



# IPHA Newsletter #21

June 2023 edition

[www.indigenousplantsforhealth.com](http://www.indigenousplantsforhealth.com)

## Usnea—Lichen Medicine of Old Man's Beard

By Kathleen Bennett

Graceful and pendulous, *Usnea* has been the most widely used lichen genus for thousands of years (Guo, et al., 2008, Crawford, 2015). The earliest known *Usnea* specimen was found in Baltic amber dating to the Eocene era, about 45,000 years ago (McCarthy and Mallett, 2004).

Known as tree gauze in ancient China (101 B.C.), *Usnea longissima* (syn. *Dolichousnea longissima*), was first noted as Song Lo, a Traditional Chinese Medicine (TCM) that was used both internally and externally as an antimicrobial tea (Malhotra, Subban & Singh, 2007, Guo, 2008; Choudary, Muhammad and Jalil, 2005). *U. diffracta* (syn. *Dolichousnea diffracta*) also known as pine gauze and Lao-tzu's beard, was recorded in an early Chinese herbal (500 A.D), "to be picked in the 5<sup>th</sup> lunar month dried in shade and used to stop sweating, dizziness, cold, pain and phlegm, benefits urinary tract and stops swelling in female sexual organs." (Sharnoff, 2001).



*Usnea diffracta*

The Greek physician Hippocrates recommended *Usnea barbata* for uterine ailments and in 14<sup>th</sup> century Europe, pendulous Usneas, described as "old man's beard," were collected for use as a hair re-

storer (Pereira, 1853; Malhotra, Subban & Singh, 2007). In the Russian Far East, *Usnea filipendula* was used as a powder to treat wounds (Chevallier, 1826).

In New Zealand, a traditional Maori medicine, *angiangi*, refers to several soft and absorbent Usneas and mosses that were used as baby diapers and wound dressings. One has a tufted appearance, and grows on trees and poles; another is a long and pendulous species that grows in sub-alpine forest (Kawhia.Maori.nzare, 20213, Kerridge, 2016, Manaaki Whenua Landcare Research, 2011).

Curiously, there are no records of *Usnea* being used in Australia where according to The Australian Biological Resources Study (ABRS) (1968), there are 4,308 known lichens in Australia including 53 species of *Usnea*

Usnea—Lichen Medicine of Old Man's Beard, cont.

### Indigenous Plants for Health Association, Inc.

Indigenous Plants for Health (IPHA) is a not-for-profit incorporated association, formed with the objectives of raising awareness and research into Australian health-promoting plants, and protection of their habitat.

We acknowledge that Aboriginal and Torres Strait Island Peoples are the Traditional Owners of this country, and they retain their relationship and connection to the land, sea, and community .

(Hawksworth, 2017). It is difficult to imagine that a species which is naturally antibiotic, antifungal, absorbent as a dressing, and an excellent fire starter (Crawford, 2015), wouldn't have been used. The lack of records does not prove that Usneas were not used, just that use was never recorded.

Currently, while scientific research on *Usnea* is increasing, most studies that include Australian species are done by other countries in which the same species grows. There is a great need for more research on all the Australian lichens, especially *Usnea* species.

## Description

*Usnea* lichens vary from tiny scraggly-looking little tufts to meter-long graceful strands. Two features are universal among all *Usnea*—one is the presence of usnic acid and the other is the presence of an inner, slightly elastic cord which is revealed as a strand when gently pulled. They thrive in a variety of habitats and are not parasitic. The presence of many lichens on dead trees is a result of the lichens taking advantage of a habitat with more light, rather than causing any harm to the tree. The name may have been derived from *ushnah* (Arabic) meaning moss. (Dobson, 2011).

## Official History

According to the *Commission E Approved Herbs* (1989), medicinally approved *Usnea* is described as “the dried thallus of *Usnea barbata*, *U. florida*, *U. hirta*, or *U. plicata*. These are made and sold as antimicrobial lozenges and preparations containing 100mg of any of the four species listed, and taken 1-3x/day for mild inflammations of the throat and mouth” (Blumenthal & Busse, 1989).

*Usnea barbata* (old man's beard) is used as the industry standard and is known to contain usnic acid, norstictic acid (major), stictic acid, protocetraric acid and atronorin. Some products sold as *U. barbata* may consist of several *Usnea* species (Cocchitto, et al., 2004). According to the Consortium of Lichen Herbaria, *Usnea barbata* in the United States contains usnic acid and slazinic acid, but may sometimes contain salzinic acid alone (Dobrescu, et al., 1993).



*Usnea hirta*

Of the lichens listed in the *Commission E Monographs*, the usnic acid content varies from 1-3% of dry weight and although none are known to grow in Australia (ABRS, 2023), many native Australian *Usnea* species contain significant amounts of the same acids as *U. barbata* (ABRS, 2023).

## Chemistry

All *Usnea* species contain usnic acid in varying amounts along with combinations of other acids; the proportions and content of these acids can vary by species, elevation, substrate, habitat, etc. A lichen growing in one environment on a particular substrate may have a completely different constituent profile, when compared to the same species on a different substrate or environment.

One Australian example of acid variation in *Usnea* is *Usnea pycnoclada* which can contain:

1. Usnic acid, protocetraric acid (minor) and barbatic acid (minor), or
2. Usnic acid, psoromic acid (minor) and conpsoromic acid (minor), or
3. Usnic acid, barbatic acid (minor) and psoromic acid (major), or
4. Usnic acid, norstictic acid (minor) and stictic acid. (ABRS, 2023).

Compare the above to the constituents of *Usnea baileyi*:

1. Usnic acid, stictic acid (major), constictic acid (minor or trace), cryptostictic acid (trace), menegazziaic acid (trace),  $\pm$ diffRACTAIC acid (minor), norstictic acid (trace), connorstictic acid (trace) and accessory scabrosin 4-acetate-4'-butyrate, scabrosin 4-acetate-4'-hexanoate, scabrosin 4,4'-dibutyrate, scabrosin 4,4'-diacetate, or
2. Usnic acid, rarely protocetraric acid only, or
3. Usnic acid, salazinic acid (major) and norstictic acid (major).

