INTRODUCTION

About 65,000,000 years ago Australia was still joined to Antarctica, South America and South Africa. The seas around the south-eastern coast were much warmer than today and the rain bearing winds penetrated a long way inland. Rainforest was the major vegetation covering a great deal of Australia.

Then, about 30,000,000 years ago, Australia moved northwards away from Antarctica and this allowed the Antarctic Ocean and its circumpolar currents to develop. This in turn produced much colder and drier conditions and as Australia moved northwards, the rainforest retreated to the more favourable areas which allowed the development of Eucalypt forests, a host of grasses, wattles and a range of pea type plants.

Moving forward to 2,000,000 years ago, the rainforests had declined to 55% of their former coverage. By the time Europeans arrived in Australia the rainforest coverage had declined to 22%. In the past 200 years that figure has further reduced to 20%.

Types of rainforest fall into many divisions or classifications and that is a separate issue from rare plants. Evidence of the previous extent of our rainforest can be seen today by the presence of a few lingering rainforest species outside the current margins of designated rainforest areas. Specimens of the rainforest species, Alphitonia excelsa, commonly called Red Ash, can still be found as far west as Mount Kaputar, Boggabri and Warialda. Similarly the rainforest species Alectryon subdentatus (Hairy Birds Eye) is still found from Gloucester to west of Narrabri and Warialda.

RARITY

Several influences can contribute to making some plants rare and these same influences can also allow a single species to proliferate to the level of being a pest or weed. Examples include human interference (land clearing) and the natural decline of a species due to growth or breeding weaknesses in the species. Fire is a double edged sword – it can be devastating to some species but a necessary rejuvenation aid to other species. Occasionally a species that has been regarded as extinct will suddenly appear in the landscape after a fire. Some species are forced into the background as the natural forest or landscape evolves due to climatic or topographical changes. It must be remembered that nothing in nature is constant.

DISCERNABLE EVOLUTION

If we take the time to study and record observations of the natural landscape, evolution can be observed over as small a period as ten years. I have been maintaining records of the flowering times and subsequent harvest times of a wide range of species since 1989 or thereabouts and even when you allow for highs and lows due to drought or flooding rains, there is a notable change in flowering times and seed ripening.

A further complication with timing of seed collection arises with location and elevation influences affecting some species. Seed of Waterhousia floribunda (now renamed Syzigium floribunda) can be
ripe at Clarence Town but maturity at Main Creek will be delayed for at least 3 weeks. On the other hand, Alphitonia excelsa (*Red Ash*) is always ripe around the 1st week in December regardless of where each specimen is located.

**SPECIES IN DEPTH**

**ALPHITONIA EXCELSA –*Red Ash***
This species has many common names including Red Almond, Sarsparilla, leather jacket, Red Tweedie, Humbug & Coopers Wood and it is a personal favourite of mine because it is the first tree I identified to a botanical level as a teenager and also because it ticks all the boxes as far as hardiness, attractiveness and usefulness goes. It is frost tender when young but it soon gets over this. In the enclosed confines of a forest area it can grow to 35 meters in search of light but in an open garden it usually stays a small tree. The silvery undersides of the leaves are very conspicuous in the landscape especially when the breeze is strong enough to rotate the leaves into view. The flowers are fragrant in the evening and the trees are a favoured food for the caterpillars of the Moonlight Jewel butterfly (Left) and the Small Green-Banded Blue butterfly (right). The timber is extremely valuable for ornamental panelling, cabinet work, flooring, tool handles and general building. Another remarkable feature of this tree is its advantage as a fodder tree. The leaves and shoots are eaten by stock and are considered good forage.

It grows from Mount Dromedary on the south coast of NSW, north to Torres Strait and west to Mt Kaputar, Warialda and Boggabri. Its occurrences mark the limits of the early rainforests.

