



Thicket to Treasure

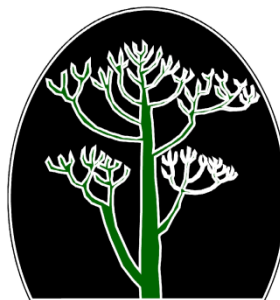
A selection of trees and shrubs of the Mesic Thicket

Ryana Johnson, Elizabeth Milne & Rina Grant-Biggs



**forestry, fisheries
& the environment**

Department:
Forestry, Fisheries and the Environment
REPUBLIC OF SOUTH AFRICA



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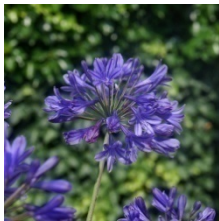
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Welcome to paradise!

Why is Thicket so special? The Subtropical Thicket Biome (previously known as Albany Thicket) is one of the most ancient in the world, and some of the plant lineages go back 30 - 40 million years. Plants from the Thicket are tough, water wise, and beautiful. They are grown as features all over the world, including agapanthus, strelitzia, plumbago and spekboom. Unlike any other biome, Thicket plants intertwine with each other and grow together rather than competing with each other as they do in other places. They form an impenetrable, often thorny mass and indeed some species cannot grow unless they have the protection of other plants.

The Thicket biome is part of the internationally recognised Maputaland-Pondoland-Albany hotspot for biodiversity, and the Albany Centre of Plant Endemism. Bathurst (and many other towns) falls into the Albany Thicket Biome, which is one of nine biomes in South Africa. A biome is a specific geographical area that is home to unique combinations of plants, animals, birds and insects who depend on each other for survival - in other words they are the havens of biodiversity. Thicket occurs in areas where rainfall has a 50/50 summer/winter split. Once the ratio of rainfall exceeds 60/40, Thicket begins to break up into mosaic patches as it meets other biomes.



Agapanthus



Strelitzia



Plumbago



Spekboom

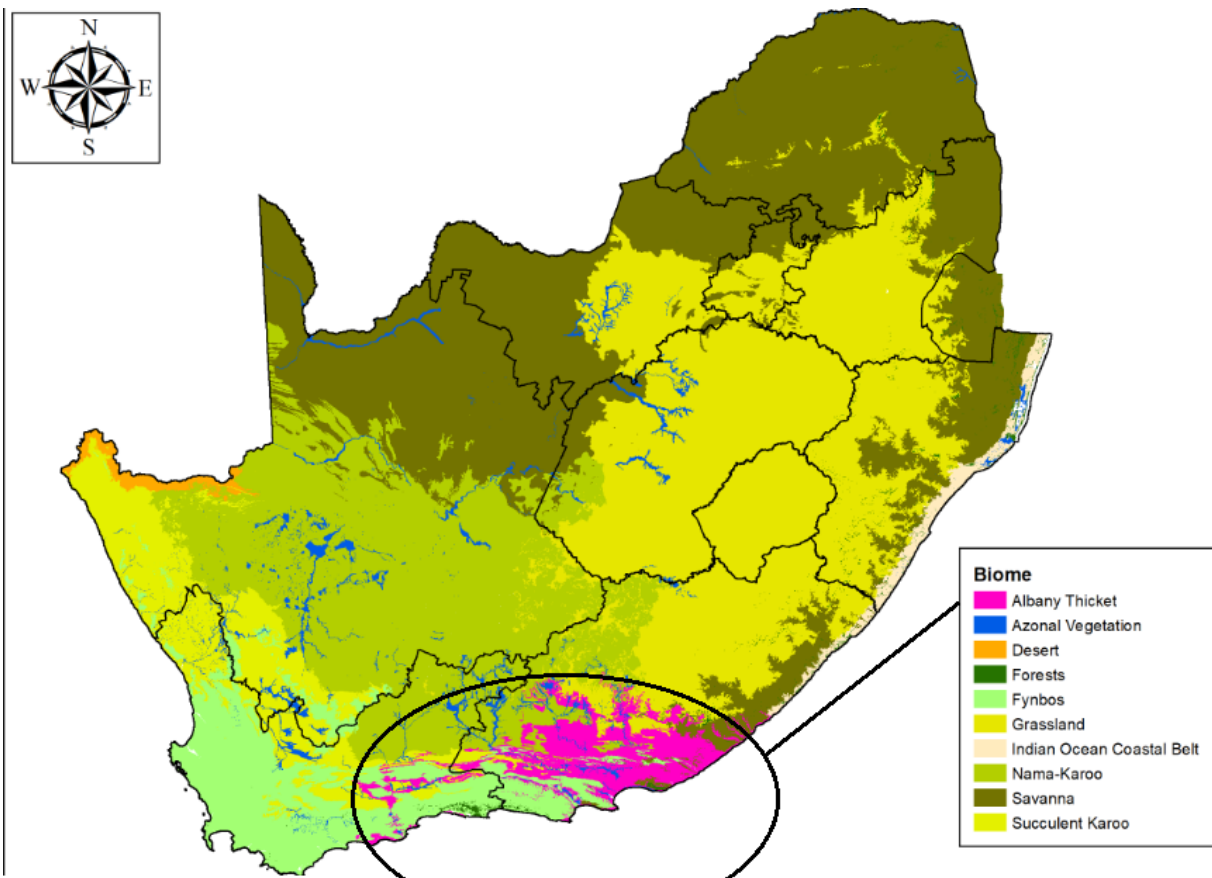


Figure 1: Map of biomes in South Africa

Map credit: Nicholaus Huchzermeyer

What is this booklet about?

This booklet showcases some of the indigenous trees and shrubs that grow in the Subtropical Thicket, and aims to help you identify some of the Thicket plants you may already have growing in your garden. It may also give you some ideas about what species might do well if you plant them. If you live in a Thicket area, you may find this rewarding when planning your garden. .

Thicket is very diverse, and there are a number of subtypes to the biome as can be seen in the map below. The four main subtypes are Dune thicket, Mesic Thicket, Arid Thicket and Valley Thicket. Each subtype has distinct plant species, although there may be crossover from one subtype to another. The Thicket biome also shows considerable variation in plant species distribution within in each sub-type, and where Thicket forms mosaics with other biomes such as Karroo or Grassland, there is even more variation and biodiversity.

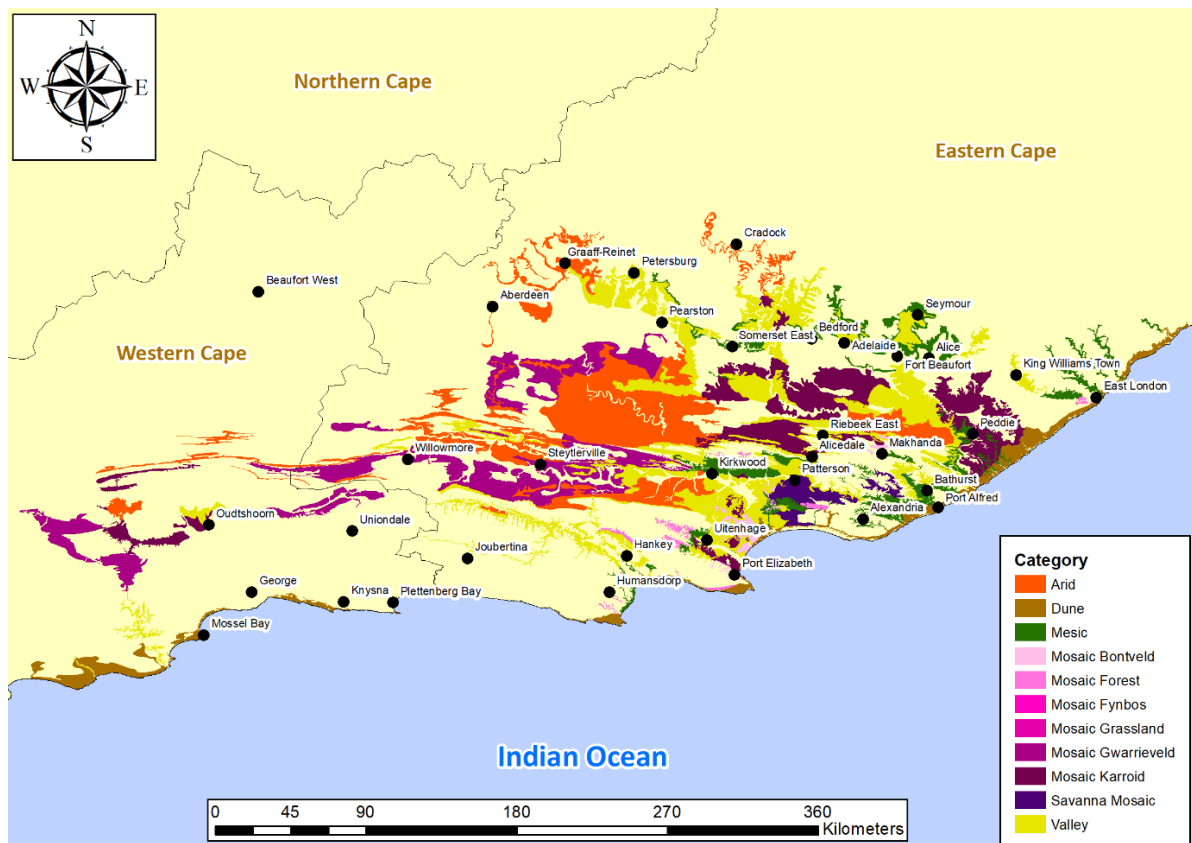


Figure 2: Map of the Thicket biome subtypes

Map credit: Nicholaus Huchzermeyer

Why does Thicket matter so much? How does it benefit us?

