The wind today is neither zephyr nor tempest. It brushes us airily. What were you feeling on your way here? I have been feeding

Noiselessly on the manna of this threshold between gated field And numinous edge. Can you see fogs of falling water fading?

On a sliver between ledges, wind-chiseled acacias flare upward Like flambeau. Bearded dragons are blown up, midstep, sunning.

Now listen. Can you hear the murmuring innards of the land below? Turn around. Look down. Can you touch the braille of our foraging?

My face (is rummaging in leaf litter) my fur (is carob-brown) my tail (Is a thick ashen-hued balancing stick). I am immersed in this feeling.

Near the lookout, mosses are composing faint verses in pubescence. Through the cypress, did you notice the perfectly clear plateau fading?



# **Rock Orchid**

(Dendrobium speciosum)



With its large size, interesting growth habit and impressive floral display, the rock orchid is one of the most prominent orchid species in Australia. It also has one of the broadest ranges of Australian orchids. Known by the vernacular names "king orchid," "outstanding dendrobium" and "rock lily," *Dendrobium speciosum* occurs widely from Cape Melville on Cape York Peninsula in Northern Queensland and Carnarvon Gorge in Central Queensland to Genoa in Eastern Gippsland on the Victorian coast. Long-lived and either lithophytic (grow-

ing on rocks) or epiphytic (growing on plants), the conspicuous orchid inhabits rainforests, dry forests, gorges and rocky outcrops along the Great Dividing Range.

The rock orchid is known for its remarkable display, on occasion including more than one-hundred flowers per stem and one-thousand per plant.<sup>4</sup> Its inflorescences (flower heads) are bright, large, fleshy, aromatic and range in colour from nearly pure white to cream, yellow and gold.<sup>5</sup> The flowers on all plants in an area will

open nearly synchronously sometime between August and October each year.<sup>6</sup> As the gardener-naturalist Estelle Thomson wrote in the 1930s, "each flower is charming in its delicate perfection, but it is the imposing massed effect that is so arresting."<sup>7</sup>

In optimal rainforest environments, the species grows as a large epiphytic mass several metres in width and bearing distinctive pseudobulbs, or leaf-bearing axes.<sup>8</sup> In exposed and drier habitats, the orchid is smaller and more compact. The thick, lily-like leaves range in number from two to ten and originate from pseudobulbs from a few centimetres to nearly one metre in length.<sup>9</sup> Observing the importance of the species to the Aboriginal people of Queensland and New South Wales, Joseph Maiden commented that "the large pseudo-bulbs have been eaten" but claimed that they contain "little nutritive matter."<sup>10</sup>

In 1804, botanist and founder of the Linnean Society, James Edward Smith, first described a specimen collected at Port Jackson, NSW. Smith published the colloquial name "great dendrobium."11 With respect to the orchid's growth habit, the genus Dendrobium literally means "tree of life" (dendron, for a tree and bios for life). In 1927, a writer for Lismore's The Northern Star explained that its name refers to "the way these airplants fasten on to trees for support and sustenance."12 The rock orchid, in particular, "dearly loves to fasten on to the fig trees [Ficus spp.] and the giant stinging nettle tree [Dendrocnide spp.],"13 two other plant species included in Between Art and Poetry.

Reflecting its morphological variability, there are six recognised varieties of *D. speciosum*. The New England variety is

generally *hillii*, occurring from the Hawkesbury River north-west of Sydney to the Mount Mee-Crows Nest area of south-east Queensland where it begins to intergrade with the northern variety *grandiflorum*. Maiden observed that, in the Dorrigo area, the orchid grows on trees and is called "wood lily" but, in Sydney, it attaches to rocks and is known as "rock lily. Go course, although its leaves resemble those of lilies (Liliaceae), orchids occupy a completely separate botanical family (Orchidaceae).

Rock orchids are visited by a number of insects including the dendrobium beetle (Stethopactus formosa), hoverflies (Syrphridae), the European honey bee (Apis mellifera) and native bees of the genera Trigona (stingless bees), Homalictus, Lassioglossum and Hylaeus.17 Only native bees, however, are regarded by botanists as effective pollinators.18 The large, showy, cream- to yellow-coloured inflorescences attract nectar-seeking pollinators.19 Known as osmophores, scent glands along the perianth (the outer part of the flower) produce a strong, sweet fragrance, especially in full sun.20 Additionally, botanists have identified a number of fungal endophytes, defined as fungi that live inside the tissues of the orchid without causing negative effects.21