In the tropics, *U. baileyi* produces diffRACTAIC acid (ABRS, 2023).

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## Message from President Jen Stroh



*Galangoor Djali* or hello/good day from Badtjala country, Fraser Coast, Qld.

Welcome all to this edition of our newsletter, as most of this country cools in readiness for quiet dormancy and strengthening of energies. It may seem that things go underground for a while but as we know, brewing and fermentation gives rise to greatness over time. On Badtjala/Butchulla country this season is generally *walay* (cool) and *dauwa* (dry).

### Some of IPHA's recent projects:

Field Day in NSW at the Hunter Botanical Gardens;

Updates on *Persoonia* and other research projects;

Submission from IPHA to support Alpine wilderness wellness;

Updated brochures about the Association are on the way.

Andrew & Sophie presented at the Australian Bushfoods Association Conference 27-28 May in MacLean Qld;

### Keep an eye out for upcoming opportunities:

June 24-25 is a less formal free gathering at Woodfordia Qld, where IPHA will share with field walks and talks;

August 19-20 IPHA will host a Field day at Yandina Qld— further details in this newsletter

Please join us if you can at our events or contribute an item to y/our newsletter. Let us know how you may like to support your Association. Volunteers are the essential ingredient.

*Galangoor nyin* Thankyou

## Bio of New President, Jen Stroh

Jen is a practising Naturopath with over 40 years experience in private clinic and teaching at various institutions. She is a member of ANTA, Associate member ACNEM, past member AAMT, NHAA & AMP; VicHerbalists (Executive Committee for 3 years).

Jen has recently relocated from Victoria to the Fraser Coast, Queensland. Her curiosity about local indigenous plants and medicinal uses was sparked in the 1980's with her focused study of Western Herbal Medicine, and the noticeable lack of quality information on Australian plants. Jen was strongly influenced by teachers like Bev Lane at SSNT Melbourne, whose knowledgeable field walks highlighted local medicinal species as well traditional Western plants.

Along the way other influential folk have been Aboriginal elders; Beth Gott, renowned botanist; teachers Dr Sue Evans, Dr Vincent DiStefano, Dr Andrew Pengelly, Prof Kerry Bone and many others, and Nature herself most profoundly.

Jen sees IPHA as a valuable practical vehicle to showcase and enhance our understanding of Australian native plant species in a way that includes and is deeply informed by Aboriginal ways of knowing and being.

We have an opportunity to listen well to the knowledge holders and original custodians of this amazing country.

[www.integrityhealth.com.au/biography/](http://www.integrityhealth.com.au/biography/)

[www.linkedin.com/in/jen-stroh-549a3b93/](https://www.linkedin.com/in/jen-stroh-549a3b93/)

If you'd like to read about the beautiful *Melaleuca quinquenervia* (broad-leaf paperbark) in all her glory, please visit my recent blog. [integrityhealth.com.au/from-tree-to-tea-meet-my-new-friend-mel/](http://integrityhealth.com.au/from-tree-to-tea-meet-my-new-friend-mel/)



## Usnea—Lichen Medicine of Old Man's Beard, cont.



*Usnea barbata*

Because of the variation seen in *Usnea* composition, which varies by habitat as well as by species, caution is urged against randomly foraging *Usnea* for internal medicinal applications (Zugic, 2018, Hauck, 2010).

Most sources indicate that used as a whole herb, under guidance, *Usnea* is not known to be toxic. There have been four cases that linked *Usnea* to liver toxicity, however, one literature review notes that these are mostly associated with a single dietary supplement, LipoKinetix (now removed from market) or concentrated usnic acid, mixed with other (potentially toxic) compounds. The reviewers concluded that there was no clear indication that the herb *Usnea*, itself, was associated with toxicity (James-Yi, 2017). Because commercial extractions that use petrochemicals (which are known liver toxins) may leave some residue, plain use of whole herb in powders, water or alcohol extractions would be preferable.

Usnic acid, the first chemical isolated from *U. barbata* and tested scientifically, has been found to possess strong antibiotic properties (Crockett et al. 2003; Malhotra, Subban & Singh, 2007; Reuter, 2010). Usnic acid is also antifungal, as are isodivaricatic acid, 5-propylresorcinol and divaricatinic acid (Schmeda-Hirschmann et al. 2007;

Malhotra, Subban & Singh, 2007).

Studies on other lichen acids are also important medicinally. Both stictic and nor-stictic acids are antimicrobial, which would lend added impact to the usnic acid in lichens that contain them (Garlick, et al., 2021; Haick, 2010; Lohèzic-Le Dèvéhat, 2007). *Usnea articulata*, which grows in Serbia as well as Australia, provides significant antioxidant properties as a result of the stictic acid content (Lohèzic-Le, et al., 2007).

There are other acids under investigation which will be included in a future article.

### Medicinal applications of the whole lichen

Both water and alcohol extracts of *Usnea* have been found to be useful antibiotics, especially with regards to wound healing & treatment of acne (Reuter, 2010). Topical application of methanolic *Usnea* extracts were shown to inhibit skin cancer in vitro (Kim & Cho, 2007; Malhotra, Subban & Singh, 2007). In China, 6-9 grams of dried *Usnea* (Song Lo) constitute a medicine to treat wounds and detoxify the liver (Guo, et al., 2008).

To make a topical medicine for treating wounds *Usnea* is dried, powdered and dusted on wounds. It can also be made into a wash using 1 part lichen, 2 parts boiling water and 3 parts of 151 proof alcohol (75.5% alcohol by volume), mixed and stored 6-8 weeks before using (Hobbs, 1986).

In the Greek-European tradition, *Usnea* tea is used as a treatment for cough, sore throat and stomach upset. There is some media reports that *Usnea*, more specifically usnic acid, may help with weight loss. However, there is currently no research that supports such usage. More promising is the use of *Usnea* both externally and internally to prevent, and possibly reduce tumor growth. At present the most well researched applications are as antimicrobial agent.