Although Thicket is an ancient biome, it is very vulnerable to being over-used for grazing and browsing animals, and disturbance of the plants by human activities such as bush clearing. Once Thicket has been removed or transformed, it does not readily re-establish without active restoration efforts. Thicket trees and plants play many important roles in the balance of nature, including:

- **CARBON:** They store carbon, providing an important service as part of reducing carbon dioxide in the atmosphere, so planting trees will help reduce your carbon footprint. In fact, keeping existing trees and bushes on your property is already helping reduce reflected sunlight, increase humidity and maintain air temperatures as well as storing carbon
- **SOIL STABILITY:** Their roots stabilise the soil and prevent soil erosion during droughts and the rainy season - so we need to spend less on insurance and landscaping

- **SOIL FERTILITY:** Their leaves feed the soil when they drop and decompose, improving the soil's fertility: they make compost naturally
- **HABITATS:** They provide a habitat for insects, bird and animals, and provide food for these creatures as well as millions of insects and micro-organisms
- **GROUND WATER INFILTRATION:** Some trees concentrate rain, increasing the amount of water that penetrates the soil, saving us money for irrigation and restoring ground water
- **BIODIVERSITY:** Biodiversity is the complicated and delicate way that living creatures, plants and natural systems work together to keep the planet healthy, and us with it.

What if there are no trees in my garden, "only" bush?

In nature, young trees often grow in the shade of bushes until they are strong enough to withstand the elements. In fact, sometimes the trees start out looking very "bushy" themselves. Some bushes or shrubs can grow very large and tall, and end up looking like small trees as a result of pruning by animals or people.



In the Thicket, shrubs and bushes also play an important role in providing food and habitats for insects, birds and animals. In fact, the dense bush is exactly what Thicket is: a thorny, tangled shelter and haven of biodiversity. So look carefully at what is growing in your garden, as each indigenous plant has a role to play.

Where can I see these trees and shrubs?

Once you begin to recognise Thicket plants, you will see them in many places. They are often cultivated in gardens, and grow wild all over the Eastern Cape and beyond (see figure 2.). At the end of this booklet, there is a map of the Bathurst Treefinder Trail, an exploratory drive you can do to see mature specimens of some of the species in this book.



Look out for the Treefinder Trail icon (☆) in the pages that follow.

Waters Meeting Nature Reserve in Bathurst, Thomas Baines Nature Reserve in Makhanda, Addo Elephant National Park, and many other Eastern Cape nature reserves also showcase some of these species. There are also beautiful specimens in Kirstenbosch National Botanical Gardens.

Bladder-nut, Umtenatane, Swartbas

Diospyros whyteana



Photo: Rhulan Heunis

Why the name?

Deriving from the Latin *Deus* for godly or celestial. *Pyros* is variously presented as “fruit”, “pear”, “grain”, “fire” or “wheat”. *Whyteana* honours Alexander Whyte (1834 – 1908), a Scottish explorer. At least nine isiXhosa names are on record – none of them explained – including Insanzimane, Intsazimane, Umbongisa, Umgungunga, Umkhaza, Umkhaze, Umtenatane, Umtenatena and Umtshikivane

How to identify?

This is mostly a small tree growing on the forest margin. They are attractive trees with very dark green shiny leaves, with russet hairs on the edge of the new leaves. Dark grey to black bark, smooth on young trees and becoming rougher as the trees age. If they have a near-by male partner, female trees also bear interesting berries, bright red when ripe, enclosed in papery bladder-like fruit capsules that persist on the tree long after the fruit has fallen.

Why have the tree in your garden?

They grow equally well in full sun or partial shade. The scented, creamy flowers attract insects, including honey bees, and the edible but not very interesting fruit is popular with a number of birds.

What is it used for?

In the African Tree Essences collection, Bladder-nut is seen as the tree of self-knowledge. Perhaps it alone understands the range of names and traditional uses it enjoys. Traditional uses relate mostly to urinary, fertility and potency problems. The seeds have been roasted and ground to make a pleasant tasting but caffeine free substitute for coffee. Bladder-nuts mainly occur as a forest edge or under-storey plant in a more or less coastal band from Cape Town to Ethiopia. They have been cultivated in Europe since the 18th century.

Blue bush, Umbhongisa, Bloubos

Diospyros lycioides



Photo: Rhulan Heunis

Why the name?

Lycioides means resembling *lycium*, another ancient name for a medicinal plant found in Southern Anatolia. There is no recorded explanation for the isiXhosa name Umbhongisa

How to identify?

It is very important to distinguish *Diospyros lycioides* from *Diospyros dichrophylla*, because *D. dichrophylla* is poisonous. *Diospyros lycioides* has a more blue appearance and leaves have a very fine quilted network of veins. The berries are small about peanut size. *D. dichrophylla* has narrow green leaves and the fruit is the size of a cherry tomato with a distinct calyx.

Other shrubby *Diospyros* species that occur in the Eastern Cape and in and around the Albany Thicket biome include *D. natalensis*, *D. scabrida*, *D. simii*, and *D. villosa*.

Why have the tree in your garden?

Blue bushes are tough, adaptable, drought and frost resistant and make versatile garden plants, whether for screening, as features, in containers or for bonsai. They do not have aggressive roots, although they can be difficult to eradicate because they naturally create thickets of new shoots around the parent stem.

What is it used for?

At least 22 different medicinal uses are recorded for the plant's leaves, stems, bark and roots or root bark. A very widespread use of Blue bush is for dental care.

Blue bush fruit (on female trees only) is edible by birds, animals and humans, and has been fermented to make alcoholic beverages. Dried, roasted and ground, the seeds make a caffeine-free coffee substitute. Quinones in the roots provide a yellowish dye that is used for colouring grasses and palm fronds for basketry.

Boer bean, Umgxam, Boerboon

Schotia afra (Karoo Boer bean)



Photo: Pods - Mike Powell, leaves and flower - Ryana Johnson

Why the name?

It's said that the "Trekboere", probably guided by their Khoekhoen workers, used to eat the seeds of various *Schotia* species.

How to identify?

These trees have striking red flowers. The leaves are small and compound - many leaflets on one leaf stem. The pods are strikingly broad and flat. Many of these trees in this area are small and grow among other tree species.

Why have the tree in your garden?

The spectacular red flowers and broad pods make this species attractive in the garden. The tree does not have thorns so it is easy to work and play next to it. These trees drip with nectar in spring and early summer and thus attract honey bees, butterflies, sunbirds and a host of other creatures. Once established, the trees are tough, trouble free and long-lived. They're mainly evergreen, with a possible brief semi-deciduous period in frosty areas or during a very dry year. .

What is it used for?

The barks are rich in tannins and have therefore been used to treat conditions like diarrhoea. They also yield a reddish or red-brown dye. More traditionally, bark and root decoctions are used to "purify the blood" and "strengthen" the user. The beans can be pounded into flour.

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DMS location S 33°31'50.952" E 26°48'1.835"

Bush-cherry, Umphunzisa , Witbos

Maerua cafra



Photo: Ryana Johnson

Why the name?

Maerua may be from the Arabic *meru* (high). It is also suggested that the name (Witbos in Afrikaans) is for the delicate, spidery, white, scented flowers that appear in profusion above the leaves in spring, turning the bushes white.

How to identify?

Easiest to identify when covered in white flowers from August to October. The flowers are made up almost entirely of a mass of pincushion- like, long green-tipped stamens unsupported by any petals. The leaves are compound, having groups of three, four or five leaflets, usually leathery but almost succulent in coastal populations. The fruit is roughly cherry-sized and remains green when ripe. It develops a jelly-like flesh containing a multitude of seeds.

Why have the tree in your garden?

Apart from the attractive white flowers, the fruit is sweet smelling and attractive to birds. Several species of butterfly feed on this shrub or small tree which is also browsed by game and, occasionally, by domestic stock.

What is it used for?

The bush-cherry is part of the caper family (*Capparaceae*) or yet maybe the cabbage family (*Brassicaceae*), the two families being closely related. Both groups produce mustard oils, very interesting compounds with potential anti-fungal and anti-carcinogenic properties being investigated by the pharmaceutical industry. Umphunzisa (also Umqomoqomo) is recorded as having traditional medicinal uses. Given the chemical characteristics of the family, this is not surprising. However, exactly what uses and exactly how it's used are less clear from the records.

Cabbage tree, Umsenge, Kiepersol

Cussonia spicata (Common Cabbage tree)



Photo: Rina Grant-Biggs

Why the name?

It is suggested that the Afrikaans name Kiepersol has Portuguese or Indian origins. Cabbage tree might refer to the taste of the edible water-rich root. Umsenge, in both isiXhosa and isiZulu, is the name not only for *Cussonia* species but also for the False cabbage tree, *Schefflera umbellifera*.

How to identify?

This tree has a unique growth form. It is very common in the wooded parts of Bathurst. The leaves are large and deeply divided.

Why have the tree in your garden?

They make a striking feature with intriguingly shaped and textured trunks and amazing leaves. Their flower spikes are also extraordinary. Insects love them, and birds follow the insects, followed by other birds that eat the fruits. The trees also provide forage for browsers.

What is it used for?

Traditional medicinal uses include the treatment of infections, inflammation and malaria, and the leaves are a remedy for indigestion.

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DMS location S 33°31'22.332" E 26°48'29.34"

Cape ash, Umnyamathi, Essenhout

Ekebergia capensis



Photo: Berries - Rhulan Heunis, bark - Mike Powell, leaves - Ryana Johnson

Why the name?

Cape ash is a member of the mahogany family, whose timber looks similar to European Mahogany. Umnyamathi is also known as “umgwenya wesinja” or “dog plum”.

How to identify?

This often huge, single trunked tree is most easily identified when covered in cherry sized fruit, which turn red when ripe. The leaves are compound and spirally arranged towards the tips of smaller branches. Flowers are pleasantly scented (male and female on separate trees) although quite insignificant.

Why have the tree in your garden

It makes an excellent street tree or garden specimen where shade is needed. It not only attracts many birds but is also great for feeding mammals. Dog plums are edible for humans too, but not particularly palatable, tasting a bit like onion.

What is it used for?

Traditional uses include use of the bark as an emetic, and as a remedy for dysentery and heartburn, also, powdered, as a topical treatment for abscesses, boils and acne. The roots are used for chronic coughs, dysentery, gastritis, headache and scabies.