Cultivated extensively in Australia and overseas, the great dendrobium is valuable to the horticulture industry.<sup>22</sup> The tradition of growing *D. speciosum* began in the early-nineteenth century following its taxonomic classification by James Edward Smith. By 1831, the species had already been cultivated at Liverpool Botanic Garden and Royal Botanic Gardens, Kew, but "rarely produced blossoms."<sup>23</sup> Perhaps the habitat requirements of the orchid were not being met in

the Northern Hemisphere by its early proponents. By the mid-twentieth century, however, some Australian garden writers clarified that "being epiphytes (or air-feeders) and orchids, all they need is a roothold and root-cover to ensure the moisture which they usually get in their natural habitats."<sup>24</sup>

In the early 1900s, with increasing interest in the rock orchid among flower collectors, the conservation of *D. speciosum* in its natural habitat became more of a widespread concern. An article in the *Sydney Mail*, for example, asserted that "stringent protection is the more necessary as these orchids set very little seed, and the multiplying of their root masses undisturbed in wild flower sanctuaries is the only sure means of preserving these beautiful plants." <sup>25</sup> In terms of plant conservation today, the true range of

*D. speciosum* is difficult to ascertain partly because of habitat loss, especially of the variety hillii occurring in the New England Tablelands.<sup>26</sup> Moreover, without the orchid, its rare and endangered pollinators, such as the sugarbag bee (*Tetragonula carbonaria*) endemic to the north-east coast of Australia, cannot continue to survive.

David and John encountered a large rock orchid just below the viewing platform at Budds Mare overlooking the Apsley Macleay Gorge in the Oxley Wild Rivers National Park, part of the Gondwana Rainforests of Australia World Heritage Area. Budds Mare is a unique ecotone (or transitional environment) between eucalyptus forest and dry rainforest. The orchid specimen was not just part of an important relict ecosystem: it was an ecosystem in itself.



Photo by Louisa Murray

"The rock orchid defies the general conception of orchids as diminutive, ephemeral and difficult to locate. In contrast, the outstanding dendrobium is hard to miss from the perspective of the visitor platform at Budds Mare. Accumulating debris from upslope, the specimen was sliding gradually away from its precipitous gorge-side niche. The poem 'Outstanding Dendrobium' narrates the precarious physical situation of the orchid as symbolic more broadly of the tenacious pull of the unknown. My A3-sized 'Rock Orchid Hyphae' is a meditation on the haptic sense and the longing for contact between living bodies, both macroscopic and microscopic".

~JR

Cutlass-shaped leaf, rigid sandpaper sheet smoothed from use,

but with gritty aftertouch. Margin and midrib surprisingly resistant when

strummed between thumb, index and middle finger. From tip

to base, faintly traceable veins break out in browning blemishes.

Profound gouges found on hide-leather edge where beetle mandibles

chewed abscesses charred blotches with rimes of ash, like cigarette

burns on old mattresses. Fitful wind shakes organs of rock orchid.

#### hack, Dulba, ar distance. False lily, suilless at gulch limbic impressions of being continuent of plump brink, intraviously, yes in touch, of beings as paragus spears—squasity but savuly too—how things in touch—banches of heibs Rock Orchid Hyphae rotten, half-heartedly eaten. must reach out continually, forgotten in refragerator across yawning hugeness, bottoms but, to touch them wayfacing by yank of feeling arches open in welcome. sensation speaks truth, like hydral filaments, upends espectation—Beshy unseen, spindling through antennae of lithophyte, inner urchild circuity. Other should bring to mind smoothed from use, conter shalls bring to mind rosemary but with-out woody camphur aroma, has with gritty aftertouch. Margin and midrib surprisingly resistant when as dense as antique vooden unstrella handles. fists clenched around them interbreed in ravine creases, hemlack-like evergreen strummed between un samur squally amlde. stime austonine at herizum wielding ordnance of any. Between stallsy assemblage, are femoral heads kind, Jeriseletion shaking slightly on verge, articulated with acetabular of king orchid, outstanding to base, faintly traceable veins break out in browning blemishes. and lichen-splotched tock: time, waiting, fee millennia, dendrobium, imperfeet to stand upright. eeek lily, noe-yet in bissess sprawl in ais, their menset. strike till into opsages light. but susses-to-be, стеану Profound gouges found on hide-leather edge carrhly medium there. across terranss of glorial flowers about to masker extract what nuturent they censistence— synchronously, ean from edds and ends. landscapes echoed within scent glands over perianth where beetle mandibles aggregated miscellany budies russeed by priced to perfine stringless of gum trose. Impen, dry. fellows. Termite mounting, but during wary, uncooled noedles. canical adobe oven. polyphony of boulder ledge charred blotches with rines of ash. Lise eigarette hurns on old mattresses. Fitful wind shakes organs of rock orchid— Firthal wind shales opingy to phalans pressure, concrete tough from sevent attach for true, there is organs of recit excited and spirite opins. Another deather injured upon. Another deather injured upon. Another deather deather has been and spirite opins. Transmitting, abivers. Along ridge of stretched by chearing of hurst to Thidense. A shinleng ridge of stretched coulypts, actid with secent learness in featalong ridges of stretched tempt to sharp pitch could pitch the stretched tempt to sharp pitch could pitch the stretched of granite ministrue generates of the stretched tempt to sharp pitch could pitch the stretched sharps. knowing not always in flesh, but of cuticles of beings half-clothed in membrane. of yellow pains leans to old growing potent with sus, in communion nonetheless feeling of filthy paper include helter, get fing injuring arrang young to stretch filterents closer partly by millimeters. Intern natorial left outsides Things he by touch, live by which insurate rainforest. chasmic spaces between Whiff of fire incites memory threads of hyphae, incised in Apoley guiges. unseen reach to deep given being touchedthrive in becoming touched