**EMMENOSPERMA ALPHITONOIDES –*Yellow Ash***
The Yellow Ash is closely allied to the Red Ash mentioned above and is also known as Grey Ash, Mountain Ash, Yellow Rosewood, Yellow Almond, Bonewood and Pink Ooline. It is a medium sized tree and is a fast grower but is not quite as hardy as the Red Ash as it is more particular in its growing requirements. It does not like clay soils and needs plenty of water when it is young. It grows best on deep loams or on rocky sheltered hill sides where it can get its roots deep into the soil. The timber bends well but is heavy and difficult to work however it is quite durable and makes excellent tool handles and is used in boat building and for general building as well. Although it occurs across a wide area, its presence is quite sparse. It makes a magnificent statement as it passes through the stages of flowering, fruiting and seeding. The orange fruit lasts for months and is very conspicuous, especially if it can be viewed from a location where the road runs above the forest and you can look down on them. The seed is regarded as hard to germinate but a friend of mine bought a river flat property on the upper reaches of the Allyn River and because the area may have been subject to inundation, he built a 2 storey house. The property was also home to a
very old specimen of Emmenosperma on the riverbank and a younger seedling nearer the house site and it was a pleasure to sit on the top veranda with a drink in one hand and look down on the fruiting Yellow Ash. On one such peaceful afternoon, 3 or 4 black magpies flew in and picked off 4-5 seeds, rolled them round and round their beaks and then spat them out. They repeated this several times which was both fascinating and intriguing. My friend’s brother was a researcher with the CSIRO at the time so the seeds were sent to him for analysis and it seems that the seeds contain a high concentration of salt which was what the Magpies were after. This also gave a clue to improving germination rates – by soaking the seed in water for several days (changing the water every day), a multitude of the seeds germinated readily – so many in fact that the excess was offered to State Forests for free but they declined the offer.

Both the Red and the Yellow Ash ripen their seed in a similar fashion. Their fruits are usually 2 celled with one seed per cell. The outer fleshy part of the fruit dries and falls away leaving the seed enclosed in a hard shiny purse like structure called a “cocco”. Over time, the coccus also falls away and leaves the seeds hanging on a branch for up to 3 months.

AKAMA PANICULOSA (previously known as CALDCLUVIA PANICULOSA) - Rose Leafed Marara
Other common names for this one include Corkwood, Brown Alder or Sugarbark. This species can grow to 40 meters in the competitive confines of a rainforest but in the open it is more likely to be 10-15 meters making it a good tree for the larger backyard. Some gardening books denote this tree as frost tender, however it grows from the Hawkesbury River to the south of the Hunter Valley through to the Eugenella Range in tropical North Queensland. If you source trees from the North Coast or Queensland areas, then the specimens are likely to be frost tender, however the specimens from The Paterson, Allyn and Williams River are frost hardy. The new growth is a dark red and very attractive. The flowers are massed in creamy white panicles and each flower forms a small capsule that slowly turns red. The flowers appear in November and the capsules remain on the tree until February or March. The seed themselves are very small black dots and need to be sown on top of the seed raising mix.

The word Marara is a word in the Hununòo language of the Philippines and commonly refers to the relative presence of red.

VESSELOWSKYA VENUSTA – Barrington Tops Marara
This Marara is named for a Russian plant morphologist by the name of E. Vesselowsky and the Latin word Venusta which means charming. This tree can grow up to 8m tall but is more often a large shrub up to 3m tall. According to the books, it typically grows overarching a creek line or gully in a rainforest dominated by Antarctic Beech. Having said that, my specimens were collected about mid-way along the road connecting the upper reaches of the Paterson River to the upper reaches of the Allyn River, at an elevation of around 300m which is well below the
Beech forests. It needs a shaded and sheltered position to grow well but it is frost hardy. Plants of this species can be male or female. Vesselowskya venusta occurs from the Barrington Tops to Werrikembe National Park south west of Port Macquarie and its alter ego Vesselowskya rubifolia occurs northwards from Cunnawarrah National Park (south west of Dorrigo). The difference between these two species can be determined by close botanical scrutiny but is not obvious to the overall visual appearance of the species.