☆ DD location -33.50225, 26.82643
DMS location S 33°30' 8.1" E 26° 49' 35.147"

Cape beech, Isiqwane sehlati, Kaapse boekenhout

Rapanea melanophloeos



Photo: Rhulan Heunis

Why the name?

The grain in the hard wood of the Cape beech, apparently resembles that of the European tree. Isiqwane sehlati (protea of the forest) is also known as Udzilidzili or Igcolo, and, in “muthi” circles, often by its isiZulu name: Umaphipha. The similarity to proteas is only in the arrangement of groups of leaves at the ends of branches

How to identify?

The stem of young trees tend to be knobbly, something like ostrich skin. The sturdy leaves are single, dark green above and lighter below and often have red in the leaf stem. The flowers and fruit grow below the leaves directly on the stem and are quite small.

Why have the tree in your garden?

Flowers of the Cape beech are small, and the fruits soft, round and deep purple when ripe. They are popular with baboons, monkeys, bush pigs and many species of birds. The bigger tree gives a deep shade, somehow seeming more dense because of the very dark green colour of the leathery leaves. It's a good tree for coastal areas, being very wind resistant. Once established, the tree is also quite drought resistant, but will not withstand any frost. Best not planted near paving as it sends up suckers.

Rapanea gilliana (Dwarf cape beech) is endangered. More shrub than tree, it occurs only in a fairly small area of the Eastern Cape, roughly between St Francis Bay and Port Alfred, mostly in coastal dunes and on rocky soil. Invasive alien vegetation and habitat loss to agriculture and coastal development are the major threats.

What is it used for?

In traditional medicine, Umaphipha can be used as a kind of “aspirin” – sometimes employed when the healer or diviner is at a loss for what to do. A bark decoction functions as an emetic – useful where induced vomiting might be seen as “cleansing the blood” or even “warding off evil”. It appears as an ingredient in many medicinal and magical mixtures.

Cape chestnut, Umbhaba, Wilde kastaiing

Calodendrum capense



Photo: Leaves - Mike Powell, tree and flowers - Ryana Johnson

Why the name?

The English explorer William Burchell thought that its fruits looked rather like the European horse chestnut.

How to identify?

This tree is easiest to identify when covered in pink flowers. In the field it is most common in river valleys where the pink flowering trees stand out among the other vegetation.

Why have this tree in your garden?

It really is one of Africa's most beautiful trees, and this is a prime motivator to plant it in gardens and along street sides where its non-aggressive root system causes no problems. The trees attract butterflies, other insects and birds, including the African olive (Rameron) pigeon. Monkeys also eat the seeds.

What is it used for?

Also referred to as ummemezi, it is traditionally used as a charm to secure the attentions of a desired partner. The black, bead-like seeds are also regarded as lucky, being carried by hunters to ensure success in the chase. The seeds also yield yangu oil, a rich moisturising oil that can be used to make soap, and also nourishes skin and hair and protects against UV radiation.

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DMS location S 33° 30' 1.8" E 26° 0' 0"

Cape onionwood, Ummemezi, Kaapse uiehout

Cassipourea flanaganii



Photo: Tony Dold

Why the name?

Onionwood? The fresh wood smells of onion. *Cassipourea*? Apparently derived from a Guyanese vernacular name. *Cassipourea flanaganii* is specifically named after Henry George Flanagan (1861 – 1919), a citrus farmer and plant collector from the Komga district

How to identify?

It is a small tree with glossy dark green leaves with translucent veins. The flowers are small, white to cream with a green centre and intriguingly feathered petals.

Why have the tree in your garden?

Cape onionwood occurs naturally on forest margins in only a small part of the Eastern Cape, is endangered. There has been a decline of at least 50% of the wild population in the last 50 years, and the trend is likely to continue because of habitat destruction and over-harvesting for the traditional cosmetic market.

What is it used for?

Powdered bark, mixed only with water, is made into a paste and is applied like calamine lotion to relieve sunburn. In many areas of Africa and Asia, a lighter skin tone is associated with good luck, better employment opportunities, sexual attractiveness and success in a number of other desirable areas. Powdered Ummemezi bark, mixed with soda ash and milk, produces an effective skin lightener. Unfortunately, this combination produces a hydroquinone that does bleach the skin but can also result in ochronosis – a permanent blue-black staining/scarring. Traditionally, the tree is one of those believed to attract lightning. Streetside plant traders will cache their stocks of bark if there is thunder about, and women with the cosmetic on their faces will remove it if there is the possibility of lightning. Nevertheless the bark is commercially valuable as there is huge demand.

(White) Cat's whiskers, Umqwaqwanam, Tontelhout/Harpuisblaar

Rothea (was *Clerodendrum*) *glabrum*



Photo: Wikimedia Commons

Why the name?

Clerodendrum is from the Greek *kleros* chance or fate and *dendron* a tree. *Rothea* originates from the Malayalam (the language of Kerala in South-west India) *Tsjerou-theka*, or “little teak”, “latinised” to *Rothea*! In isiXhosa the tree has at least six names: iNunkisiqaqa, umQangazani, umQwaqwanam, umQwaqu, uQangazana, Uluvethe. The first of these means smell of a skunk, but the Venda name equates the smell with less obnoxious cow dung.

How to identify?

The flowers grow in tight bunches at the end of twigs above the leaves. The stamens are very long, sometimes curling, and have given the tree one of its several names – Cat's whiskers. The berry-like fruit are also easy to spot and turn pale yellow when ripe. Dried fruit is still visible after July when the fruit is ripe. The leaves grow in whorls of three and are clustered towards the end of branches where they tend to curl downwards. The leaves smell strongly when crushed.

Why have the tree in your garden?

Dense bunches of tiny white to pinkish flowers appear on these pretty small trees, sometimes for months at a time during summer, attracting many insects. The flowers are usually sweet-smelling, reminiscent of verbena.

What is it used for?

Tontelhout refers to one of its many historical uses – starting fires. Other uses of the wood include medicine, construction, fish traps, carving and furniture making. Cat's whiskers is one of South Africa's “rain trees”. Sap-sucking insects, often *Ptyelus grossus*, cover themselves in foam as a protection against the sun, so-called “cuckoo spit”. Meanwhile the insects exude almost as much water as they ingest, sometimes enough to form puddles under the trees. Crushed leaves are used as an insect repellent and are said to be anti-convulsant and soporific. Infused as tea, they are taken for colic, coughs and colds. Infused in milk, the leaves are given to calves to rid them of intestinal worms. Boiled up, they are placed on wounds to prevent infestation by maggots.

Cheesewood, Umkhwenkwe, Kasuur

Pittosporum viridiflorum



Photo: Rhulan Heunis

Why the name?

Pittosporum is from the Greek *pitta* = pitch or sticky resin, and *sporum* = seed. Smallish, dark seeds that appear in late summer are covered in a sticky bright orange resin and are extremely attractive to a large number of bird species. *Viridiflorum* = having green flowers. Why the name? No-one explains! One assumes the lightweight, soft, pale wood reminded someone of cheese. Kasuur is thought to derive from the Dutch “kaarsuur” or “candle hour” and may relate to the fact that the honey-scented flowers are at their most fragrant in the evenings. Umkhwenkwe (alternatively Umfusamvu) is also unexplained.

How to identify?

This tree is very common around Bathurst and may be shrubby. The leaves are bright green and clustered towards the end of branchlets to form rosettes. The cream star-shaped flowers grow at the tips of branchlets within the leaf rosette. The fruit is conspicuous as bunches of yellow berry-like seeds standing out among the leaves. Bruised leaves smell resinous. The bark smells of liquorice or resin and tastes bitter. Bark wounds often exude a whitish resin that somewhat resembles melted fat.

Why have the tree in your garden?

Cheesewood is useful in the garden. It has an attractive shape, does not have an invasive root system and will grow in full sun or light shade, even in a pot on a patio. Flowers attract insects which attract birds, as do the seeds.

What is it used for?

Umkhwenkwe – mainly stem and root bark - has a myriad of medicinal and magical uses. Its use for various cattle diseases has been on record for centuries, and it is still used by some Xhosa stock farmers. Medicinal uses for people include treatment of headaches, respiratory difficulties, digestive problems and male infertility. It is also used as an aphrodisiac. Magical uses aid in divination and protect against witchcraft.

Coast coral tree, Umsintsi, Kuskoraalboom

Erythrina caffra



Photo: Tree -Francois Joubert, Leaves - Rhulan Heunis, flower -- Mike Powell

Why the name?

The flower colour is generally red, more orangey and very occasionally salmon-cream in the coast coral tree.

How to identify?

The tree is easiest to identify when covered in the characteristic red flowers. The leaves consist of three heart-shaped leaflets. The pale bark of the tree and branches is covered with small hooked thorns.

Why have the tree in your garden?

The nectar rich flowers attract insects, including honey bees, as well as many birds, among them brilliant sunbirds. The buds and flowers also feed monkeys and other birds like starlings. The soft wood of dead branches and trunks houses barbet and woodpecker nests and sometimes swarms of honey bees. The leaves feed game and various caterpillars, and seeds host beetle larvae as well as feeding yet more birds.

What is it used for?

Leaves, bark, roots and seeds of all *Erythrina* species are toxic. However, they are extensively used medicinally, mainly topically, in contexts that suggest anti-bacterial, anti-inflammatory and analgesic effects.

☆ DD location -33.51762, 26.81181
DMS location S 33° 31' 3.432" E 26° 48' 42.516"

Common guarri, Umgwali, Gewone ghwarrie

Euclea undulata



Photo: Rhulan Heunis

Why the name?

The names almost certainly originate from Khoehoe languages, but no reference source suggests any interpretation or meaning. *Euclea* is from the Greek *eu* = good and *kleios* = report, so fame or glory. *Undulata* is for the often extremely wavy margins of the leaves, though they are also sometimes quite flat.

How to identify?

The most striking feature is a dense canopy of simple leaves with wavy margins. Young leaves often feel hairy, and maybe covered in rust-coloured glands. Round berries on long stalks turn black when ripe April to October

Why have the tree in your garden?

