
NEWSLETTER

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323 Philp Ave.,
Frenchville.
Qld. 4701.
6/8/2005

Dear Members and subscribers,

As always, I have some apologies to make for glitches and omissions in the last newsletter. The final photograph of *Davidsonia pruriens* fruit was taken by Kris Kupsch, and the drawings of the seed and cut fruit were copied from those in "Fruits of the Rainforest" by Cooper and Cooper. The Davidson's Plum of northern NSW is usually considered to be *Davidsonia jerseyana*, though the Queensland Herbarium does have a listing for *D.pruriens* as well. Previously, there was only one species, with two sub-species, but there are now three named species (*jerseyana*, *johnsonii* and *pruriens*), and Kris reports there is a fourth as well. He also reports that the hairs do cause irritation in some people.

I don't know what the weather's been doing in your part of the country, but here it's been very topsy turvey. We've had a dry summer and a bit of winter rain - enough to give the landscape a most uncharacteristic green tinge for this time of year, but not enough to produce any surface water. Then the minimum temperatures are seeing between about 2 and 18 degrees C, and the maximums from around 14 to 27. It's no wonder the plants don't know what's going on!

We had just started to pick a few ripe raspberries (*Rubus probus*, formerly *R.fraxinifolius*) when another spell of warm weather hit, and turned the leaf edges brown and the fruit stopped developing, shrivelled and dried. However, the current spell of cold has re-started the fruiting and we are finally picking again. All the wild raspberries that used to cover the roadsides on Mt Archer have been slashed and poisoned by the City Council, so they are now much harder to find. When the kids were small we used to pick the wild berries nearly every week for jam and pies as well as eating fresh, but they've gone the way of so much "untidy" bush round town unfortunately.

The Callistemons and Melaleucas have flowered well, and are full of nectar. While green *M.fluviatilis* and cream *M.leucadendra* occur naturally along all the watercourses in Rockhampton, the burgundy form of *M.viridiflora* has been widely planted as a small feature tree in gardens, and has been in spectacular bloom. *Callistemon viminalis* has been used extensively as a street tree, and together with all the

other garden varieties has produced a most colourful streetscape, alive with birds.

As usual, we've been busy with an assortment of plant-related activities, largely in response to various requests for information. Cawarral State School (between Rockhampton and the Capricorn Coast) is embarking on a bush food garden, and I've recorded the first of a series of three interview/talks as part of a gardening pilot programme for our local community radio.

As an aid to dealing with the many queries we receive, it would be helpful to have the names of as many native plant nurseries and suppliers of food products as possible on file, particularly from states other than Queensland. When you discover a nursery or producer you are happy to recommend, please drop me a note either by email or snailmail with the name and contact details.

As I've had no responses regarding a Study Group display at the ASGAP conference in Perth, it's unlikely there'll be a proper one, although one of the Rockhampton people attending has volunteered to put up some of our posters if I can post them over ready

Regards,

Lenore Lindsay and Rockhampton SGAP.

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EDIBLE SPECIMENS TABLED AT MEETINGS:

25/2/05: *Acronychia laevis* (fruit), *Brachychiton bidwillii* (seeds, root), *Bridelia leichhardtii*, *Capparis canescens*, *Drypetes deplanchii*, *Passiflora suberosa** (fruit), *Sterculia quadrifida* (seed kernels), red form of *Melaleuca viridiflora*, *M.thymifolia* (nectar), *Orthosiphon aristartus* (medicinal), *Themeda trianda* (seed).

1/4/05: *Aidia racemosa* (fruit), *Acacia salicina* (seeds), *Backhousia citriodora* (leaves), *Emilia sonchifolia* (whole plant), *Myoporum ellipticum*, *Syzygium 'Aussie Gold'* (fruit), *Sterculia quadrifida* (seed kernels), *Orthosiphon aristartus* (medicinal), *Eucalyptus shirleyii*, *Hakea trineural* and a number of nectar-filled *Grevillea* hybrids.

22/4/05: *Brachychiton bidwillii* (seeds, root), *Capparis lucida*, *Carissa ovata* (fruit), *Ficus opposita* (fruit, shoots, medicinal sap), *Marsilea drummondii* from the Diamantina at Birdsville (sporocarps), *Myoporum montanum* (fruit), white and lavender forms of *Orthosiphon aristartus* (medicinal), *Sterculia quadrifida* (seed kernels), *Syzygium "Aussie Gold"* (fruit).