# River Sheoak

(Casuarina cunninghamiana)



A protected species in New South Wales, river sheoak is a medium to large casuarina with soft foliage, small woody fruits and a preference for permanent freshwater.<sup>1</sup> As one of the few genuinely riparian trees endemic to Australia,<sup>2</sup> Casuarina cunninghamiana is the physically largest of the genus in Oceania. It ranges in height from 20 to 35 metres and, in width, from 0.5 to 1.5 metres.<sup>3</sup> Growing principally on river and stream banks, this tall casuarina forms monospecific (pure) stands in narrow riparian belts, often between normal water level and flood water level, where its roots can obtain hydration directly.<sup>4</sup>

Flowering typically between February and March, river sheoak is wind-pollinated and dioecious (having male and female plants).<sup>5</sup> The tree releases seeds continuously over a six-month period. One of the means through which the well-floating seeds are dispersed is by water.<sup>6</sup> The bark is dark-grey, hard and with deep furrows. The fruits are pale-brown samaras (winged achenes), enclosed by woody leaf-like structures known as bracteoles. Growing in soils ranging from fine-textured sands to gravels, river sheoak forms nitrogen-fixing associations with soil bacteria, particularly of the genus *Frankia*.<sup>7</sup>

The scientific name *Casuarina* is said to derive from the Malay term *kasuaris* for "cassowary." The genus denotes the visual similarity of sheoak foliage to the plumage of the bird.<sup>8</sup> The species designation honours Allan Cunningham (1791–1839), "King's Botanist, and formerly Superintendent of the Botanic Gardens, Sydney," who collected plants mostly in eastern Australia. The term "sheoak," moreover, alludes to the conspicuous medullary rays – cellular structures appearing as distinct radiating lines in the wood – which, for early settlers, brought to mind the true oaks (*Quercus* spp.) of the Northern Hemisphere.<sup>10</sup>

In 1848, the first taxonomic description of river sheoak was published by Dutch botanist Friedrich Anton Miquel (1811–1871) in *Revisio Critica Casuarinarum*. Another early scientific account of the casuarina species was supplied in 1876 by French botanist Jules Poisson (1833–1919) in his treatise *Recherches sur les Casuarina*.

Casuarina cunninghamiana has been known by a number of evocative vernacular names, from river oak, giant river oak, swamp oak, creek oak (especially in Queensland), white oak and fire oak (for the use of its wood as fuel) to brown sheoak, Australian beefwood and Australian larch.12 Aware of the limits of vernacularisms, botanist Joseph Maiden recommended "fresh-water swamp oak" to avoid confusion with "salt-water swamp oak," or Casuarina glauca, but concluded that "river oak" would be the most appropriate common designation for this species, given its riparian habitat.13 The river-dwelling casuarina is known as billagin in the Indigenous languages of the Camden region, located south-west of Sydney.14 River sheoak prefers temperate and subtropical areas along the eastern and northern coasts of Australia. The species occurs naturally along freshwater streams from southern New South Wales to the Northern Territory. <sup>15</sup> C. cunninghamiana is dominant along rivers east of the Great Dividing Range but is generally absent from areas with less than 500 millimetres of rainfall per year. <sup>16</sup>

With its overall distribution determined by fresh water, river sheoak is replaced, towards the coast, by swamp oak (*C. glauca*) especially along rivers with higher salinity. C. cunninghamiana is rare in western New South Wales but becomes more common in areas with higher annual precipitation. In the north of its range – the Gulf of Carpentaria in Queensland and in the Northern Territory – the casuarina is frequently only 10 to 12 metres in height and has a distinctive straggly presentation. In