This small, densely branched, evergreen dioecious tree makes an excellent attraction for insects and birds. Small creamy flowers and purple edible (not tasty) fruit often occur simultaneously on mature female trees. Common guarri is very hardy and water wise. It makes a good centre for a thicket clump and is good as a hedging plant.

What is it used for?

The hard, tough, densely clustered leaves do not easily catch alight and branches are widely used for beating out veld fires. The wood burns hot and slowly, giving excellent braai coals. It has also been used for fence posts. Umgwali is widely used in traditional African medicine. Bark, root and leaves are all used, each with different effects. Bark is said to ease body pains, headache and toothache and is also used for chest complaints, heart related diseases and diabetes. Roots provide a purgative, as well as having other applications. Leaves treat stomach ailments, diarrhoea and infected throats. Shredded twigs make good toothbrushes.

Common hook thorn, Umtholo, Gewone haakdoring,

Senegalia (previously *Acacia*) *caffra*



Photo: Edith Mukaro

Why the name?

The name *Acacia* was first given by the Greek physician Pedanius Dioscorides to a species of thorny medicinal tree. The species name *caffra* relates to an area of the Eastern Cape called British Kaffraria. The genus *Acacia* (from the Greek *akis* = spine) included a wide variety of different groups of thorny plants in areas of Asia, Australia, Africa and the Americas. In the early 2000's, Australian botanists proposed a revision of the classification system. 900 thornless Australian species keep the name *Acacia*. African species have had their names changed. Those with fluffy ball flowers and thorns at the leaf bases are now *Vachellia*. Those with flowers in spikes, with thorns but non-spinescent leaf bases became *Senegalia*. Umtholo has many other isiXhosa names, several of them indicating an association with water, for example Umngayamanzi. These may relate to the fact that the tree is often found near rivers.

How to identify?

This is a finely leaved thorn tree and is often multistemmed or branches low down. Creamy-white flower spikes cover the tree in spring. The branches and branchlets are covered in hooked thorns. In summer the tree carries a crop of long, usually straight, narrow pods that split to release small flat seeds.

Why have the tree in your garden?

In spring the flower spikes are creamy-white and sweet scented. These are eaten enthusiastically by a number of animals, and, according to some reports, even by people. In the garden it is fast-growing and striking as a centre piece for a lawn where its light foliage lets through enough sunlight for the grass to grow happily right up to the trunk.

What is it used for?

Scientific studies indicate the presence of several extremely unusual combinations of chemical compounds in this and some other *Senegalia* species. The traditional medicinal uses of this tree mostly deal with digestive disorders.

Common wild fig, Umthombe, Gewone wildevy

Ficus burkei



Photo: Ryana Johnson

Why the name?

Ficus is the old Latin word for fig, and may derive from older Persian and Hebrew words. The isiXhosa name Umthombe applies to the common wild fig, but also to the veld fig (*Ficus burtt-davyii*), and both are sometimes called Uluzi.

How to identify?

This tree is easiest to identify by its dense green canopy, smooth bark and hanging aerial roots. The green “fruits” on the tree are in fact bunches of tiny flowers, all hidden inside the expanded twig-end (receptacle) that turns itself in around them. The flowers are accessible to specialist wasp pollinators only through the tiny hole (ostiole) at the tip of the structure. Once the flowers are pollinated and the wasps escaped, the seeds ripen and the fruit (synconium) softens to an edible condition. South African fig trees are evergreen or deciduous, depending largely on location and weather conditions.

Why have the tree in your garden?

Ficus species are hosts to the larvae of two blue butterflies, as well as various beetles and borers. These insects attract insectivorous birds in numbers. They are followed by fruit-eaters and sunbirds, while monkeys and baboons also relish the feast. Fallen fruits are consumed by many species of buck as well as bushpigs and warthogs.

What is it used for?

In traditional medicine, *Ficus* species have many uses. The sticky root sap has been used to trap birds and small animals.

☆ DD location -33.502461, 26.838820
DMS location S 33° 30' 1.8" E 26° 0' 0"

They were planted (probably by the municipality or residents) alongside the roads, and grow into very large trees.

Cross-berry, UmNqakaza, Kruisbessie

Grewia occidentalis



Photo: Flower - Rhulan Heunis, berry and leaves - Ryana Johnson

Why the name?

Grewia occidentalis (*occidentalis* = from the west) has many popular names. These include Cross-berry, Cross-berry raisin, Four-corners (all for the nature of the fruit), Assegai wood, Bow wood, Buttonwood (for historical uses) and Lavender star (for the colour and shape of the flower). IsiXhosa names include Umnqabaza, Uhlolo, Uhlolo-oluncinci, Umvilani, Umvileni, Unyenye. Ukuhlola is to check. Uhlolo means inspection, which suggests that the plant has traditional magical or ritual uses that are not on record. The other names remain mysterious.

How to identify?

The star-like five-petaled flowers, are usually pink, mauve or purple, they can be seen from October to January and even longer in the Eastern Cape. The simple leaves are shiny, dark-green above and paler below. The berries are characteristically four-lobed hanging from single stems. They can be seen from January to May and often even longer.

Why have the tree in your garden?

Happy to grow on most soils, in sun or shade and in a wide variety of habitats, Cross-berry is easy to cultivate, either as a garden plant or as supplementary stock feed and wind break on farms. With fairly regular rain and little or no frost Cross-berry is evergreen, losing its leaves in very cold or dry conditions. Pruned to shape, it makes an attractive feature, with some flowers most of the year, peaking in spring and early summer. Left to its own devices, it tends to be a spreading shrub, even climbing into surrounding vegetation, and makes a good hedge or screen. It has become a sought-after garden ornamental as far afield as New Zealand.

What is it used for?

Traditional uses on record include eating fruits fresh or dried, boiling them in milk for a pleasant drink, fermenting and even distilling them for alcoholic beverages. Bark and roots have significant cosmetic and medicinal uses.

Eastern Cape Giant Cycad, Umphanga, Oos-Kaapse Broodboom

Encephalartos altensteinii



Photo: Tony Rodd

Why the name?

The name Broodboom derives from early colonists' observation that indigenous peoples buried the stems to ferment them, then dried the pulp and pounded it to a meal for making a bread over coals. *En* is Greek for "in", *kephale* is "head" and *artos* is "bread", so *Encephalartos* = "bread-head" or "bread-in-the-head". For the Xhosa names, Umphanga, Umpanga, Umguza, Isundu no explanation has to date been found. *Ukuphanga* means "to loot".

How to identify?

This cycad grows up to seven metres tall and may be branched or unbranched. The leaves are straight or curved backwards and are up to three metres in length. The leaflets are rigid and fairly broad with one or both margins toothed. There are no prickles at the base of the leaf.

Why have the tree in your garden?

Cycads are the most primitive living seed-bearing plants and belong, still largely unchanged, to an ancient order that flourished 50 to 60 million years ago. Knysna turaco and trumpeter hornbills eat the seeds, digesting the pulp and regurgitating the hard seeds, thus aiding distribution.

The Eastern Cape Giant Cycad grows easily in cultivation and makes a striking palm-like focal point where there is enough space in a garden. Seed cones and whorls of new spring leaves are particularly attractive. This cycad copes with full sun or semi shade.

What is it used for?

The survival of all cycad species in South Africa is threatened by habitat loss, unscrupulous plant collectors and, allegedly, also by harvesting for medicinal use, though few traditional medicinal or magical uses are recorded for any cycad species. A mistaken belief that the seeds are also edible has led to some severe attacks of gastro-enteritis, if not death.

Forest Bride's Bush, Umhleza, Bruidsbos

Pavetta lanceolata



Photos: Flowers - Marion Whitehead, leaf - Ryana Johnson

Why the name?

Altogether five Xhosa names are on offer, none with any interpretation on record, nor any possibly related words listed in the South African Multi-language Dictionary. Umhleza, Umdleza, Ilitoba, Umgonogono, Umponyane.

Forest? This is indeed a forest edge species that also grows in bush clumps in Albany Thicket. Weeping? Somewhat speculatively explained, most probably referring to the drooping habit of the branches. Bride's Bush? More speculation. Is it because the tree, in full flower, resembles a bride in her white finery? Or does it refer to some forgotten wedding ritual of local indigenous people?

How to identify?

This small tree with drooping leaves is very striking when covered in bunches of white, trumpet-like flowers. *Lanceolata* refers to the lance-shaped leaves. Crushed, the leaves have a spicy potato-like scent. When held up against the sun the tiny bacterial nodules on the under-surface are clearly visible. In the leaves of seedlings, these nodules are on the upper surface and work their way to the underside in more mature plants.

Why have the tree in your garden?

Bride's Bushes are very attractive evergreen garden plants. In bloom, usually in early summer, they are covered with bright snow white pleasantly scented pincushions of flowers. These are rich in nectar and attract sunbirds as well as a multitude of insects. Insects attract insectivorous birds. Flowers are followed by small round fruits attractive to a wide range of fruit eaters that also disperse the seeds.

What is it used for?

They are said to be edible, apparently cooked as a vegetable, and to taste like watercress.

Forest Elder, Ingqota, Bosvlier

Nuxia floribunda



Photo: Leaf - Ryana Johnson, flowers - Rhulan Heunis

Why the name?

The Forest Elder is named for the superficial similarity of its flowers to those of the European elder, or elderberry,

How to identify?

This mostly single stemmed tree is easy to identify when covered in white flowers in May to September. The shiny green leaves are arranged in whorls of three. The bark is smooth and grey in younger trees becoming rougher with age.

Why have the tree in your garden?

Large, loose bunches of tiny, creamy-white, sweet-smelling flowers cover the tree in autumn or winter, making a spectacular show in its natural forest-edge habitat, or as a feature tree in the garden. These attractive evergreen trees can be planted close to walls or paving in the garden as their root systems are non-invasive. In full flower they attract many insects and also insect eating birds. Sunbirds, too, feed on the nectar the flowers produce.