**CALLITRIS MACLEAYEANA** – Stringybark Pine, Brush Cypress or Kerosene Pine

This species grows from Pine Brush near Clarence Town to Trinity bay in North Queensland or so the books advise, however Dr Cameron Archer and Greg Giles have uncovered records from the very first timber cutters on the Paterson River that show large quantities of Brush Cypress and Plum Pine were harvested on the Paterson and Ally rivers and shipped to Sydney through the port at Morpeth. There are very few trees left in the wild because of the quality and versatility of the timber for use as weatherboards, cabinet work, joinery, lining, indoor fittings and fronts for violins. No-one thought to plant more at the time so their presence in this district was severely compromised. There are now around 6 plants reintroduced at Tocal and a further 20 here at Riverdene. In my opinion it is a much better tree than Arizona or Monterey Pines. Its natural habitat is poorer podsolic soils. It can reach up to 30m in the rainforest.

A lot of people assume that the name *macleayeana* comes from the Macleay River however it is actually named after Sir William MacLeay, a plant collector who collected the first seeds near port Macquarie in the 19th Century.

**ACRONYCHIA OBLONGIFOLIA** – White Lilly Pilly or Yellow Wood. This species grows from Victoria to Maryborough in Queensland. It is tough and hardy tree but also very showy. It grows up to 20m tall in lush rainforest but only reaches 8-10m as a specimen tree. Its only fault seems to be that if the roots are damaged and exposed, they will sucker. In some years they produce a mass of white fruit that is edible and is widely used as a citrus flavouring in cooking. The fruit contains from 1-4 small black seeds. The leaves can be crushed for a nice citrus scent. This tree grows almost anywhere except poorly drained heavy clay. It is a great plant for the home garden or farm and is an excellent plant for riparian work.
ELAEODENDRON AUSTRALE var AUSTRALE – Red Olive-berry, Olive Plum (Formerly Cassine australis). The name Elaeodendron is derived from the Greek word Elata which means Olive, Dendron which means Tree. The word Australe is derived from the Latin word Australis which means Southern.

The Elaeodendron is a small tree up to 8m tall and is very decorative when grown in the open. Although they can be ungainly teenagers, patience is rewarded by very nice mature trees. The female trees are very attractive in flower and in fruit.

This species is fairly common in remnant dry rainforests and grows from Tuross Head on the NSW South Coast to Windsor Tablelands in Queensland. In the Hunter, it has been recorded from Belmont, Scone, Murrurundi, Cedar Brush, the Allyn & Williams Rivers, Tabbil Creek headwaters, Gloucester, Monkerai and Myall Lakes National Park. Until recently it was regarded as difficult to germinate with only around 1% success rate and this may take up to 7 months to come to fruition so the plant is not widely available. Des from Tabbil Creek usually brings me ripe seed every year but last year he was late and bought me seed encased in leaf mulch. The acidic leaf mulch had eaten away all the flesh and we had the best germination ever. This year when seed arrived from the Gloucester and Monkerai area I put the ripe seed through a blender prior to sowing and I have achieved 30 – 40% germination success in just 2 ½ months.

ARCHIDOMYRTUS BECKLERI – Small Leafed Myrtle. This is a beautiful shrub that has an equally beautiful flower and I can never understand why it is not more widely grown. It grows to about 5m under cultivation and has graceful arching branches and neat shiny leaves. The fruit is reddish yellow to orange when ripe and as a bonus it is edible although it is a little crunchy! This shrub will grow almost anywhere that it can get a foothold and prefers poorer soils. It can struggle in situations where it is subject to hot summer sun so the cooler protected corners are best. In the local area it has been recorded from the Allyn & Williams Rivers, Barrington Tops, Chichester State Forst, Jerusalem Creek, Tabbil Creek headwaters and Pilcher Mountain.

BRACHYCHITON DISCOLOR – Lacebark or Pink Kurrajong. Also known as the Lace Kurrajong, Scrub Bottle Tree, White Kurrajong, Hat Tree and Sycamore. This is another beautiful tree that can grow to 30m high in forested areas but in the open grows to about 12m. It is a glorious wide spreading shade tree that will grow in most soils providing they are well drained. It is regarded as being evergreen but it does drop all its leaves just before it flowers. The dusky pink flowers are very large and conspicuous and are borne on the ends of the branch which produces a magnificent display. The seeds of the
Lacebark were roasted and eaten by the Aboriginal people. It occurs naturally in the areas North of Paterson through to Mackay in Queensland.

The lacebark is closely aligned with the better known Illawarra Flame Tree, **BRACHYCHITON ACERIFOLIUS** and the Kurrajong, **BRACHYCHITON POPULNEUS**.