## Usnea—Lichen Medicine of Old Man's Beard, cont.

### Other Uses

In Buddhists and Nepalese groups, the long strands of *U. longissima* are wetted and used to clean silver bowls, religious cups and butterlamps (Devkota, et al., 2017). Nomadic tribes are known to collect the soft *Usnea* species to use as mattresses, pillows and baby diapers (Devkota, 2021).



*Usnea inermis*

### Environment

Most *Usnea* do not thrive in polluted atmospheres, however they can continue to persist in an increasingly polluted environment for some time, absorbing environmental toxins before they die. As, like many lichens, *Usnea* can fix nitrogen, it therefore contributes to soil fertility (Purvis, (2007).

### Conclusion

Whether considering using *Usnea* for medicine or for research, identification is important, even essential. With identification, refer to the ABS website and note the active acids in your species. Keep notes and be very cautious regarding cheap commercial products. Collections should preferably be made from fallen specimens, to reduce impact and protect existing populations.

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Organic, regenerative and agroecology are methods of sustainable agriculture that encourage retention of health-promoting native plants.

But what is the difference?

[wickedleeks.riverford.co.uk/features/regenerative-organic-and-agroecology-whats-the-difference/](http://wickedleeks.riverford.co.uk/features/regenerative-organic-and-agroecology-whats-the-difference/)



# IPHA Autumn Field Day at the Hunter Region Botanic Gardens, NSW—Report

By Pat Collins & Reesa Ryan



A great day on Sunday, 2 April at the gardens in the lovely Banksia Room—an outdoor screened-in room—and a comfortably full complement of interested and interesting people.

Acknowledgement of Worimi country by Phil Shepherd, including a story of travelling up the Karuah River with some local elders.

Pat's Insect repellent lotion using 'stinking roger,' while not immediately obvious how this is related to indigenous plants, soon became clear that this is a wonderful way to control a weed—harvest it abundantly to use to ward off the mozzies. This gives our natives like tea tree and lemon myrtle, which are also good mosquito repellants, a break from the harvest. Only small amount was used in the potion to add a bit of extra kick.

Samples of stinking roger lotion were given to all, which came in handy in walk through garden!

Pat had been busy cooking trays of macadamia and wattleseed and bunya nut and ginger Anzac biscuits as well as lemon myrtle and maiden hair fern teas for morning tea.

An informative tour of gardens with Ken, the local volunteer, who is managing the gardens. He was very enthusiastic and happy to answer everyone's questions. We did get to the area of the gardens where there was a native bush walk and the plants had signs that told you of their uses. Then it was off to the Herbarium in groups and everyone was shown how samples were preserved for the future, giving insight into the work all herbariums do for us.

NB: The Hunter Gardens have been given the job of propagating, to aid in its preservation, the *Persoonia Pauciflora*, the North Rothbury persoonia.



## IPHA Autumn Field Day at the Hunter Region Botanic Gardens, cont.





## IPHA Autumn Field Day at the Hunter Region Botanic Gardens, cont.

Pat also cooked up bunya nut rissoles and kangaroo rissoles with amazing mountain pepper seasoning. Yum! Pat's daughter and granddaughters set up lunch and everyone enjoyed trying the various foods with lots of salad and flat breads, bunya nut pesto or macadamia oil mayonnaise.

In the afternoon Jonathon Coombes talked about fungi that grows in the area and had a very informative power point presentation. He called his talk "Fungi: farm, forage and first aid" and you certainly need to be able to recognise your fungi as many are poisonous. Great tour through some of the fungi around us; the eatable, the edible and those to avoid.

[Jonathon Coombes—Hunter Gourmet Mushrooms huntergourmetmushrooms@gmail.com](mailto:huntergourmetmushrooms@gmail.com).

"Connecting Food Webs: Towards Sustainable Farming," Maree McCarthy—[naturesmagic.com.au](http://naturesmagic.com.au). Then Maree McCarthy, one of our members, spoke on "Connecting Food Webs: Towards sustainable farming." She also had a power point presentation and it was extremely informative on the importance of planting local natives to provide food and habitat to local native insects, especially the caterpillars, moths and butterflies.

We would love to visit her block in suburban Newcastle and see all her lovely local natives.

Pat talked about natives and Bunya nuts and then we had to quickly have afternoon tea and clean up as the gates close at 4pm.

It was a great day and thanks to everyone that helped and everyone that came to our field day. We try to run a field day in Spring and Autumn in NSW and Qld.



*Dipodium punctatum*—blotched hyacinth orchid



*Acronychia acidula* Lemon aspen

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### Free IPHA membership for Indigenous Australians

The committee has agreed that people who identify as Aboriginal or First Nation Australians should be exempted from paying a registration fee (currently \$20) for joining IPHA.

The application form will be amended to allow for this change. No proof is required, and while registrants will be encouraged to nominate their cultural or language group, it won't be compulsory.

# IPHA collaborates with University of Newcastle in Research Grant Application

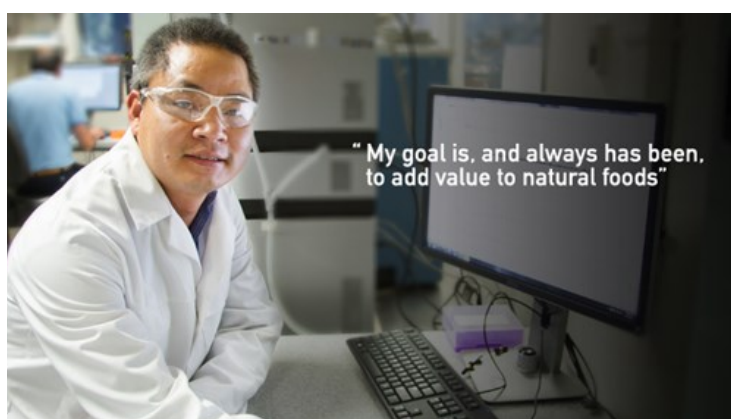
IPHA was recently approached by Dr Quan Vuong, of the School of Environment and Life Sciences at the University of Newcastle, to collaborate in a funding application for an Australian Research Council (ARC) linkage project, titled “Advancing the scientific knowledge on bioactives derived from Australian native plants and translating it into practical applications.”

