June 2009

#### Compiled by Andrew Goodson (May 2009)

The Academy is like a large botanical garden and contains a wealth of trees. In 1979, before the school was built, two botanists from Zomba made a survey of the trees, grasses, and other plants of the Academy (E.A.K. Banda, A.J. Salubeni, *The Vegetation Survey of Kamuzu Academy and Mtunthama, Kasungu* June 1982 – a copy is kept in the Biology Department) and listed over 100 native trees; but this does not include the numerous foreign species such as jacaranda, pine, palm, eucalyptus, pine and so on which are commonly found here, and even some of the native ones such as mwimbi and m'mbale are missing, presumably because they were planted after 1979. Here I describe about 65 native species and 42 imported ones.

In investigating the Academy trees I have been greatly helped by a local expert, Cliff Kalonga, and by Mr Heavener Daut Phiri of the Landscape Department; I have also consulted the following books from the Library (mostly these are in the Malawiana room downstairs, apart from Palgrave):

Bins, B, Logah, L.P., Dictionary of Plant Names in Malawi, 1972;

Pullinger, J.S., Kitchin, A.M., Trees of Malawi, 1982;

Shorter, Clare, An Introduction to the Common Trees of Malawi, 1989;

Forestry Research Institute of Malawi, *Trees, shrubs and woody climbers of Zomba Botanic Gardens*, 1985:

Palgrave, K.C., Trees of Southern Africa, 1977/1981.

Lane, Stewart S., A Field Guide to the Aloes of Malawi, 2004.

Other works available in whole or in part on the internet are:

Burrows, J., Willis, C. (eds), Plants of the Nyika Plateau, 2005;

Morris, B, Chewa Medical Botany: A Study of Herbalism in Southern Malawi;

a survey by the Malawian Environmental Monitoring Programme (MEMP) at

http://ag.arizona.edu/OALS/malawi/PLUS.html, which gives the Chichewa names of very many trees and other plants.

da Silva, M.C., Izidine, S., Amude, A.B. A preliminary checklist of the vascular plants of Mozambique (2004)

Topham, P. 'The genus *Brachystegia* in Nyasaland', *Bulletin of Miscellaneous Information (Royal Botanic Gardens, Kew*), 1930, No. 8, pp.348-364.

In classifying the trees into families I use the following scheme, which follows the order published on the internet by the Angiosperm Phylogeny Group (a group of botanists who in recent years have been attempting to classify all the families of flowering plants more exactly using DNA evidence). As far as getting to know the trees is concerned, however, it is best to begin with the most common trees, the brachystegias, acacias, bauhinias etc., which belong to the family Fabaceae. The names ending with *-ales* give the orders, those with *-aceae* give the families, and the last two names, e.g. *Brachystegia spiciformis*, give the genus and species. I have omitted those families which are not represented at the Academy.

ORDER	FAMILY	GENUS (pl. Genera)
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# **Monocotyledons (monocots)**

LauralesLAURACEAEPerseaMagnolialesANNONACEAEAnnona

Asparagales ASPARAGACEAE Agave, Aloe, Dracaena

(AGAVACEAE)

Pandanales VELLOZIACEAE Xerophyta

Commelinids

Arecales ARECACEAE (PALMAE) Borassus, Hyphaene, Phoenix, Raphia

Poales CYPERACEAE Papyrus

Poales POACEAE Bambusa, Oxytenanthera

Zingiberales MUSACEAE Musa

# **Dicotyledons (eudicots)**

Proteales PROTEACEAE Faurea, Protea Caryophyllales NYCTAGINACEAE Bougainvillea Santalales OLACACEAE Ximenia

