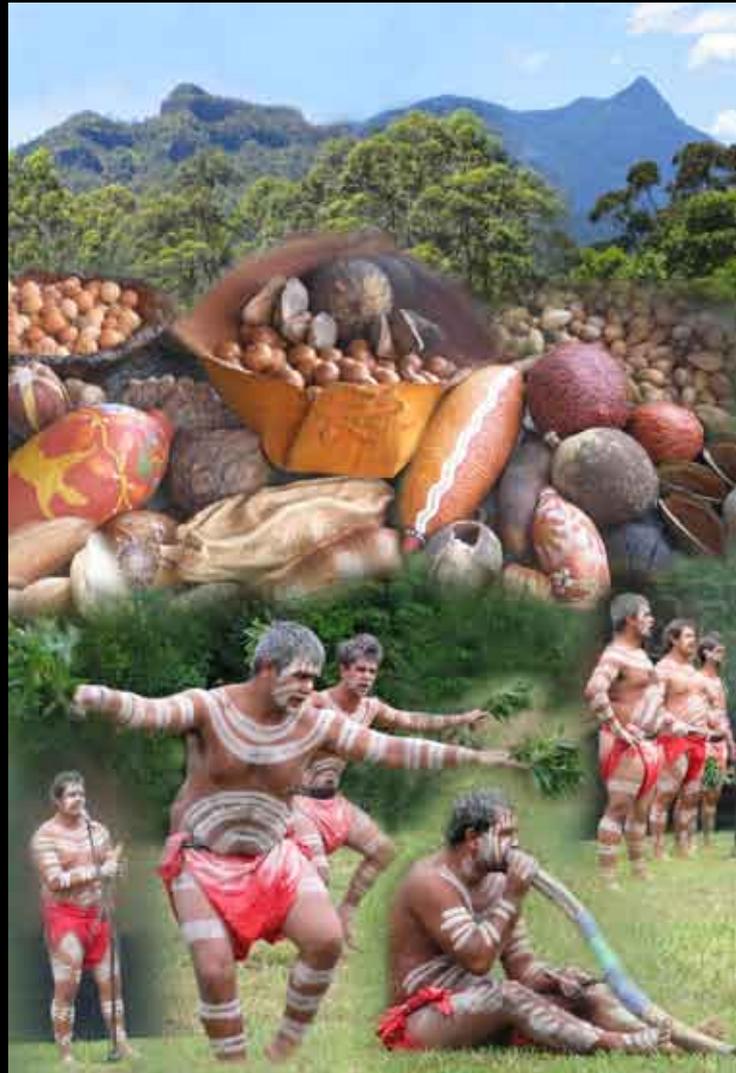


# Wild Sense

## On The Tukka Trail



**A Field Guide to the Edible, Medicinal  
and Useful Plants of Australia**

**Volume 1**

**Johnnie McCarthy & Alison Ratcliffe**

First Published in 2009

by  
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Australia

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# Foreword



Seeds from the Australian bush  
Some with Indigenous artwork

The aesthetic value of Australian plants has grown within the general community and the horticultural industry over many years. Recent public concern about the impact of climate change has drawn new focus to the ability of our flora to flourish in the extreme and often unpredictable conditions that they have evolved in, while new developments in plant breeding have 'tamed' many of the difficult to grow ornamental species and provided greater opportunity to display them in garden landscape settings. We are justifiably proud of the diversity of our vegetation and regularly find acknowledgement internationally as the beauty and vitality of Australian plants are now keenly sought and instantly recognised.

Through all this progress, however, we continue to largely ignore the potential of our flora as a source of sustainable agricultural produce. I do

not use the word 'sustainable' lightly. Organically grown and long-lived trees, adapted to our climate, such as the Bunya Pine *Araucaria bidwillii*, with the ability to produce a staggering 150 tonne of seed each season and with the carbohydrate value to sustain a family of six for an entire year is an exceptional model for sustainability. We should ask ourselves why is this not being held up (and sold) alongside the Macadamia as a cracker of a nut!

The culture I inherited was to be nervous of eating anything when walking through our bushland for fear of a potential lingering bad taste or even worse instant death. Perhaps it is true that many still believe that Australia was uninhabited (indeed uninhabitable) prior to European colonisation, the vegetation of such a continent was found interesting but of no lasting 'economic' or 'nutritional' value. Of course all evidence would dispel this myth in an instant.

And so it is left to bush tucker pioneers to continue to try to educate our horticultural practices, our foodie palates and our many cultural preconceptions about how these still curious ingredients can find a way into our diets.... without nauseating or killing us.... perhaps providing a strong and enduring acknowledgement of country and a conduit for reconciliation with indigenous people, who's ancient knowledge have greatly assisted in our understanding of these plants.

I commend you to this guide, compiled by Ganngjalah, Place of Learning, as the information contained within demonstrates how we can incorporate native plants into a sincere "Oz Nouveau" cuisine. The recipes don't masquerade as bush food while simply being 'flavoured' by an Australian ingredient. The background horticultural information, indigenous uses and European culinary experience, provided by the inimitable Johnnie McCarthy, is a truly unique combination of knowledge and will endure as the most interesting and informative text on Australian plant foods to date.

**Daniel Bishop**

Manager of Horticulture, Mount Annan Botanic Garden,  
Botanic Gardens Trust, Sydney, Australia



An assortment of wild fruits & nuts

# Acknowledgments

First and foremost, we wish to thank the indigenous people of Australia for trusting us enough to share the knowledge and culture of ancient Australia and for the information that has been passed on to early colonists who, in turn, took the time to look, listen, learn and write about the many plants which were utilised by indigenous people of Australia in their everyday lives. It is all this information that has provided the fundamental inspiration behind this book.

Many thanks to Envirofund for supporting this project and providing the funds to publish this book.

We acknowledge the work carried out by modern day pioneers in the native foods industry who have served as a great inspiration. These include Ian Tolley, Andrew Beale, Andrew and Rodger Fielke, Tony Sharley, Vic Cherikoff, Jean Paul Brunteau, Paul James, Peter Hardwick, Peter Latz. In particular, Adrian Notman who, in addition to being a pioneer in this field, has supported and assisted the development of Ganngjalah Cultural Gardens with sincere passion and commitment.

Thank You to staff at the Royal Botanic Gardens in Sydney for not only supporting this industry, but also for your belief in the Spirit of Ganngjalah. In particular, Daniel Bishop (Manager of Horticulture, Mount Annan Botanic Garden) for his encouragement and contribution towards this book.

We would also like to thank the staff of Tursa for providing ongoing funding and volunteer teams. In particular Wayne Davis for his encouragement and support that goes above and beyond the line of duty. Thank you to Job Futures for recognising the work we are achieving within the community and supporting all projects at Ganngjalah by providing Green Corps teams and Tukka Trail participants.

A huge Thanks to all community members in the Mt Burrell region and to our regular volunteers, in particular Michelle McCarthy whose amazing zest for this cause, as well as commitment to the activities at Ganngjalah and its relationship with the indigenous community, in itself deserves an OAM.

Our first full time employee and local community member, Ziggy Martin deserves considerable acknowledgement for his 4 years of previous volunteer work at Ganngjalah and for successfully completing a full time traineeship which resulted in a certificate III in horticulture. Ziggy has contributed an enormous amount of work towards restoring the environment with native food plants, whilst helping to establish Ganngjalah.

Eternal gratitude goes to our committee members who have provided creative ideas, inspiration, encouragement and lots of energy - Richard and Jenny Norwood, Shane Naughton, Tammie Eveleigh, Andrew (Rusty) Russell and last but not least, Leno Sersale whose brilliant culinary skills gleaned from his Italian upbringing have added a unique twist to many of our recipes that are served at Ganngjalah's bushfood banquets.

Last but not least, sincere thanks goes to our sponsors and corporate TreeLovers - Mal Emery, Alpha-H Cosmetics, The Aussie Rob Foundation, James McLaughlan from Solarwise Hot Water, Pete Godfrey, CPR Marketing and Global Wellness, Matt and Amanda Clarkson from Bidding Buzz and E-Bay Magic. Their choice to help resolve issues that require global co-operation is setting a commendable example within the business sector and providing essential encouragement for our volunteers who are working hard to make a positive difference.



Views of Mt Burrell from the top of Wollumbin (Mt Warning)

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# Preface

We first met Johnnie in the year 2000 when he performed his music at the Wollumbin Festival - an event to raise awareness about the Bundjalung culture and the importance of our sacred mountain - Wollumbin (Mt Warning).

Shortly after that festival, Johnnie and his wife Michelle requested a meeting with us to ask permission to establish an environmental and cultural centre where they would replant the bush on cleared land, bring back the bush foods and medicines and share the land with community for health, recreation and educational purposes.



*Awakening the Spirit of the Land Ceremony - Morangjham*

Ever since that meeting, there have been two things that have been constant in our relationship and no doubt beyond our relationship into the rest of our lives.

The first is: Jagun - the land. From our first conversations, we were impacted and encouraged by the depth of knowledge Johnnie had about our land.

We were impacted because we know that developing this type of knowledge takes years of commitment, dedication and an understanding of the times and cycles of our land. Encouraged because, we also found in Johnnie something that is pretty rare to find these days. That is, an ability and willingness to understand and move with these rhythms and cycles. Our people understand this, and it is a quality we value.

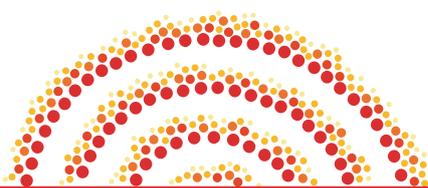


*Kyle Slabb and Johnnie McCarthy - working together to deepen relationships between People, Land and Spirit.*

The second is a genuine value for people and his concern for their relationship and interaction with the land.

These qualities were apparent from our first meeting and it is for this reason and many more that we gave our blessings to their proposed project by offering the name Gannjalah - Place Of Learning (or more simply - 'look, listen, learn').

Over the years a close friendship has developed as we work together to create Gannjalah - a place that shows its visitors the beauty of Australia's natural environment and tells stories about our indigenous and non indigenous ancestors. A place where a wide variety of bush foods and medicines are growing abundantly. A place where the native animals are returning to. A place where Bundjalung traditions can be continued and shared.



*Sharing Bundjalung stories - Morangjham*

For hundreds and thousands of years our ancestors lived in harmony with the earth and survived on the foods they found in the wild. Today, many people in our indigenous communities have continued to use bush meat resources, but a few factors have limited some of our plant resources and their traditional uses. This has caused considerable decline in aboriginal health and we are now facing high rates of diabetes, heart disease and an average lifespan 17 years shorter than non-indigenous Australians. Bush foods are an opportunity to turn this plight around as well as encouraging cultural continuity.

Ganngjalah has renewed access and created interest in something that is very important to the wellbeing of our people and our land. Johnnie's knowledge and passion for our bush food plants and his openness to sharing has been a blessing to many people from our community, as well as the broader community.

The relationship between People, Land and Spirit is the essence of life for all cultures, some cultures have forgotten this, some have forgotten parts, some still hold tight, some are losing their grip. Whatever culture you come from, deepening your understanding of these relationships will only strengthen yourself, your community, your culture and your people.

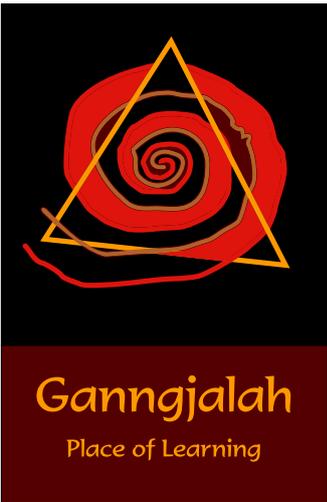
## *Yoway*

### *The Slabb Family*



*Johnnie McCarthy, Uncle Kevin Slabb,  
Michelle McCarthy, Kyle Slabb*

# About Mt Burrell



A group of dedicated volunteers are working together with the Australian indigenous Bundjalung people of Northern New South Wales to establish an environmental and cultural education centre which is helping to cool our planet as well as showing many people how to take the same simple steps to nurture their own environment.

Encompassing 100 acres of both cleared and forested bushland and surrounded by 4 world heritage national parks, the Mt Burrell Cultural Gardens is an outdoor education centre that is being established to instil:

- a deeper understanding of Australian indigenous culture, through demonstration and involvement;
- knowledge and respect for the environment (our natural heritage) to provide solutions for global concerns such as climate change.

Regular activities at this scenic centre which is often described as a botanic garden combined with nature reserve include:

- Educational workshops (eg cooking with foods found in nature, dry stone walling, etc)
- Creative social activities (programs include up-to-date music, art, theatre and sporting activities);
- Environmental restoration and regeneration (over 7000 native trees planted to date) / Landcare education;
- Cultural demonstration and involvement such as corroboree, bushfood cooking and tasting (e.g. wattleseed ice cream & bunya nut pancakes);
- Multicultural educational activities, events and festivals;
- Heritage walks;
- Wildlife trails, etc.

In early 2000, project founders, Michelle and Johnnie (Mac) McCarthy followed cultural protocol by seeking the appropriate elder to request permission for this northern New South Wales development. 2 years of searching resulted in Bundjalung elder and traditional custodian of Mt. Burrell, Uncle Kevin (Slabb) warmly embracing the concept and giving Bundjalung blessings by offering the name 'Ganngjalah' (pronounced garn-jar-lar), meaning 'Place of Learning'. Uncle Kev and his family soon joined the cultural gardens committee, where together, they form a true representation of reconciliation as they work in unison to establish a centre that creatively combines education with the many different aspects of Australian culture.

Ganngjalah is a continual 'work in progress' with many exciting developments still to come. It currently offers the following unique services and facilities:-

The native plant nursery provides a place of growing - for the thousands of seeds that Director, Johnnie Mac collects on his daily travels. Here we teach innovative methods of plant production and nursery management to aspiring horticulturists and botanists using a diversity of Australian indigenous flora. We differ from other botanic gardens and tree planting ventures because 99% of our plants have either an edible or medicinal quality. When the plants are ready to leave the nursery or have been adopted, we plant them to regenerate remnant bushland, revegetate cleared land and create beautiful educational gardens.

The landscaped bush gardens provide visitors with a scenic, aromatic, 'outdoor classroom' offering insight and practical knowledge about the history and use of Australia's native plants. Visitors who walk through the gardens and nature trails find fun facts and intriguing information about the importance of nature; the cultural value of bushland, as well as how it was and still is being used by people all over the world to heal their environment, mind, body and soul.