Here is the brief for the project:

“Australia is home to a diverse range of native plants that provide a valuable source of bioactive compounds. Plant bioactives are molecules within the plant that have potential health benefits. While many of these plants have been traditionally used as bush medicine, only a few have been scientifically studied for their bioactive composition and potential application as functional ingredients in food, cosmetic, and health products. This project aims to expand our knowledge of untapped native species and identify new active molecules with potent preservative, protective, and therapeutic effects, with the goal of translating this knowledge into practical applications. The global demand for natural bioactives is expected to reach USD 52 billion by 2028, presenting a significant opportunity for local companies involved in the commercial production of plant bioactives or related sectors to take advantage of this growing market. Moreover, the increased value of native plants can benefit indigenous communities through harvesting or farming, creating jobs and increasing income. Therefore, this project will not only enhance Australia's expertise in the field of natural bioactives but also attract international recognition and collaboration, promoting sustainable use of the country's biodiversity. The outcomes of this project have the potential to benefit various industries, including food, cosmetics, and healthcare, while also promoting the sustainable use of Australia's unique flora.”

Dr Vuong noted the following outcomes anticipated from the project:

- We will identify and characterise novel bioactives and the most potential plant species containing high levels of these novel compounds.
- We will identify the optimal conditions for extraction and encapsulation to produce powdered extracts enriched with novel active molecules. The powdered extracts with strong properties will be selected for further applications as functional ingredients.



Dr Quan Vuong

Scientific evidence as a proof of concept on practical applications of the Australian native bioactives.

The funding would pay for a postdoctoral fellow and 2 PhD students working on the proposed three-year project.

In addition to IPHA, the following collaborators are contributing in-kind and cash support:

QGS: [qualityglobalsupply.com.au](http://qualityglobalsupply.com.au)

Green blue health: [www.greenbluehealth.com](http://www.greenbluehealth.com)

CCIC: [centralcoastindustryconnect.com.au/about/](http://centralcoastindustryconnect.com.au/about/)

Mrs Bronwyn Chalmer, Elder in Residence of Wollotuka Institute, University of Newcastle, for sharing Indigenous knowledge on the use of native plants as bush medicine.

IPHA has sent a letter of support to the ARC and will be contributing in-kind support only, in the form of advice and information related to native plants, which have been used as bushfoods and medicine.



## IPHA collaborates with University of Newcastle in Research Grant Application, cont.

Dr Vuong and his group at the University of Newcastle are leading researchers into the chemistry and bioactivity of Australian plants, including bushfoods. The following excerpt is from the University of Newcastle website.

Dr Vuong is exploring the benefits from a diversified array of natural products. His research interest is on compounds that have potent antioxidant capacity, and effective biological actions on human health, and that can be utilised in pharmaceutical and nutraceutical industries.

"I focus on identification, extraction and purification of bioactive compounds from various natural sources, such as medicinal plants, native flora and marine materials, as well as from the waste generated by agricultural and food production," the enthusiastic academic asserts.

[www.newcastle.edu.au/profile/vanquan-vuong](http://www.newcastle.edu.au/profile/vanquan-vuong)

The following papers are an example of Dr Vuong's research into the chemistry and properties of the *Eucalyptus* genus, with links to the full papers:

Botanical, Phytochemical, and Anticancer Properties of the *Eucalyptus* Species, [doi.org/10.1002/cbdv.201400327](https://doi.org/10.1002/cbdv.201400327)

In vitro anticancer properties of selected Eucalyptus species, [www.researchgate.net/profile/Deep-Jyoti-Bhuyan/publication/316532592\\_In\\_vitro\\_anticancer\\_properties\\_of\\_selected\\_Eucalyptus\\_species/links/603499b74585158939c27d6e/In-vitro-anticancer-properties-of-selected-Eucalyptus-species.pdf](http://www.researchgate.net/profile/Deep-Jyoti-Bhuyan/publication/316532592_In_vitro_anticancer_properties_of_selected_Eucalyptus_species/links/603499b74585158939c27d6e/In-vitro-anticancer-properties-of-selected-Eucalyptus-species.pdf)

Phytochemical, antibacterial and antifungal properties of an aqueous extract of *Eucalyptus microcorys* leaves, [www.sciencedirect.com/science/article/pii/S0254629917303113](http://www.sciencedirect.com/science/article/pii/S0254629917303113)

Physicochemical, antioxidant and anti-cancer activity of a *Eucalyptus robusta* (Sm.) leaf aqueous extract [www.sciencedirect.com/science/article/abs/pii/S0926669014006797](http://www.sciencedirect.com/science/article/abs/pii/S0926669014006797)

## Let plants be our teachers

'WA's Christmas tree': what mungee, the world's largest mistletoe, can teach us about treading lightly [theconversation.com/was-christmas-tree-what-mungee-the-worlds-largest-mistletoe-can-teach-us-about-treading-lightly-205568](http://theconversation.com/was-christmas-tree-what-mungee-the-worlds-largest-mistletoe-can-teach-us-about-treading-lightly-205568)



*Nuytsia floribunda* (mungee) in full flower, Stirling Range National Park, W.A.

# Research from Uniquely Australian Foods

By Sophie Ader

IPHA committee member and Research Officer Sophie Ader will present in her capacity as Engagement Coordinator for University of Queensland's (UQ) Uniquely Australian Foods (UAF) training centre, at this year's Bushfoods Conference. In her talk, Sophie will highlight successful case studies of Indigenous owned and led native botanicals enterprises. She will firstly present several critical success factors she has observed of those partners she has worked with over the past few years. Sophie sought feedback on these observations from a number of Indigenous partners, each of whom contributed their thoughts and reflections, and indicated they were happy for her to share these factors at the conference.



Murri school visit in the labs

Sophie will then take a deeper dive into one particular Indigenous enterprise based in WA, by explaining and examining the value chain they have created, before finally circling back to redefine what 'success' for this, and other similar, Indigenous Enterprises in the native botanicals industry means, beyond the economics of it.