Nuxias are unsuitable for very frosty or dry regions, occurring naturally in a more or less coastal band along Africa's eastern seaboard

What is it used for?

Leaves are used medicinally to treat respiratory and digestive disorders, the roots for influenza, and smoke from burning leaves for infantile convulsions. Traditional ritual uses include strengthening survivors after a death in the village, and to repel evil spirits.

Horsewood, Unukambile, Perdepis

Clausena anisata



Photo: Lorraine Solomon

Why the name?

Horsewood leaves contain gland dots with strong-smelling essential oils. The scent – strong when leaves are crushed – has been likened to aniseed, curry, garlic, mice and horse urine. There are also at least thirteen isiXhosa names on record for Horsewood: Iperepesi, Isiqhumiso, Isifutho, Isifutha, Isifudu, Umfuto, isiFutu, umFutu, umNukambiba, umNukambele, umNukambile, umTutu, isiTutu. Tony Dold and Michelle Cocks, in *Voices from the Forest*, list the first three of these names and offer explanations. Iperepesi reflects the Afrikaans name referring to horse urine. Isifutho and Isiqhumiso relate, respectively, to the use of Horsewood as a steam bath and as a source of inhaled smoke.

How to identify?

The leaves of this small tree closely resemble those of small knobwood, but leaflets are alternate not opposite.

Why have the tree in your garden?

An attractive shrub or small tree for the garden, with a non-invasive root system, sweetly scented white flowers and edible fruits that attract birds. This tall shrub to small tree has also been described as both deciduous and evergreen!

What is it used for?

Wherever it occurs, Horsewood is used medicinally and magically. Magically mostly because its smoke is believed to dispel evil spirits, though some recent studies suggest that this belief commonly relates to smokes that do have disinfectant properties. Numbers of active compounds have been isolated from leaves, stem bark and roots, largely supporting Horsewood's use as human and animal medicine, insecticide and insect repellent. It is reputed to have been one of the more effective remedies during the 1918 influenza pandemic.

Ironwood, Igqwanxe, Ysterhout

Olea capensis subsp *capensis*



Photo: Rhulan Heunis

Why the name?

These trees seem to have a multiplicity of names in most of the languages spoken where they occur, which could be attributable to the fact that there are 3 species of ironwood. The isiXhosa names include Igqwanxe (it's weird), Umhlebe, Igxanci, Umsinjane, Umnquma swile. This last translates as "the olive tree has withered". *Olea* is the Latin name for olive, in use for thousands of years. It also gives its name to the family *Oleaceae* to which these trees belong.

How to identify?

This small, evergreen tree occurs as a small tree on hilly and often rocky sites in the coastal bush and forest of the Eastern Cape and Natal. Its pale to dark-green leaves are hard, rounded and have a spout-like tip with a conspicuous mid-vein.

Why have the tree in your garden?

The dense clusters of white flowers are sweetly scented, and the trees add interest to the garden because they do not necessarily flower and fruit every year.

What is it used for?

Ironwoods are relatively small trees or large shrubs and their wood is not much used except for fuel. The fruits are edible, but opinions differ as to their palatability. The fruit is smaller and rounder than commercial olives, but are otherwise similar. Some sources indicate that the Ironwoods have traditional medicinal uses. No specifics could be found.

Kei apple/Sourberry, Umqokolo, Wildeappelkoos/Suurbessie

Dovyalis caffra



Photo: Fruit - Rhulan Heunis, leaf - Ryana Johnson

Why the name?

Kei apple has the biggest fruits of the genus, aromatic, yellow and resembling apricots in shape and size. Its “apple” name relates to the fruit, which contains malic acid, the substance that gives apples their tartness.

How to identify?

It also shares all their diagnostic characteristics – sexes separate on different trees, simple elliptic to obovate leaves, often shiny, ferocious long, hard thorns, and edible but sour fruit on female trees. This small tree has strong straight thorns, especially on young trees. It is easiest to identify by the apricot-like fruit.

Why have the tree in your garden?

More or less evergreen, these dense, shrubby, spiny trees make excellent security hedges if kept trimmed. Their flowers attract insects, their fruit appeals to birds, and they provide excellent nesting sites for small birds, so they are great in a wildlife garden. Their roots are not aggressive, and they can be attractive as feature plants. Most of them are also drought tolerant and can cope with seaside conditions.

What is it used for?

Traditionally the Kei apple plant has found magical and medicinal uses, including for treatment of pain and rheumatism.

Kooboo berry, Umnqayi, Koeboebessie,

Myroxylon aethiopicum



Photo: JMK

Why the name?

It is known popularly as “spoonwood” for one its uses. *Mystron* is Greek for spoon, *xylon* = wood and *aethiopicum* is Latin for from Africa. Kooboo berry is the more permanent South African name, from the original Khoe *!kubuh*.

How to identify?

This tree often grows interspersed with other other plants. It is easiest to identify when bearing the deep pink to purple gooseberry sized berries, that look like tiny grooved apples, from January to June. The blue-green leaves tend to form spirals and are leathery with a toothed margin.

Why have the tree in your garden?

In the garden, the kooboo berry can be an attractive evergreen feature, particularly when it is in fruit, but it can also make a dense screening hedge to shut out noise, wind and dust. Ripe fruits are very attractive to a large number of bird species so this is s a great tree for the bird garden. It responds well to pruning and the wood makes good fuel. The roots are not at all aggressive and kooboo berries can be grown successfully in containers.

What is it used for?

Early Xhosa explorers sought out settlement areas where they could find wild olive, sneezewood, sweet thorn and kooboo berry – Umnquma, umthathi, umnga and umnqayi. Since umnqayi feeds both game and domestic stock which browse the leaves as well as eating the fallen fruits, this would seem to have been a good strategy. Kooboo berries are also edible for humans, though opinions differ as to their sweetness or sourness. The inconspicuous, scented, greenish-yellow flowers make good bee forage, so there would be honey to be had in the area.

Medicinal uses include treatment of hypertension, haemorrhage, dysentery, diarrhoea, stomach ache, and respiratory and urinary infections.

Pompom Tree, Intozane, Kannabas

Dais cotinifolia



Photo: Lorraine Solomon

Why the name?

Most of the names of the Pompom Tree or Pincushion Tree relate to its spectacular flowers. *Dais* is named after the Greek for torch, the flowers being seen as similar to an unlit fire-torch. *Cotinifolia* is for the resemblance of the leaves to *Kotinus* or *Cotinus*, the old world wild olive. For the Xhosa name Intozane (also spelled Intozani) we found no explanation. The Khoe and Afrikaans name for many of the *Thymelaeaceae* shrubs is *Gonna*. Some people think that the name *Kannabas* may have originated in error, as *Kanna* normally refers to *Sceletium tortuosum*.

How to identify?

This single stemmed tree mostly forms a nice rounded canopy and is very striking when covered in its ball of pink flower from November to February.

Why have the tree in your garden?

The flowers are an almost luminous pink and are clustered in smallish tight round bunches virtually hiding the foliage when in full bloom. With its showy flowers and accommodating growth habits, even tolerating well-drained containers, the Pompom tree is popular in gardens large and small and as a street tree. It will grow in sun or dappled shade. Pompom trees have been cultivated in Europe for hundreds of years. It usually grows about 5 metres high, with the canopy often as wide-spreading and does not have an aggressive root system so is safe near paths and pools and in small gardens.

What is it used for?

Leaves are sometimes chewed for stomach ache.

Red currant, Umhlakothi, Bos-taaibos

Searsia (was *Rhus*) *chirindensis*



Photo credit: Leaf - Mike Powell, berries - Rhulan Heunis, foliage - Ryana Johnson

Why the name?

The isiXhosa name Umhlakothi applies to more than one species of *Rhus/Searsia*, in particular to *Searsia rehmanniana* (blunt-leaved currant), of which there are several variants.

How to identify?

This tree is easiest to identify by its dark green canopy of large leaves with three leaflets. They grow to an average of 10 – 12 metres, but with some specimens reaching 20 metres. Often multi-stemmed, and young branches often have huge spiky thorns.

Why have the tree in your garden?

These trees are strong growers and are valuable shade trees. They coppice enthusiastically if cut down or damaged, but do not have aggressive roots, so are versatile garden subjects. Male and female flowers occur on separate trees. As with many *Searsia* species, the ripe fruit is edible, with a sweet-sour taste.

What is it used for?

Species, like red currant, that produce long, straight coppice shoots were used as a source of arrow shafts. Bark of many *Searsia* species can be used for dyeing and tanning, having a high tannin content. The bark is also often used medicinally, and sap tapped from the red currant has been used for heart complaints

☆ DD location -33.50401, 26.82407
DMS location S 33° 30' 14.436" E 26° 49' 26.651"

Real Yellowwood, Umkhoba, Opregte Geelhout

Podocarpus latifolius



Photo: Fruit - Rhulan Heunis, leaves - Franz Xavier

Why the name?

Yellowwood very aptly for the light, even colour of the fine, easily worked timber. Because of past over-exploitation, all yellowwoods in South Africa are now legally strictly protected. *Podocarpus* is from the Greek *podo* = foot and *karpos* = seed or fruit, meaning having a foot (receptacle) supporting the seed, Umcheya, umkhoba, umkoba, umkhomba, umsonti, umgeya are all offered as Xhosa names, all without explanation!

How to identify?

These single stemmed trees can grow very tall. The bark has lengthway grooves and form long thin strips. The narrow leaves tend be in spiralled clusters. Young leaves are bright green.

Why have the tree in your garden?

In forest conditions Real yellowwoods will grow straight-trunked to 30 metres or more, but in open, stressed locations may be gnarled shrubs of only about two metres. Their dense, dark evergreen foliage and bright flushes of new leaves in spring are making them increasingly popular garden subjects. Seeds on female trees with their bright red or dark purple receptacles can be eye-catching.

What is it used for?