27/5/05: *Acronychia laevis* (fruit), *Atractocarpus fitzalanii* syn *Randia* (fruit), *Geijera salicifolia* (medicinal),

Mimusops elengi (fruit), *Orthosiphon aristartus* (medicinal),
Tetrastigma nitens (fruit).

24/6/05: *Acacia decora* (edible gum), *A.holosericea* (seeds), *Dodonaea viscosa* (dried capsules as a hop substitute for brewing), *Grevillea obtusifolia*, *G."Honey Gem"* (nectar), burgundy form of *Melaleuca viridiflora* (nectar, medicinal leaves, bark to wrap food), *Myoporum montanum* (fruit).

22/7/05: *A.podalyriifolia* (flowers), *Brachychiton bidwillii* (seeds), *Callistemon polandii*, *Grevillea obtusifolia*, *G.rosmarinifolia*, and a number of *Grevillea* hybrids (nectar), *Melaleuca leucadendra*, *M.quinquenervia*, burgundy form of *M.viridiflora* (nectar, medicinal leaves, bark to wrap food), *Orthosiphon aristartus* (medicinal).

26/8/05: *A.podalyriifolia* (flowers), *Brachychiton bidwillii* (seeds), *Cassia brewsteri* ssp *brewsteri* (edible gum from seeds), *Grevillea longistyla*, *G.rosmarinifolia*, *G.venusta* and a number of *Grevillea* hybrids (nectar), *Leptospermum polygalifolia* (leaves for tea; flowers the source of medicinal jellybush honey), *Pittosporum angustifolium* (medicinal).

EXCURSIONS:

6/2/05: Continuing work on identifying and labelling trees in grounds of Frenchville State School.

6/3/05: South Yaamba: *Acacia disparrima* (root), *A.farnesiana**, *A.salicina* (seed), *Capparis canescens* (fruit), *Clerodendrum clerodendrum* (root), *Corymbia dallachiana*, *C.tesselaris* (nectar), *Eucalyptus coolibah* (seed), *E.crebra*, *E.platyphylla*, *E.populnea*, *E.tereticornis* (nectar), *Ficus opposita*, *F.virens* (fruit, shoots, medicinal sap), *Grewia latifolia* (fruit), *Lantana camara** (fruit), *Lysiphyllum hookeri*, *Melaleuca leucadendra*, *M.fluviatilis* (nectar, medicinal leaves, bark to wrap food), *Nauclea orientalis* (fruit), *Pittosporum spinescens*, *Planchonia careya*, *Santalum lanceolatum* (fruit), *Commelina cyanea* (shoots), *Cucumis melo* (skinless fruit), *Passiflora foetida* (fruit), *Wahlenbergia gracilis* (flowers), *Lomandra longifolia* (flowers, leaf bases), *Marsilea hirsute* (sporocarps), *Amyema quandang* (fruit flesh).

3/4/05: Stockyard Creek, Kelly's Landing, Byfield: *Acronychia laevis* (fruit), *Backhousia citriodora* (leaves), *Diospyros fasciculosa*, *Elaeocarpus grandis*, *Euroschinus falcate* (fruit), *Ficus congesta* var *congesta* (fruit, medicinal sap), *Corymbia trachyphloia*, *Eucalyptus platyphylla*, (nectar), *Lantana camara** (fruit), *Melaleuca quinquenervia*, *M.viridiflora* (nectar, medicinal leaves, bark to wrap food), *Nauclea orientalis*, *Podocarpus elatus*, *Rubus moluccanus*, *Syzygium australe*, *Terminalia porphyrocarpa* (fruit), *Sterculia quadrifida* (seed kernels), *Cassytha filiformis* (fruit), *Dioscorea transversa* (roots), *Eustrephus latifolius* (roots, aril), *Cissus oblonga*, (fruit, roots), *Geitonoplesium cymosum* (shoots), *Melodinus australis*, *Melodorum leichhardtii*, *Passiflora suberosa**, *Smilax australis*, *Trophis scandens* (fruit), *Livistona decipiens* (palm "cabbage"), *Macrozamia miquellii* (treated seeds), *Alpinia caerulea* (fruit), *Commelina cyanea* (shoots, young leaves), *Emilia sonchifolia*

(whole plant), *Dianella caerulea* (fruit), *Gahnia aspera* (seeds), *Geodorum densiflorum* (tubers), *Bowenia serrulata* (treated seeds and tuber).