Sophie's workplace at UQ is a great alignment with IPHA's work—with the research conducted in the UAF training centre there spanning a wide range of native plants, while ensuring best practice collaboration and partnership with Indigenous enterprises.

The UAF centre recently supported around 20, Year 11 and 12 Indigenous high school students from Murri School, to visit the labs. Staff members and researchers gave students a very interactive day in the labs, where they got to perform a few different experiments, take part in a native bushfoods drink experiment and hear about study opportunities, along with

tasting some really healthy, yummy, wattleseed buns which were baked by Indigenous partners up in NT. On parting, they were gifted with a pack of IPHA plant knowledge cards, which will support their current learning about native bushfoods, and in the establishment of their native bushfoods garden at their school.

You can check out some of the different projects of the Uniquely Australian Foods centre here: [uniquelyaustralianfoods.org/our-work/](https://uniquelyaustralianfoods.org/our-work/) and by accessing all their publications and resources: [uniquelyaustralianfoods.org/resources/](https://uniquelyaustralianfoods.org/resources/).

Check out the news page [uniquelyaustralianfoods.org/news-events/](https://uniquelyaustralianfoods.org/news-events/) for other adventures the team get up to!



wattle seed bun morning tea



With one of our indigenous partners, striking old man saltbush cuttings (Centre Dir Prof Yasmina Sultanbawa and myself in the photo).



## Some threatened plant species in the Kosciusko region



Swamp everlasting *Xerochrysum palustre*



Anemone buttercup *Ranunculus anemoneus*

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## IPHA Submission to Senate Inquiry into the Impacts and Management of Feral Horses in the Australian Alps

Indigenous Plants for Health (IPHA) is an association incorporated in New South Wales, formed with the objectives of raising awareness, sourcing grants and sponsorship for sustainable production of indigenous health-promoting plants, and protection of their habitat. In particular, IPHA is concerned with protection of wild plant species with edible, medicinal, aromatic, pollinator attracting and cultural values.

The Australian Alps consist of the only alpine region of our vast continent, however it is a very fragile environment which faces multiple threats from global warming, destruction of habitat and the effects of feral animals, the worst example being the 20,000-plus brumbies that occupy the region. Some Invasive Species Council campaigners, just returned from a trip into Kosciuszko National Park, report the sheer scale of the damage caused by feral horses is shocking, that the park is turning into a paddock.

To many of our members the fact that most of these feral animals are able to roam freely in National Parks is astonishing. Even more remarkable, NSW provides legal protection to feral horses inside a national park and national heritage place through the *Kosciuszko Wild Horse Heritage Act 2018*. With this in mind, a Federal coordinated project to manage a dramatic reduction in brumby numbers is urgently required.

As a result of ineffective management in the past, horse populations are now expanding and causing well-documented damage to Australia's alpine parks, placing at risk almost \$10 million spent on restoration after livestock grazing ended. The costs of horse control and restoration escalate, the longer large horse populations remain in the alpine parks. It is crucial that feral horse numbers are rapidly reduced to levels where ecosystems begin to recover. Aerial culling is needed as part of the toolbox to achieve that reduction (Driscoll et al., 2019). This method should be part of an integrated invasive species management approach. More recently the effects of the long drought and bushfires have placed vulnerable plant and animal species further at risk. Vast areas of vegetation have been wiped out, and the newly emerging green shoots and remnant vegetation that followed the fires are being eaten up by the feral horses (Pittock, 2020).

The loss or degradation of this plant habitat is significant to the Traditional Owners, who have relied on the presence of plants and other organisms for medicinal, edible and other uses. This is highlighted in the Aboriginal Cultural Values Report (p.65) where it states "In terms of our women's plants the orchids, the tubers and the medicinal plants, they've been demolished.

And that's because, not only because of the wild horse population, but the recreational horse riders taking horses into the area" (Donaldson & Feary 2021).



Monaro golden daisy *Rutidosia leirolepis*

## IPHA Submission— Feral Horses in the Australian Alps, cont.

One species of interest is the murnong or yam daisy (*Microseris* spp.), a plant that once provided a reliable source of food for Aboriginal people throughout the region. In the words of Traditional Owners “the murnong is becoming an endangered species because it’s not getting an opportunity to regenerate” (Donaldson & Feary 2021).

IPHA members are concerned that few, if any, of the threatened plants in the area of concern have been subjected to phytochemical analysis or pharmacological investigation, hence there may be plants with medicinal or other utilitarian applications that could disappear before they have been investigated.

With these factors in mind, IPHA strongly supports a significant and rapid reduction of the number of feral horses in Kosciuszko National Park to help protect threatened species, ecosystems and Indigenous heritage. We further recommend the initiation of a management plan under the Environment Protection and Biodiversity Conservation (EPBC) Act, to require states and territories to remove feral horses from the Australian Alps National Parks and Reserves, and National Heritage Places.

Yours sincerely

Andrew Pengelly PhD

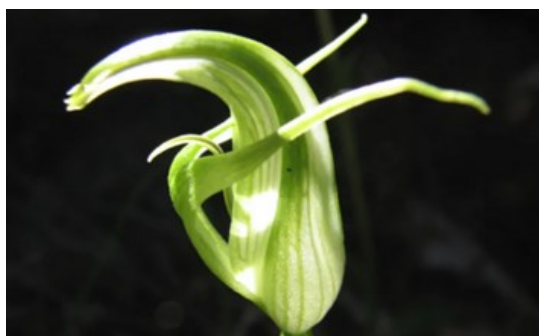
Vice-President, Indigenous Plants for Health Association Inc.