The two subspecies are *cunninghamiana* (NSW and QLD) and *miodon* (NT). Found in New England, subsp. *cunninghamiana* occupies narrow belts along permanent freshwater courses in eastern Australia from Bega, in coastal southern NSW near the Victorian border, to the Laura Basin in north-east QLD. This subspecies extends inland to Chillagoe and Augathella in QLD and Narrandera in NSW. Identified in 1989, subsp. *miodon* can be found alongside large fresh or brackish streams from the Daly River, NT, to the Gulf of Carpentaria, QLD.<sup>20</sup>

As with *C. equisetifolia* and *C. glauca*, river sheoak has become naturalised or invasive in South, Central and North America as well as parts of Africa and Asia.<sup>21</sup> In 1840, the species was introduced to

Réunion Island for firewood and erosion control.<sup>22</sup> The capacity of the tree to tolerate frequent inundation renders it valuable for protecting river banks from erosion.<sup>23</sup>

River sheoak timber has been used to make turnery, bullock yokes, planks, floorboards, shingles, umbrella handles, serviette rings, ash trays, batons and walking sticks. When seasoned, the wood becomes remarkably dense. A writer using the alias "Silky Oak" in *The Queenslander* in 1926 observed that the wood "is understood to give the best results when it is buried for some time before use."<sup>24</sup>

According to an edition of the *Daily Liber-al* from Dubbo, NSW, the "timber is of pink color, is light and strong and was used by early settlers for shingles."<sup>25</sup> An article in a 1931 edition of the *Central Queensland Herald* indicates that "the principal use to which [the wood] is put is in the making of bullock yokes, in which capacity it experiences a different atmosphere to that it enjoys when, more rarely, it is used for turnery that might grave even ecclesiastical edifices. Pit sawn into planks, it has been found in good condition after 50 years of service."<sup>26</sup>

Providing a superior fuel source, river sheoak wood was preferred for bakers' ovens.<sup>27</sup> Maiden asserted that "this and other casuarinas burn well, and their ashes retain the heat for a long while."<sup>28</sup> The foliage has also been used as a fodder during times of drought. Maiden, accordingly, effused that "in many districts the mortality amongst sheep and cattle would have been far greater than it was had it not been for this valuable tree."<sup>29</sup>

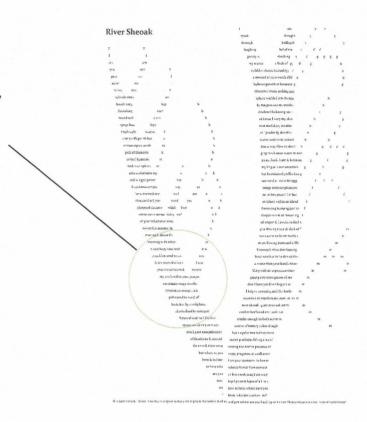
Casuarinas, such as river sheoak, provide critical habitat for rare and endangered

animals. The vulnerable glossy black cockatoo (*Calyptorhynchus lathami*) and the red-winged parrot (*Aprosmictus erythropterus*), for instance, depend on eucalypt and *C. cunninghamiana* woodlands of which only one-quarter of the original remains.<sup>30</sup> River sheoaks also furnish habitat for the critically-endangered regent honeyeater (*Anthochaera phrygia*) as well as butterflies and epiphytic orchids.<sup>31</sup>

A healthy riparian zone consisting of river sheoaks supplies diverse benefits to adjacent dryland and riverine biota. Riparian botanical communities in Australia, however, are threatened by land management practices, invasive plants, salinisation and reservoir development.<sup>32</sup> What's more, grazing can pose problems for already-degraded riverine habitats.<sup>33</sup>

Over one-hundred years ago, Maiden extolled river sheoak as a "natural bank protector." He recommended that C. cunninghamiana should be "faithfully conserved, for besides its value as a stock food in time of drought it is one of the best trees we have for protecting the friable banks of rivers."34 Encouraging "intelligent conservation of existing and future trees," the prescient botanist recognised the "equilibrium" of river bank ecosystems and called into question the widespread removal of river sheoaks "to obtain more ready access to the river frontage, and to enlarge the area of cultivated land."35 For plant conservationists today, Maiden's message resonates still.

bury your soul below in sodden sand & my roots shall rap your mindstream & my seeds will release you on samara wings, riparian sovereign I am pollinated by windriff fruiting in creekphrase, idioms fixing nitrogen, fraternal with soil Frankia, spraying inside electricity, intelligent circumlocutor, of floodzone & around for eons (& then some), but where've you been? tell me, tell me, who are you?