1/5/05: EPA Herbarium Rockhampton:

5/6/05: Gladstone Eco-Fest at Tondoon Botanic Gardens:

3/7/05: Calliope, SF 150 "Beecher": *Corymbia citriodora* (leaf, nectar), *Acronychia laevis*, *Aidia racemosa*, *Alectryon conatus*, *Arytera divaricate*, *Canthium odoratum*, *Carissa ovata*, *Capparis arborea*, *C.canescens*, *Cyclophyllum coprosmoides*, *Dianella caerulea*, *Diospyros australis*, *D.geminata*, *D.humilis*, *D.fasciculosa*, *Drypetes deplanchii*, *Euroschinus falcata*, *Exocarpus latifolius*, *Grewia latifolia*, *Lantana.camara**, *Melodorum leichhardtii*, *Pleiogynium timorense*, *Pogonolobus reticularis*, *Pouteria pohlmaniana*, *Psychotria daphnoides*, *Rapanea variabilis*, *Smilax australis*, *Terminalia porphyrocarpa*, *Tetrastigma nitens*, (fruit), *Gahnia aspera*, *Pogonolobus reticularis*, (seed), *Geitonoplesium cymosum* (shoots), *Acacia disparrima*, *Clerodendrum floribundum*, *Eustrephus latifolius* (roots) *Ficus coronata*, *F.rubiginosa* forma *rubiginosa* (fruit, shoots, medicinal sap), *Trophis scandens* (fruit flesh,) *Cissus oblonga*, *C.opaca* (fruit, roots), *Dodonaea viscosa* (dried capsules as a hop substitute for brewing), *Geijera salicifolia* (medicinal), *Xanthorrhoea latifolia* (leaf bases, growing shoot), *Macrozamia miquellii* (treated seeds).

7/8/05: Bukkulla Conservation Area, Marlborough: *Acacia bidwillii* (root), *Brachychiton bidwillii* (seeds), *Canthium odoratum*, *Carissa ovata* (fruit), *Clerodendrum floribundum* (root), *Corymbia dallachiana*, *C.erythrophloia*, *C.tesselaris*, *C.clarksoniana*, *C.xanthope*, *Eucalyptus crebra*, *E.melanophloia*, *E.platyphylla*, *E.tereticornis* (nectar), *Diospyros geminata*, *D.humilis* (fruit), *Dodonaea lanceolata*, *D.viscosa* (dried capsules as a hop substitute for brewing), *Drypetes deplanchii* (fruit), *Erythrina vespertilio* (root), *Euroschinus falcata*, *Exocarpus latifolius* (fruit), *Ficus opposita* (fruit, shoots, medicinal sap), *Geijera salicifolia* (medicinal), *Grewia latifolia* (fruit), *Hibiscus heterophyllus* (buds, flowers, shoots, roots), *Lantana.camara** (fruit), *Melaleuca bracteata*, *M.fluviatilis*, (nectar, medicinal leaves), *Myoporum montanum* (fruit), *Pittosporum spinescens*, *Planchonia careya*, *Pleiogynium timorense*, *Pogonolobus reticulatus*, *Psychotria daphnoides*, *Rapanea variabilis*, *Terminalia porphyrocarpa*, *Eremophila debilis* (fruit), *Oxalis corniculata* (leaves), *Cissus oblonga*, *C.opaca* (fruit, roots), *Eustrephus latifolius* (root), *Trophis scandens* (fruit), *Dianella caerulea* (fruit), *Gahnia aspera*, *Themeda triandra* (seed), *Lomandra longifolia* (flowers), *Xanthorrhoea johnsonii* (leaf bases, growing shoot), *Cycas ophiolitica* (seeds after prolonged and extensive treatment), *Opuntia tomentosa** (fruit).

LETTERS TO THE EDITOR

Ballarat, Vic. 3350

Dear Lenore,

..... I've started full-time study, but have been keeping in contact with a few Victorian members. I haven't done any drawings of bush food species for a while, but will be doing some of Victorian species shortly so I'll send them when they're done, if you like. (Yes please! Ed.)

I was in Far Nth Qld (Cairns area) recently, so was finally able to sample some of the fruit I've only ever read about - Cheesefruit, Blue Quandong, a mistletoe, and some crisp lillypillies with a lemon finish - Lemon Aspen? With the exception of the Cheesefruit, I found them all to be very palatable and apple-like in flavour. I thought the Cheesefruit tasted like blue vein cheese (which I like), but a strange experience with the texture of the flesh. Maybe it would be nicer on some crackers, or on a cheese platter? It would have been good to meet up with some locals with bushfood knowledge and see and sample some other bushfood species. I also tried Black Sapote ice cream - yum! Does that count?