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R	Cosids	COMBRETACEAE	Combretum, Terminalia
	Myrtales Myrtales	MYRTACEAE	Callistemon, Eucalyptus, Psidium, Syzygium
F	Surosids I	MIKIACEAE	Cattistemon, Eucatypius, I statum, Syzygium
L	Celastrales	CELASTRACEAE	Maytenus
	Malpighiales	CHRYSOBALANACEAE	Parinari
	Malpighiales	CLUSIACEAE	Psorospermum
	Malpighiales	EUPHORBIACEAE	Acalypha, Bridelia, Euphorbia, Flueggea
	1 6		(Securinega), Pseudolachnostylis, Uapaca
	Malpighiales	OCHNACEAE	Ochna
	Malpighiales	RHIZOPHORACEAE	Cassipourea
	Malpighiales	SALICACEAE	Flacourtia, Oncoba
		(FLACOURTIACEAE)	
	Fabales	FABACEAE (a) Mimosoideae	Acacia, Adenanthera, Albizia, Dichrostachys, Elephantorrhiza
	Fabales	(b) Caesalpinioideae	Afzelia, Bauhinia, Brachystegia, Caesalpinia,
	1 dodies	(b) cuesurprinorueue	Delonix, Julbernardia, Piliostigma, Senna
			(Cassia), Tamarindus
	Fabales	(c) Faboideae (Papilionoideae)	Adenodolichos, Dalbergia, Droogmansia,
		( )	Eriosema, Erythrina, Mucuna, Ormocarpum,
			Pericopsis, Philenoptera (Lonchocarpus),
			Pterocarpus, Swartzia
	Rosales	MORACEAE	Ficus, Morus
	Rosales	RHAMNACEAE	Catunaregam (Xeromphis), Ziziphus
	Cucurbitales	CUCURBITACEAE	Luffa
Е	Curosids II		
	Brassicales	CARICACEAE	Carica
	Brassicales	MORINGACEAE	Moringa
	Malvales	DIPTEROCARPACEAE	Monotes
	Malvales	MALVACEAE ANACARDIACEAE	Azanza, Ceiba, Grewia, Hibiscus, Sterculia
	Sapindales	ANACARDIACEAE	Allophylus, Lannea, Mangifera, Ozoroa, Sclerocarya
	Sapindales	BURSERACEAE	Commiphora
	Sapindales	MELIACEAE	Azadirachta, Ekebergia, Khaya, Melia, Toona,
		-	Turraea
	Sapindales	RUTACEAE	Citrus
	Sapindales	SAPINDACEAE	Allophyllus, Lecaniodiscus, Zanha
Α	sterids		
	Ericales	EBENACEAE	Diospyros
Е	Cuasterids I		
	_	BORAGINACEAE	Cordia
	Gentianales	APOCYNACEAE	Diplorhyncus, Plumeria, Rauvolfia, Thevetia
	Gentianales	LOGANIACEAE	Strychnos
	Gentianales	RUBIACEAE	Multidentia (Canthium), Gardenia, Pavetta,
	Lamiales	BIGNONIACEAE	Psychotria, Tapiphyllum, Vangueria Clytostoma, Jacaranda, Kigelia, Markhamia,
	Laimaies	BIGNONIACEAE	Spathodea, Stereospermum, Tecoma
	Lamiales	LAMIACEAE	Clerodendrum, Rotheca, Vitex
	Lamiales	PEDALIACEAE	Sesamum
	Lamiales	VERBENACEAE	Duranta, Gmelina, Holmskioldia, Lantana, Lippia
	Solanales	SOLANACEAE	Nicotiana, Solandra
Е	Cuasterids II	2	
	Apiales	APIACEAE	Steganotaenia
	-	(UMBELLIFERAE)	
	Apiales	ARALIACEAE	Cussonia
	Asterales	ASTERACEAE	Vernonia
		(COMPOSITAE)	
G	Symnosperms (Cone-		
	Pinales	ARAUCARIACEAE	Araucaria
	Pinales	CUPRESSACEAE	Juniperus, Widdringtonia

Pinales PINACEAE Pinus

#### LAURACEAE (Laurel and avocado pear family)

# peyala (Persea americana)

This is the avocado pear tree, a native of south and central. There is a big avocado tree at the door of the boys' hostel (overhanging the wall), with fruit; another near the ring road by the CVG (where a path leads to two little white huts at the sewage treatment plant); others in the housing area, e.g. in house 37 or house 10. The leaves are quite large and shiny, round at the base but pointed at the tip. Since not many animals eat avocados, it is speculated that the fruit was designed to be eaten by large prehistoric animals, now extinct. It is rather surprising to find this tree classified in the monocotyledonous group, along with palm trees, bananas and bamboos, since it looks very much like any other tree.