# Introduction



**Johnnie McCarthy connects youth with the natural environment at Ganngjalah**

This book is intended as an educational resource to provide information and knowledge about Australian native food plants. Compiled from the experiences I've gained during my extensive horticultural career and whilst establishing Ganngjalah 'Place of Learning', it is a guide to recognising and using Australian food plants in a garden, on the farm and in the kitchen. The plants included in this book offer innovative options for gardeners and land managers to use native flora in a way that is relevant to Australia's environment in a rapidly changing world. Most importantly, this book provides an opportunity to deliver significant information back to the indigenous communities who are seeking it. It has also become an important practical example of the reconciliation process, as this publication has stemmed from the relationships that have been established by indigenous and non indigenous people involved with the development of Ganngjalah.

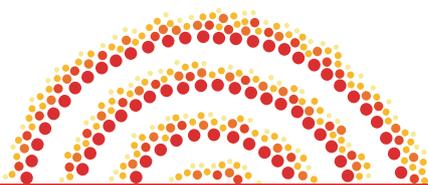
Further volumes have been planned and will be written, but for now I'd like to share with you the story behind this information and why I have finally decided to put it into print.

After working in the environment and bush food industry for quite some time, one question I find myself continually contemplating is... "Are Australians alienating themselves from their own environment?"

During my work at Ganngjalah, it is interesting to observe comments and reactions from both Australians and international visitors who have previously had little experience of the natural Australian environment. They are usually surprised with its incredible beauty and tranquillity and often make comments such as "Wow it's absolutely beautiful out here, but surely it's very scary... are there any snakes around?", "I really like the views and the sounds of nature, I'd love to live out here, but I'd worry about running out of water", "I couldn't live out here even though it's so beautiful - what if there was a bush fire!". The majority of people hear and see a great amount of negative news about the environment such as droughts, floods, bushfires, snake and spider bites, shark and crocodile attacks to name a few. These dramatic stories often dominate the news and many Australian's live in fear of their natural heritage.

Is it fear that prevents most people from experiencing the beauty of our land and from learning about the gifts it has to offer? As the natural heritage is pushed further and further away from our living space, do we actually realise the distance and disconnection that is occurring?

Here's an interesting story from a place that may initially appear totally irrelevant. The USA. If we wander out into the desert we will find the rare Saguaro Cactus, a succulent that reaches 15 metres in height, weighs several tonnes and takes 25 years to seed. In 1982, David Grundman from Phoenix, went into the Arizona desert and stood at the base of an 80 year old, 10 metre Saguaro Cactus *Carnegie gigantea* with a shotgun in hand and a chip on his shoulder. Dave was a city dweller and knew that there was an interest in conserving this well known cactus - its flower was the floral emblem for the state of Arizona. Yet, just for the thrill of annoying a few conservationists, he fired a couple of shots into the lower trunk. What he didn't know was that his third shot was the best in his life. It was also his last. The trunk gave way and the upper section of this particularly spiny specimen, weighing tonnes, fell on him, perforating his body with spines and killing him instantly. This may be one of those rare incidents where the plant resorted to direct action to protect itself against human violence. The significance of poor deluded David the cactus blaster perhaps demonstrates a modern day ignorance that has resulted from a separation from the natural environment, therefore a distant relationship with it. Like David, many people have little or no understanding of the resources that our land produces.



It's comments, questions and stories such as this, that motivated me to finally get this book happening.

Australia's culture is continually being shaped by its ecosystems, yet most people avoid any need to adapt to the rhythms of our unique environment. Rather than learning how to adjust to these changes and how to live with them, decision makers are trying to dominate and control nature. Forcing Australia's ancient ecosystems to become a part of our adopted Anglo-European culture is a battle that stems from our increasing separation from the natural environment, and therefore a lack of knowledge and understanding of it.

Previously, the original Australian's relationship with flora was based on the continuation of diversity and resulted in a relatively stable ecosystem, the preservation of species and a much healthier ecology than we have today.

It seems the combination of ancient knowledge, land management plans and modern day scientific research is largely ignored and instead we still clear trees and continually attempt to conquer and dominate the environment to make way for 'views', more roads and housing whilst society rapidly becomes more and more disconnected from their natural environment. Time-honoured, basic elements that are vital for healthy lifestyles, for example good quality water and soils are diminishing and sadly most don't even notice.

As we struggle to achieve a balance between the natural environment and our use of its resources, the question that we should be answering is 'how do we generate a healthy and harmonious relationship with our land, (the clichéd cry of sustainable living is another way of describing it), when a large proportion of education and modern day culture is becoming synonymous with being 'landless'?

I find it remarkable that half the world lives in suburbia, yet farmers are regularly blamed for most environmental dilemmas. Ironically, farmers producing food resources are at the mercy of consumer demand and operate according to the purchasing choices of urban dwellers – people raised in cities and towns who are unfamiliar with what Australia's rural land is capable of and who lack any understanding of its management. Consequently, relationships between land managers (farmers, natural area managers and Aboriginal people) and the consumer have become uncooperative and in many ways destructive. Our farming systems have overlooked the importance of diversity to support the natural rhythms of Australia's ecosystems. This lack of knowledge, awkward relationships, European based diets and a foreign land ethic has contributed to a disinterest in farming native species. The development of Gannjalah and this book have been designed to create wider interest in native plant species and demonstrate that they can provide great value as well as profitable incentives to maintain wild habitats and ancient ecosystems.



**On the Tukka Trail at Gannjalah. Visitors sample native ribberries and enjoy a new (tasty) experience in Australia's natural environment.**



**Margot Lacey - expecting the worst... but was pleasantly surprised with the refreshing burst of flavour from a finger lime that was given to her directly from the bush**

# Introduction



Learning about Native Gooseberries at Ganngjalah

During my horticultural career, I have worked on bush food development projects for several government and private organisations throughout Australia such as botanic gardens, councils, schools, colleges and commercial plant nurseries. My work has also taken me throughout Australia where I have spent time at numerous indigenous communities and observed their deep understanding of the land and their simple yet very successful wild food expeditions. I've watched government funded projects fail repeatedly due to one important element – no indigenous relationships or input, followed by no input whatsoever once initial funding stopped. This experience showed me that if we want land management systems that are truly sustainable, then it is essential to develop relationships with the Australian indigenous people who hold an ancient knowledge of our land and a natural understanding of the flora and fauna of this country. The general consensus may be that Aboriginal people have lost touch with this knowledge, yet my experience of

talking and working closely with Aboriginal people in cities, towns and communities all over Australia is that there are hidden gems in all areas who still have an intimate localised knowledge and a strong, instinctive awareness of how to live in harmony with the environment. This knowledge has come from stories passed down to them and/or from living on the land for most of their lives.

This book provides an opportunity to catch a glimpse of indigenous insight that has been shared with me over the years – the information that many people say “is lost”.

Recognition of the traditional Aboriginal food sources and creatively bringing them back into the modern day Australian cuisine is an excellent starting point and an underestimated bridge between Aboriginal and non-aboriginal people seeking to establish cross cultural relationships. Having a common interest in native foods is the perfect icebreaker. In fact, bush tucker has been a very successful element in all of the relationship building and reconciliation processes I have experienced.



Native Gooseberry fruit

However, fear can damage these opportunities. One common concern involves the question of ownership. When it comes to the topic of bush foods, who has cultural property rights? Is it the traditional owners or the new custodians? I believe ownership should remain with the traditional owners. Not necessarily ownership of the plant itself, but rather ownership of the knowledge. Knowledge of where wild food plants are found, how they were farmed, harvested, processed and prepared for consumption. Perhaps a royalty payment or a proportion of produce or a percentage of profits could be offered to indigenous communities for the knowledge that has been passed on. The supermarket chain – Coles Myer allocate 5% of every bush food product sold towards bush food production in indigenous communities and provide an excellent example of this concept. Another example is that certain companies selling products with native plant ingredients will only buy the produce from indigenous communities.

At Ganngjalah, the Bundjalung community has ongoing access to a wide variety of bush food produce and the land where the plants are growing.

It is important to understand that Aboriginal people did manage the land extensively to produce food sources prior to our arrival and that much of their baseline knowledge is still being used by the bush food industry today. After years of living with and observing the cycles and rhythms of the land, they cleverly manipulated its diversity, changed it, some argue that they may have reduced it. However, they always maintained enough diversity to exist as a healthy, culturally rich society for thousands and thousands of years.

This ancient knowledge and close connection with Australia's vegetation is something that current bush regeneration and Landcare groups aspire to and is of particular relevance to native food farmers and wild harvesters. For example, it is the Aboriginal land management system that provides the bush food industry with a regular supply of bush tomatoes *Solanum centrale*. Although wild populations of bush tomato are by far the main source of supply, cultivation is now starting to increase the quantity available.

The Aboriginal relationship with our flora involved the manipulation and dispersal of food species. A majority of our society is not acquainted with these techniques, due to the reduction of both Aboriginal land management practice and habitats and we have been unable to observe the intricate methods and finer details of how the Australian land was originally managed. As a result, with the exception of fire stick farming there is little information or published scientific research to support this system. Consequently, there are many anecdotes throughout this book that have been obtained through storytelling and practical experience.

Since colonisation, foreign animals and plants have been introduced and now dominate our land, replacing the native vegetation as a food source (eg. cows, grain, sugar cane versus kangaroo, emu, wattle seed, sugarbag). A common argument is that native species are unproductive and this is one reason why Australian's neglect to see the value and wealth of their own bio-diversity. However there are studies that contradict this line of reasoning. Just a couple of examples.....

Mulga *Acacia aneura* seed, once roasted and ground to a paste has a texture and taste similar to that of peanut butter and is equally, if not more nutritious. A conservative estimate of seeds gathered from 2.5 acres of a typical stand of Mulga would weigh approximately 100kg. An experiment showed that thirty Aboriginal women, working 6 hours a day, 5 days a week, over a month can harvest and process 500kg of mulga seed. Initially this may sound like hard work or an expensive labour input, yet it is worth noting that the production comes from land that is generally not suitable for agriculture and requires little or no management or farming inputs. From a community safety perspective, wattle seed protein may help eliminate health risks associated with peanuts.



Combining modern technology with ancient culture.  
Native seeds are cleaned using a cement mixer

# Introduction



Bush Tomato flower



Unripened Bush Tomato fruit

Research shows a colony (approx 5-10 plants) of bush tomatoes that germinate after fire will produce up to 20kg of fruit in its first season of growth. How many readers are now saying... “Fire! I’m not going to wait for fire to grow tomatoes!”. The good news is YOU don’t need fire to grow bush tomatoes. When the plant stops producing after a season or two, you can simply buy a new plant, rather than torching your backyard! Thankfully the traditional method, which involves fire or smoke, produces enough seed to supply us with the opportunity to buy new seedlings.

This introduces the subject of “fire-stick farming”. Fire was an extremely important land management tool for Aboriginal people throughout Australia and is probably the most important aspect of desert ecology. Its aim was to produce a mosaic of plant communities on land that was in different stages of fire recovery. Fire provided easy access, plant regeneration, particularly of edible tuberous crops and fire weeds (ie. lilies, orchids, yam daisies and desert potatoes) as well as areas for animals to graze on new shoots, which made hunting a lot easier. This traditional fire management system still helps to reduce the impact and frequency of large scale fires that threatens communities and their food resources. The extremely detailed and intimate understanding of our native plants and their relationship with fire as a land management tool is knowledge that we can no longer choose to ignore. Having a better understanding of our flora and its response to fire will greatly assist our understanding and connection with Australia’s unique and diverse environment.

Another traditional land management technique that people may be familiar with is the dispersal of food producing plants, using the seed.

One of the most popular seasonal food sources came from the Bunya Pine *Araucaria bidwillii*. The nut from this tree is prepared in a wide variety of ways and provides great nutritional value. Aboriginal people would trek thousands of miles to attend bunya nut feasts. The gathering of many tribes would last weeks, possibly months and during this time bunya nuts were the main food source. When tribes left the feasting area, the seeds were carried away from the cooler higher altitude environment and then planted within the vicinity of campsites in other regions, well away from the area that this species was naturally dominant. The seeds were planted and dug up a few weeks later to be eaten as sprouts. Some seeds were left for a few months and the swollen starchy tubers were consumed. Other seeds were left in the ground to grow into trees so that a greater supply of this important food source was in close proximity to their camps. Once the trees produced bunya cones years later, the nuts were removed and used in a number of different ways such as roasted whole or ground into flour for damper.

As tribes travelled along known walking tracks, they would intentionally distribute seeds. Native ginger spp *Alpinia caerulea/species*, *Midyum Austromyrtus dulcis* and Geebung *Personia spp* are examples of fruits that were eaten or sucked and their seeds deliberately spat out to enable germination in disturbed areas adjacent to the track. This strategy would replenish the supply and ensure it was always easily accessible.

Another important food group found all over Australia is the yam. This sweet potato-like root grows underground and was harvested by Aboriginal women often after fire, because it was easier to find, or in rich soil along creeks or rivers and in deep sandy soils along the coast where it was easy to dig. With some species of yams such as *Dioscorea transversa*, where male and female flowers occur on separate plants, the female plants, which produced the seed, were rarely dug except in times of scarcity. If the female yam was needed, only small sections were taken and the rest left behind or replanted.

Curiously, for some plants such as the bush onion (*Cyperus bulbosus*) and pigweed, *Portulacca oleraceae* the same tilling technique was used even though one grew from seed (pigweed – the whole plant was used for seed and greens) and one from tuber (onion). Aboriginal women would deliberately break, loosen and aerate the soil when they pulled the plant from the ground. During this process, some of the native onion tubers or the pigweed seed would fall back into the disturbed soil which provided ideal conditions for regeneration and again demonstrating how Aboriginal people understood very well how to ensure propagation of desirable species.

Another innovative technique that Ngurunderi people from South Australia use is the layering of large areas of muntries *Kunzea pomifera* – sometimes referred to as the native cranberry. The edible fruit is gathered by removing large stems that cover the ground and taken back to campsites behind sand dunes. After fruit removal, the stems were discarded around the campsite boundaries where they would regrow naturally. Significantly, bush regenerators in coastal areas of South Australia and Victoria have adopted this method to assist revegetation of native bushland in these regions.

Without doubt, there are many more examples of Aboriginal horticulture (land management techniques) like this, which should be documented. By combining native food plants and traditional land management techniques together with modern day research, we can encourage farming and other land management strategies that are much more relevant to Australia and inspire a stronger connection with our environment for all Australians.