Back in Victoria, I've sampled Leafless Currant Bush fruit (pleasantly sour and refreshing, Daucus (Native Carrot) leaves, which tasted like parsley only more subtle, a large heath fruit with a star pattern on it which was very nice (and again, apple-like) and sucked nectar from the tubes of Pine Heath (*Astroloma pinifolium*), lovely and sweet. Many of my own bushfood plants are flowering at the moment, including Apple Berries, Bindweed and Chocolate, Vanilla and Bulbine lilies.

I'm very interested in learning more about local (Victorian) bushfood species from local indigenous people; the rituals, stories, art, the sacred aspect, as well as ID and traditional methods of preparation. Are any other Study Groupmembers also interested in this sort of thing and does anyone out there know if anything like this exists in Victoria? If others are interested, we may be able to get together and organise something.

Best wishes
Kate Vleck.

*I have a book, "Victorian Koori Plants" by Beth Gott and John Conran published in 1991 by the Yangennanock Women's Group, whose address is given as the Aboriginal Keeping Place, PO Box 666, (Gray Street), Hamilton, Victoria 3300. Perhaps that might be a starting point for your search? (Ed)

SNIPPETS:

Kris Kupsch, Leader of the Rainforest Study Group, is growing many *Athertonia diversifolia*, and reports he has seen hundreds in the wild.

Kris has also sent some comments about the plants Cas Liber enquired about in the last letter: He has *Guettarda speciosa* growing in Burringbar, NE NSW. He planted one last year which died instantly in winter, but has a summer planted one growing in a 'warmer' spot. He sourced the trees from Darwin. He regards them as similar to *Morinda citrifolia* in their ability to grow well when it gets cold. He has one *Morinda* doing well after the previous 12 or so died.

He's been told that soaking *Gahnia aspera* seeds in Coca cola helps them germinate.

Ochrosia elliptica is surprisingly easy to grow, in sun or shade, with trees fruiting after 4 years in Burringbar (rather surprisingly, given it's a maritime species of the north Qld coast). Caterpillars strip the leaves bare! (Remember, the fruit is POISONOUS.)

Kris suggests trying a graft of *Podocarpus spinulosus* on to *Podocarpus elatus* to produce a topiarised Plum Pine, complete with fruit!

Readers may be interested in the menu which was served at a fundraising dinner at Ricky Ricados in Noosa last year to assist indigenous "Bush Tucker" chef, Dale Chapman Scott of The Dilly Bag Restaurant at Eumundi, attend a week of Australian bush food activities at Nice College in Southern France.

Savouries: Emu and pepperberries koftas
Sop sop blini with finger lime
Seared kangaroo en croute and akudjura

Appetiser: Bunya nut soup and Dorrigo pepper crust
Perfume of native mint and aniseed myrtle

Entrée: Potted possum served with damper

Main: Wallaby shanks on a gum leaf kumara mash

Dessert: Strawberry eucalyptus custard tart in a roasted wattle seed crust
Glace native limes and sandpaper figs

A new range of bush food products was recently launched in Yeppoon by young Murri man, Eddie Currie, with the support of the Nescafe Big Break. The Murri Magic range includes sauces - Akadjura, Smokey Mt BBQ Pepperberry and Quandong in a Bottle, Wattle and Lemon Aspen syrups, Desert Lime Juice, roasted Wattle Seed, Wattle flour, dried Quandong, Quandong leather and ground Akadjura, Pepperberry and Pepperleaf.

Gardeners may be interested in a new hybrid Lillypilly. *Syzygium* 'Cascade' is a cross between *Syzygium luehmannii* and *S.wilsonii* ssp *wilsonii*. It's a weeping shrub with red-changing-to-pink new growth, fluffy pink pom-pom flowers tipped with gold and edible berries. Grow in full sun, part shade as a tub specimen, hedge or feature. Feed regularly, and expect it to reach 2 to 3m by 1.2m. 'Cascade' is PBA protected and comes from Limpinwood Gardens nursery selections. However, as both its parents grow well in Rockhampton, I suspect frost will be more of a problem than heat.

Portulaca oleracea - an overlooked treasure?

Peter Hornsby

The January 2004 South Australian Regional Meeting in Adelaide was significantly different from the general run of talks. The speaker was Glenys Morrison from Brinkworth and her topic was 'Using Bush Tucker in Everyday Recipes'. It was an absorbing and rewarding meeting, particularly for those already into native foods, and an inspiration to others to begin thinking along those lines.

I had brought along some *Portulaca oleracea* for "show and tell", but Glenys' talk was so well received that there was no time left for specimens. Imagine my surprise when later someone remarked, "What's this weed here for? It's not even a native!"