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The Firewheel tree **STENOCARPUS SINUATIS** is a very hardy and attractive tree but it is not native to the Hunter Region; however its cousin **STENOCARPUS SALIGNA** or Scrub Beefwood is native to the Hunter. For some reason this tree is also called the Red Silky Oak in reference to the dark red timber it produces. Its flowers are pure white and fragrant. This is a highly variable species with some forms growing 20 m high and other forms grow to around 3m only and are more shrub-like. The smaller forms are generally very floriferous. We have collected both forms locally, the taller form from Tabbil Creek and the more compact form a few kilometres away as the crow flies at Bingleburra. The timber is soft when first cut but hardens on drying. It occurs naturally from Batemans bay on the NSW South Coast to Maryborough in QLD. We usually produce this one by seed but we are trying to produce the compact form by cutting as we think this will be an ideal garden shrub.

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The Genus **WATERHOUSIA** or Weeping Lilly Pilly has gone through an identity crisis for a number of years. It first started out as Eugenia ventenatii but then changed to Waterhousia florabunda and now is has been renamed **SYZYGIUM FLORABUNDUM**. Common names include Weeping Myrtle, Weeping Eugenia, Weeping Lilly Pilly and Weeping Satin Ash. This species occurs naturally from the Williams River in the Lower Hunter Valley northwards to Mackay in QLD. It is common on nearly every major stream on the NSW coast. There is very little variation in the
plants regardless of their location. They usually grow in dense stands on riverbanks but are seen at their best when they are widely separated. They are a densely foliaged tree with a wide spreading and strongly weeping crown. They can be a bit overpowering for an urban backyard but are an elegant addition to the larger rural block or to riparian situations. At Riverdene we have developed a compact densely foliaged form which also has finer leaves that is suitable for the urban backyard or as a smaller specimen on a rural block and is a great windbreak tree.

(RIGHT: Waterhouisia Allyn Fine)

**EUPOMATIA LAURINA – Copper Laurel.** This is one of the most interesting plants we have because firstly, it is one of the most primitive plants we have and secondly it is pollinated by beetles. It produces large flowers that are almost overpoweringly fragrant. The flowers are unusual in that the sepals and petals are fused together as one unit and fall as one unit. The fruit is edible and has an unusual sweet flavour with a lingering after-taste. The Eupomatia is widely grown in Victoria but does not seem to have the same popularity in NSW. It has a dense bushy habit and glossy leaves that take on strong coppery tones in winter. The plants can be damaged by heavy frost so it is best in protected sites in frost prone areas or even as an indoor plant. They are not particular as to what soils they grow in providing they are well drained. They usually grow from 4-10m high and 1-2m wide. It is a most unusual plant that pops up in the most surprising places. On the road to Eaglereach at Vacy, they are growing in pure rock scree in full sun. It occurs naturally from Eastern Victoria through to New Guinea.

**FICUS SPECIES-** The genus Ficus or native Figs provide us with a whole palette of plants from the giants like the FICUS MACROPHYLLA, the Moreton Bay Fig and FICUS RUBIGINOSA, the Port Jackson Figs to smaller growing ones such as FICUS CORONATA the Sandpaper Fig. There are another 2 Ficus that are frequently overlooked. FICUS OBLIQUA, the Small Leafed Fig can grow almost as big as her giant cousins and bears tiny fruit that is borne in masses and loved by birds and fruit bats. This variety is also favoured by Bonsai growers as it is very supple and can be bent into any shape. It grows from Mt Dromedary in Tasmania to the Torres Strait and across the top end of Australia to WA.

(FICUS OBLIQUA)
The second lesser known Fig is **Ficus Superba var Henneana** the Cedar Fig or Deciduous Fig. This species grows up to 25 meters which puts it halfway between the 12m Sandpaper Fig and the 60m Moreton Bay Fig. The fruit of the Cedar Fig is edible and the inner bark is sometimes used to make rope. In the rainforest it is usually tall and elongated but it also occurs in the dryer forests and rocky slopes where it develops a wide spreading habit. It has a very short deciduous period. It occurs naturally from Southern NSW to QLD and the Northern Territory.