What of the non-indigenous relationship to our native foods? Recently I visited a couple of highly experienced horticulturists (aged in their 50's) and was delighted to find a Lily Pily *Syzigium paniculatum* fruiting heavily in their garden. It was late in the night when I made my discovery and even though it was dark I collected 14 kilograms of high grade Lily Pily fruit in one hour. Surprisingly, they had never tasted the fruit that carpeted their garden and had no idea that Lily Pily fruit of that quality was valued at approximately \$15 per kilo at the time. Their relationship with this plant was an example of how little we relate to our native food species. Instead, they had planted an English oak at the base of the Lily Pily with the aim of removing the native species once the oak was large enough to take over, even though the oak had struggled for a number of years without actually growing.



**A fresh, healthy bunya cone.  
Fruiting native ginger plant behind.**

# Introduction



Lily Pily fruit lined with Bunya Nuts

No consideration or value had been given to the Lily Pily as an important and attractive resource, or its value to the native wildlife. In another very productive hour on the central coast of New South Wales, I filled a one tonne truck with bunya cones.

I must emphasise that production is not only about quantity, it includes knowing where, when and how to manage and maintain diversity to achieve productivity. It seems Australia's relatively new population has made almost no effort to adopt any of the technologies I have documented and our present food bearing ecologies reflect this.

With the largely unknown impact of global warming providing a degree of uncertainty in the community, planting trees is a step that provides the most significant

method of removing carbon from the atmosphere naturally. This provides an excellent alternative for the farming sector, as most of the core native food species are tree crops. Therefore in addition to creating a farming resource as well as the many other benefits that are listed in this book, planting native food trees can also help to resolve current environmental predicaments. This example illustrates an underestimated opportunity that exists, and one that is often overlooked.

The good news is awareness is increasing and the relationship between land and people is gradually improving. With constant reminders of the vulnerability of rare and endangered species, global warming concerns and other environmental debates as well as the growth of the native plant and food industry, we have important indicators of change (albeit still on a small scale). With the assistance of Landcare, bush regeneration, and catchment management programs, thankfully our relationship with the land is now developing on a much more consistent, community driven and widespread basis.

A growing interest in native foods, alongside concern for rare plant species has contributed to an upsurge in native plant popularity in suburban gardens and community landscapes.



Increasing awareness at Ganngjalah with cross cultural activities

This new trend is increasing cultivation and dispersal of rare or threatened bush food species and providing additional motivation for preservation of their remnant wild habitats.

The concept of further developing our native foods is an interesting part of our changing relationship with the Australian land. This up and coming industry combines western and indigenous knowledge and involves a diverse range of industries including agriculture horticulture, science, land regeneration and revegetation, catchment management, food technology, hospitality, and catering as well as benefiting tourism, Aboriginal health, arts, crafts, natural medicines, essential oils and toxicology to name a few. I believe, the true value of this relatively new industry is underestimated and most of the core edible and medicinal species are worthy of further research. Our horticultural industries, botanic and other scientific institutions should be urged to shoulder more of this responsibility. Australia's wealth of floral resources points to a need to go beyond only botanic classifications and cultivation for beauty.



**Working together. Uncle Kev, Johnnie and Kyle educating young adults at Ganngjalah**

In conclusion, the reality is that, no matter how vigorously we attempt to avoid change, Australian culture is being shaped by its ecosystems. No matter how much we seek to modify and manipulate our environment, it will always dictate our future direction. If we wish to make a smooth change, it is essential that Australians develop relationships with our flora that consider these factors and help us all to prosper in the long term on our continent.

More positive stories about the success of indigenous and non-indigenous teamwork should be seen and heard, as well as the exciting benefits that Australian native plants produce can provide (eg. taste sensations, aromas, beauty, business opportunities, etc). At Ganngjalah, we have implemented all of the strategies discussed here, whilst working side by side with the traditional Mt Burrell custodians. We invite people from all walks of life to Ganngjalah, where we regularly share stories of the land, plants, food, medicines and long history of this country. We sing traditional and modern day messages and share ancient bush food flavours in modern Australian cuisine. As a result, I observe respectful and joyful cross cultural interaction more than I've ever experienced before and I notice that more and more people leave Ganngjalah with a passionate understanding and newfound connection to Australia's natural environment. This is what native plants, bush foods and an understanding of Aboriginal culture can achieve.

Last but not least, Australian plants offer exquisite flavours, wonderful aromas and many of the species that are included in this book are stunning ornamentals, as well as being extremely beneficial around the home. I encourage you to use this book regularly and hope that it inspires you to bring the pure flavour of Australia into your backyard, your kitchen - your life!

**Johnnie McCarthy**

# Aniseed Myrtle



Mature Aniseed Myrtle tree

**FAMILY:** MYRTACEAE

**OTHER NAMES:** Ringwood, Aniseed Tree, Native Aniseed formerly *Backhousia anisata*

**LATIN NAME MEANS:** Anetholea - named after the main compound / oil anethole, + anisata - anisatus partaking of the scent of anise *Pimpinella anisum* to which it has no botanic relationship.

**HABIT:** A medium to large spreading tree to a height of 25-40m in its natural habitat. In cultivation 7-12m and a spread of 4m.

**HABITAT:** Occurs in gully rainforest with bangalow palms *Archontophoenix cunninghamii*, and flooded gums, *Eucalyptus grandis*, on the richer alluvial soils and occasionally into lowland subtropical rainforest along water courses.

**DISTRIBUTION:** Confined to the Nambucca and Bellinger valleys in north east New South Wales.

**GROWING REQUIREMENTS:** Enjoys full sun with ample moisture without being waterlogged. Mildly frost hardy though favours a protected position in a medium to heavy soil. Responds well to pruning and makes an exceptional hedge.

**MATURITY:** 3-5 years to fruiting. 2-3 years before leaves can be harvested. Germinates easily from fresh seed that is soaked in water. Strikes from cuttings with some difficulty, unless propagation material is taken from young seedlings with active juvenile vigour. This will achieve greater success rate, in a shorter period of time and result in stronger plants.

## IDENTIFYING FEATURES:

**Leaves:** Thin, firm, glossy, hairless, narrow-lanceolate, 5-12cm long, drawn to a blunt point with numerous oil dots. The unique aroma of aniseed and instant liquorice taste is the easiest way of identifying this tree.

**Flower:** September-December. Scented, white about 1cm in diameter with prominent anthers.

**Fruit:** May-July. A small, dry, brown capsule approx 5mm. Strongly scented and possibly a richer source of aniseed oil than the leaves.

## HISTORY:

\* Is one of the highest sources of the compound anethole to be found in nature. According to some reports, it contains over 99% anethole in the essential oil of some genotypes.

## USES: Aboriginal

\* The leaves are soaked in water and the liquid taken as a refreshing tonic, mouthwash and general 'pick me up tonic'.

\* They are also chewed as a mild stimulant, to cleanse the palate and to aid digestion.

## Culinary:

\* Aniseed myrtle has a subtle pernod-like aniseed flavour with a sweet liquorice after taste, which can be overpowering if used in the wrong way. An extremely versatile flavouring, although its high oil content makes it quite volatile so it is best added to cooking cold-formulated or as a post-preparation seasoning. It is well suited with chicken, seafoods or as a seasoning in pumpkin and vegetable soups.



Aniseed Myrtle leaves and seeds

# Anetholea anisata

It can be used in sauces and confectionary, to compliment fetta cheeses, ice creams and other desserts, or to make liquors and teas. It also makes an exceptional substitute to star anise *Illicium verum* in Thai satays. Its uses are almost limitless.

\* The ground spice, which has a light green colour, will lose its flavour if stored for long periods of time, therefore it is recommended to grind what is required and store remaining dried leaves whole.

## Medicinal:

\* Due to its high content of anethol, (a stimulant with antiseptic, antiviral, and bactericidal properties) Aboriginal people would have utilised aniseed myrtle as an important medicine.



Aniseed Myrtle flowers



Aniseed Myrtle seeds

## DID YOU KNOW?

- \* Makes great teas - the cysanathol in its leaves can make you slightly euphoric.
- \* Very few aniseed myrtle trees still exist in their natural habitats.
- \* The bright green new growth and undulating leaves make it a great ornamental.
- \* It is an excellent indoor plant as it tolerates areas of low light.
- \* The timber is useful which accounts for its rare and threatened status. The wood is reddish brown, hard and quite durable. It is resistant to termites and fungal attack and its common name of 'ringwood' alludes to the thin brownish concentric arcs on the cross section of the log. It is hard to imagine the need to cut down such a majestic tree for timber when it has so many other uses alive.
- \* The most amazing thing about the aniseed myrtle is why it has remained ignored for so long by mainstream chefs, horticulturists and herbalists???

## RECIPE: WATTLE AND ANISEED MYRTLE CHAI

### Ingredients (serves 2)

- 10 cloves of Cardamom
- 4 Aniseed Myrtle leaves (fresh if you have a plant handy)
- 1 heaped teaspoon of ground and roasted wattleseed (more if you like it strong)
- 2 generous teaspoons of honey (more if you like it sweet)
- 1 1/2 cups of water
- 1 cup of milk

### Method

- Grind the cardamom in a mortar and pestle.
- Break up the aniseed leaves.
- Put 1/2 cup of water in the pot, add the cardamom, aniseed and wattle seed, bring to boil for 1-2 minutes.
- Turn down the heat, add milk and remaining water.
- Allow to come to the boil slowly, (the slower to boil, the better the flavour).
- Strain into cups and add honey to taste.
- Note: If using soy milk for this recipe, the ingredients may separate should the honey be added to the cup before the brewed chai.



New Aniseed Myrtle leaves

# Bunya Pine



Mature Bunya Pine tree

**FAMILY:** ARAUCARIACEAE

**LATIN NAME MEANS:** *Araucaria* = Araucanos named after a Chilean tribe where the Bunya relative (Monkey Puzzle Pine *Araucaria araucana*) was first identified by non-indigenous peoples; + *bidwillii* named in honour of horticultural botanist John Carne Bidwill.

**HABIT:** Large to very large tree, up to 50m high with a maximum spread of 10m. A straight trunk and a distinctive rounded crown.

**HABITAT:** Upland and Highland rainforest. Also lower regions leading to montane habitats particularly in dry-rainforest remnants along creek lines and into open forest.

**DISTRIBUTION:** The Bunya Pine is widespread around coastal Queensland, with an unusual disjunct distribution including Rockhampton, Mt Lewis and even with some trees in northern New South Wales. However the epicentre is the Bunya Mountains.

**GROWTH REQUIREMENTS:** Once germinated growth can be slow. Mulching, access to moisture and removal of weed competition encourages a consistent growth rate. Bunyas are capable of surviving the most tumultuous of conditions from snow to desert, though they favour warm temperate conditions with high rainfall and rich soils in full sun.

**MATURITY:** Bunya seeds are quick to germinate, quite often whilst still in the cone. Under optimum conditions they can produce a cone within 7-10 years, although 15 years is the average.

## IDENTIFYING FEATURES:

**Bark:** Dark, rough and extremely thick, up to 15cm.

**Leaves:** Alternate, dark glossy green upper, paler beneath, leathery, narrow, sharp tipped, 1-6.5cm long.

**Flower:** Female cones are separate from male spikes which are up to 20cm long, thin and abundant, appearing early summer. The tree is monoecious - both male and female occur on the same tree.

**Fruit:** From January - April. Large green cone up to 50cm long, weighing as much as 10kg, containing between 20-150 seeds about 4-5cm long. One tree can have over 150 cones. Inside the seed is the edible kernel.

## HISTORY:

\* In 1823, surveyor/explorer, John Oxley came across two Europeans in south east Queensland. They were convicts stranded on the coast of Queensland after their boat had blown off course on a journey from Sydney. There was a third member of the group who was attending a bunya feast with Aboriginal friends (most likely one of the first Europeans to eat bunya nuts).

\* Bunya trees were logged heavily in the 1800's because they are an excellent timber tree with similar properties to Hoop Pine *Araucaria cunninghamii*.



Bunya Pine leaf

# Araucaria bidwilli



Bunya Pine cones and nuts

## USES: Aboriginal:

\* Aboriginals baked the starchy seeds (that have a potato/ chestnut taste), which provided an important carbohydrate staple. The young seeds were eaten raw which taste similar to coconut. The seeds were ground into flour, then made into dampers (dough) and cooked in fire coals.

\* Sometimes seeds were buried in mud allowing a type of yeast or fungus to grow through the nuts. This may have been a *Rhysopus* sp. similar to the one used to create Tempeh from soybeans. Bunya processing in this way acquired a distinctive taste and smell.

\* Every three years bunya trees produce an enormous crop. Aboriginal people trekked great distances to the Bunya

Mountains to meet and feast on the nuts for periods up to three months. During this time they would perform ceremonies, songs and dances, exchange stories and barter goods. The last great bunya feast took place in 1876. Bunya trees have so much importance to Aboriginal communities that individual members of the Waka Waka and Gubi Gubi tribes were made responsible for individual trees and authority to collect the seeds from that tree was passed from father to son or mother to daughter.

## USES: Culinary:

\* Used extensively in bush food recipes for soups, casseroles and pastries etc. Cooked seeds can be used in recipes or ground into flour. Bunya flour has a sweet nutty flavour and can be mixed 50/50 with plain flour or self raising flour and used for pancakes, muffins, fruit pies, etc.

## DID YOU KNOW?

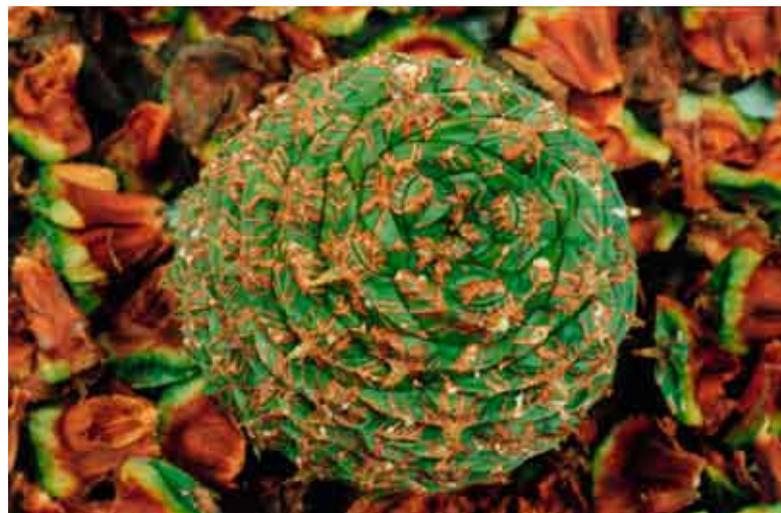
- \* Most Australians are unaware of the immense value bunyas have nutritionally, in the kitchen and environmentally.
- \* Bunya nuts are high in protein ~ 11%, high in complex carbohydrates, and low in oil ~ 1%.
- \* One mature bunya tree can provide all the carbohydrate needs for a family of six for one entire year.
- \* Each tree can produce 1,500kg of seed each season and are mostly left to rot under the tree!
- \* If the nuts are not pierced or split before they are roasted they will explode!!
- \* The family Araucariaceae are a relic from Gondwana times and were around when the dinosaurs ruled.
- \* When the cones are ripe they plummet to the ground at speeds of up to 177km p/hr causing considerable damage to anything underneath (eg cars and roof tops).