Yellowwoods are not much used traditionally, have very limited medicinal application and do not seem to figure much in African folklore. The ripe receptacles of Real yellowwoods are said to be sweetish and edible, but they do not feature as a major food source, except for several forest birds, fruit bats and other animals. Historical uses for yellowwood timber were many: roof beams, floor boards, wagon and boat building, coffins, railway sleepers, furniture, firewood and even butchers' blocks.

River euphorbia, Umhlontlo, Riviernaboom

Euphorbia triangularis



Photo: Rhulan Heunis

Why the name?

Juba, king of Roman Mauretania, is thought to have taken an interest in Northwest African medicinal plants, including one used as a strong laxative. This he named after his Greek physician, Euphorbus. *Triangularis* means three-angled and refers to the shape of the stems, though these trees in Kwazulu/Natal generally have five angles

How to identify?

These trees have a striking growth form seeming to consist of stems only that branch higher in the canopy, and vary in height from about 2.5 metres to as much as 18 metres. Leaves on new growth don't last long and the plants photosynthesise through their stems.

Why have the tree in your garden?

Euphorbias make a striking garden feature, and their flowers attract many bees

What is it used for?

Many South African euphorbias are potentially dangerous plants, exuding a toxic watery latex that is damaging to the eyes and that can severely irritate skin, and most of them are also spiny. Euphorbia latex has been used for caulking boats, as a glue and as a fish and arrow poison.

Imihlontlo tend to tower above surrounding Thicket and are believed to protect the "Xhosa forest". These trees have an important cultural function in relation to the birth and health of twins.

☆ DD location -33.52498, 26.80522
DMS location S 33° 31' 29.928" E 26° 48' 18.791"

Septee saucer-berry, Umlovulovu , Septeeboom

Cordia caffra

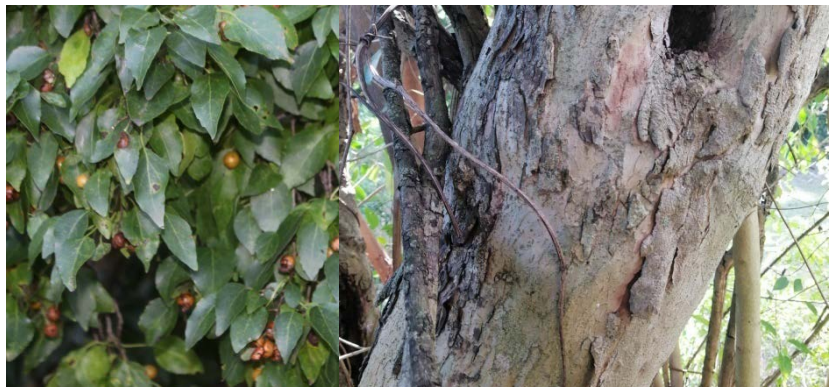


Photo credit: Leaves - Mike Powell, tree, flower and bark - Ryana Johnson

Why the name?

For septee, no explanation has been found! Saucer-berry derives from the fact that the calyx persists, saucer-like, around the base of the fruit, even sometimes after the fruit drops or is eaten.

How to identify?

The smooth mottled pinky bark with flaky patches is characteristic in older trees. The leaves are large and pointed. In riverine areas these trees form an impressive part of the canopy. The berry-like fruit turns yellow when ripe.

Why have this tree in your garden?

Flowers and fruit attract bees and other insects. The small orange fruits are eaten by birds, especially coucals, and by monkeys and bats. It is said to be edible by people, but not very tasty. Being deciduous, the trees allow sunny picnics in winter and provide delightful shade in summer

What is it used for?

Medicinal uses are listed for the leaves, bark and roots of septee, including the treatment of sore eyes, fever and wounds. The heartwood is hard and has been used for building . Septees are browsed by game and livestock

☆ DD location -33.51089, 26.82045
DMS location S 33° 30' 39.204" E 26° 49' 13.62"

Silver oak, Umphahla/Isidulisehlati, Vaalbos

Brachylaena discolor,



Photo: L - Rhulan Heunis, R - Lorraine Solomon

Why the name?

Brachylaena is from the Greek *brachus* = short and *klaina* or *chlaina* = a cloak, from the structure of the flowers with short bracts surrounding the central flower group. *Discolor* Latin = two colours

How to identify?

The single stemmed tree branches low down to form a v-shaped blue-green canopy. The simple leaves are blue-green above and very pale and velvety below. The simple leaves have toothed margins and white thistle-like flowers grow bunches on the tips of branches. The younger branches are covered in white dots -stipules.

Why have the tree in your garden?

In the garden these fast-growing, sprawling often shrubby trees can be attractive as a hedge or screen. Coast silver oak copes particularly well with difficult coastal conditions and seems impervious to salt winds as well as being happy to grow in sun or shade. They do not have aggressive roots so can be planted close to buildings and paving. They produce nectar rich, sweetly scented flowers beloved by bees. Male and female flowers occur on separate trees

What is it used for?

The traditional applications suggest anti-bacterial, anti-fungal, digestive and anti-diabetic properties. Coast silver oak is also regarded as an “ancestral” tree, facilitating communication with one’s spirit guides. Ash from burnt leaves has been used for alkali in making soap, and the wood, which is hard but flexible and resistant to wet conditions has in the past found many uses, even as fire-by-friction sticks.

Small bone-apple, Umgxube , Kleinbeenappel

Coddia rudis



Photo: Franz Xavier - CreativeCommons

Why the name?

Coddia is named for Dr L E W Codd one time Director of the South African Botanical Research Institute. *Coddia rudis* (Latin for rough) is the only species currently recognised in this genus. Its former botanical name was *Xeromphis rudis*: *Xeromphis* is from the Greek *xeros* = dry and *omphalos* = navel. In isiXhosa Umgxube is also known as Intsinde, but neither of them is elucidated in the reference works. What a “bone-apple” might be is anyone’s guess.

How to identify?

This small tree is often multi-stemmed with unusual arching branches, covered in clusters of small roundish smooth leaves growing in tufts along their length. The small, white, trumpet-like flowers can be seen from August to January.

Why have the tree in your garden?

Small white scented bell-shaped flowers emerge with the new leaves in spring, fading to cream as they age. The flowers attract insects which attract birds, as do the fruits. Fruit is small, round, brown and edible when ripe. The small bone-apple is easy to grow in relatively high rainfall, low frost gardens and makes a good screen or specimen plant. It survives strong winds, heat and sporadic drought. It does well in pots and makes an interesting bonsai.

What is it used for?

Small bone-apple is an important browse plant for both game and domestic stock, sometimes so heavily browsed that it forms a compact shrublet.

Small Knobwood, Umlungumabele, Klein Perdepram

Zanthoxylum capense



Photo: Rhulan Heunis

Why the name?

Most of this tree's names derive from the characteristic corky spine-tipped knobs on the trunk and branches. *Zanthoxylum* = yellow wood, from the Greek *xanthos* = yellow and *xylon* = wood. Umnungwane, Umnungumabele, Umlungumabele are all Xhosa names for the Small knobwood. For the first name we have not found any explanation. Umnungumabele means "breastlike thorns" but Umlungumabele means "breasts of a white woman". *Perdepram* alludes to the shape of a mare's teats, seen as resembling the knobs on the tree trunk.

How to identify?

The stem of older trees are covered in distinct knobs with thorns at the tip. The leaves are compound and have tiny thorns on the leaf stem. The Small knobwood is a member of the citrus family (*Rutaceae*) and leaves give off a distinct lemony scent when bruised. The fruit resembles minute oranges and grow in bunches at the ends of branches.

Why have the tree in your garden?

Trees are either male or female, and deciduous or semi-deciduous. Lemon-scented flowers, leaves and fruits attract many butterflies and birds.

What is it used for?

Traditionally, bark has been stripped from twigs, the ends beaten flat and used as toothbrushes. Small knobwood sap contains a host of biologically active substances, one of which binds selectively with dental plaque and kills most oral bacteria. Another traditional use is as a treatment for epileptic convulsions. Many other uses include treating fever and respiratory and digestive conditions, but also for eruptive sores and snakebite.

Sneezewood, Umthathi, Nieshout

Ptaeroxylon obliquum



Photo credit: Leaf and bark - Mike Powell, foliage - Rhulan Heunis

Why the name?

The wood's ability to trigger violent sneezing accounts for the tree's botanical and popular names, and for many of its traditional medicinal uses.

How to identify?

These trees are very striking when covered in yellow flowers in summer. The leaves are compound, and the central vein is clearly off centre. The leaves often turn yellow in winter and during dry seasons.

Why have this tree in your garden?

It has an attractive small crown of intriguing leaves, interesting whitish bark and sweetly scented dazzling pale yellow flowers in spring. The root system is non-invasive.

What is it used for?

Their wood is hard, heavy, and water and termite resistant, so ideal for construction. Indeed, some rafters and fence posts still in use date from 200 years ago. In addition, the wood burns "like paraffin" even when fresh because it contains high concentrations of resin and oil. The wood, which is fine-grained, an attractive colour and finishes well, is still in demand for furniture making and crafts.

Culturally, Umthathi is seen as having a close association with the ancestors, and plays a role in men's initiation rites. Its wood is often used for the ritual tethering post in the sacred cattle byre, and its branches as a platter for sacrificial meat. The town of Mthatha derives its name from this tree.

☆ DD location -33.52547, 26.80498
DMS location S 33° 31' 31.692" E 26° 48' 17.928"

Sweet thorn, Umnga, Soetdoring

Vachellia karroo



Photo: Rhulan Heunis

Why the name?

The gum is sweet to taste and edible.

How to identify?

This tree is easiest to identify by its prominent white thorns. The characteristic thorns are spines – leaf base stipules that develop into formidable long, straight, paired, greyish-white defences for the tree. The bark is dark and the leaves are compound and feather-like. The yellow flower balls cover the trees in summer and are followed by curled bean-like pods that stay on the tree for a long time.

Why have the tree in your garden?