**Hymenosporum Flavum** – Native Frangipani or QLD Frangipani. This is a fairly common species that is hardy and fast growing and is grown over a wide area. There are magnificent examples of this tree growing at Tamworth. The name Hymenosporum refers to the winged seed and flavum is from the Latin Flavus meaning yellow. It occurs naturally from the Grose Valley in the NSW Blue Mountains to Cooktown in Northern Queensland and then again in New Guinea. Because of the winged seed it comes up in the most surprising places. This is an excellent plant for gardens and general planting.

The Koda Tree **Ehretia Acuminata** is another local tree that is extremely hardy. It is also known as Silky Ash and Churnwood. This is one of very few Australian native deciduous trees. It is native to areas from Bega on the NSW South Coast to Cairns in Northern QLD and extends to New Guinea, China, Japan and India. In our local area it has been recorded from Belltrees, Watagan, Newcastle, Kelehears Brush, Cedar Brush Reserve, Stewarts Brush, Allyn River, Paterson River, Williams River, Tabbil Creek, and many other areas. These days though it is hard to find a large mature specimen as they were valued for furniture making, cabinet work and lining. The timber is light brown, firm and course grained. It resembles the wood of an English Oak and is very easy to work. The flowers are small white and sweetly scented and are followed by sprays of orange yellow fruit that are edible with a sweet taste.

**Tristaniopsis Laurina** – Water Gum or Kanuka Box. This is a well-known tree along our waterways. It is slow growing but forms a mass of fibrous roots that are excellent soil binders. Large trees tend to lay over in large floods but the roots hold the tree in place. It is often used in landscape projects due to the density of the foliage and the dark green leaves with burgundy new growth. It is often used as a feature plant or as a hedge. Most years it produces a mass of yellow flowers that are clustered along the branches during December and January. Despite being a riparian species, it is very drought hardy as well.
Whilst the Water Gum is a valuable tree, its sister the Hill Water gum or Hill Kanuka is always overlooked. **TRISTANIOPSIS COLLINA** is almost identical to is better known cousin and there are very clues to differentiate between the two apart from a few minor botanical differences. The biggest hint is the locality – if you climb Mt Allyn in the Allyn River State Forest which is about 800m above the river, you will find yourself in Hill Water Gum territory. It does not like growing on the river bank, but it is an even better species for general planting. Both species of Tristaniopsis were widely used for Tool Handles, mallets and Golf Club Heads.

**SANNANTHA CRASSA - P.A.W Form (Paterson Allyn Williams FORM)** Sannantha is the new name for some of the old Baeckia species. When I originally found this plant, I fell into the trap of just going on the overwhelming scent of camphor from the crushed leaves to identify it as Baeckia camphorata. This lead to a prolonged discussion with Dr Peter Wilson who was the Principal Research Scientist, Science and Conservation at the National Herbarium of New South Wales about the identity of the plant. Sannantha crassa occurs as far South as Mt Royal and Dr Wilson and I agree that whilst the plants from the P.A.W. are allied to Sannantha crassa, they are different. Dr Wilson believes that when they have time to work on it, they will nominate it as a new species or a variety of Sannantha crassa. It is very rare and therefore endangered. So far we have recorded the plant from Jerusalem Creek (Below Chichester Dam), 3-4 plants west of Gresford on Private Property, 3 plants at Eaglereach, 2 specimens on Bucks Creek at Vacy, 3-4 plants south of Martins Creek quarry and a small group near the State Forest at Clarence Town. These plants are all in danger from fire and accidental or deliberate clearing, the Eaglereach specimens fell victim to fire a while back.