### **ANNONACEAE** (The custard-apple family)

# **mpoza** (Annona senegalensis and Annona stenophylla).

Banda and Salubeni noted this in the dambo area, and there was apparently one near the flats too, but it has been cut down for firewood. I have not been able to locate one in the Academy, but there is one in the Anglican hospital grounds (behind the warehouse, near the Wimbe road; it is quite a low tree, with large leaves, and looks flattened as if someone has sat on it.) A large cultivated version of the mpoza fruit (looking like a dimpled hand-grenade) can be bought at the roadside near Ntcheu. It tastes like banana-flavoured ice-cream.

# ASPARAGACEAE (AGAVACEAE) (The sisal family)

### khonje (Agave sisalana)

Sisal is a Mexican plant, one of the numerous agave family. (The name 'sisal' comes from the Mexican port of Sisal.) This is the plant which consists of a rosette of long spiky sword-shaped leaves, which can be seen, for example, around house no. 7 and elsewhere. It produces a tall flower after seven to ten years, and then dies. Traditionally in Mexico agave plants are pollinated by different species of bat, but the sisal planted commercially or for ornament is all planted artificially, and every plant is genetically identical. Sisal leaves are long and straight, so the sisal-like plants with short leaves (as seen outside Landscape for example) are presumably a different species of agave.

# khonje wa fisi (Aloe spp.)

There are various kinds of aloe planted round the Academy. They look a bit like sisals, but are less spiky, and the leaves tend to flop. There are several near the Girls' Hostel junction, and three more at the corner of house 33 near the Club. In the Library

(Malawiana room) there is a book describing the aloes of Malawi with colour photographs (for the title, see above).

### mchemani (Dracaena spp.)

In the middle of the Maths corridor is one of these trees, with a weak, papery trunk. It has strap-like leaves at the top. This is the 'large-leaved dragon tree'. (A nickname for it is 'mzekezeke', since it reminds people of a Shona dance performed with pompoms.) There are two species of large-leaved dragon tree, *steudneri* and *hookerana*; the *steudneri* is bigger. I am not sure which this one is. There is also a small-leaved dragon tree (*Dracaena reflexa*); you can see some near the tuck shop, and the two together can be seen side by side on the roundabout in Mtunthama.

#### VELLOZIACEAE

Banda and Salubeni noted *Xerophyta splendens*, known as cheyo in Chichewa, but I do not know where it is. (*Xerophyta* was formerly called *Vellozia*.)

# **ARECACEAE** (Palm family)

#### kanjedza (Phoenix reclinata)

There are two of these tall beautiful trees, the wild date palm, in the garden of house 27 in the upper housing road. (At first there seems to be only one, but if you look carefully there are two.) In the *Odyssey*, Odysseus flatters Princess Nausicaa by comparing her to a palm tree which he once saw on Delos, presumably a tree like this. There are some other *Phoenix* palms in other gardens, but less conspicuous.

### **chiwale** (Raphia farinifera)

This palm, the raffia palm, grows more or less straight out of the ground, without a stem. You can see tall ones growing naturally in various places, where the land is wet and low-lying, on the road to Nkhotakota just before the gate of the game reserve. (The palm near the corner of the lake looks a bit like a young chiwale, but Mr Phiri says it is a young kanjedza.)

# mgwalangwa (Hyphaene benguellensis)

There are various species of *Hyphaene* palms, called 'fan palm' or 'doum palm', which have fan-shaped leaves. There are three or four to be seen on the road to Kasungu, and two more on the Lilongwe road after Kasungu, laden with fruit which looks like coconuts. There is another palm, the Borassus palm (mvumo or mlaza, *Borassus aethiopum*), which looks very similar, but with leaves twice as large, but I believe these are *Hyphaene*.

#### CYPERACEAE (Sedge family)

#### papyrus (Cyperus papyrus)

A cluster of papyrus grows in the lake outside the staff room. This is the plant from which the ancient Egyptians made paper. At certain times of year it provides a roost for dozens of white egrets.

# POACEAE (Grass family)

## nsungwi (Bambusa vulgaris)

I believe the bamboos in the Academy are the common bamboo (*Bambusa vulgaris*) rather than the native African bamboo (*Oxytenanthera abyssinica*). They have beautiful yellow stems. There are some near the door of the Clinic, some in front of the Headmaster's house, some near the Club; but the tallest and most magnificent cluster of all is the one outside house 21.

#### MUSACEAE (Banana family)

#### nthochi (Musa spp.)

The banana tree, with its beautiful green leaves, can be seen growing in the garden of house 37 and elsewhere. But the tall banana-like plant growing outside the dining hall, or near the music room, is not banana but is, I believe, *Strelitzia*, from a related family Strelitzaceae. Cliff says the name for this is 'mtochi', but I have not seen this name in any of the books.