Portulaca deserves a better fate than that; so what is it, and what are its uses? Black's Flora quotes its native name *Munyeroo*, with colloquial names of common purslane or common pigweed. "It occurs in all states, and in temperate and tropical regions throughout the world. Usually grows as a weed in disturbed areas and is common in cultivated land, sometimes forming dense mats." 'Common' and 'weed' seem to be the the most pervasive epithets for what must be one of Australia's most ubiquitous native plants. It is even included as one of the weeds in Lamp and Collet's "A Field Guide to Weeds of Australia".

The plants are very succulent with thick stems and pairs of opposite, ovate, fleshy leaves up to about 2cm in length. Stems sprawl along the ground and one plant can be up to a metre across. Historically it was held in much higher regard. The Aborigines considered it a prized food. Those from north-eastern South Australia knew it as *paua biddi-curdi*, and ate it in a variety of ways. They cooked the roots, and all the plant above ground was eaten raw or cooked. Most highly regarded were the seeds, which were ground and made into a paste for damper *wai-mal-ya*.

The jet black seeds are minute, about 0.6-1.00mm in diameter, and occurring in ovoid capsules 3-5mm long. Maiden in his 1889 book on "The Useful Native Plants of Australia" said one would suppose that so small a seed would scarcely repay the labour of collecting. He went on to say though, with the vernacular of those days, that the Aborigines got into splendid condition from the plants!

Although the seeds are very small, collecting them was easy. Around the time when they were ripe, the abundant plants were piled upside down in a heap on a sheet of bark or a kangaroo skin and left for a couple of days for the seeds to fall out. One plant can produce up to about a tablespoon of seeds. Baron von Mueller reported that "an Aborigine can gather many pounds weight of seeds in a day!" In his botanical report for the North-Australian Expedition [quoted in William Woolls' 1867 book, *A contribution to the flora of Australia*], von Mueller went on to say: "We had almost daily occasion to praise the value of purslane, which occurred in every part of the country explored. [We used] it for food without any preparation, and I have reason to attribute the continuance of our healthy party to the constant use of this valuable plant. The absence of other antiscorbutic herbs in the north, and the facility with which it may

be gathered, entitle it to particular notice." Woolls himself reported that it was formerly cultivated as a pot-herb, "the young shoots and leaves having been used in spring and autumn as ingredients in pickles and salads." Joseph Bancroft, an eminent natural scientist and medical man in the nineteenth century, described it as "perhaps the most valuable of all the specimens of native food under examination."

The other side of the coin is that in his book "Poisonous plants of Australia", Everist noted that *Portulaca* contained potentially toxic amounts of oxalate and nitrate. "All recorded cases of poisoning have been in sheep or cattle starved for a time, and then allowed access to large amounts of pigweed in a succulent state, usually growing on soils rich in nitrogen." He did, however, go on to say that under most conditions it is both palatable and nutritious.

Kutsche and Lay in their new book *Field Guide to the Plants of Outback South Australia* refer to pigweed as "highly nutritious, high in protein and fat, but rather bland in taste. Early settlers also utilised this species".

As a family, we have used it for many years, either raw as a salad vegetable, or cooked as greens. For such a useful and readily available plant, today its potential is easily overlooked. It really does deserve more culinary consideration than currently it receives. As Woolls reported nearly 150 years ago: "It is highly important that the value of purslane should be made known"! Try it yourself.

Reprinted from the APS SA Journal (August 2004)

NEW LIMES FOR HOME GARDENS.

Three CSIRO-bred Australian lime varieties are now available for backyard gardeners. Originally bred to give the Australian native foods' industry reliable supplies of quality fruit, the varieties have been grown commercially since 2001 and are available for home gardeners in limited quantities for the first time this year.

"Australia has a range of true native citrus limes," said Dr Steve Sykes of CSIRO Plant Industry. "They include the Finger Lime, the Round Lime or Dooja, and the drought-tolerant Desert Lime. By breeding with native limes we were able to retain their unique flavour in new varieties, producing truly novel fruit types. The varieties can be propagated on to and grown using normal citrus rootstocks."

The three varieties produce red, yellow or green fruit. They are available through Floriana, a wholesale nursery.

(From the "Rural Weekly" CQ Edition 26.8.05)

Roses with other names.

Phil Watson

The Rose family (*Rosaceae*) is a well-known and economically important family incorporating numerous delightful, long established garden favourites (Roses, Spiraeas, Japonicas, Flowering Cherries, etc), productive fruit trees and shrubs (Pears, Apricots, Apples, Plums, Loganberries) and notorious weeds. For the native plant enthusiast, the family is represented in our temperate bushland communities by a small group of intriguing but often overlooked herbs (native buzzies, Geums, Parsley Piert) as well as scrambling Native Raspberries.