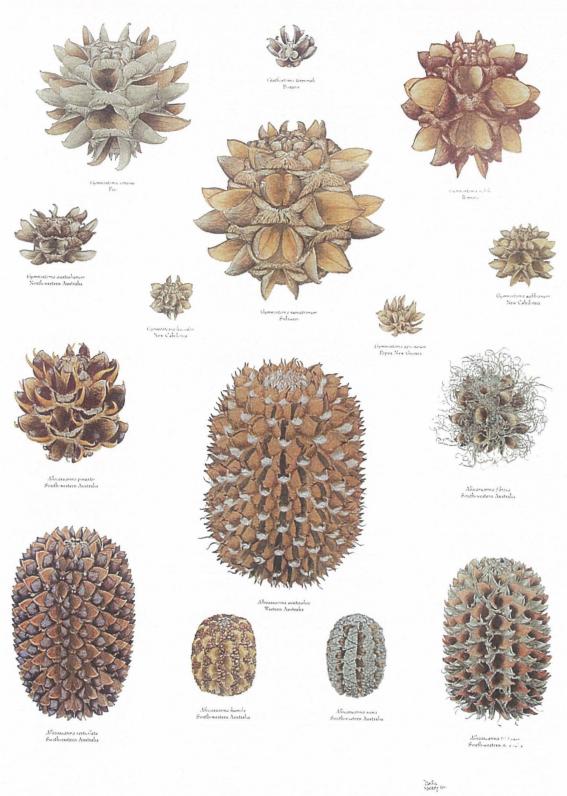
#### The Casuarinaceae

The sheoaks, bull oaks, forest oaks, swamp oaks and river oaks are so-called because of the appearance of their timbers which have been used for shingles, fencing, firewood and beautiful cabinetry. The female inflorescences in these plants all develop into distinctive, woody cones which, together with the fine, needle-like 'leaves' (actually photosynthetic stems), add to the pine-tree-like appearance of these trees and shrubs.

The Casuarinaceae family of plants comprises some 100 species in 4 genera, found from SE Asia, through Papua New Guinea and Australia to the Pacific Islands. About seventy species are found in Australia. Representatives of all four genera and all the major groups within the largest genus, *Allocasuarina*, are illustrated in these two images. One genus, *Ceuthostoma*, is restricted to South East Asia and the genus *Gymnostoma* is represented in Australia by only one species (illustrated, *Gymnostoma australianum*).

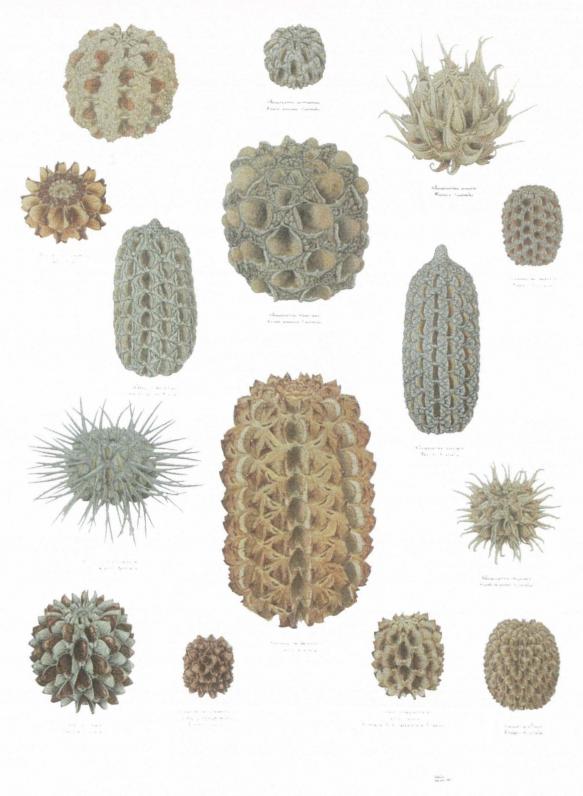
Casuarina cunninghamiana, at the bottom-left of centre in 'Casuarinaceae II', whilst having one of the smallest cones in the family, grows into one of the grandest trees and is a well-known and appreciated member of our river- and creek-side environments in the New England Tablelands.