## RECIPE: BUNYA NUT HOUMOUS

### Ingredients

- 15 Bunya Nuts (quantity may vary according to size of nut)
- 3/4 Cup Tahini
- 3 Teaspoons Vegie Stock
- 1/2 Cup Macadamia (or Olive) Oil
- 10 Lemon Myrtle Leaves (small young, with mid rib removed)
- Lemon Juice (from 2 medium size lemons)
- 1 Cup Hot Water (quantity may vary according to size of nuts)

**Method:** Boil bunya nuts in shell for 15 minutes. Whilst nuts are cooking, blend remaining ingredients in a food processor and let stand for 1/2 hour. Remove bunya nuts from shell whilst still hot and wet (use tea towel to handle hot nut and small sharp knife to cut shell). Put shelled bunya nuts aside to cool. Add (shelled) bunya nuts to mixture and blend again until thoroughly combined. Mix in lemon juice, followed by water.



Bunya Pine cone

# Davidson Plum



Young Davidson Plum tree

**FAMILY:** CUNONIACEAE

**ABORIGINAL NAMES:** Ooray (Wuray / Way Way), Jabugay

**LATIN NAME MEANS:** Davidsonia, after J.E. Davidson, a pioneer sugar grower at Rockingham Bay where the first specimen was collected.

**HABIT:** An extremely attractive small to medium sized slender tree up to 10m tall, either with a single unbranched stem or several stems arising from the base. Shiny foliage and weeping branchlets bunched towards the top.

**HABITAT:** In warm subtropical rainforest and wet eucalypt forest at low altitudes.

**DISTRIBUTION:** Restricted to the Brunswick and Tweed Rivers region in northern New South Wales.

**GROWING REQUIREMENTS:** Is adaptable to a range of soil types, preferring rich soil with a high moisture content for good fruiting. Needs a shady sheltered area as young plants are susceptible to frost and damage from strong winds.

**MATURITY:** Approximately five years before fruit can be harvested with trees bearing considerably more fruit after eight years.

## IDENTIFYING FEATURES:

**Bark:** Light brown, corky and softly scaly. Young bark light green.

**Leaves:** Large 50-60cm long with 7-19 large, strongly toothed opposite leaflets, 10-25cm long. Leaves and branchlets have pale brown hairs which can detach and penetrate the skin when touched, causing irritation for some people. New leaves are crimson-red and velvety soft.

**Flower:** October to January. Pink-red weeping clusters about 30 cm long borne directly from the main stem.

**Fruit:** Large, blue-black, oval, plum-like, covered with loose short brown hairs when young. Up to 7.5 cm long. The pulp crimson and juicy. The stone consists of two separate seeds surrounded by a fibrous covering, one seed generally flatter and sterile. The flesh is edible. Fruiting from November to March though can be found in fruit at anytime of the year.



Davidson Plum fruit on main stem



Ripe Davidson Plum fruit

**HISTORY:** In 1949, a young botanist labelled three samples of *Davidsonia pruriens* var *jerseyana* as 'clearly a new species'. Some of these samples had been collected as early as 1926. They looked quite different from the other collections of *Davidsonia* being smooth-leaved and unhairly. It was known from a few sites and was considered extremely rare as it produced 'seeds' without any embryo.

# Davidsonia jerseyana



Young Smooth Davidsonia tree

Plants were grown from suckers at Sydney Botanic Gardens. It remained un-named however for almost another 50 years until after the collectors death. It was eventually named Davidsonia johnsonii after Laurie Johnson, the botanist who collected and identified it, and Director of Sydney Royal Botanic Gardens in the 1980's.

## USES: Aboriginal

\* The sour fruits were a favourite food. The supple trunks were used as harpoons for hunting turtle or dugong. Old fruit was used as a dye.

## USES: Culinary:

\* The fruit resembles a plum but is much more similar in flavour to the Japanese sour plum or umobushi plum.

\* It makes superb wine, jam and mayonnaise.

\* The juice is so acidic that it makes an exceptional alternative for vinegar used in tangy salad dressings.

\* It works well as a dried condiment that can be added to ice-creams, sprinkled over porridge, yoghurt and fruit salad or infused in a cold drink with ice.



Smooth Davidsonia leaf

\* Hairs can be removed by rubbing the fruit under cold water.

## DID YOU KNOW?

\* It is rare in the wild - classified as endangered under the Threatened Species Conservation Act 1995.

\* One mature tree produced more than 40kg of fruit!

\* Aboriginal children who were accustomed to eating fruits low in sugars, used to devour the sour tasting plums. This sharp acid taste, which is common in Australian native fruits now proves to be an obstacle for the palate of non-indigenous people, whose spoilt and fussy palates have evolved in the opposite direction. As a result many native fruits are now considered unpalatable. This legacy has proven costly to relationships with indigenous people, native vegetation and is the core obstacle to understanding and embracing the wonderful foods eaten in this country.

\* It's local relative, the Smooth Davidsonia, does not produce viable seed and is therefore sterile. The only way it can reproduce is by suckering from the parent plant.



Ripe Davidson Plum fruit

## RECIPE: DAVIDSON PLUM & LEMON MYRTLE SWEET CHILLI SAUCE

### Ingredients

Davidson Plum jam (1x 275gm jar)  
3 1/2 fresh birdseye chillies OR 2 tablespoons chilli flakes  
2 teaspoons garlic (minced)  
2 1/2 tablespoons balsamic vinegar  
1 1/2 tablespoons sugar (rapadura organic)  
14 Lemon Myrtle leaves (young soft, with mid rib removed)  
Water (boiled and cooled)

### Method

Blend all ingredients to a smooth paste adding small amounts of water gradually until a smooth chilli sauce consistency

# Flame Tree



Mature Flame Tree in flower

**FAMILY:** STERCULIACEAE

**OTHER NAMES:** Illawarra Flame Tree, Flame Kurrajong

**ABORIGINAL NAME:** Bugahr-Bin

**LATIN NAME MEANS:** Brachy = brachya, short + chiton, a coat or small tunic, in reference to coating (of short massed hairs over the seed, acerifolius = Acer the maple leaf, + folius a leaf, ie leaves like a maple.

**HABIT:** A large, semi-deciduous tree, 30-40m in height.

**HABITAT:** Subtropical and warm temperate rainforest.

**DISTRIBUTION:** Widespread, north from Nowra on the Shoalhaven River in New South Wales, to Iron Range, North Queensland.

**GROWING REQUIREMENTS:** An extremely hardy and adaptable tree suited to most aspects. For best flowering and fruiting, it prefers full sun and rich organic soils, with a heavy layer of mulch.

**MATURITY:** Generally slow to flower and fruit taking from 4-8 years to mature. Grafted plants will produce a lot sooner from 2-4 years. Growth during this period growth can be quite rapid.



Immature Flame Tree

## IDENTIFYING FEATURES:

**Bark:** Brown with many splits, young growth moss green.

**Leaves:** Large on long slender petioles, dark green, glossy, hairless, 3 lobed, 25cm long. 5-7 lobes on young saplings.

**Flower:** October to December. Bright red, bell-shaped, 2cm long.. Extremely attractive, often covering the entire tree.

**Fruit:** February-August. Large boat-shaped woody pods, 10cm long, borne in clusters. Green pods turn to black when ripe. The pod is covered both inside and out with fine irritant hairs. The brown angular seeds, 13mm long are edible.

## HISTORY:

\* Kurrajong means shade tree and is the name given to a related species *Brachychiton populneus* by the Dharruk people of the Sydney region.

## USES: Aboriginal

\* The seeds of all *Brachychiton* are traditional foods. In some regions hunters would wait by small pools (billabongs) for birds who were known to eat the flame tree seeds. After drinking, the birds would always relieve themselves, leaving a pile of droppings loaded with seeds. These were collected, washed and stored in a bark bowl (coolamon). This ingenious method of opportunism resulted in a cleaned seed free of irritant hairs that diminished the lengthy and at times, hazardous cleaning process. A tasty and nutritious flour was made by grinding and roasting the cleaned seeds.



Flame Tree leaf and bark

# Brachychiton acerifolius



Flame Tree flowers

\* The inner bark is very fibrous and reportedly used by the Aboriginals for making fishing lines and string.

\* The tea coloured sap was highly prized as a treat and can vary in flavour considerably from dried apricots to tea, depending on the species and locality.

#### USES: Culinary:

\* Extreme care must be taken when harvesting the seeds as the fine hairs can cause severe irritations if inhaled or come into contact with the eyes. Gloves, goggles and careful positioning (according to wind) is required to minimise risks.

\* Dry-roast the seeds in a pan over high heat shaking continuously until they smoke heavily or pop. Alternatively they can be baked in an oven at 160C for approx 30 minutes or until they begin to smoke. The longer they are cooked, the darker the colour, the stronger the flavour. Grind the required amount of cooled seeds into flour. Store excess baked seeds in an airtight container to maintain flavour and freshness. The uniquely flavoured flour can be used in savoury or sweet dishes such as damper, breads, cakes, pastries, dairy or soy products, desserts and beverages.

\* A fine flavoured high quality oil can be pressed from the seed which has been rated highly by native food chefs.

#### USES: Medicinal:

\* The porous inner bark can be stripped from the outer bark, and used as 'band-aides' or as a bandage. The clear sap of some species is useful as a healing agent for open cuts, sores and wounds.



Flame Tree seed pods

#### USES: Other:

\* There are at least 28 species of Brachychiton in Australia, from small shrubs to huge trees.

\* The seed pods are often infested with metallic, red, blue and green harlequin bugs.

#### DID YOU KNOW?

\* The Brachychiton species is a remnant of the wet forests and has adapted extremely well to Australia's dry conditions.

\* There are very few Australian trees that are fully deciduous and the flame tree is one of them. Its habit of producing stunning bright displays of red flowers, with no leaves make it particularly attractive.

#### RECIPE:

##### BANANA & FLAME TREE SEED ICE CREAM

##### Ingredients

- 4 Bananas (peeled, cut into pieces and frozen)
- 4 Dried Figs (chopped)
- 1 Desert Spoon of ground roasted Flame Tree seed
- 2 Tablespoons Honey
- 1/2 Cup Milk (soy milk is suitable)

#### Method

Soak figs, honey and flame tree seed in milk overnight.  
Blend a small amount of the bananas with some of the soaked mixture.  
Keep adding ingredients gradually until all ingredients are combined and have formed a creamy texture.  
Serve immediately or store in the freezer.



Flame Tree flowers

# GyMEA Lily



GyMEA Lily with flower spike

**FAMILY:** DORYANTHACEAE

**LATIN NAME MEANS:** Doryanthus - doratos = spear + anthos = flower + excelsa = tall

**OTHER NAMES:** GyMEA Lily, Flame Lily, Spear Lily, Giant Lily.

**ABORIGINAL NAME:** GyMEA = large/giant Lily

**HABIT:** GyMEA Lilies are spectacular giant herbs with large, compact heads of nectar filled red flowers atop tall, thick stems. They are an extremely hardy perennial clumping lily to 6m in height (including the 5m flower spike) with a spread of 1.5m.

**HABITAT:** Found with a restricted distribution from southern Sydney to the Central coastal and lower north coast regions of New South Wales where it can be locally abundant in Sandstone country and sandy coastal soils in open woodland.

**GROWING REQUIREMENTS:** GyMEA Lilies love a deep, well-drained soil and a position in full sun to filtered shade and are a very difficult plant for even the laziest gardener to kill. Plants can be grown from seed, and established clumps can be divided. It is suited to most environments throughout Australia. This includes cooler areas though the flower spikes are sometimes damaged by frosts. Most Australian native plants resent being transplanted, but GyMEA Lilies can be dug up, moved and planted bare rooted.

**MATURITY:** Although the seed germinates easily, plants grown from seed are initially slow growing and take from 4-7 years to flower.

## IDENTIFYING FEATURES:

**Leaves:** Rosettes of large sword-shaped, light green leaves over 1.2m long borne in a cluster of 100 or more.

**Flower:** October-November. Deep blood-red, about 30cm in diameter, on the end of tall stems up to 6m tall. Each inflorescence is composed of several clusters of 3-4 flowers with petals about 14cm long and stamens of about 10cm.

**Fruit:** Fruits are a woody 3-celled capsules to 10cm long which split open when ripe, releasing flat, slightly winged seeds.

## HISTORY:

\* The GyMEA lily proved an imposing sight to the first Europeans. It was taken back to Europe and first flowered outside Australia in 1814 in the glasshouse of Charles Long at Bromely Hill, Kent. Like much of Australia's flora, the GyMEA Lily has been ignored by horticulture until recently. Due to an increasing interest in Australian flora for cut flowers, it has gained in popularity as a lucrative cut flower and foliage species and as a landscape specimen. Now the giant lily is somewhat ubiquitous, popping up almost triffid-like in the most unlikely garden surrounds such as the local KFC, highway truck stops, and the like.



GyMEA Lily plants

# Doryanthes excelsa

## USES: Aboriginal

\* The flowering stems that grow up to 6m in height were cut when young, (when approximately 0.5m long and thicker than a mans arm). They were then roasted and at this stage, resembled a giant asparagus.

\* The edible roots were crushed between stones and, on occasions, mixed with a species of edible ant to form a paste which was then made into a kind of cake and baked on ashes or hot stones. The name Gymea comes from the Wodi Wodi tribe of the Illawarra district south of Sydney.

## USES: Culinary:

\* An important form of nectar for indigenous people of the Sydney region (see recipe). The young stems and some parts of the roots are edible. The flower stems resemble a giant asparagus in texture and flavour after roasting. The skill is an ability to select and cut the flower spike at the correct time for eating. This means the magnificent flower (almost 30cm across in size) has to be sacrificed.