Many of today's declared weeds in the cooler parts of the country have derived from the Rose family. They were introduced by the early colonists into the pristine native landscape for their important amenity and horticultural values of the day. Within a short period some had escaped the confines of their English-style gardens and farms to flourish as aggressive weeds, initiating their invasion and subsequent degradation of our vulnerable vegetation communities. Weeds such as Briar Rose, Blackberry, Hawthorn, Cotoneaster, etc, have now become well known for their ability to tolerate the toughest environmental conditions and out-compete indigenous flora.

Native Rose family members provide tea, bush tucker and delicate flowers.

Indigenous to Eastern Australia, the Sheep's Burr (*Acaena echinata* and *A.ovina*) and Buzzy or Bidgee Widgee (*A.novae-zelandiae* and *A.montana*) are glossy pinnate leaved ground covers, often proliferating within the inter-tussock spaces of sunny woodlands and coastal sites. The generic name *Acaena* is Greek for 'thorn' referring to their distinctive burr-like seeds, which make up their globose, bristly fruits. Along with the fur of our native marsupials, most bushwalkers have inadvertently contributed to the seeds' dispersal. The laborious process of removing the balled seed clusters entangled in your woolly socks instils in your memory the need to spot this plant early. No better awareness campaign exists for a native plant!

The drought tolerant, thorny, straggling Native Raspberry (*Rubus parvifolius*) and the more compact Mountain Raspberry (*R.gunnianus*) with its distinctive red blackberry-like fruit, are the only two Tasmanian examples of the twelve native raspberries in Eastern Australia. For optimum development of their tangy sweet fruit, they prefer the moister sections of your bush tucker patch. A quenching and therapeutic tea can also be derived from drying their young leaves or 'tiny tips'.

The Aborigines were not the only devotees of these fruit. They are cherished by a selection of birds (including the ravenous Currawongs), blue tongue lizards (do you ever wonder where some of your luscious raspberries and strawberries mysteriously disappear to?), the New Holland mouse and even the tiny Dusky Antechinus. Their resulting deposits (or regurgitations, in the case of the Currawong) disperse the seed.

Interestingly, the larva of the blue male and green pink female Ghost

Moth (*Aenetus sp.*) is known to bore into and feed within the stems of these native raspberries and other Rosaceae fruit trees (eg Apples). They have fascinating life cycles, starting out as 'litter larvae' living under logs and feeding on the decaying wood and its associated fungi. They then moult into 'transfer larvae', which migrate and bore into their host's plant stems. A silken wad of excavated fragments acts as a tunnel covering. Here, they moult again transforming into 'shrub or tree larvae', which continue to enlarge their tunnel, until finally, after an exhausting five years, they metamorphose into beautiful moths.

Mountain Geum (*Geum talbotianum*) has white chalice-shaped flowers with yellow centres and forms small tufts of kidney shaped leaves in sheltered alpine slopes. It is one of only two Tasmanian representatives (*Geum urbanum* is the other) of this spectacular cosmopolitan genus cultivated for brightly coloured, long lasting floral displays. The clove-like fragrance of their roots has proved historically popular for flavouring wines and ales. Unless you are happy to experiment, don't expect to succeed in growing this in your patch - instead, it can be cared for as a pot plant, requiring regular potting on to keep it happy.

Native and introduced Parsley Pierts (*Aphanes australiana* and *A. arvensis*) are small inconspicuous parsley-like annuals with minute flowers that crowd together forming greenish tufts. The Latin name *Aphanes*, which means 'inconspicuous', is well chosen. However, the significance of Lady's Mantle (*A. vulgaris* syn *Alchemilla vulgaris*) with alchemists cannot be overlooked. By steeping four grams of the herb for five minutes in one cup of boiling water and straining, a brew was produced for women following childbirth, both for promotion of healing and staunching blood flow. Its coagulation properties made it a common mouth rinse after teeth extractions. Relief from diarrhoea, menstrual problems and inflamed throats are other proven uses.

The Rose family is also the source of some major environmental weeds.

By 1820 Hawthorn (*Crataegus monogynus*) proved a godsend to the early settlers as a fashionable hedging and 'wicker' style stock fence plant. The fences grew rapidly from hawthorn seedlings (called 'quicks') closely planted and woven into wands. Louisa Anne Meredith, a noted author and flower painter of the day, wrote of her admiration for 'the anglicised countryside of sober green and white flowering hedgerows'. She loved the 'glorious hawthorn hedges in bloom', consisting of the white 'May' flowers which she and her fellow estate owners had gathered as English children.