~DM



Casuarinaceae I

In 'Casuarinaceae I' and 'Casuarinaceae II' I have painted as much of the range of species as I could fit in, including representatives of the four genera in the family. These are *Ceuthostoma*, *Gymnostoma*, *Allocasuarina* and *Casuarina*. Some of the cones appear quite bizarre, such as those of *Allocasuarina fibrosa* and *Allocasuarina spinosissima* from Western Australia. Our own

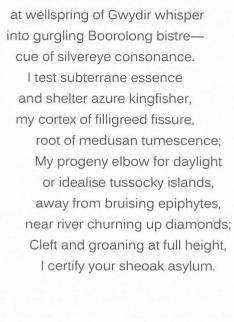


Casuarinaceae II

Casuarina cunninghamiana is just left of centre, at the bottom of 'Casuarinaceae II', juxtaposed below the huge cone of Allocasuarina decaisneana from central Australia. The original paintings were made 5x life size to show off their beautiful and intricate details. Painted in acrylics on paper in 2001. ~DM

### A Conference of Casuarina

Envoi of casuarine conference



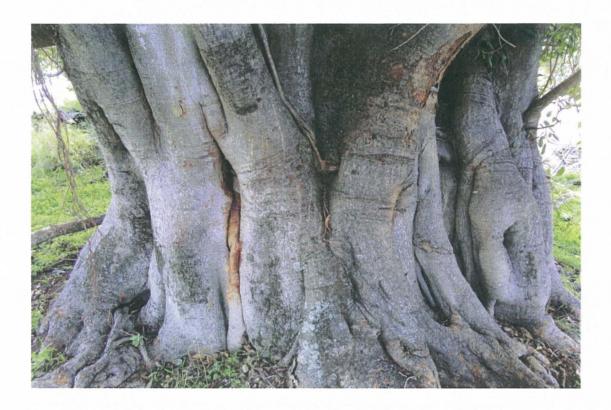


In May of 2017, David and I visited a grove of river sheoak close to where the Rocky River and Boorolong Creek join to form the Gwydir River south of Yarrowyck. The solidarity of *C. cunninghamiana* as a pure stand of large, timeworn trees impressed me. As conveyed by my sonnet 'A Conference of Casuarina', the experience of being sheltered by the trees, within earshot of the gurgling river, was acutely memorable. The poem 'River Sheoak' suggests that, just as the trees protect the river bank—as Maiden emphasised more than one-hundred years ago—so too does the casuarina ecosystem shelter human passersby.

~JR

# Port Jackson Fig

(Ficus rubiginosa)



There are approximately 850 fig species worldwide, including the common fig (*Ficus carica*) originating in the Middle East and western Asia. Known as a "synconium," the urn-shaped fig fruit, depending on the species, encloses up to 5,000 flowers. Port Jackson fig is an endemic Australian fig with a highly variable growth habit.¹ Although its fruits are not as large, sweet and succulent as those of the common fig, it nevertheless is ecologically vital for many mammals, birds and insects.

A small to large spreading tree, *F. rubig-inosa* displays lower trunk buttressing, downy rust-coloured stems and prominently warted fruits ripening from yellow to red in all months of the year.<sup>2</sup> The spe-

cies grows as a free-standing tree, epiphyte (on plants) or lithophyte (on rocks and boulders). In some populations of trees, all three habit types occur together.<sup>3</sup> The fig can reach 30 metres in height.<sup>4</sup>

Port Jackson fig is widespread in diverse habitats, from rainforests to dry rocky hill-sides from the Cape York Peninsula in Far North Queensland to the South Coast region of New South Wales and west to Porcupine Gorge National Park north of Hughenden, QLD, and the Far Western Plains of NSW.<sup>5</sup> The fig occurs in coastal areas of NSW north-west from Bega to Warrumbungle National Park near Coonabarabran, the Nandewar Range and the Narrabri dis-

trict.<sup>6</sup> *F. rubiginosa* is commonly confused with *F. obliqua* and *F. platypoda*, both of which occur on the east coast of Australia.<sup>7</sup>

Other common epithets for Port Jackson fig include rusty fig, Illawarra fig, narrow-leaved fig and native banyan. The plant is known as *dthaaman* in the language of the Dharawal people of the Sydney basin area.<sup>8</sup> The species designation, *rubiginosa*, means "rusty red" and denotes the presence of hairs on the stems and lower leaf surfaces.<sup>9</sup> Joseph Maiden observed that "this fig, like other figs, exudes a juice when the bark is wounded."<sup>10</sup> According to Maiden, the exudate is not sticky, lacks taste and odor in its natural state but begins to resemble wax when heated.<sup>11</sup>