\* Sweet drinks can be served in the flowers at bush food restaurants to entertain and educate patrons about Australia's unique flora.



Gymea Lily flower spike



Gymea Lily flower

## USES: Medicinal:

\* The large strap like leaves could be used as a tourniquet or to slow loss of blood from a wound when wrapped tightly around a limb.

## USES: Other:

\* The leaves and flowers are excellent for cut flower arranging, the flower proving to sell for a premium price when exported.

## DID YOU KNOW?

\* Gymea Lilies contain thick contractile roots which contract during dry weather, pulling the plant into the ground to reduce water loss and give it easier access to water.

\* There is an extremely rare, white flowering form of Gymea Lily. The white flowering form is rare because the nectar producing flower is pollinated by nectar feeding birds who prefer the colour red. Unfortunately the white flower is less likely to be pollinated in the wild, therefore produces less seed than the standard Gymea lily, which is popular with the birds due to its bright, blood-red flowers.

\* A keen gardener waited patiently for his two Gymea Lilies to flower. 20 years passed and only one plant flowered (at 7 years old). He said it was outrageous conduct on the part of the other 20 year old. So he pulled apart the central section of the strappy leaves on both plants and dropped a rough sandstone pebble, about the size of an Australian 20 cent coin into each one. He firmly pushed and prodded each one down with a stick until it would go no further. His theory was that the irritant of the pebble should set the reproductive process in motion. 3-4 months later, eureka!!! both plants sent up flower spikes.

## RECIPE:

The huge flowers capture dew every morning and are a rich source of nectar providing copious quantities of sweet liquid as an early morning refreshment. Alternatively, the flowers can be cut when ripe, filled with water and placed in the fridge to cool before drinking. This can be carried out at least five times before the liquid begins to lose its sweet refreshing flavour.

# Lemon Myrtle



Lemon Myrtle tree



Lemon Myrtle leaves

**FAMILY:** MYRTACEAE

**LATIN NAME MEANS:** Backhousia - after James Backhouse, an early Quaker missionary among convicts and a keen botanical collector; citrodora - citron, lemon + dora - odorus, from the smell of the crushed leaves.

**OTHER NAMES:** Lemon Scented Myrtle, Lemon Verbena Tree, Lemon Ironwood.

**HABIT:** An evergreen small to medium sized tree, 3-15m in height with a dense canopy. When young may develop a climbing habit.

**HABITAT:** Sub-tropical and tropical rainforests along creeks and rivers in areas that receive greater than 600mm of rainfall.

**DISTRIBUTION:** Coastal Queensland and on the high sand masses north from Brisbane.

**GROWTH REQUIREMENTS:** It enjoys full sun, prefers a protected site, relishes a well drained site on rich organic, sandy or heavy soils with plenty of water and can tolerate light frosts, although tender when young.

**MATURITY:** Initially slow growing as a seedling until established. If grown as a cutting by a skilled propagator it can flower and produce enough leaves to harvest within 6 months.

**IDENTIFYING FEATURES:**

**Bark:** Grey-brown, attractive, vertically cracked, scaly, often hidden by the weeping foliage.

**Leaves:** Opposite, elliptic drawn out to a blunt point, shiny, 10cm long. Numerous oil dots present. Strongly aromatic - a blend of lemon, lemon grass and lime. New shoots and leaf undersurfaces hairy. The leaves are the richest known natural source of the lemon flavour and fragrance - citral. The leaves contain 0.33 - 0.96 % essential oil.

**Flower:** October-February. Clusters of tiny white to light-green nectar rich flowers covering the entire tree.

**Fruit:** Small, dry fruit. The seed capsules give the tree an attractive rusty brown-orange tinge throughout winter.

**HISTORY:** During the war, lemons in Australia became scarce. Soft drink company, Tarax used lemon myrtle as a substitute to flavour lemonade. The plant was over harvested and became less common. After its initial popularity as a source of citral-rich essential oil for lemon flavouring and fragrance, it was supplanted by citral-rich oils from lemon grass, Cymbopogon citratus and may-chang Litsea cubeba.



Lemon Myrtle tree in flower

# Backhousia citriodora



Lemon Myrtle flowers

## USES: Culinary

\* One of the best herbal teas to enjoy with a dash of honey, tasting like a mouthful of liquid barley sugar.

\* The leaves can be picked at any time of year. They can be used fresh, dried, whole or ground. If fresh leaves are preferred, use the youngest, softest leaves, picked from new shoots and remove centre stem. These younger leaves are free of stringy fibre and easily digested.

\* The dried leaves will retain their full flavour for lengthy periods. When ground into a spice, the uses become almost infinite. Fresh leaves are used widely to flavour seafoods, salads, savoury sauces,

hot and cold beverages, desserts and ice-creams. Makes a great addition to curries and Thai dishes replacing lemon grass. Excellent in a mayonnaise or in guacamole.

## USES: Medicinal

\* This oil has been shown to exhibit antiseptic, calmative, sedative, anti-viral and anti-fungal properties. Its germicidal properties are considerably higher than that of eucalyptus and tea tree oils. It can therefore be useful in the treatment of the common cold, influenza, bronchitis, indigestion and other irritable gastro intestinal disorders.

\* Lemon Myrtle works synergistically with native pepper, *Tasmannia stipitata*, *T. Lanceolata*, *T. Spp*, in a broad range of medicinal applications. This includes antiseptic handwash, a tinea paint, a thrush treatment and an antiseptic cream.

## DID YOU KNOW?

\* Close to 1.5 million trees have been planted in North Queensland, to supply the expanding Lemon Myrtle industry.

\* Makes an excellent indoor plant, hedge or street tree.

\* Lemon myrtle can maintain its natural status as a clean green herb, as a result of powerful antimicrobial properties within the native pepper extract mentioned above, which has been effectively utilised to fumigate Lemon Myrtle spice for export markets.

## RECIPE: LEMON MYRTLE DRESSING

### Ingredients

60ml White Wine Vinegar

Pinch Salt

Pinch Mountain Pepper (ground)

1/4 Teaspoon Sugar (Rapadura organic).

1g Lemon Myrtle (finely ground)

90ml Olive Oil

### Method

Combine vinegar, salt, sugar in stainless steel pot.

Heat slowly and stir until dissolved (do not boil).

Remove from heat, stir in lemon myrtle and mountain pepper while still hot. Once mixture is cold, pour into 150ml bottle and top up with olive oil. Store in cool dry environment, do not refrigerate.



Lemon Myrtle plantation

# Native Ginger



Native Ginger plant

**Flower:** White, all year round.

**Fruit:** November to March. Bright blue edible berries.

## **HISTORY:**

\* Indigenous people helped to disperse the seed and ensure a future food source by spitting the seeds out along favoured trails.

## **USES: Aboriginal**

\* Ate the flesh of the berries from February to May (spitting out the seeds) as well as the gingery root tips using these parts of the plant to clean the teeth and the palate.

\* Used the large leaves to wrap around meat and then cook.

## **USES: Culinary:**

\* The white fruit pulp around the seeds can be eaten fresh. It has a slight sherbet tang and serves as a refreshing snack when bush walking or wandering around the garden.

\* The seeds themselves can be eaten fresh, or dried and ground as a mild form of the exotic spice cardamon, with a subtle eucalyptus aftertaste.

\* The leaf shoots can be eaten as a vegetable and the tender young root tips can be eaten when red or used as a flavouring.

It is a much milder form of its exotic relative True Ginger *Zingiber officinale*, or the greater ginger/ galangal *Alpinia galanga*.

**FAMILY:** ZINGIBERACEAE

**LATIN NAME MEANS:** *Alpinia* after Italian professor of Botany, Prospero Alpini (1553-1617), + *caerulea*, blue referring to its showy blue fruits.

**OTHER NAMES:** Common Ginger, Blue Ginger.

**ABORIGINAL NAME:** Darghan

**HABIT:** Large clumping herbaceous perennial, 1-2 m height with a 1-2 m spread.

**HABITAT:** In all types of rainforest and frequently in wet sclerophyll forest.

**DISTRIBUTION:** Central New South Wales, north of Sydney to Cooktown Queensland, on the east coast of Australia.

**GROWING REQUIREMENTS:** Performs best in well-watered, composted, semi-shaded positions. Protect from strong, dry winds and long exposure to full sun.



Native Ginger flowers

**MATURITY:** Under ideal conditions can fruit within first year of growth.

## **IDENTIFYING FEATURES:**

**Leaves:** Glossy green, linear, to 50cm long. 20-30 fronds growing in a clump.



Native Ginger flower

# Alpinia caerulea



Native Ginger fruit

## USES: Medicinal:

\* All edible parts of the plant can assist in cleansing the palate, stimulating the appetite or to aid digestion. The seeds can be sucked or along with the young root tips steeped in water and taken to assist in travel sickness.

## USES: Other:

\* Bird attracting, particularly favoured by cassowaries in the north and brush turkeys.



Narrow-leaf Ginger leaf

- \* Makes an excellent understorey ornamental plant especially by a pool or water feature.
- \* Fruits and leaves are excellent in floral arrangements (particularly the red backed leaf variety) but are rarely used for this purpose.
- \* All species make excellent indoor feature plants.

## DID YOU KNOW?

\* There are a number of other varieties of native gingers or related genera found in Australia. This includes an attractive red-leaved form of common ginger that is referred to by some botanists as *Alpinia caerulea* var. *rubra*. Two species of a smaller, but very attractive narrow-leaf ginger *Alpinia modesta* and *A. Arundelliana* are also common in the wild, yet have been overlooked by gardeners and horticulturists for too long.

\* Native forms of cardamon, *Hornstedia scottiana*, *Amomum dallchyi*, Turmeric, *Curcuma australasica* and Torch or Backscratch Ginger *Tapeinochilus queenslandiae* are attractive both for foliage and flowers. The latter having very tough bracts around its tiny yellow flowers that were used as a back scratching device by indigenous people. It is a stunning cut flower plant with a very lengthy vase life.



Red-leaved Ginger leaf



Native Ginger plants

## RECIPE: CARROT & CHEESE SALAD WITH NATIVE GINGER Ingredients

2 Large Carrots

1/2 Cup Sultanas (organic)

1 1/2 Tablespoons Native Ginger Root (grated)

Note: Pick soft red tips of the native ginger root for best results

1 Cup Hard Cheese (grated)

Dash of Macadamia Oil

Dash of Balsamic Vinegar

## Method

Combine all ingredients and serve immediately on a bed of native ginger leaves.

# Native Guava



Native Guava plant

**FAMILY:** EUPOMATIACEAE

**OTHER NAMES:** Bolwarra, Copper Laurel

**ABORIGINAL NAMES:** Bolwarra, Wujigay

**LATIN NAME MEANS:** Eu = well,+ pomation, a small cap, in reference to the small cap or operculum of the flower. laurina = laurus, the laurel, because of its similarity to the leaves of the European laurels.

**HABIT:** A straggling shrub or small tree with arching stems, usually between 3-8m high.

**HABITAT:** Found in all types of rainforest and also adjoining open eucalypt forest, generally as an under story species, common along creeks and rivers.

**DISTRIBUTION:** from Gippsland, Victoria to West Irian, New Guinea. Also west to cooler higher altitude areas such as the Blue Mountains and Dorrigo, New South Wales.

**GROWING REQUIREMENTS:** Will grow in a wide range of soils and tolerate dry periods. Though it prefers a protected environment when young, once established it enjoys full sun or semi-shade in higher rainfall (over 600mm per annum) or cool climate regions.

**MATURITY:** 4-5 years for seedling grown plants to fruit. Strikes easily from cuttings which can fruit within the first two years of growth.

## IDENTIFYING FEATURES:

**Bark:** Strong, smooth dark grey, with multiple layers. Branchlets being smooth green.

**Leaves:** Glossy with tinges of copper. Alternate, simple, oblong-elliptic, 6-13cm long, contracted into a short point at the tip and quickly tapering at the base. Smooth on both surfaces, paler on the underside.

**Flower:** November to January Green cap sheds to reveal numerous white petal-like staminodes (infertile stamin), 2cm long. The strong and distinctly fragrant flowers have a daisy like appearance. The flowers are carried at the join of the leaf and the stem.

**Fruit:** April to August. Cup-shaped berry, 3cm long, 1.5-5cm in diameter. Un-ripe fruit are green, developing into a darker brown colour or banana yellow when ripe. Can be harvested green and will ripen off the tree, which prevents them getting eaten by birds and animals.

## USES: Aboriginal

\* Fibre from the bark was used for making string and fishing lines. The bark was stripped vertically from the trunk and strengthened by saturating it in a solution made from the bark of a geebung, *Persoonia laurina*, and water. This was pounded between two rocks, then two strands of fibre were rolled tightly together along the insides of the thighs. The string was then soaked in the sap of the red bloodwood, *Eucalyptus gummifera*, to prevent it fraying. The finished product was as fine as raw silk.



Native Guava leaves

# Eupomatia laurina

## USES: Culinary

- \* The fruit is edible and best harvested when slightly soft and yellow with a brown tinge.
- \* Has a strong flavour, reminiscent of cinnamon, cloves and nutmeg. Is sweet when eaten raw.
- \* The whole fruit, including seeds, should be sliced and dried (allow 10 days in good weather or use a fruit drier), then ground into a powder. This can be used to flavour ice-creams, milks, yoghurt, porridge, fruit salads, etc.
- \* The fruit makes a wonderfully refreshing hot or cold beverage.



Native Guava fruit

## RECIPE: BOLWARRA BLAST

### Ingredients

- 1 Cup Coconut Milk
- 1 Cup Pineapple Juice
- 3/4 Teaspoon Native Guava spice
- 10 Macadamia Nuts
- 3 Bananas (peeled, cut into pieces and frozen)
- 1 Cup Natural Yoghurt (organic)
- 2 Tablespoons Honey (or to taste)

### Method

Starting with bananas, combine all ingredients until a smoothie consistency is achieved. Serve into milk shake glasses and sprinkle a dash of native guava.



Native Guava leaves and fruit

## USES: Medicinal:

- \* The stems and bark contain unique alkaloids, which have shown some activity against sarcoma tumours.

## USES: Other:

- \* A hardy plant and if pruned regularly when young will attain a neat compact shrub like habit. If growing in full sun, its newer foliage will take on a beautiful coppery appearance hence the common name Copper Laurel.