196 Bridge St Muswellbrook, NSW 2333

Some  
endangered  
orchids



Blue tongue greenhood *Pterostylis oreophila*



Mountain greenhood *Pterostylis alpina*



Sun orchid *Thelymitra atronitia*



Slender greenhood *Pterostylis foliata*



Mountain spider orchid *Caladenia montana*



Sun orchid *Thelymitra alpicola*

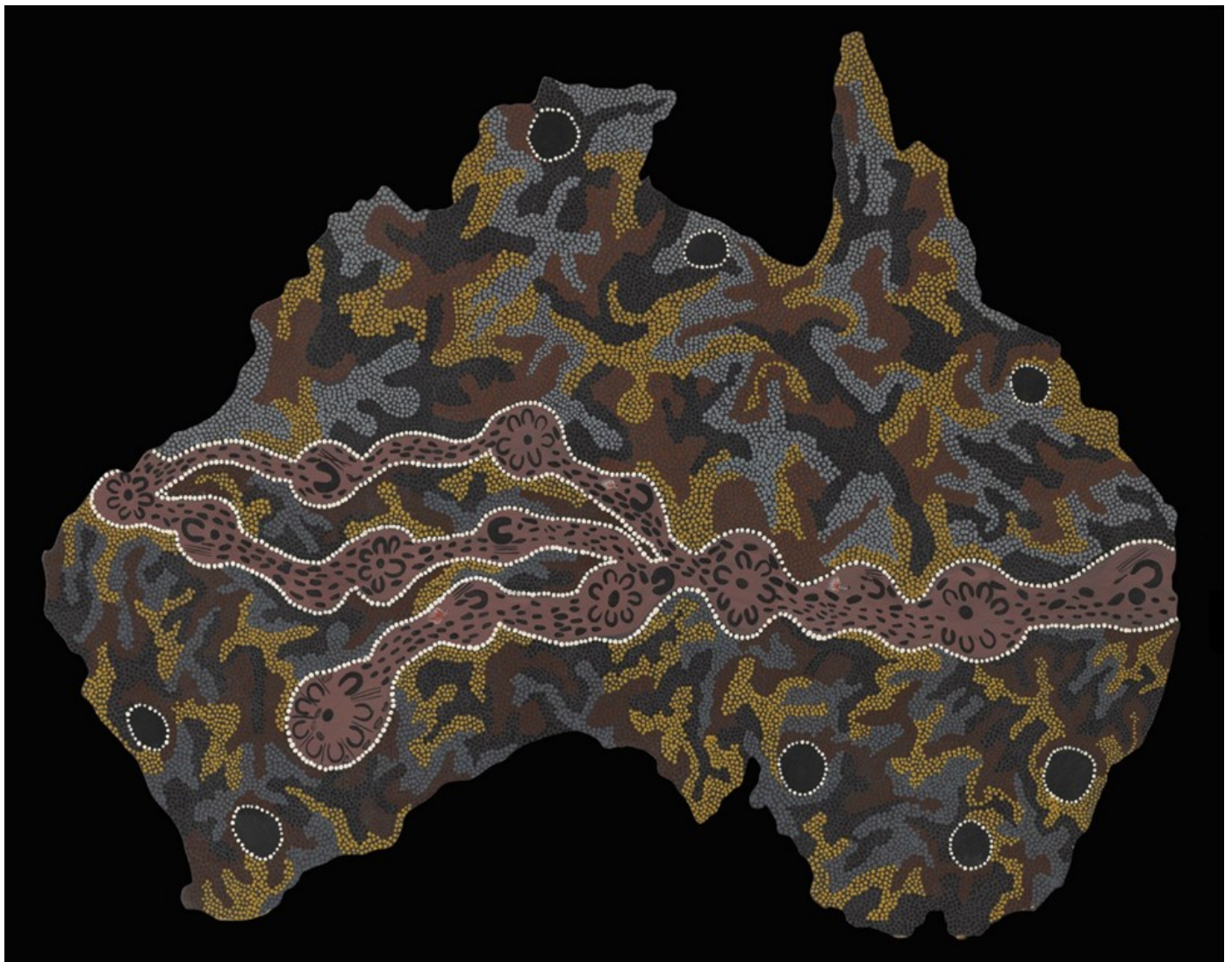


## A UNIVERSAL LESSON OF THE SEVEN SISTERS STORY

*by Alexis Wright*

"This story is both ancient and modern, a universal law for sustaining our entire family, a family that includes all that lives in the world, the lands, rivers, mountains, seas, and the air that we breathe."

Read the companion essay: [emergencemagazine.org/essay/a-universal-lesson-of-the-seven-sisters-story/](https://emergencemagazine.org/essay/a-universal-lesson-of-the-seven-sisters-story/)



*Seven Sisters Songline*, by Josephine Mick, Ninuku Arts



## Indigenous art to inspire, cont.

Ten paintings from an Aboriginal-led exhibition offer portals into the Dreaming track of the Seven Sisters songline:

[emergencemagazine.org/gallery/stories-written-in-the-land-songlines/?utm\\_source=Emergence+Magazine&utm\\_campaign=7c0dc28ff1-Songlines%E2%80%949420230507&utm\\_medium=email&utm\\_term=0\\_73186f6259-7c0dc28ff1-356536406](https://emergencemagazine.org/gallery/stories-written-in-the-land-songlines/?utm_source=Emergence+Magazine&utm_campaign=7c0dc28ff1-Songlines%E2%80%949420230507&utm_medium=email&utm_term=0_73186f6259-7c0dc28ff1-356536406)

Note: Emergence Magazine invited readers to share these links.

### Bush medicine: a collaborative work by women from Wirrimanu (Balgo)

This artwork was commissioned by Dr Jacqueline Healy, Senior Curator, Medical History Museum and Henry Forman Atkinson Dental Museum for the Faculty of Medicine, Dentistry and Health Sciences. It was painted for the exhibition "The art of healing: Australian Indigenous traditional healing practice" and will be part of the permanent collection of the Medical History Museum.

This extraordinary painting can be viewed here:

[collections.mdhs.unimelb.edu.au/objects/28304/bush-medicine-a-collaborative-work-by-women-from-wirrimanu-balgo#&gid=1&pid=1](https://collections.mdhs.unimelb.edu.au/objects/28304/bush-medicine-a-collaborative-work-by-women-from-wirrimanu-balgo#&gid=1&pid=1)

"The Conversation" included the above painting among a feature titled **The art of healing: five medicinal plants used by Aboriginal Australians**. My favourite in this collection is the health-promoting hop bush (*Dodonaea viscosa*) by Rosie Ngwarraye Ross.