Sweet thorn is an attractive garden subject. The yellow early-summer puffball flowers have a sweet scent, are rich in pollen and great for bees. They are also eaten by birds. No less than 10 species of butterfly larvae are dependent on Sweet thorn. Sweet thorn fixes soil nitrogen assists the growth of grasses and other plants in its vicinity. It is adaptable, not fussy about soil type, frost and drought hardy, grows fast and can regenerate after fire. It is deciduous in cold or dry conditions

What is it used for?

The wood makes good fuel and charcoal. It can be used for posts and fencing, but is subject to attack by borer. Inner bark makes a strong rope that does not stretch when wet. Outer bark tans leather a red-brown colour, but makes it smelly. Foliage, which is completely non-toxic, is browsed by game and domestic stock. In autumn and winter it is also enthusiastically picked up from the ground, as are the fallen flowers, seed pods and seeds. Gum is eaten as a sweet, and has been used in confectionery and as glue. . Ripe roasted seeds have been used as a coffee substitute. Medicinal uses have included treatment of colds, flu and fevers, as well as digestive problems from colic to dysentery. The gum is effective against oral thrush.

Thorny elm, Umkhovothi, Doringolm

Chaetacme aristata



Photo: Adriaan Grobler

Why the name?

Chaet is Latin from the Greek *khaite* = long hair, mane or crest of a Greek Mohican style helmet. *Acme* is from *akmi* = peak or tip, both apparently relating to the diagnostic thread that extends from the tip of the leaf. *Aristata* is from the Latin = having an awn or bristle, describing the same feature. Possibly because of its use to make spiny fences and hedges, in West Africa one of its names translates as “fights against the elephant”, where “catches the leopard” is one of its Southern African names.

How to identify?

Smooth mature leaves have an unbroken margin and a very slightly asymmetric base. Mature trees often have a fluted or multiple trunk that creates many gaps and holes, and the base is often covered in many young thorny branchlets. The mature dark-green leaves have a smooth margin and are lighter and course below. Young leaves are characteristic and have a toothed margin. The resin covered leaves crack audibly when folded.

Why have the tree in your garden?

The gaps and holes in the trunk create havens for a variety of wildlife and a major contributor to biodiversity, so they are an absolute must for a wildlife garden. The gaps and holes also collect droppings and leaf litter that eventually fall to the ground and enrich the surrounding soil. Although growing easily and offering dense summer shade and an attractive appearance, this deciduous tree is very uncommon in gardens.

Chaetacme leaves have special water-absorbing cells. When the ground is dry and the leaves are short of water, they have the ability to take in water droplets from dew and fine mists that would do nothing towards watering the roots. This capacity would also benefit browsing animals in times of drought. Several species of butterfly larvae feed on the leaves. Turacos eat the fruit and thick-billed weavers crack open the hard seeds.

What is it used for?

Throughout its range Umkhovothi has many traditional medicinal uses. Locally, the roots are used for toothache, and the bark for various digestive problems.

(Eastern) Tree Aloe, Ikhala, Boomaalwyn

Aloidendron (previously *Aloe*) *barberae*



Photo: Rhulan Heunis

Why the name?

Aloe is from the Greek *aloe*, meaning bitter. Mary Elizabeth Barber, a naturalist living in the then Transkei, first sent a sample for identification in 1874. Xhosa names include Ikhala, Ikhilane enkulu, Umgxwala, Uphondonde. None of the reference material offers an interpretation of any of this, except that *enkulu* means big. Big it certainly is!

How to identify?

Rosettes of long, downward-curving succulent leaves at the ends of succulent, leafless branched stems sometimes hide the pink-to-orange flower spikes that appear in winter. The Eastern Tree aloe can grow very large, 20 metres or more tall, and developing a stem that can be more than 3 metres in circumference. The stem of these aloes are light grey and smooth.

Why have the tree in your garden?

In frost free situations where it can enjoy some shade in its youth, it grows into a magnificent, sculptural feature plant. The flowers attract nectar-seeking insects and are pollinated mostly by the hosts of sunbirds that visit the trees.

What is it used for?

Most aloe species are traditionally used for burns and skin irritations.

White ironwood, Umzane, Witysterhout

Vepris lanceolata (previously *Vepris undulata* or *Toddalia lanceolata*)



Photo: Leaf - Rhulan Heunis, flower and fruit - Lorraine Solomon

Why the name?

White ironwood / Witysterhout is named for its timber – extremely hard and very light-coloured. The Xhosa names for plants are sometimes derived from their habitat or growth habit, sometimes from their uses, sometimes are inexplicable, and often vary from area to area and from dialect group to dialect group. We could find no-one to interpret any of the names for us. On record these include: Umzane, Umzani, Umngamazwele, Umngamazele, Umngumaswile

How to identify?

This single stemmed tree has white-grey bark. The three-leaflet leaves are bright green and have wavy margins. Male and female flowers occur on separate trees, and only female trees bear fruit – bunches of small berries, purple when ripe. Gives off a lemony scent when leaves are crushed.

Why have the tree in your garden?

White ironwood is an important food source for insects and birds as it fruits in early winter when little else is available. In the garden it is an attractive smallish tree with a non-aggressive root system and shiny evergreen leaves. It hosts several kinds of swallowtail butterfly larvae.

What is it used for?

Dried leaves can be used as a pepper and spice substitute. In colonial times white ironwood was popular for construction, wagon wheel spokes, implement handles and furniture. Few big trees are left, but the timber is still used, mainly for furniture and turnery. Powdered roots are used for respiratory infections and fevers,, and also for abdominal pain and infertility. Leaves have anti-bacterial and anti-fungal properties and are applied topically to wounds and sores. They are also burnt as a disinfectant fumigant.

White milkwood, Umqwashu, Witmelkhout

Sideroxylon inerme



Photo: Leaves - Mike Powell, bark - Ryana Johnson, berries - Rhulan Heunis

Why the name?

The milky sap that oozes from broken branches is the origin of the tree's name. Milkwoods are protected trees in South Africa. Protection means they may not be damaged or removed without a permit. Four of these trees, all hundreds of years old, are proclaimed national monuments. These are the "Treaty Tree" in Woodstock, a 1000-year-old specimen on a farm near Bredasdorp, the "Post Office Tree" in Mossel Bay and the "Fingo Milkwood Tree" near Peddie.

How to identify?

Milkwood are most easily identified by their dense green canopy and characteristic blocky bark in older trees. The leaves are oval with a clear central vein and produces a thin milky latex when broken from the stem.

Why have them in your garden?

Not usually very tall trees, milkwoods have a dense, spreading crown of dark green leaves that make them an ideal shade tree. Both flowers and fruit attract insects and birds, and the fruit also appeals to bats, monkeys, baboons and bush pigs.

What is it used for?

The wood is very hard and was previously used for boat-building, mill-work, bridges, ploughs and rural implements. Bark infusions are emetic and are taken to dispel bad dreams. Roasted powdered roots, mixed with oil from seeds of *Trichilia emetica*, are used as an aid in healing fractured limbs. Umqwashu is now also sometimes used as a cosmetic. Powdered bark has been given to calves and goats as a tonic, and to cattle as a remedy for gall-sickness.

☆ DD location -33.50391, 26.82409
DMS location S 33°30' 14.076" E 26° 49' 26.724"

White pear, Umdakane, Witpeer

Apodytes dimidiata



Photo: Rina Grant-Biggs

Why the name?

The English name, white pear, is said to relate to the similarity of the wood to that of the European pear – pinkish, hard, flexible and useful for many purposes. The isiXhosa adjective –mdaka means dirty, brown or untidy.

How to identify?

White pears are most striking when covered in white flowers in summer. The fruit are small, kidney shaped and black covered partly by a scarlet finger-like cap at one end. The tree has a dense canopy and the bark is pale grey and smooth.

Why have them in your garden?

Attractive, evergreen, a gardener's delight with a non-invasive root system, pretty scented white flowers and non-messy fruit - a pleasant specimen tree or a dense screening hedge. They attract pollinating insects that attract insectivorous birds.

What is it used for?

In Southern Kwazulu-Natal and East Griqualand, the leaves are boiled whole and eaten with porridge. Root bark infusions have emetic effects and have also traditionally been used for the control of internal parasites. Leaf infusions have been used to treat ear inflammation. Recent research indicates that chemicals derived from white pear leaves may find a use in killing the snails associated with bilharzia.

☆ DD -33.5145, 26.81668
DMS location S 33° 30' 52.2" E 26° 49' 0.048'

White stinkwood, Umvumvu, Witstinkhout

Celtis africana



Photo: Rhulan Heunis

Why the name?

The Latin name *Celtis* was first used by Pliny some 2000 years ago, but apparently relative to a different tree. In Greek *Celtis* is the name of the laurel tree. *Africana* = from Africa. Umvumvu is the isiXhosa name for two species of *Celtis* – *C. africana* and the closely related *C. gomphophylla*.

How to identify?

This single stemmed tree has smooth and pale bark. The leaves are toothed in the upper two thirds with three veins from the base. The fruit is small berries carried among the leaves. Freshly cut wood has an unpleasant smell.

Why have the tree in your garden?

A fast-growing tree that thrives in a wide range of soils and climate zones. It is deciduous, with very pretty new leaf growth in spring, and a non-aggressive root system that allows it to be planted near buildings and paving, as well as being successfully grown in pots and as bonsai. While its flowers, separate male and female on the same tree, are insignificant, the edible fruits are hugely popular with many bird and primate species. Fresh and fallen leaves feed several species of butterfly larva, domestic stock and game.

What is it used for?

Some African cultures see Umvumvu as a protective tree whose wood and bark can promote fertility, overcome evil and keep lightning, witches and snakes at bay. The tree is also being investigated in connection with reforestation in Lesotho.

Wild or Forest gardenia, Umkhangazi, Buffelsbal

Gardenia thunbergia



Photo: Ryana Johnson

Why the name?

Gardenia was named by Linnaeus for a Scottish physician and amateur naturalist, Alexander Garden. *Thunbergia* is for Carl Pehr Thunberg, famous Swedish naturalist. For *Umkhangazi* we can find no recorded interpretation. *Buffelsbal* (buffalo testicle) is a colourful Afrikaans allusion to the fruit of what is otherwise known as *Wildekattjiepiering*.