Owing to its variable form, Port Jackson fig has been subject to numerous nomenclatural changes since French botanist Étienne Pierre Ventenat published the scientific name F. rubiginosain Jardin de la Malmaison (1803-04). After Ventenat, German botanist Carl Ludwig Willdenow applied the nomen illegitimum Ficus australis.12 In an effort to reconfigure the Ficus genus in 1844, Italian botanist Guglielmo Gasparrini classified the fig as Urostigma rubiginosum in his Nova Genera Quae Super Nonnullis Fici Speciebus.13 What's more, in 1861, Dutch botanist Friedrich Anton Wilhelm Miquel renamed the fig Urostigma leichhardtii from specimens collected at Cape Cleveland, QLD.14

Taxonomists have more recently identified two "forma" of the Port Jackson fig. (A "form" is a taxonomic rank below "variety," as indicated by the letter "f.") The two forma are *Ficus rubiginosa f. rubiginosa* and *Ficus rubiginosa f. glabrescens*. Form *rubiginosa* occurs south of Weipa on the

Gulf of Carpentaria along the east coast of QLD to the border of NSW and Victoria while form *glabrescens* can be found from Cape York to the QLD-NSW border.<sup>15</sup>

The relationship between figs (Ficus spp.) and their pollinator wasps is an excellent example of obligate mutualism in which both the plant and the insect have evolved to depend on each other.16 A single wasp species exclusively distributes the pollen of the fig. In return, the wasp larvae feed on the ovary and develop in the synconia.17 In addition to the pollinating wasp, thirty or more kinds of wasp can mature within the fruits of a Ficus species.18 In the case of Port Jackson fig, the pollinator is an agaonid wasp (Pleistodontes imperialis).19 In fact, a mature synconium is regarded as "wasp-emitting" because the process of ripening signals the appropriate time for the insects to depart.20

Bushman and author Robert Lucian Kaleski (1877–1961) of Dorrigo observed that the fig tree is "at first a parasite, seed being dropped by birds into the tops of other trees, generally Rosewood (Dysoxylon lessertianum) or Nettle (Laportea gigas). As the seed grows it sends out feelers, which grow downwards till they reach the ground, where they root."21 In the 1930s, a writer for Sydney Mail noted the "parasitic habit of growing from the limbs of a more useful tree, thus enmeshing its host in a maze of aerial roots" and, moreover, that the trunk buttresses are "sometimes as deep as horse-stalls."22 Settlers regarded the leaves and fruits as good fodder for cattles, horses and goats.23

Port Jackson fig is especially integral to the ecosystems in which it grows. The tree provides food for flying foxes (*Pteropus* spp.) and numerous birds such as the



'Lithophyte'. Graphite on paper, 2014, by David Mackay

One of the older and larger trees at Moonbi Lookout, this fig is a 'keystone' in its rocky environment, providing over one hundred thousand fleshy fruit every year, with about fifty seeds in every fruit, for over one hundred years.... playing the odds that one of these seeds will lodge in a suitable place and grow into the next generation of providores.

satin bowerbird (*Ptilonorhynchus violaceus*), regent bowerbird (*Sericulus chrysocephalus*), Australian king parrot (*Alisterus scapularis*), Australasian figbird (*Sphecotheres vieilloti*) and wonga pigeon (*Leucosarcia melanoleuca*).<sup>24</sup> Throughout its range, Port Jackson fig is well-conserved in national parks and state forests.<sup>25</sup> Climate change, however, has the potential to disrupt the delicate evolutionary balance between the agaonid wasp and *F. rubiginosa*.

For their collaboration, David and John visited fig trees at Mount Yarrowyck, an important site for the conservation of natural and cultural heritage in New England. Lo-

cated at the head of the Gwydir River valley, about 30 kilometres west of Armidale, the 585-hectare Mount Yarrowyck Nature Reserve contains one of the few remnants of the original vegetation of the western slopes of the Northern Tablelands.<sup>26</sup>

Mount Yarrowyck is a 1153-metre-high granite outcrop known to Aboriginal people as Bullcorronda.<sup>27</sup> The central cultural feature of the reserve is the 500-year-old Mount Yarrowyck Art Site, situated on a granite boulder beneath an overhang. The paintings feature emu tracks, dot patterns, larger circles, line groupings and two stick figures.<sup>28</sup>

fig tree
espaliered to granite,
splaying tentacles around it;
as cicadas call in counterpoint
I swivel on my ankle joint to
grasp the woody limb
that spans it.

banyan
lichened to blue-grey
by boulder it pours over,
a lithophyte, stone-lover,
suckering up top—who
dropped it there, a
rosella?