Although it is considered a weed today, its cultural significance should be respected. In an increasingly denuded landscape, its value as a refuge for many of our displaced feathered and furry friends is critical for their survival. Its attributes also extend to craft wood, medicines, food, tea (remember to use those 'tiny tips') and a Moorish hawthorn berry wine.

Blackberries (*Rubus fruticosus*) and Rosehips (*Rosa rubiginosa*), famed for its Vitaamin C content, were introduced for their versatile

fruits, and hedging abilities. Their aggressive weed status attracts huge resources in an attempt to control their spread.

Ironically the botanist Baron Von Mueller regarded blackberries as a valuable plant for the colony -hedges with luscious berries, nectar supplies and leaves for herbal tea and medicine. Religiously, after boiling the billy on his botanical sorties, he spread their seeds in the ashes. He mused that 'poor people in times to come will bless me for my thoughtfulness'.

Although only touching the surface of the many renowned uses of the members of the family (not forgetting the vicar's rose petal champagne), it is hoped that you are a little more inspired to grow and enjoy the lesser-known 'Roses' and to weed out the odd 'Rose' weed.

Reprinted from 'Eucryphia' July 2004.

According to Cribb (1974), Bidgee-Widgee yields a drink reminiscent of tea, but tea made from rather stale leaves. Considerably more of the leaves are required than in the case of tea. (Ed).

If your lillypillies or other native trees or shrubs seem to have small, round, scale-like lumps appearing on their leaves, they are probably infested with sap sucking insects called lerps. The scales are the waxy protective covering of the nymph stage. They come in various shapes and colours, depending on the species. Most are pale coloured, but they can be pink or red. Extensive colonies can cause significant damage to leaves if left unchecked.

The solution is to encourage natural predators such as birds, spiders, assassin bugs and lacewings. If the problem is severe, spray with white oil, or use a registered synthetic insecticide containing the active ingredient maldison.

Cribb (1974) states that many lerps produce significant concentrations of sugar extracted from the host plant, and this evaporated exudate formed an integral part of the diet of Aboriginal tribes in some areas for limited periods. So maybe you could at least taste test your lerps before deciding to get rid of them. (Ed)

RUBUS MOLUCCANUS var. trilobus

Gus Donaghy

Rubus moluccanus (Molucca bramble or Molucca berry) is one of only 8 indigenous Australian native raspberries in the true sense that they bear red raspberries on mostly prickly bi-ennial canes. Whilst much is known of its close relatives in the northern hemisphere which number in their hundreds, little information is available on Australian *Rubus* species and their taxonomic variations, which isn't surprising given real interest in Australian natives is still in its infancy.

Rubus Moluccanus var trilobus is a perennial shrub with a distinctly 3 lobed leaf, with coarse reddish prickles on leaf midveins, leaf stalks and canes. Arching canes from 2-3 metres with tasty red succulent berries borne in clusters from white flowers on tips of canes and laterals. It is common locally (Northern Rivers), on cleared margins of woodland, swamp and rainforest areas.

Following the discovery of a thousand or more Moluccaberry plants growing in a clearing on a friends' property near Woodburn, northern NSW, my partner and I decided to experiment with a few plants to see how they would respond to some T.L.C.



With some encouraging results from these existing stands we've selected 250 plants with preferred characteristics i.e. plant vigour, fruit yield, size, taste etc. The original site was partially cleared and the selected plants placed in slightly raised beds of organically improved clay loam soil just above flood level. They are cut and tied to a 2 metre high 3 wire trellis, and are protected from detrimental hot northerly winds by a South Easterly aspect on a heavily forested hill. These plants are not under irrigation and survived their earliest days through some of the driest conditions on record. It is probable moisture is being sourced from an aquifer within the hill.

Whilst the roots of *Rubus moluccanus* are perennial the fruit is borne on last season's canes, so traditional raspberry cultivation practices have been adopted. Last season's canes (primocanes) are pruned and tied to 2 metres in spring. This encourages the growth of many laterals, some over a metre long, extending from leaf nodes. These laterals form racemeous panicles at their tips each with 6-30 buds which flower and fruit consecutively over a three month period. This coincides with our wet season from late march to late June. These fruiting canes (floricanes) are cut to ground level when fruiting has finished (July) leaving 6 of the healthiest primocanes for next season. Interestingly, floricanes left unpruned will set fruit again in December but of low yield and poor quality. New plants are sourced from the many root suckers or from cane tips which strike readily when in contact with the ground.