How to identify?

This small single stemmed tree branches low down, has a dense crown of shiny green leaves and twigs that may form sharp spines. The creamy-white, sweet smelling flowers that can be seen from October to February make a striking display. The egg-shaped, egg-sized grey-green fruit is smooth, hard and woody and does not often drop from the tree.

Why have the tree in your garden?

It is a striking garden subject for semi-shade. Its flowering season (usually spring or early summer) is brief but spectacular. The plant is often almost completely covered in brilliant white flowers deliciously scented especially at night.

What is it used for?

The coffee, gardenia or madder family (Rubiaceae) is vast - mainly cosmopolitan tropical and sub-tropical. Many of its species have commercial or medicinal value, e.g. *Coffea arabica*, *C. robusta* (coffee), *Cinchona* spp (quinine) and *Rubia tinctorum* (madder). African Gardenias are no exception. Roots, leaves and bark have been widely used to treat mainly skin lesions, including eruptions resulting from syphilis and leprosy. They are also used as an emetic for various purposes. *Gardenia thunbergia* is also planted to ward off evil.

Wild olive, Umnquma, Olienhout

Olea europaea subsp. *cuspidata*



Photo: Rhulan Heunis

Why the name?

Originally thought to be a separate species – *Olea africana* – the wild olive, was re-classified as a sub-species of the European olive – *Olea europaea* – and more recently re-labelled as subspecies *cuspidata*. *Elaia* in Greek is the name of tree and fruit. *Olea* (alt. *Oliva*) is the ancient Latin name for the olive fruit, *africana* means from Africa, *europaea* = from Europe, and *cuspidata* = having a cusp or sharp tip, e.g. the leaf of this tree.

How to identify?

The leaves are long, narrow, sharp-tipped, glossy darkish green above, and paler and furry/scaly on the underside. This hardy tree has a single stem with a bi-coloured canopy. The berry-like fruit is carried among the leaves.

Why have the tree in your garden?

Attractive and frost, drought and wind resistant, the African wild olive has been a popular garden tree for centuries. Olive fruits, wild and cultivated, are edible. There is disagreement about their palatability. Some wild olive trees bear sweetish fruits that are not at all bitter. Wild animals and birds eat the fruit readily, and the trees are also useful fodder plants for game and livestock.

What is it used for?

Though they yield less oil than cultivated olives, wild olives are suitable for oil production. One can make writing ink from their juice. Wild olive wood is beautiful, hard, durable and resistant to termites and wood borers. Research shows significant support for traditional uses of this plant, especially the leaves. They contain compounds that have demonstrated anti-oxidant, anti-microbial, hypolipidemic and hypotensive activity. Umnquma, for the amaXhosa and many other African peoples, is more than a food or medicine. It is also a sacred tree, seen as enabling significant connection with the spirit world. Umnquma branches, for example, are extensively used as platters to hold sacrificial meat during traditional ceremonies. .

Wild plum, Umgwenya, Wildepruim,

Harpephyllum caffrum



Photo: Rhulan Heunis

Why the name?

In isiXhosa and isiZulu, Umgwenya is named for the crocodile-skin quality of the bark on mature trees. Ingwenya is a crocodile. Other names include Umgwenye, Umgwenyobomvu (bomvu = red), Ichanti-lomlambo (lomlambo = of the river). The botanical name is for the shape of the wild plum's leaflets. *Harpe* is Greek for sickle, and *phyllon* = leaf. Latin *Caffrum* = from the Eastern Cape.

How to identify?

The leaves are compound – made up of a central stalk with leaflets of varying size in opposite pairs along it, ending in a single leaflet at the tip. The pairs of leaflets are dark green and shiny, asymmetrical and usually curved into a “sickle” shape. Leaves are crowded at the ends of thickish branchlets in swirling rosettes that give the dense canopy a lively dancing appearance. Wild plum has a single dominant pip with edible flesh surrounding. Only female trees bear fruit.

Why have the tree in your garden?

It provides a home for epiphytic orchids, various lichens and nesting birds. It is also an important food source for a wide range of insects, birds and animals..

What is it used for?

Its wood, hard and heavy, has been used for furniture, planking and rafters. Fruits –bright red when ripe - are sour on some trees, and sweet on others, but all make excellent jelly or jam and can be used to make a “lemonade” or a rose wine. Medicinally, the bark is used primarily as a treatment for acne and eczema in a combination of facial sauna, skin wash and “blood cleansing” emetic. Current research reveals complex phytochemistry and biological activity in leaves, fruit, bark and roots of Umgwenya, amongst them anti-convulsant qualities that may account for one of its traditional uses “for paralysis caused by walking over bewitched soil”. Other medicinal uses include treatment of sprains and fractures, wounds and asthma.

Wild pomegranate, Ithobankomo, Wilde granaat

Burchellia bubalina



Photo: Rhulan Heunis

Why the name?

There is some resemblance between *Burchellia bubalina* in full flower and the European pomegranate. Inthobankomo is also on record as iTobancone, inTsizi ezimnyama, umFincane, umFinca, umFincane wehlathi, Ubuhlungu wenyoka, iZothwane. Dialect variations? Regional differences? Differences in traditional applications? Changes over time? None of the reference material offers any interpretations

How to identify?

This small tree is quite common, but only conspicuous when flowering. The red, trumpet-like flowers form clusters between the leaves. The glossy dark green leaves are leathery and stiff. The green to red-brown oval fruit has 5 horns and may be seen on the tree for long periods.

Why have the tree in your garden?

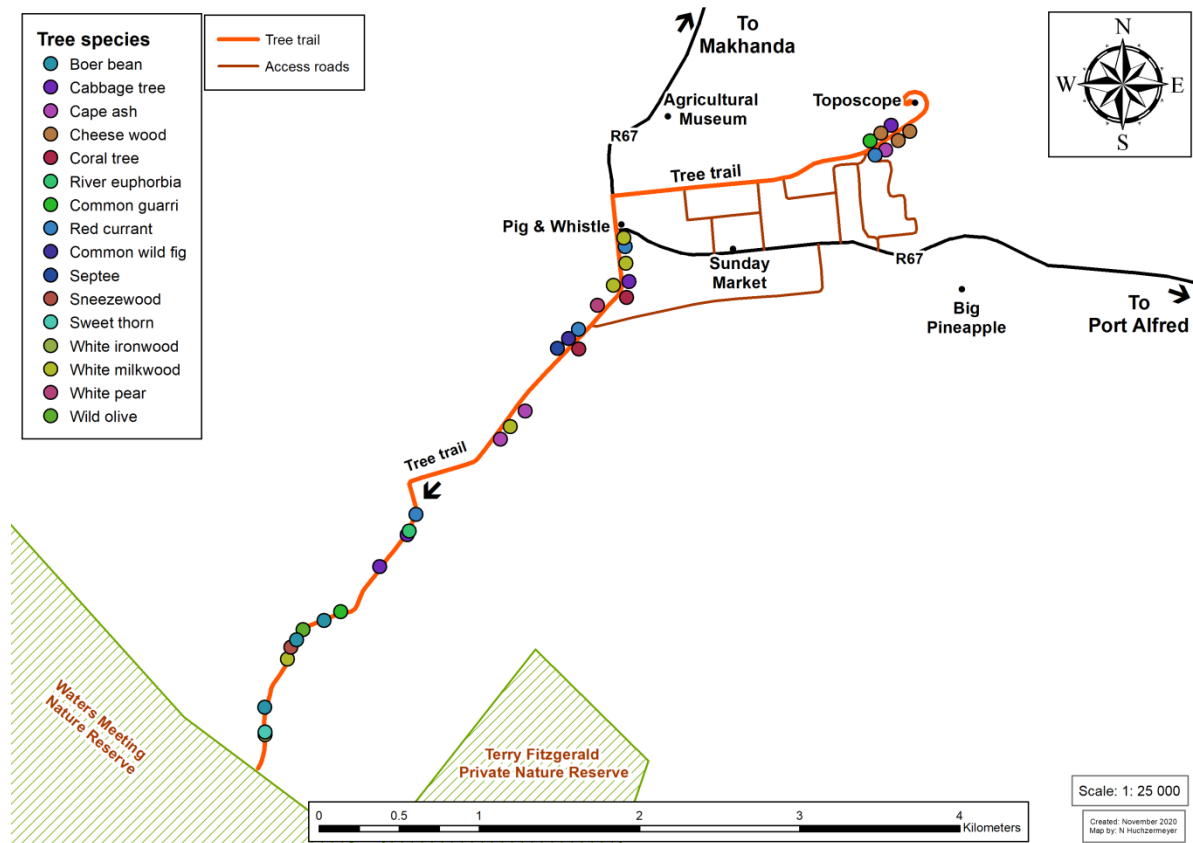
It will grow in sun or shade and looks spectacular with dense bunches of orange-red flowers contrasting with shiny dark green quilted leaves for months at a time. Nectar rich flowers attract sunbirds and lots of insects, which, in turn, attract insectivorous birds. It is slow growing and will probably not reach more than about six metres in height, so is great for small gardens. Its roots are not aggressive. Once established, it copes reasonably well with sporadic periods of drought and will survive mild frost.

What is it used for?

The major traditional uses of Ithobankomo are magical – to bring success to a hopeful lover, and as a protective charm. Roots and bark have also been used to bind animals' broken limbs.

Bathurst Roadside Treefinder Trail

While there are several nature reserves in the Eastern Cape where Thicket species can be enjoyed, during the disruption of COVID 19 many of these had to close, necessitating alternatives for people who wish to learn more about Thicket. The Bathurst Treefinder Trail is a map of roadside trees in this small Thicket town, where mature specimens can be seen alongside public roads. Please note that the trees are not marked, and that it is important to stop in safe places and take care with passing traffic when looking at the trees.



The interactive Google Earth version of the Treefinder Trail map can be accessed via the Rhodes Restoration Research Group website. This can be found at the following url: <https://sites.google.com/view/rhodesrestorationresearchgroup/home>

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