**LOMANDRA LONGIFOLIA CMU FORM (Crazy Mixed Up Form)** A few years ago Singleton Landcare engaged me to do a flora survey of several areas in their zone which included sites east of Singleton towards Gresford, Mirannie & Glennis Creek, Lambs Valley, Elderslie, Howes Valley and Putty. We did a detailed survey of the two creeks in the Putty area and found a group of Lomandra on Putty Creek. My first reaction was the assumption that they resembled Lomandra hystrix but that they were out of place given that the growing zone for Lomandra hystrix does not extend further south than Tocal. A closer look revealed it had 2 types of leaves, one with the identifying aspects of Lomandra longifolia and the other with the identifying aspects of Lomandra hystrix. I muttered something along the lines of “crazy bloody mixed up plant” and so CMU - Crazy Mixed Up Form was borne. I went back later in the season to collect seed and was then invited to visit a property on the western side of McCullys Gap at
Muswellbrook – I cannot remember the name of the mountain but it was steep and high – the lower levels carried the regular Upper Hunter Form of Lomandra longifolia but when we reached the top we found our beloved CMU Form and I was delighted to know the Putty plants were not the only ones. This is a magnificent plant under cultivation growing up to 1.25m tall and is an excellent low screen or windbreak plant.

**LOMANDRA FILIFORMIS SOBOLIFEROUS FORM** -The word *soboliferum* comes from the Latin soboles meaning “offshoots” and refers to a species bearing creeping, rooting stems. While working in the Putty Valley I the boundary of one property extended over an escarpment comprising a long line of various sandstone levels. I was warned that the escarpment could be a bit hazardous with sheer rock faces that sported the occasional ledge that had up to 100mm of sandy soil and decaying sandstone on them. These sites were very dry but most were covered in a carpet of Lomandra filiformis – the *Wattle Mat Rush*. The land owner consented to me digging up a few small clumps from the outside edge of one of the carpets which I brought home and potted up. Unfortunately they did not like the TLC they received at the nursery and one by one they succumbed except for one that thrived. It was obvious that it was not the usual form and whilst it spread like the Putty variant, it did so slowly and strongly. It did so well that I planted it out and fortunately it was a female and bore seed – I have no idea where the male pollen came from but we are now slowly building up stocks. It is an ideal plant for erosion control.

**EUCALYPTUS SPECIES AFFINITY AGGLOMERATA** – This is an entirely new species for the Hunter Valley and has not been named as yet. It occurs in a very small area in the Hunter Economic Zone (HEZ) that borders Kurri Kurri. The area boasts other stringy-barks like Eucalyptus eugenoides and Eucalyptus capitellata but this variety stands out. It is tall and straight and would have provided excellent pit-props for the Richmond Vale Colliery. Before HEZ got started it was necessary to conduct a Flora Survey and the firm that did the survey simply recorded it as Eucalyptus agglomerata because they had no idea what else it could be. When Riverdene was awarded the contract to collect seed for the project, we questioned the species list and advised the firm that commissioned the seed collection that Eucalyptus agglomerata does not occur this far North? They provided the coordinates of the specimens and I located the trees in question and confirmed that they were definitely not Eucalyptus agglomerata. We were also working hand in hand with National parks and Wildlife and they took samples for analysis. The reply came back that as expected, the sample was not Eucalyptus agglomerata but it was allied to it. A very rare species indeed.

**LEPTOSPERMUM ARGENTEUM – Barrington Tops Tea Tree.** This species has only been recognised in the past 20-30 years. It is recorded as growing along shallow streams on the Barrington Tops Plateau but we have also found it growing on the upper reaches of the Paterson River. On the plateau it is usually only a tall shrub and at most would be 3m high. At lower elevations when it finds a suitable site that is well drained but moist for the majority of the year, it can reach 4-5m at least. The plants produce a mass of white flowers in spring. It makes an ideal screen or windbreak plant if you can provide the right conditions. So far very few people are interested in it. It is frost hardy but not drought hardy.
**ALLOCASUARINA GYMNANTHERA** – This species is quite common in the Bywong area of the Upper Hunter where it seems to thrive on what I call the serpinticious clay soils that occur in that area. The reason that I have included it in this list of plants is because although it is not exactly a rare plant, it is one that is commonly overlooked. Many people seem to mistake it for a young plant of the larger growing Allocasuarina verticiliata (formerly A. stricta) which can reach 10m at maturity. Allocasuarina gymnanthera commonly only grows to around 2m high with the occasional specimen reaching 5m. The female flowers are quite attractive and they produce very large pods or cones in comparison to the size of the tree.