## DID YOU KNOW?

- \* That native guava can be slightly intoxicating when ingested in a particular way.
- \* Native guava has survived from Australia's primitive past. It is very significant due to it being in one of the 13 primitive plant families that exist in Australia (out of 19 found world wide), where flowering plants underwent massive and important early evolutionary development.
- \* The unripe fruit will be carried on the plant for six months or more, but flowering is complete in only a few days. The flowers are eaten by a host specific weevil (*Elleschodes hamiltoni*) which appears to be the only pollinator. This may explain why, occasionally it will not fruit if grown out of its natural habitat. The flowers emit a strong odour that can be an overpowering ether-like, unpleasant or pleasant fragrance (depending on personal taste).



Native Guava flower

# Palm Lily



Palm Lily plant

**MATURITY:** Fast growing and quick to germinate from seed (3-5 weeks). Will slow down once it reaches 0.5m high unless it has access to ample water. Fruits occur between 3-5 years.

**IDENTIFYING FEATURES:**

**Bark:** Grey, to grey brown with an attractive wrinkled appearance due to fissures or corrugations along the trunks. Similar to happy plants (*Draceana* spp)

**Leaves:** Linear-lanceolate, gradually tapered at the base. Leaf blades 30-80cm long and 4-12cm wide with deeply channelled petioles (leaf stork) 12-45cm long.

**Flower:** September-November. Small lily like flowers, white to pale lilac.

**Fruit:** January-June. 15mm in diameter, red, in bunches emerging from the top of the plant or leaf bases. Seeds 3-6, angular, black.

**FAMILY:** ASTELIACEAE (AGAVACEAE)

**OTHER NAMES:** Cordyline, Broad-leaved or Ragged Palm Lilly, Cabbage or Club Palms. (see Latin derivative)

**ABORIGINAL NAME:** Churoga.

**LATIN NAME MEANS:** Cordyline - cordyle, club. Club like form of some stems, hence the common name of club palms + petiolaris - having petioles (leaf stems/ stalks, from pes - foot.

**HABIT:** Very attractive medium sized to tall shrub with slender stems bearing a tuft of long narrow leaves. Graceful sometimes weeping, or at times stately when growing upright.

**HABITAT:** Subtropical to warm-temperate rainforest, and wet eucalypt forests.

**DISTRIBUTION:** Central New South Wales, north from the Nambucca River to northern Queensland on Australia's East Coast.

**GROWING REQUIREMENTS:** Extremely hardy plants that are ideal for the lazy or uninformed gardener.

Excellent in full shade to filtered sunlight but will tolerate full sun if given ample moisture and wind protection.



Palm Lily leaf



Palm Lily flowers

# Cordyline petiolaris

## HISTORY:

\* Cordylines were called Ti in New Zealand by the Maori. The use of this word by them prevents its use for species of *Lepospermum* or *Manuka* in N.Z, which were used to brew tea by Cooks Sailors.

\* The previously used common name of Cabbage-Tree is believed to have been coined by early colonists who used the tender young parts of some species in Australia and New Zealand as a cabbage-like vegetable. Its taste and appearance bares a similarity to palm 'hearts' or shoots eaten in the tropics, hence the name cabbage tree palm (which is still applied to the genus of palms) *Livistona* spp.

## USES: Aboriginal:

\* Leaves were used to wrap and flavour food in wet forest areas that didn't contain many or any paper bark species which were normally used for this practice.

## USES: Culinary:

\* The beautiful shiny broad leaves can be used to wrap food before cooking in earth ovens. It can also be used to decorate platters under food for catering or dining table presentation.



Palm Lily fruit

## USES: Medicinal:

\* Sap from the heated leaves of a number of palm lily species including *C. petiolaris* is applied to cuts and wounds by Aboriginal people to cleanse and initiate healing.

## USES: Other:

\* The leaves are an excellent additional foliage for cut flower arrangements. This plant makes a 'fool proof', almost indestructible indoor plant.

\* *Cordyline stricta*, the species with the most southerly occurrence in Australia, is grown as an indoor plant or glasshouse feature plant in the cool temperate areas of western Europe. The long thin or broad leaves of all species make a pleasant contrast when mass planted or used indoors as potted feature plants where they can remain indefinitely.

\* They will grow as excellent under storey to greedy canopy thieves such as *Eucalyptus* or *Ficus* spp.

## DID YOU KNOW?

\* An interesting example of their hardiness comes from an account of a felled *Cordyline* which languished on a beach for eight months, swamped by tides and beaten by the fierce sun, only to be washed up on fresh soil where it promptly produced roots and sent out new growth shoots to start life again.

\* A Palm Lily can be easily propagated from large pieces of the stem (30cm) laid horizontally in a bed of raw sawdust, and covered with more sawdust. They will normally put out roots within 1-3 months and can be divided and potted up to create many more plants with minimal effort.

\* A dainty species that is somewhat smaller in all its parts and size occurs in association with the broad-leaved palm lily. It is known as the Red Palm Lily or *Cordyline rubra*.



Palm Lily in fruit

# Plum Pine



Mature Plum Pine tree

**FAMILY:** PODOCARPACEAE

**LATIN NAME MEANS:** podos, a foot + carpos, fruit. Refers to the fleshy 'foot-stalk' of the fruit; elatus = tall.

**OTHER NAMES:** Illawarra Plum, Brown Pine, Plum Pine.

**HABIT:** An evergreen, upright conical to spreading, tree of variable height, 5-35m in nature. More commonly 8-15m in cultivation.

**HABITAT:** Subtropical rainforests including littoral, riverine and gallery. Along river banks and in areas with 800-1500mm of rainfall.

**DISTRIBUTION:** North of Batemans Bay on the Shoalhaven River, New South Wales to Cairns, north Queensland on the east coast of Australia.

**GROWTH REQUIREMENTS:** Plum Pine is suited to a broad range of soil types with ample moisture but is also well adapted to drier climates growing well in Adelaide, South Australia. Will fruit with better results in full sun but often occurs in nature as an understory species in full shade. Tolerates moderate to heavy frosts of -6°C.

**MATURITY:** Male and female flowers are found on separate trees, so female trees are required if fruit is desired. May take ten years before bearing fruit. Cuttings taken from female trees of improved fruiting varieties will graft readily and can bear fruit within two years of propagation

**IDENTIFYING FEATURES:**

**Bark:** Scaly brown to dark brown bark that is often cracked and flaky particularly on old trees.

**Leaves:** Dark glossy green, new growth is an attractive lime-green. Veins invisible except for the prominent midrib.

**Flower:** The male flowers are in catkins arranged in clusters of up to 10 where the leaves join the stem. Female flowers are found in the axils of the leaves on separate trees.

**Fruit:** March-July. Blue-black plum like fruit to 2-3cm, are carried on the female trees. The fruit have a waxy bloom and conveniently have a large seed attached to the 'outside' of the flesh at the opposite end to the stem. The fleshy plum-like edible fruit hang in masses from drooping branches and fall to the ground when ripe. It has a subtle plum/pine flavour and a grape like texture.

**HISTORY:**

The wood of the plum pine was used in early colonial buildings.

**USES: Aboriginal**

\* An important source of winter fruit for people on the east coast of Australia. The juice provides soluble fibre, energy and vitamin C.



Plum Pine leaves

# Podocarpus elatus

## USES: Culinary:

\* The plum is actually a swollen stem. Its core giving it a subtle pine flavour with (it has been suggested) a dash of shiraz. The texture of the fruit is a blend of grapes and lychees. It is used for sweet and savoury recipes. eg. plum and chilli sauces, chutneys, jams, pies, and deserts.

## USES: Medicinal

\* A particularly important source of vitamin C during winter with an ascorbic acid content of up to 11%.

## USES: Other:

\* An excellent fine grain, pale brown timber.  
\* It is an extremely hardy and attractive species which is often used as a roadside tree, in parks and gardens throughout Australia.

\* Makes an excellent indoor or outdoor pot plant and though not to be encouraged, it is ideal for the lazy gardener.

## DID YOU KNOW?

\* The Plum Pine has both male and female trees and a mix is required for good fruit production. Approximately 1 male (pollinator) is required for every 25 females (For commercial purposes 1 male to 5 females is a better ratio).

\* The Plum Pine is neither a pine or a plum! Although generally considered a conifer, it is more closely related to the Yew than pines.

\* All Podocarpus spp have edible fruit but some are only 2mm in diameter!

\* One tree can produce 100kg of fruit. The fruit was relished by the children of the early colonists and called 'Damsons Plum'.



Ripe Plum Pine fruit



Plum Pine leaf

## RECIPE: ILLAWARRA PLUM & CHILLI SAUCE

(Slightly modified from original recipe by Jean-Paul Bruneteau 'Tukka')

### Ingredients

1kg Illawarra Plum (seeded)  
300ml Water  
1 Cup Sugar (rapadura organic)  
1 Cup Balsamic Vinegar  
1/2 Teaspoon Chilli (finely chopped)  
1 Teaspoon Garlic (freshly minced)  
1 Teaspoon Ginger (grated)  
1 Teaspoon Ghee (clarified butter)  
3 heaped Tablespoons Cornflour  
1 1/2 nips Cointreau or Grand Marnier

## Method

Place the plums and 250ml of water into a stainless steel pot. Simmer for 3 hours. Drain and push through a sieve. Cool and store overnight in the refrigerator. This will become the Illawarra liquor. Make a syrup of sugar and vinegar by bringing to the boil and simmering for 30 minutes. In a separate stainless steel pan, sweat the finely chopped chillies, minced garlic and grated ginger in ghee. Add all of the Illawarra liquor to the sweated chilli mixture, then the vinegar sugar syrup and the Cointreau or Grand Marnier. Cook until reduced by half. Thicken with cornflour blended with the remaining water.

# Riberry



Mature Riberry tree in fruit

Is generally wind firm and makes an excellent windbreak.

**MATURITY:** 3-5 years until fruit is produced. It fruits in its first season of growth, when grown from cuttings.

#### IDENTIFYING FEATURES:

**Bark:** Silvery grey with brown vertical cracks.

**Leaves:** Small, broad, hairless, glossy dark-green, rounded and, drawn out to a narrow point. 4-6cm long, Numerous distinct oil dots.



New growth of Riberry leaves

New growth being bright pink in colour usually in spring, although can occur at any time.

**Flower:** September to December. Profusion of cream to white flowers.

**Fruit:** December to February. 12-15mm long, pear shaped, scarlet-red when ripe, with one seed. Fruit is edible.

#### USES: Aboriginal

\* This highly favoured fruit was popular amongst coastal aboriginal people in northern New South Wales to north Queensland. Most of the fifty Lilly Pilly species were an important source of water, vitamin C, plus other essential minerals and eaten as a delicacy. The Riberry specifically, was a succulent spicy sweet treat and its wonderfully refreshing aromatic flavour combined with its heavy fruiting made it an important food for social gatherings of these coastal tribes.

**FAMILY:** MYRTACEAE

**OTHER NAMES:** Small-Leaved or Weeping Lilly Pilly, Cherry Alder, Cherry Satinash, Small-Leaved Water Gum.

**LATIN NAME MEANS:** Syzygium - syzygos, a joining or yoking together (or more interestingly defined as the meeting of two heavenly bodies),+ leuhmannii after German born botanist, John George Leuhman (1843-1904), Director of Melbourne Botanic Gardens in Victoria, after Mueller.

**HABIT:** Medium to large sized evergreen pyramidal tree of variable height, 5-30m, with a spread of 6m in nature, 7-10m under cultivation. With a buttressed trunk and weeping foliage.

**HABITAT:** Subtropical on volcanic soil, and littoral or riverine rainforest in deep sand.

**DISTRIBUTION:** Macleay river near Kempsey, New South Wales to Cooktown, North Queensland, on the east coast of Australia.

#### GROWTH

##### REQUIREMENTS:

Prefers well-drained soil. Protect from frosts when young. Can grow in part shade, but enjoys full sun for good fruiting.



Riberry tree in fruit with new leaves

# Syzygium luehmannii



Riberry leaf and bark

## USES: Culinary:

\* Its spicy fruit is related to cloves, *Syzygium aromaticum*, and has a unique flavour of cardamom, cinnamon and cloves. It makes excellent jams, marmalades, relishes, glazes, sorbet, ice-cream and can be added to punches, breads and muffins.

\* Its essential oils, which contain limonene (found in bay leaves), pinene (common in many culinary herbs) and myrcene (from nutmeg), make it easy to see how this delicious and versatile fruit can be used more widely as a culinary delight.

\* The ripe red fruit can be eaten directly from the tree, harvested from the tree or collected from the ground.

\* Fruits can be frozen or dried and store well for up to 12 months. They can also be preserved in liquid or liquor.

\* The resilient Riberry retains its shape, vigour and flavour after extensive cooking, but its scarlet red colour fades to pink.

## USES: Other:

\* Is used widely throughout Australia as a roadside tree.

\* Is extremely hardy and fast growing and also makes an attractive indoor plant.

## DID YOU KNOW?

\* 75kg of fruit has been harvested from one tree!

\* It is commonly found in specialist bush food restaurants but rarely in other culinary establishments.

\* Rainbow lorikeets and other birds eat the fruits and enjoy the nectar from the flowers.

\* It is a good windbreak, is fire retardant and can be planted along creeks for erosion control.



Riberry fruit

## RECIPE:

### RIBERRY MUFFINS

#### Ingredients

2 Cups Flour (organic)  
1/3 Cup Sugar (rapadura organic)  
2 Teaspoons Baking Powder  
1/2 Teaspoon Sea Salt  
2 Eggs (organic free range)  
1/3 Cold Pressed Macadamia Oil  
3/4 Cup Rice OR Oat Milk  
1 1/2 Cups Riberies (with seeds removed)

#### Method

Preheat oven to 180C.  
Mix all dry ingredients together.  
Add eggs, oil and milk and mix until just combined.  
Squeeze riberry between fingers to pop seed out.  
Add riberies to mixture and mix lightly.  
Spoon into oil lined muffin baking trays to 3/4 full.  
Bake for 30 minutes.



Riberry fruit on the tree

# Shinning Burrawang



Shinning Burrawang

**FAMILY:** ZAMIACEAE

**LATIN NAME MEANS:** Lepidozamia - lepidos, a scale + zamia - a genus of cycads, the word coming from a false rendering of Pliny's word 'azaniae' for pine cones. perofskyana - from a living plant growing in the St Petersburg Botanic Garden.

**OTHER NAMES:**

Cycad Palm

**ABORIGINAL NAMES:**

Wunu, Binggir(a)

**HABIT:** Unbranched palm-like shrub up to 3m tall, with a very thick trunk.

**HABITAT:** Scattered in small colonies on the margins of subtropical and warm-temperate rainforest as well as eucalypt forest. Usually in steep country.