<https://theconversation.com/the-art-of-healing-five-medicinal-plants-used-by-aboriginal-australians-97249>



Rosie Ngwarraye Ross (b. 1951), Bush flowers and bush medicine plants, 2015  
acrylic on linen, 91x91cm, MHM2017.3, © Artists of Ampilatwatja. Medical History Museum



# Indigenous Plants for Health Bushfoods Field Day

**Free event**  
**Free camping**  
**available**

*Sat, 24<sup>th</sup> June 2023*  
**Held at Woodfordia**  
**Home of the famous Folk Festival**  
10.30am – 5pm  
Jinibara Country, Woodford, SE Qld

## Programme

MORNING	AFTERNOON
10.00 am Morning tea and mingle Welcome to Country – Uncle Noel, Jinibara Elder Bill Hauritz – Woodfordia founder, introduction to the Conservatree Andrew Pengelly – the bushfood gardens project Jen Stroh – President, IPHA. Sheryl Backhouse – Queensland Bush Food Assn Veronica Cougan – Witjuti Grub Bushfood Nursery Rod Fensham – Botanist, Qld Herbarium Warwick Grace – Food forest creation Andrew Pengelly – The Woodfordia Herbarium	1.30 Guided walk through bush food gardens Botanical descriptions and information on edibility Sampling fruit of plum pine  3.30 Afternoon Tea at Festival Hall (provided)
12.30 Lunch Available at Festival Hall (small fee)	4.00 Julian Griggs – Treehuggers Open discussion and future planning 5.00pm Barbeque at the Duck (small fee)
SUNDAY (optional)	
8.30am Treehuggers meet at Festival Hall Help to weed and maintain bushfood gardens	12.00 Sausage sizzle lunch (also veg options) Bring a salad or other contribution

## Essential information

Location - Festival Hall and surrounds. Map will be provided to registrants

Free camping at sites nearby Festival Hall (unpowered only) – hot (usually) showers, camp kitchen

If camping, provide your own breakfast, or breakfast/coffee may be available for purchase at the Duck

Woodfordia Folk Club is open on Saturday night, at the Coopers Bar. No entrance fee for participants

Alternatively, join the campfire and music at Festival Hall. What to bring: walking boots, hat, , jacket, notebook, camping gear

**Note: All attendees must register with Woodfordia closer to the day, (link to be forwarded).**

**You will then receive the gate code**

**Inquiries** Andrew at [trueunicorn11@gmail.com](mailto:trueunicorn11@gmail.com) <https://indigenousplantsforhealth.com/>

Directions: <https://goo.gl/maps/dn8DJqED8WPMxiLc8>

**Request to members: Please bring a contribution to morning/afternoon teas**

# Indigenous Plants for Health August Field Day

*Sat, 19<sup>th</sup> August, 2023*

**Held at Yandina**

**The Sunshine Coast region**

**Kabi Kabi Country, SE Qld.**

The field day will be held on the 10-acre property of Uncle Tais K'reala Randanpi. It is adjacent to a bushland reserve.

Uncle Tais is a Kabi Kabi Elder doing educational activities on this property. He will lead a cultural spiritual bush tour including a water washing ceremony. The property has plentiful level campsites and town water supplied.

## **Confirmed Presenters**

Uncle Tais – Greeting to Country

- Cultural and spiritual bush tour

Veronical Cougan – Witjuti Grub Bushfood Nursery

Simon Bush – Botanist, bush regenerator

Warwick Grace – Native Foodforests

Andrew Pengelly – Vice President IPHA

Full cost. incl. lunch, morning and afternoon teas \$100 pp. (IPHA Members \$85). Children 5-16yrs \$50.

Camping fee \$20/site (paid to landowner)

Register (after 1<sup>st</sup> July) at <https://indigenousplantsforhealth.com/>

## **Sunday**

For Saturday night campers, there will be an optional visit to Warwick Grace's working Food Forest at West Woombye. No cost involved.

## **Directions**

145 Ben Williams Bridge Rd (old Bruce Hwy), on Brown's Ck, Yandina

Exit off Bruce Hwy north of Nambour - Yandina/Coolum

Further Information: Andrew at [trueunicorn11@gmail.com](mailto:trueunicorn11@gmail.com) <https://indigenousplantsforhealth.com/>





# Knowledge cards—Australian Medicinal & Edible Plants

Indigenous Plants for Health Association beautiful and educational, native botanical cards are available on the IPHA website and at our field days and other events. All monies will be spent on our projects as we are a not-for-profit organisation.

We have also decided to donate cards to Indigenous groups, especially those focusing on education, so if you know a group that would like these useful cards please let us know.

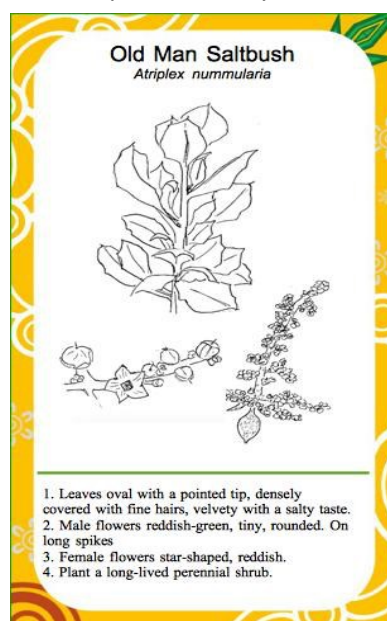
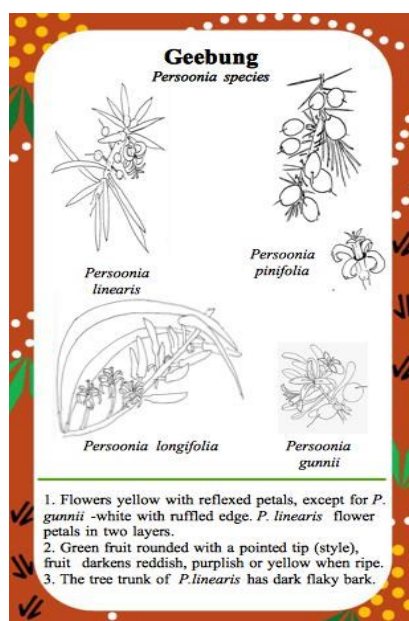
Originally the cards were created by our members and paid for with a grant from the Aboriginal Community Development Fund—Waranuah Local Aboriginal Land Council, which supports Aboriginal communities in the Upper Hunter.