#### **Figwarts**

"Figs yellow turning red, usually prominently warted" -Flora of New South Wales

herd

of feral goats, snow coats bolting upslope or have they absconded their paddock beyond to a feast of fig hope?

gum bark stripping streamers, tree unzipping trousers, or was it billy rutting that left these frilly jutting splats of rusty red around it?

blue-tongue nudges head between boardwalk planks to glean bush flies zinging by, or is she simply saying hi to blue sky while it can be seen? fig tree
espaliered to granite,
splaying tentacles around it;
as cicadas call in counterpoint
I swivel on my ankle joint to
grasp the woody limb
that spans it.

latex like
milk exudes when
bark is wounded and then
from warted skin of fruits,
hard and green beans in
groups between rust
stems.

flowers
turn shyly inward,
inflorescence splintered
into ovaries translucent, juicy
as vescicles of ruby grapefruit,
wasp-churned through
this winter.

banyan
lichened to blue-grey
by boulder it pours over,
a lithophyte, stone-lover,
suckering up top—who
dropped it there, a
rosella?

rusty
fig is shapeshifter,
polymorphous stonelifter,
creeping body cables through
slimmest creases—rnot lace
to stone cyclet, or, likewise,
seed to sifter?

this
fig is freestandling!
hmm, wait, maybe not: did
its seed vessel take a different
landing, slip off its stony loft
into rubble wedge it's now
commanding?

rig
nested in crook
of gum who mistook
a feather-lifted fruit for
a casual visitor wanting
just a one-night
nook.

ficuses
in fields growing
huge, showing sculpted
muscles, flexing six packs,
ripped lats, perfect pees
hot as molten lava
flowing.

currawong, darts among upper branches, taking chances with sudden lances of its beak and tongue.

### **Rusty Ficus**

In this province of currawongs and goats, I am watching. As you cross the fence and enter the field, I am watching.

I am the cornea of this winter field preparing to enclose you. Tell me, is today the day when the southerly wind is blowing?

Tell me, is today the day when the stacked stones will topple?

I was once water flowing around stone. I hardened in my waiting.

The ribbons of tumbling water calcified to ligaments and bones. My leaves agreed with the stones, sand, stars and sun watching.

The grazers stave off other trees. Goats manicure this foliate gloss. When will these inner fruits ripen? My wasps will cease their waiting.

From this rock-strewn rise, I shepherd the slow flexures of seasons. New families come. Children mature. They leave. I am left waiting.

See my purpling air roots spider darkly as venous blood. Lean in. Soothe this calloused skin with your touch. Breathe in. Watching.

In many ways, Port Jackson fig is an ideal plant subject for poetic contemplation. My encounter with the figs of Mount Yarrowyck was intensified by the physical proximity of the trees to the Art Site. The trees' growth habit as a lithophyte – a lover of rocks – is visually mesmerising, as my light-hearted poem 'The Churchill of New England' aims to convey. Its evolutionary relationship with the wasp *Pleistodontes imperialis* particularly embodies the vast timescales and adaptive strategies of plants and their pollinators. In my 14-line ghazal 'Rusty Fig', the stone-like tree speaks directly to the reader about its observations over – and of – time. And a third poem, 'Figwarts', borrows its form from the warty appearance of the synconia while also punning on a completely unrelated plant called a 'figwort'. ~JR

#### **Notes**

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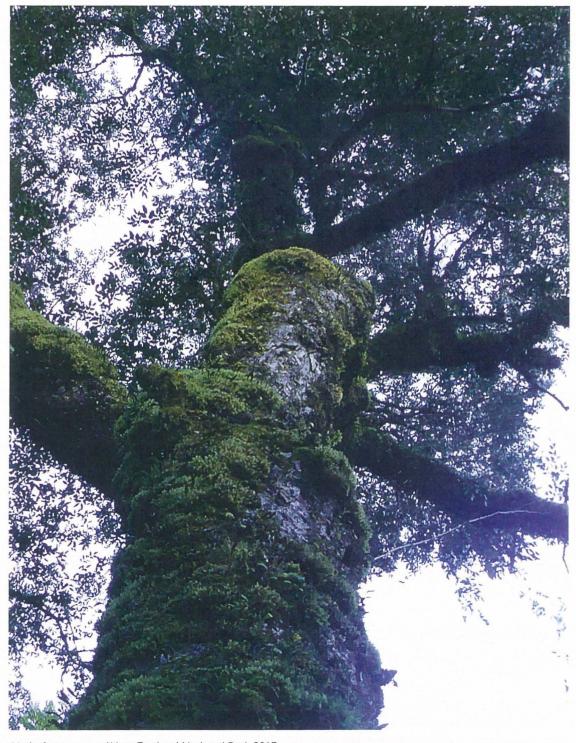
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