Raspberry farming is highly labour intensive so yield is directly related to input. We live 35kms from the farm and most of our efforts go into our wholesale bushfood business leaving precious little time for proper crop management. But nonetheless the plants pretty well tend to themselves in a natural, but seemingly harsh environment, and we've managed to pick an average 350g (approx 400 berries) per plant per season. Noticeable losses were incurred

because we only picked twice a week. This should have been done every other day as the berries ripen and fall quickly.

Strangely, birds and insects have not taken to the fruit at all despite the native woodland setting. This by the way contradicts my original assumption that the seeds were spread by birds, something that warrants further investigation. Insect pests have been seen but appear under control by natural biological process, and in any case seem generally more interested in the leaf, not the fruit.

Here's a list of some of the nasties I've encountered and survived: Grey mould, Red spider mite, Rose scale, Raspberry Sawfly, Green Vegetable bug, Attractomorphs, wingless grasshoppers, monolepta Australis, metallic beetles.



At all stages of growth the cultivated plants have consistently out-performed their wild counterparts i.e. longer fruiting season, much higher yield, larger sweeter berries, more vigorous growth habits, less fungal and insect attack. I have no doubt with better farming practices and irrigation, yields would be considerably higher and the fruiting season extended.

Significant variations occurred between natural stands, cultivated plants and several "Control" specimens which were planted at home for close examination.

Estimated breakdown:

	Natural	Cultivated	Control
WEIGHT grams	0.5 - 1g	0.6 - 1.2g	0.6 - 1.2g
QUALITY	Dry-juicy. Sweet	Juicy. Sweet.	Juicy. Sweet.
YIELD /plant/seas.	100-200grams/p/s	350grams/p/s	450grams/p/s
FRUITING season	Late Apr-early Jun	Dec./ Mar-June	Dec./ Feb-July

Note; Both "Cultivated" and "Control" specimens bore fruit of fair-good quality for about three weeks in December, January and February proving too hot for fruit set regardless of water uptake.

It's not all about the fruit though. Raspberry leaf tea, anecdotally at least, has long been well documented with medicinal benefits and we market it as such. In fact recent research attributes some berry fruit with exceptional anti-bacterial qualities. We had our berries tested by Dr Jenny Wilkinson, senior lecturer in anatomy and physiology at the school of bio-medical sciences at Charles Sturt University, with results showing excellent activity (no bacterial growth) against Staphylococcus aureus and Alcaligenes faecalis.

This is a good berry well worth a second look, if not for its potential as a productive food plant in its own right, maybe as a possible gene source for cross-pollination with commercial raspberry varieties.

Gus is the proprietor of Playing with Fire Bushfoods of East Ballina NSW. He can be contacted by email at ozberries@hotmail.com or by phone on 02 66814337. Gus was kind enough to contribute this article following our email correspondence concerning growing native

raspberries. (I grow *Rubus probus* - or maybe it's more accurate to say it survives given the year we've had - in our home garden)! And by a strange co-incidence, there was recently a little segment on ABC's "Gardening Australia" on growing native raspberries in Brisbane. Jerry Colby-Williams was showing his plants of *Rubus probus* and *R.molluccanus*. The only 'extra info' to note was the recommendation to use root-guard around the bed in the home garden, a precaution I can thoroughly recommend. (Ed).

EDITOR'S EXTRA.

I really need to add an extra bit to this issue, because it's been just so long 'in the process'. Lots of different contributing factors of course, but mostly because life just keeps happening and the constant random stream of events means so many interruptions and changes of plan. I also hadn't realised the difference lack of access to good quality cheap photocopying coupled with my only basic computer skills would make, though I am learning slowly. We are also acquiring grandchildren - all of them in far-flung places, and we naturally wish to visit and have family visit us, which certainly involves large chunks of time.

Nevertheless, I am well aware that it is now early November and I am still plodding on, though the end is close. I can only apologise for the long delay, and hope you find the various articles and snippets interesting.

I was very sorry not to get to the ASGAP Conference in WA as originally planned, but we have a new grandson overseas whom we haven't seen yet, and needed to direct our funds to an airline company instead. All going well, we will spend Christmas this year in Barcelona. However, I noticed from the ASGAP programme that there was at least one presentation on growing Australian food plants, so may be able to share something of that with you if anyone who attended is able to write an account for us. I haven't yet had an opportunity to peruse the conference papers, though our SGAP group has ordered a set.

Given the date, I'll take this opportunity to wish you all the compliments of the Season, and best wishes for the coming year.

Lenore