**DISTRIBUTION:** From the Manning River, near Kempsey in New South Wales north to the Blackall Range near Nambour in south east Queensland.



Shinning Burrawang cone

**GROWING REQUIREMENTS:** A hardy and extremely tolerant species that prefers well drained soils (eg hill-sides) with a rich layer of leaf litter.

**MATURITY:** An extremely long lived plant (100+ years). Fruiting is sporadic and generally on plants with a well developed trunk. A specimen which had not produced a cone was recently planted at Ganngjalah Cultural Gardens. This plant was purchased over 30 years ago, at an advanced stage of growth. Its sex is still undetermined!

**IDENTIFYING FEATURES:**

**Bark:** Broad trunk which may be completely below ground or exposed to a height of 0.5-7m tall.

**Leaves:** Long, pinnate, 1.5-2m long with long narrow thick glossy leaflets.

**Flower / Fruit:** Fruiting is irregular. Male and female cones are produced on separate plants. The female cone can be over 50cm long looking like large green pineapples. These break up to free many bright red-tan coloured seeds covered in a spongy, bright red skin and are held in pairs by woody brackets. The seeds and fruits contain cyanide and are **extremely poisonous**.



Shinning Burrawang leaf

# Lepidozamia peroffskyana

## HISTORY:

\* The early European explorers and settlers were unaware of the need to treat the seeds and there are many reports of poisoning, including that of Captain Cook. The seeds/ fruit which many of the early explorers saw scattered in Aboriginal camps, did not taste bitter or toxic and did not seriously harm those who ate small amounts. Those who ate the untreated seed regularly, experienced a slow gradual death over time. Fortunately the only account of deaths by consumption of zamia are cattle who ate the plant through times of drought. They developed a condition known as zamia staggers, resulting from tumours in the stomach. Eventually the cattle begin to wobble until they fall over and cannot get up.

## USES: Aboriginal

\* The seeds, although poisonous if untreated, formed an important part of the Aboriginal diet and in some regions large feasts were organised around the prolific production of this food. Individual tribes used different methods to remove the toxic substances. These treatments typically combined pounding, roasting and leaching in fresh, running water usually for many weeks.

## USES: Culinary:

\* Toxic unless treated by experienced traditional people (See Treatment of Seeds below). Comprehensive tests were carried out by a University in Melbourne. Skilled Aboriginal women from the Northern Territory, were asked to smell the seed to determine the remaining level of cyanide. Traditionally, if the old seed was smelt and if safe to consume it was collected, if not it was rejected. During the tests, the women were given mixed seeds, some toxic and some safe to use. They were asked to sort the seeds. Remarkably, all of the women rejected those seeds that were previously electronically tested and found to contain toxic levels above a nano-gram ( eg almost nothing). Unfortunately, this skill is being lost in Australia and other parts of Oceania and Asia where this delicious and nutritious flour was made into breads or damper with a unique sweet nutty flavour. It is worth noting that this author, has experienced and thoroughly enjoyed this delicacy, without sufferance, and indeed lived to tell the tale.



Shinning Burrawang cone from above

## USES: Medicinal:

\* Seeds have a powerful antibiotic activity. A related species was used to treat wounds in Australia (and Papua New Guinea) where a preparation from the male cone and human urine was used as an antiseptic to treat spear wounds.

## DID YOU KNOW?

\* These cycad palms are among the few plants that have survived from prehistoric times.

\* Very few individual plants in a colony of palms will flower and produce seed cones during the same season. The cycad can be stimulated into flowering by exposure to bush fire. Some tribes of Aboriginal people would use deliberate burning to induce a larger crop.

## WARNING - TREATMENT OF SEEDS

The seeds from the Burrawang are **EXTREMELY TOXIC** without extensive treatment. The facts on this sheet are **for information only**, and it is not recommended that the seeds or fruit are consumed unless prepared by an educated, trained and skilled professional.



Shinning Burrawang seeds

# Silky Oak



Mature Silky Oak trees

**FAMILY:** PROTEACEA

**OTHER NAMES:** Southern Silky Oak, Satin Ash Silky Oak.

**LATIN NAME MEANS:** Grevillea - after C.F. Greville a noted British Algologist and one of the founders of the Royal Horticultural Society, + robusta - robust alluding to the large size attained by this species of a predominantly shrubby genus.

**HABIT:** A medium sized to large tree, 35-40m, with a Straight cylindrical trunk to 90cm in diameter.

**HABITAT:** Commonly in riverine rainforest in warmer areas on the East-coast of Australia. Especially in dry rainforest and occasionally in subtropical rainforest particularly on basaltic soils.

**DISTRIBUTION:** North from the Orara River, mid north coast of New South Wales, to Maryborough in south-east Queensland.

**GROWING REQUIREMENTS:** Extremely hardy semi-deciduous plant which can be grown almost anywhere, anyhow, anytime. Fantastic as a quick growing regeneration plant or timber species. Provides an instant protective canopy if conditions are ideal and grass is kept away from its roots. Fool Proof! Stunning if planted with Flame Trees, Brachychiton Acerifolium as they flower at the same time of year.

**MATURITY:** Rapid growth when young to 5m within the first 2 years, flowering after four.

**IDENTIFYING FEATURES:**

**Bark:** Silvery brown with vertical brown cracks.

**Leaves:** Distinct fern like foliage, pinnate with about 10-25 leaflets each of which is dissected again or doubly dissected into narrow Lobes. Pale silky-hairy below.

**Flower:** September to December. Yellow-orange, toothbrush-like, in large racemes.

**Fruit:** December to March. A brown boat-shaped follicle with two winged seeds.

## **HISTORY:**

\* The grevillea genus is immense. There are at least 250 species, most of them Australian, a few occurring in New Guinea, New Hebrides and New Caledonia. *G. robusta* is the king (ie the biggest).

\* The first *Grevillea* to be collected in Australia was *G. Punicea* in 1825 (possibly earlier) and taken to western Europe. Since then many hybrids have been created and given lovable Australian sounding names like Sandra Gordon and Robin Gordon. Other names have been linked to the royals such as 'Royal Mantel'.



Silky Oak leaf and bark

# Grevillea robusta

This popular development of hybridisation has created an abundance for certain insects, birds and commercial nurseries. Unfortunately, many botanists and horticulturists feel extremely overwhelmed due to the challenges of identifying and remembering the many new hybrids, some of which have very similar names and appearances. Fortunately the silky oak still remains pure in its original form.

## USES: Aboriginal

\* Nectar bearing flowers are gathered and sucked for their sweet taste. Often a drink was made by collecting the dew covered flowers, soaking them in a bark carrier (coolamon) with water until the water became sweet. Occasionally it was left to ferment.

\* The seeds of some Grevillea spp were eaten, however the silky oak was not used for food because the seeds contain cyanide.

\* The timber of the silky oak and other taller species were used for making small tools and implements.

## USES: Culinary:

\* Produces numerous nectar-rich flowers which can be used to produce unique flavoured beverages. In some cases the pollen presenter 'knobs' are bitter and can be removed. (Despite being high in protein, the pollen may not be digestible by humans).

## USES: Medicinal:

\* Most of the larger species of grevillea produce quantities of sap that oozes from the wounds in the trunk to drown attacking insects. When this sap becomes hard and dry it is grated into a powder and sprinkled onto sores, burns and cuts and used as a drying and healing agent by numerous indigenous tribes.

## USES: Other:

\* It has beautiful yellow-brown timber with prominent rays producing a typical oak grain. It is considered low durability for outdoor use, lasting approximately 8 years. It is often used for ornamental cabinet work, furniture and coach building. Presently, the timber is rarely seen, possibly due to the disappearance of many of the larger trees in the landscape, but also because it has been replaced on the timber market by its relative, the Mountain Silky Oak or Prickly Ash, *Orites excelsa*.



Silky Oak flowers



Silky Oak flowers

## DID YOU KNOW?

\* The silky oak is an almost indestructible tree which endures heavy frosts, survives hot dry winds, tolerates boggy soils, is unpalatable to stock, wallabies and a myriad of pests, only to be cut down for its magnificent timber.

\* The flowers of grevilleas become coated with pollen in the bud and when the flowers open, the display serves to invitingly present pollen to visiting insects.

\* The first grevillea to be taken back to England and propagated at Kew Gardens in 1857 is still growing from the original collection.

\* A similar related species from north Queensland with very similar foliage is the Fern leaved *Stenocarpus Stenocarpus davaloides*.

# Small-Leaved Tamarind



Small-Leaved Tamarind tree

**FAMILY:** SAPINDACEAE

**OTHER NAMES:** Campbell's Native Tamarind.

**LATIN NAME MEANS:** Diploos = double + glottis,- throat; campbellii - after Mr R.A. Campbell of the Tweed District, Nth NSW, who discovered this tree.

**HABIT:** Medium to large sized straight tree, 18-25m high with a dense spreading crown

**HABITAT:** Riverine and subtropical rainforest and Brush Box forest.

**DISTRIBUTION:** Restricted to Tintenbar and along the rich alluvial flats of the Richmond River in north eastern New South Wales, to the upper Tallbudgera Valley on Currumbin Creek in south east Queensland.

**GROWING REQUIREMENTS:** Though suited ideally to partial shade away from strong winds, extreme cold conditions and heavy frosts, this Tamarind can be an extremely hardy tree. It tolerates light to medium frosts and generally only reaches a third of its height if not forced to fight for its light. Succeeds best in moist, well-drained loamy soils.

**MATURITY:** Slow to fruit from seed. Seedlings planted in the Sydney Botanic Gardens had not produced in the first 10 years. However cutting grown selected varieties produced within the first 2-3 years. They also form a smaller more attractive tree that is easier to harvest from.

## IDENTIFYING FEATURES:

**Bark:** Grey-brown with vertical cracks.

**Leaves:** 10-35cm long, leathery and tough, hairless with wavy margins, often curved and oblique at the base. 4 to 8 leaflets, 4-15cm long, dark green and glossy above, paler green and less glossy below.

**Flower:** November to February. Small to 2 cm creamy-brown-green in colour. Quite hairy. Crowded in composite racemes to 10cm long.

**Fruit:** Deep red but can vary from orange to yellow. Thin-walled, three-lobed capsule 3-10cm across containing one to three seeds coated in a fleshy, shiny aril to 5mm thick. It is this aril that can be eaten. Fruits ripen from February to March.

## HISTORY:

\* Due to its restricted distribution and its habitat preference of rich volcanic river zones, (the first areas targeted and cleared by early settlers for farming and grazing), this species is now extremely rare in the wild.



Small-Leaved Tamarind leaves

# Diploglottis campbellii

## USES: Aboriginal

\* The tart fruits (actually the aril or the outer growth of the seed stalk which largely encloses the inner seed) were devoured by the indigenous people of the Tweed region, northern NSW. In northern Queensland a greater variety of species occur, all of them being relished by the locals.

## USES: Culinary:

\* The aril is very juicy and refreshingly acidic and imparts a good strong flavour when used for drinks or jams. It is deliciously reminiscent of citrus and looks, even tastes similar to a blood orange.

\* It goes beautifully in butters, which can then be used as a glaze with duck or other water fowl.

\* It also combines well with ginger, lemon grass/myrtle, chilli and native pepper when experimenting in the kitchen.

\* Wattle, flame tree or kurrajong seed flours used in pancakes, breads or other baked treats will go well with products made from native tamarind fruits.

## USES: Medicinal:

\* Though not related to the Indian tamarind, *Tamarindus indica* its flavour and consistency are very similar. It seems to work well as a mild laxative when pulped and drunk and, similarly to the Indian Tamarind, may assist with other bowel complaints.

## DID YOU KNOW?

\* The small-leaved tamarind is now classed as endangered under the Threatened Species Conservation Act 1995. There are only twenty known trees occurring in their natural habitat.



Ripe Small-Leaved Tamarind fruit



Unripe Small-Leaved Tamarind fruit

## RECIPE: SWEET & SOUR TAMARIND DRESSING

### Ingredients

- 2 Tablespoons White Wine Vinegar
- 1/2 Cup native Small Leaf Tamarind Fruit (seeded)
- 2 Tablespoons Rice Vinegar
- 1 1/2 Teaspoons Sea Salt
- 2 Tablespoons Lemon Juice
- 1 Tablespoon Grated Ginger
- 3 Tablespoons Sugar (Rapadura Organic) or to taste
- 2 large cloves Garlic (crushed)
- 4 Tablespoons Macadamia Oil

### Method

Remove seed from tamarind by squeezing between fingers to peel fruit off seed. Blend all ingredients in food processor. Bottle and refrigerate.

# Swamp Lily



Swamp Lily in flower

**FAMILY:** LILIACEAE (AMARYLIDACEAE)

**OTHER NAMES:** Crinum Lily

**LATIN NAME MEANS:** Crinum = krinon, lily + pedunculatum - peduncle or stalk of a flower cluster or of a solitary flower when that flower is the remaining member of an inflorescence.

**HABIT:** A robust lily-like herbaceous plant with a large underground onion-like bulb. Grows to approximately 1.5m in height.

**HABITAT:** Found in swampy ground along the banks of the upper reaches of tidal creeks and streams. Also along beach frontal dunes and in littoral rainforest.

**DISTRIBUTION:** Along the coast of central to northern New South Wales and Queensland. Also found in the Northern Territory.

**GROWTH REQUIREMENTS:** Will grow in almost any aspect from full sun near the beach to full shade in a swamp. Swamp lily is drought resistant and is found in areas where frosts occur. Coastal geno-types may prove to have frost sensitive foliage, however these plants have plenty of stored energy in the underground bulb to survive through winter.

**MATURITY:** Produces flowers and seed within the third to fifth year of growth but will continue to grow, sucker and expand its trunk for many years.

## IDENTIFYING FEATURES:

**Leaves:** Up to 2m long, 20cm wide, fleshy and greyish green. Its large strap like leaves grow rosette-like from the base of the stem and are somewhat succulent due to its often close growing proximity to salt laden winds or salt water.

**Flower:** December-January. Large, white, spidery, tubular and fragrant. A fleshy upright stalk arises from the centre of the leaf cluster and produces 8-25 cream/white flowers at the end of long stall stems.

**Fruit:** January-April. Large fleshy green capsules, 2.5cm in diameter. Occur in a cluster. A prominent 'beak' is the seed sprout which can begin to shoot whilst still on the parent plant.