# PROTEACEAE (Protea family)

# chinsense; chiyere (Faurea speciosa)

Also known as broad-leaved beechwood. There are two on the road in front of house 14, another nearly opposite the junction to the girls' hostel, and one outside the TIL shop (to the right of the path as you go in). They have curly leaves and flowers on stalks.

#### **chinsense** (Faurea saligna)

Another kind of chinsense is *Faurea saligna*, 'beechwood', which has narrower leaves, very shiny. You can see an example of this on the far side of the tennis courts, and another nearby, close to the small gate in the perimeter fence.

Banda and Salubeni also noted *Protea angolensis*, *P. madiensis*, and *P. uhehensis* from this family.

#### **NYCTAGINACEAE** (Bougainvillea family)

#### **bougainvillea** (Bougainvillea spp.)

Bougainvillea trees were named after a French admiral, Louis de Bougainville, who discovered them in Brazil in 1768. They have pretty flowers in different colours, but soon grow into a thicket of vicious thorns. There are several of them around house 39 and some in the garden of house 21.

#### **OLACACEAE** (Olive family)

# nthenjere; nthundu; nthunduluka (Ximenia caffra)

This is the sour-plum, which has sour but edible fruit. These are some small trees in the area beside the boys' hostel, opposite the Chinese garden, which have long thorns and leaves growing on the thorns or at the root of them. I think these are *Ximenia caffra*, which have leaves up to 6 cm; a similar species called *Ximenia americana* is smaller, and has leaves 2-4 cm long.

# **COMBRETACEAE** (Combretum family)

# **kadale** (*Combretum fragrans* and *molle*)

Combretum trees are easy to recognise, since their seeds generally each have four little wings. (Rooibos tea comes from one of the combretum species, C. apiculatum). There is a small Combretum fragrans to the left of the path from the lake to the water treatment plant. The leaves are long, smooth and darkish green, in whorls of three or four. There is a large Combretum fragrans on the golf course, near the water plant there. There is another combretum with fruit in the Clinic circle, just in front of the CDT room. It is labelled Combretum fragrans, but this identification is perhaps not correct, since the fragrans (called 'four-leafed combretum') has leaves in whorls of three or four, which this doesn't. There is another opposite house 32, near the start of the diagonal shortcut path that cuts off the Club corner. The name 'kadale' is a general one and can also refer to the *C. molle* and the *C. zeyheri*. All three types were noted by Banda and Salubeni.

#### **mkhuthe** (Combretum zeyheri)

This tree can be seen at the start of the flats road, between houses 5 and 6; also in the wood behind house 3. It has much bigger fruits than the other kinds of combretum, giving it the name 'large-fruited combretum'. A kind of edible caterpillar grows on it.

# naphini (Terminalia sericea)

Terminalia trees have just two little wings on each seed. This one is the 'silver terminalia'. This tree is easy to find: there is one right in front of the water-treatment building (near the Senior Housemistress's house) and a couple more behind the building. The pinkish-red seeds can be seen from a distance, and the bark is deeply fissured and coloured white and black like flowing water. There is another one of these trees opposite house 33 by the diagonal path which cuts across the corner near the Club; it can be recognised from its stripy bark. Another name for naphini is gonondo. Banda and Salubeni identified another terminalia, 'chikuliungu' (*Terminalia stenostachya*), but I don't know where it is.

# **MYRTACEAE** (Eucalyptus and guava family)

katope; jambula; mpani (Syzygium guineense) The local children like to climb this tree and eat the red fruit (which is tasty, but rather sour). There is one right outside the girls' hostel; another on the corner of the crossroads near the gate (on the Headmaster's house side); another as you go down the slope outside the Art room; others near the ring road near the Kasuka well. The leaves of Syzygium guineense are shiny and have a narrow tip, like the nib of a pen. The fruit is called water-berry in English. The children also call it 'jambula'. Katope trees are generally found near water.

katope; nyowe; mchisu (*Syzygium cordatum*) Another kind of katope can be seen by the lower dambo bridge, where there are two examples, opposite the Kasuka well, and one behind the well, near the other kind of katope. The leaves of this species are more rounded than those of *S. guineense*, and they come out of the stem in pairs, each pair at right angles to the one below. There are often withered blackened flowers in the branches, which look like abandoned birds' nests.