Each deck has 71 botanical cards and a key card indicating edible, medicinal, topical, bee friendly, spice, woodworking, basketry uses. Beautiful botanical drawings of the featured plant with botanical and common names, uses, actions and cultivation guide are on each card.

Cards cost \$25 each pack and \$12 for postage for 1-10 packs.

[indigenousplantsforhealth.com/knowledge-cards-for-australian-medicinal-edible-plants](http://indigenousplantsforhealth.com/knowledge-cards-for-australian-medicinal-edible-plants)

or contact [ipha.secretary@hotmail.com](mailto:ipha.secretary@hotmail.com)

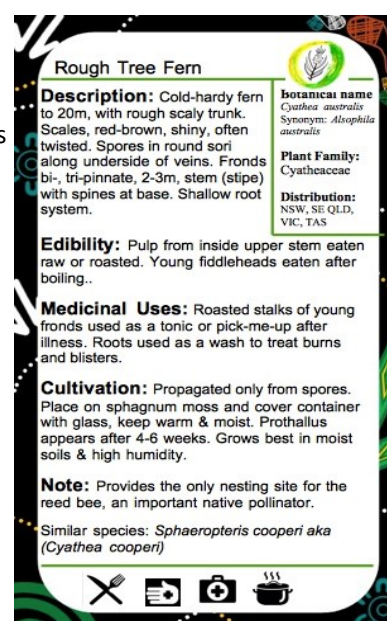


## Reviews ...

"I've been looking through my card pack. They are indeed brilliant." Sylvia

"They are bloody fantastic. So needed in this country where these types of written records are few and far between. What a joy!! I'll be sharing with my local indigenous friends who are trying to relearn their lost heritage." Alyson

"Amazing work"—Wanaruah Land Council





# Some highlights from the Queensland Bushfood Festival



After dinner entertainment. Brenden Moore on didge, Clarence Stockley dancing .



## Anti-inflammatory properties of Kakadu plum fruit and leaf extracts

**Dr. Ian Cock** School of Environment and Science, Griffith University, Queensland

## Eat your (native) greens

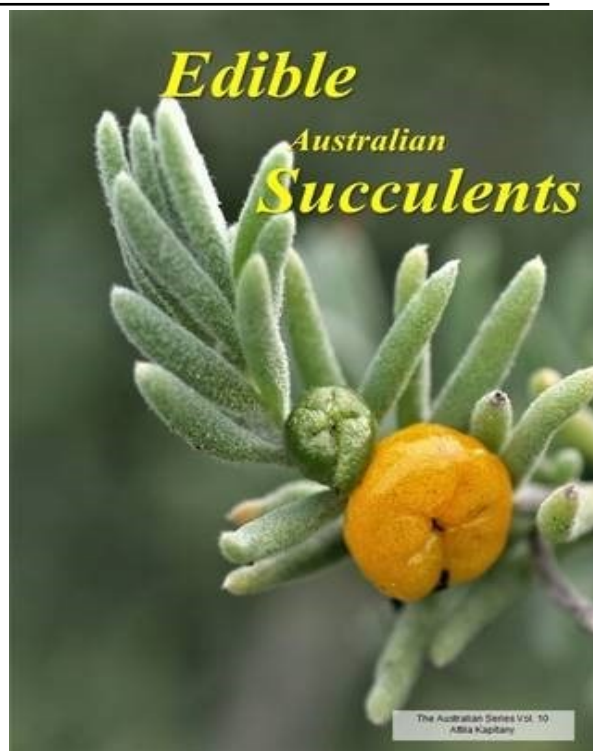
By Andrew Pengelly PhD



"The best things in life are free"



**Indigenous Plants for Health Association (Inc)**  
Awareness, Research & Promotion of Australian Health-Promoting Plants  
A Community Not for Profit Association



Award presented to Irene Babylon, for financial support of ATAC, the Conference venue.

By Atilla Kapitany, conference presenter



# ***Indigenous Plants for Health Association (Inc)***

## **MEMBERSHIP APPLICATION FORM**

Set out below are my membership application details for Indigenous Plants for Health Association Inc.

Enclosed/transferred is the sum of \$20 annual membership fee. The amount has been paid by:

Cash

Cheque

Paid by Bank Transfer (Important — flag your name with payment)

### **Post Membership Form and cheque to:**

IPHA Treasurer, 196 Bridge St. Muswellbrook, NSW 2333 **or** if paying by transfer you may scan and email the completed and signed form to Patricia Collins ([patcollins196@hotmail.com](mailto:patcollins196@hotmail.com))

**Bank Details for Payments: BSB 637000      Account 722660722**

Name: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_  
Postcode \_\_\_\_\_

Tel: Home \_\_\_\_\_

Mobile \_\_\_\_\_

Email: \_\_\_\_\_

I agree to abide by the Constitution and any policies, rules or regulations established within the association.

These are listed on the website [www.indigenousplantsforhealth.com](http://www.indigenousplantsforhealth.com)

Signed \_\_\_\_\_

Date \_\_\_\_\_

### **IPHA Committee Members**

President, Jen Stroh

Vice President, Newsletter editor in chief: Andrew Pengelly

Treasurer: Patricia Collins

Secretary, Newsletter editor: Reesa Ryan

Web, projects coordinator: Kathleen Bennett

Research Director: Sophie Ader

General member: Rob Santich

General member: Jeff Allen