**SENNÁ ACCLINIS** – This species does not have a widely used common name but some are now calling it the Brush Senna. The word acclinis comes from the Latin and means leaning, sloping, resting or inclined. This species grows on the margins or rainforests and is reported to be under threat due to the clearing of rainforest areas, however I think that the situation is not quite that simple – a few years after the road was built between Bingleburra and Dungog, these shrubs were highly conspicuous from the road. I bought some home before I realised what it was and it self-seeded itself so much that it almost reached weed status. Meanwhile on the roadsides around Mt Richardson, the Senna acclinis has almost vanished but it is still common in less conspicuous areas. It is still common at Monkerai and in the Trevor Tops State Forest area. These areas are fairly open forest and at present there is not a great deal of thick undergrowth. It is also present in some areas around Wyong and it often presents a problem for bush regenerators due to its similarity to the introduced species. Senna acclinis occurs from South Eastern QLD through to the NSW Central Coast. When I initially began to establish a rainforets area on the old farm flats behind the nursery, I planted both Senna odorata (pictured to the right) and Senna acclinis (pictured above) along either side of the access road. They are interplanted with predominantly Eucalyptus microcorys. For the first two years, both varieties were badly burnt by the frost but now as the Tallowoods get taller and broader, they are surviving much better.

**EUCALYPTUS GLAUCINA – Slaty Red Gum.** (pictured at left) This species is on the RoTAP list (Rare or threatened Australian Plants) because of the small area of natural occurrence and the possibility that a local natural disaster such as a bushfire could severely
compromise the species. It occurs from Gloucester region and south to the Pokolbin area. It is a species of sporadic occurrence and favours heavy clay flats and usually grows with a slight lean although many locals will be aware that paddocks that are shut up for a few years will experience prolific regeneration of this species. It is closely allied to Eucalyptus tereticornis, the Forest Red Gum, to the extent that I am sure that some trees in the Allynbrook area have hybridised with Eucalyptus tereticornis. The plants growing at Pokolbin are slightly different to those found at Gloucester or Gresford. When it flowers, it usually flowers in mass but at 30m it is probably not a good choice for the urban backyard, however on the larger rural block its slaty grey leaves, white trunk and rounded canopy make a nice visual statement. As a timber tree, this species is of little use but old dry wood burns very well in the fireplace.

The mystery of **Eucalyptus Seeanna – Narrow Leafed Red Gum** (*syn Euc. tereticornis var linearis*)

This species is recorded as growing north of the Hastings River at Port Macquarie, however there is a very old tree growing near Old Duninald at Paterson. I have never fussed too much about it until a few weeks ago when Bill Dowling arrived with some plant material for identification from a tree growing on Dungog Common. This specimen also keyed out to be Eucalyptus seeana and to add to the mystery I have also recorded it from a property just north of Monkerai. Exactly how these 3 specimens came to occur so far outside their natural area is unknown. The specimen at Paterson could have been deliberately planted, however the other 2 species are in natural woodland that has not been subject to any remediation? One of the outstanding features of this 40m tree is the beautiful white trunk.

**Santalum obtusifolium – Sandalwood or Coastal Quandong**

This species is not all that rare but that depends on the area. While it is classed as the Coastal Quandong, it is not strictly coastal. In the Hunter Valley it occurs more frequently in the Western Hunter. It does occur around the headwaters of Tabbil Creek and we have just recoded it from another property at Monkerai and there may well be more plants in that area. Santalums are root parasites, especially when they are young. In past trials we have attempted to provide Kangaroo Grass as a host but this did not prove to be successful. The latest concept is to provide them with Lucerne as a host plant and current trials seem to be indicating a good rate of success. It is an open shrub growing to 2.5m high. Very little is recorded about the wood uses or food value of this particular variety but Santalum’s in general are a favourite food of the aboriginal people. There is also some evidence to suggest that it may have medicinal qualities including the provision of relief from pains, aches and constipation.

**NOTE:** A few of our customers have advised that they have been buying Black Bean Trees from markets that have been promoted as ideal shade and fodder trees for stock – the Black bean is also known as the Moreton Bay Chesnut and the seeds are toxic to humans and stock. The aboriginal people had a method of preparing the seeds including prolonged washing and other treatments to remove the toxins before they could be ingested. It is a great tree but please be careful where you plant it.