## HISTORY:

\* There are over one hundred species of crinum found growing in tropical and sub-tropical parts of the world, with only 5-6 species found in Australia. Its wide distribution, especially where it grows near the coast is partly explained by the corky covering to the seeds which assist its dispersal in water. Some crinums were introduced to Britain in 1819 by Baron Field, a New South Wales Supreme Court Judge. Crinums remained largely ignored by Australian horticulture until recently (ie late 1990's). It has since been used extensively in harsh landscapes such as roadside plantings and coastal developments with great success. Unfortunately, other long lived, attractive native crinum species still remain ignored.



Swamp Lillies

# Crinum pedunculatum

## USES: Aboriginal

\* The main stems, roots and bulbs were crushed and soaked for a day, stained and then applied to inflamed skin conditions such as leprosy, marine and insect stings.

\* Aboriginals from Bingil Bay in North Queensland used this plant to treat the sting from one of Australia's worst marine stingers, the box jellyfish.

\* Pieces of the soaked bulb were placed over spear wounds as a dressing and firmed securely.



Swamp Lily seeds

## USES: Medicinal:

\* The large underground bulb contains a thin film of skin under its outer layer. This can be carefully but easily peeled off and applied to marine stings, other bites or open wounds as a bandage.

\* The bulbs can also be crushed and used as an antiseptic for wounds and sores.

\* The sap or juice from under the outer layer of the stem can also be applied as an external analgesic to marine stings (particularly blue bottles) or other bites with great effect.

\* The sap also acts as an emollient and is soothing on the skin.

\* The alkaloid (lycorine) is probably the active principle responsible for the relief of marine stings and insect bites and other wounds.

## USES: Other:

\* Used widely in landscaping due to the large ornamental flowers and long fleshy leaves.

\* Excellent plant near ponds, making an ideal frog habitat.

\* An extremely hardy and attractive lily for swampy, boggy or even over exposed sunny areas in the garden.

\* The large lily flowers are very attractive together with the grey green foliage and the stocky trunks (resembling the legs of baby elephants) on older plants, making a great additional feature to a perennial border or native garden.

## DID YOU KNOW?

\* Each flower has six petals and blooms directly from the bracts with six long stamens allowing for easy pollination by long billed honey eaters.

\* Some Crinum species have flowers which only open in the evening and last for a mere 24 hours.

\* Crinums are generally a variable genus due to fluctuating chromosomes, but require further research in Australia.



Swamp Lily flower bud



Swamp Lily flower

# White Aspen



White Aspen tree

**FAMILY:** RUTACEAE

**LATIN NAME MEANS:** Achronychia from acros, end or edge + onyx, claw referring to the petal points, oblongifolia, oblong leaves.

**OTHER NAMES:** Common Achronychia, White Lilly Pilly.

**HABIT:** An attractive, bushy, evergreen, shrub or small tree to 21m in its natural habitat. 5-10m in cultivation.

**HABITAT:** All types of rainforest except cool temperate. Also found in wet sclerophyll forest and along gullies and creeks both inside the rainforest and on the margins.

**DISTRIBUTION:** North from the Mitchell River in Victoria through New South Wales to Gympie in south-east Queensland, on Australia's east coast.

**GROWING REQUIREMENTS:** Prefers full sun for heavy fruiting, particularly when combined with induced stress (ie paving or bitumen, or sheltered hot spot). Will tolerate a broad range of soil conditions in a neutral to acidic enriched organic soil. Requires protection from severe frosts and strong winds when young. Once established, will tolerate frost to -4°C. White aspens have been cultivated successfully in dry regions of Australia such as Broken Hill, New South Wales and Renmark, South Australia.

**MATURITY:** Between 3-5 years from seedling stage to fruiting. Grafted, selected varieties will fruit within 1-2 years after propagation.

## IDENTIFYING FEATURES:

**Bark:** Finely wrinkled or cracked, dark brown in colour to light green on the live bark.

**Leaves:** Smooth textured, very shiny, the tip blunt and usually notched. Numerous oil dots that are obvious. A delicate citrus smell when crushed. 4-12cm long.

**Flower:** January until as late as May. White or cream flowers appear in bunches about 5-8cm long.

**Fruit:** Fleshy white (minature pumpkin-like) 13mm in diameter, with grey-black seeds, 3-5mm long. The fruit ripen from April in the northern extent of its range to November in its southern or higher altitude extremities. They are edible and palatable and have a unique sharp citrus flavour with subtle, unique, aftertastes. Although the initial tastes are the more familiar lemon zing they are soon followed by a puzzling array of flavours that hint of eucalyptus or honey and the Australian bush.



White Aspen leaves

## USES: Aboriginal

\* The fruits of at least a dozen of the genus Achronychia were eaten. However the White Aspen is more highly prized because it is the most palatable. Its fruit is much softer and is without the indigestible membranes that surround the seed of most of the other more popular species eg Lemon Aspen *A. acidula* and Silver Aspen *A. wilcoxyana*.

# Achronychia oblongifolia

## USES: Culinary:

\* The fruit has the versatility of lemon, though often used as a substitute, will always bring its own original characters and subtle flavours to a recipe. The flavour of the white aspen is strong without being overpowering as can be the case with other Aspens.

\* Whole White Aspen Fruit (or juice) can be used in pastries, short-breads, deserts, sauces, dressings, jams and marinades. The pulp from juicing can be infused to extract its unique flavour.

## USES: Medicinal:

\* Can be taken as an important source of Vitamin C and other trace nutrients.

\* The soft fruit can be moulded gently and placed into the ears to relieve ear aches as is the case with a number of the true lilly pillys or Syzigiums.

\* Also contains the alkaloid acronycine which shows activity against certain tumours.



White Aspen flowers

## USES: Other:

\* The fruit are an important food source for the wompoo fruit dove, topknot pigeon, catbird, regent and satin bow-erbirds and the pied currawong.

## DID YOU KNOW?

- \* One tree can produce up to 60kg of fruit in one season.
- \* A cutting from an improved fruiting variety can be grafted successfully onto a seedling rootstock within a week.
- \* Australian plant foods, such as the white aspen often bring obvious comparisons with foods from other cultures. However, when we learn to accept, value and utilise these foods in the kitchen more regularly, their own unique flavours and suitable combinations will become remarkably evident.



White Aspen in fruit

## RECIPE: WHITE ASPEN & BEETROOT DIP

### Ingredients

- 2 Large Beetroots
- 1 Cup Plain Yoghurt (organic)
- 1/3 Cup Tahini
- 2 Tablespoons Balsamic vinegar
- 1 Tablespoon Sugar (rapadura organic)
- 1/3 Cup White Aspen Fruit
- 2 Tablespoons Fresh Mint (chopped)

### Method

Boil unpeeled beetroot until tender with balsamic vinegar and sugar. Drain, cool and chop roughly. Blend beetroot with remaining ingredients. Transfer to a small serving bowl and stir in mint.



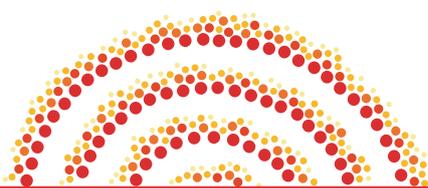
White Aspen fruit surrounded with Lemon Myrtle leaves

# Bibliography



Rainbow over Wollumbin (Mt. Warning)

- Australian Bushfoods Magazine, Issue 1, March-April 1997.  
Issue 2, May - June 1997.  
Issue 6, March-April 1998.  
Issue 7, May - June 1998.  
Issue 11, June-July 1999.  
Issue 12, August- September 1999.  
Issue 13, October- November 1999.  
Issue 15, Spring 2000.  
Issue 17, Autumn 2001.
- Australian National Botanic Garden, *Aboriginal Walk Trail Brochure* (NPWS).  
Australian Native Foods Management (1999). *Lemon myrtle*, Investors Newsletter.  
Australian Native Produce Industries Pty Ltd (1998). *Bushfoods of Australia Fact Sheet*.  
Australian Native Produce Industries Pty Ltd (1998). *Native Food Crop Management Workshop*.  
Baines, A. J. (1981). *Australian Plant Genera*, Society For Growing Australian Plants.  
Bindon, P. (1996) *Useful Bush Plants*, Western Australian Museum.  
Blandfordia. *Newsletter of the North Shore Australian Plant Society*, February 2002.  
Brock, J. (1988). *Native Plants of Northern Australia*, Reed Books.  
Bruneteau, J.P. (1996). *Tukka*, Angus & Robertson.  
Burkes Backyard Website  
Bushfoods of Australia Factsheet 2001  
CSIRO (1990). *Plants for Medicines*, Collins, Loder, Price.  
Cooper, W. & W. T. (1994). *Fruits Of The Rainforest*, Geo Productions.  
Cronin, L. (1989). *The Concise Australian Flora*, Reed Books.  
Dick, H. (1992). 'The Gingers', Article from Society For Growing Australian Plants.  
Facciola, S. (1990). *Cornucopia*.  
Floyd, A.G. (1989). *Rainforest Trees*, Inkata Press.  
Grieve, M. A. (1931). *Modern Herbal*, Penguin Books  
Hall, N. (1972). *The Use of Trees and Shrubs in the Dry Country of Australia*, Forestry and Timber Bureau, Australian Govt Publishing Service  
Hardwick, P. (1994). *Ecosystem Production In Subtropical Eastern Australia*.  
Hardwick, R. J. (2001). *Nature's Larder - A field Guide to the Native Food Plants of the NSW South Coast*,



- Homosapien Books, Jerrabomberra, NSW.
- Lamont, Byron. (August 1985). *Australian Proteaceae as Food Plants*, Australian Food Plants Study Group Newsletter # 4.
- Lassack, E.V. & McCarthy, T. (1983). *Australian Medicinal Plants*, Methuen Australia.
- McCarthy, J.G. (2000). *The Australian Native Foods Industry - New Challenges for the Plant Propagator*.
- McCarthy, J. Shell Document for Plant Information.
- McCulloch, Ellen. Article 'Where is your nearest Silky Oak?' Australian Plant Society Vol 35, No 4, (October 2000),
- Morley, B.D. (1970). *Wild Flowers Of The World*, Ebury Press.
- Nicholson, N & H. (1994). *Australian Rainforest Plants IV*, Terania Rainforest Publishing, The Channon, NSW.
- Notman, A. (2000). *Australian Food, Medicinal, Useful Plants and Animals*.
- NSW National Parks and Wildlife Service (2002). *Threatened Species of the Upper north Coast of New South Wales - Flora*, NSW NPWS, Coffs Harbour.
- Paper from Yarabah Peninsular, North QLD, Unidentified author.
- Perrin, Don. (1988). *Dictionary of Botanical Names*, Australian Plant Names, Green Data Projects.
- Radke, P & A; Sankowsky, G. & N. (1993). *Growing Australian Tropical Plants*, Frith & Firth Books, Malanda, QLD.
- Rare Spice Company (2003). Sales and Stock Price List.
- Reed, A.W. (1965). *Aboriginal Words and Place Names*, Reed Books.
- Robbins, J. (1996). *Wild Lime*, Allen & Unwin.
- Royal Botanic Gardens Sydney. (1994). *A Revision of Zamiaceae*.
- Rural Research Magazine, Issue 172, Spring 1996.
- Sked, J. (1990). *Bush Medicine*, Society for Growing Australian Native Plants.
- Society for Growing Australian Native Plants, Food Plant Study Group Newsletter vol 1 & 2.
- Turbet, P. (1989). *The Aborigines of the Sydney District Before 1788*, Kangaroo Press.
- Williams, J. B; Harden, G. L; McDonald, W. J. F (2006) *Rainforest Trees and Shrubs*, Gwen Harden Publishing.
- Williams, J. B; Harden, G. L (1999-2000). *A Revision of Davidsonia (Cunoniaceae)*.
- Williams, J. B; Harden, G. L; McDonald, W. J. F (1984). *Trees and Shrubs in Rainforest of New South Wales and Southern Queensland*, University of New England.
- Wrigley, J. W. & Fagg, M. *Aromatic Plants*, Angus & Robertson
- Wrigley, J. W. & Fagg, M. *Growing Native Plants Indoors*, Simon & Schuster



Rainbow over Sphinx Rock (Mt. Burrell)

# Notes

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# Notes

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*"It tastes like lollies"  
Children love the sweet  
nectar from this desert Grevillia*



*A vibrant bowl of freshly picked  
native ribberries*

# About the Authors



## Johnnie McCarthy

Johnnie has been active as a horticultural and botanic researcher for over 20 years and has been involved in the development of the native foods industry since 1985. Many within the industry consider him a 'pioneer', particularly through his work on the propagation and cultivation of native food and medicinal species. Through his work as chief propagator at the Royal Botanic Gardens in Sydney, Johnnie worked closely with aboriginal communities throughout Australia and is committed to fostering strong ties between cultures using land management and horticulture. He has lectured extensively on his work in Australia and overseas, has appeared on radio and television and published a number of articles in the field.

At present, Johnnie is Director at the Mt Burrell Cultural Gardens, also known as Ganngjalah – Place of Learning, an environmental and educational charity that brings indigenous and non-indigenous cultures together to learn about the values of Australian flora, fauna and ecology. Johnnie is also a rock musician, and is about to release his first solo CD entitled 'The World Seems Happy' - another important aspect of his life that reflects his environmental work. For more information about Johnnie's music visit:

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



## Alison Ratcliffe

After being born and raised in the Staffordshire countryside in England, Alison's (Aly) affinity with nature started at a very young age. And although the natural world was always her passion, Aly decided to advance her scientific and technical talents at uni which resulted in a Bachelor of Science in Information Technology at the University of Leeds. Travel, exploration and adventure are more lifelong passions that led Aly to Australia in 1995 where she immediately fell in love with the natural beauty of the land. After returning to England, Aly constantly yearned for the warm Aussie sunshine, diverse landscapes and easy going lifestyle until she finally decided to emigrate in 1999. Once settled in Australia,

Aly studied Certificate II, III & IV in Conservation Land Management / Bush Regeneration to gain more knowledge about the Australian bushland. She went on to work as a Bush Regenerator, Team Leader and Environmental Consultant and first arrived at Ganngjalah in 2004 as a Green Corps Team Leader. Aly's passion for native plants and instant connection with Ganngjalah landed her a position on the steering committee where she has since played a key role in the development of the centre. Aly shares her expertise, both in the office with admin and IT support, design and graphics services and in the gardens with bush regeneration and teaching.



Working together at Ganngjalah  
Johnnie and Aly share a common passion



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