# gwafa (Psidium guajava)

The guava tree is related to the water-berry. It is found in several of the gardens of the school, e.g. in house 37 or house 21. Surprisingly the guava is related to the eucalyptus, although they seem to have little in common apart from the fact that the bark peels off. (You can compare the two side by side in the garden of house 37.)

# 'bulugamu' (Eucalyptus spp.)

This tree is introduced from Australia. There are some tall eucalyptus trees in the wood behind house 39; other fine ones behind the Chinese vegetable garden, and others in the gardens of houses 32, 33, 37, and elsewhere. In the library (Malawiana room) is a booklet explaining how to tell the different species apart, which appears to be not an easy task.

(weeping bottle-brush) (*Callistemon viminalis*) This is the tree with drooping foliage and red brush-like flowers, which can be seen for example in the corridor outside the Lecture Theatre. It is a plant introduced from NE Australia.

# **CELASTRACEAE** (Spindle family)

# mtsukamfuti (Maytenus senegalensis)

Banda and Salubeni noted this tree. It is a type of spike-thorn, a tree which has long spines coming out from the same place where the leaves grow. I have not seen it but Cliff Kalonga says there are some at the KA farm.

#### CHRYSOBALANACEAE (Mobola family)

muula, mbula (Parinari curatellifolia)

This tree, the mobola plum, can be seen opposite the Senior Housemaster's house (about 15m from the road). The leaves come down low enough to examine, and on the far side it is laden with fruit. The fruit when ripe tastes like strawberry icecream. The leaves are roundly elliptical in shape, with veins that make a wide-angled V. Another is in the drive to house 21, just next to the back wall of the bathroom of that house, and there are lots of small ones in the wood behind the Senior Housemaster's house.

#### **CLUSIACEAE** (St John's wort family)

#### **mtsiloti** (*Psorospermum febrifugum*)

This tree has tiny white five-pointed flowers and fruit which is a cluster of little red berries. White Rhodesians used to use these as a substitute for holly berries at Christmas. There are some small ones on the dambo path (on the left as you go towards the school; there is one next to a nthudza just past the electric wires). They have dark green leaflets.

# **EUPHORBIACEAE** (Euphorbia family)

msolo (Pseudolachnostylis maprouneifolia)

This tree (called 'kudu-berry' in English) has little round green edible fruit about the size of a marble and short pointed leaves. There is one on the diagonal path leading to the BPR, on the left hand side; another near accounts; another good example on the road to the Club (with others nearby). Apart from its fruit, the most memorable thing about this tree is its very long Latin name. (Shorter calls it 'duiker berry' but Palgrave gives this name to another tree.)

#### msuku (Uapaca kirkiana)

This tree is easy to recognise from its leaves, which are rather stiff; the two edges are turned down, but the spine of the leaf generally curves upwards, a bit like a horse saddle. It has yellow fruit, which are edible although perhaps not to European taste. There are many of these trees about, for example, opposite the girls' hostel junction, others in the garden of house 32 (next to the Club) and on the other side of the road; at the upper corner of house 26, and elsewhere. Another name in Chichewa is mtoto, and in English 'wild loquat'. The fruits are called 'masuku'.

# kasokolowe (Uapaca nitida)

Although this is related to the msuku (*Uapaca kirkiana*), it doesn't look like it. In fact it looks a bit like an msolo, and small green fruit also looks similar, but the leaves (like the Chichewa name) are longer. The fruit is not unpleasant, although only the outer millimetre or so can be eaten. You can see a kasokolowe opposite the junction by house 19 (next to a mwimbi and an msuku); another one is at the beginning of the dambo path at the housing end

(leaning over the lawn, next to an msolo, on the left as you enter the path going towards the dambo).

#### nkhadze (Euphorbia tirucalli)

This is called 'rubber hedge euphorbia' or 'pencil euphorbia' in English. It is a very unusual tree quite unlike the other members of the family. It has no leaves; instead, the twigs are green. There is one very near the sausage tree opposite the Headmaster's house. If you snap a twig, you will find a white fluid, which is very irritant (on no account get it in your eye). This tree grows quickly and in the past, according to Dr Livingstone and other writers, nearly every village was surrounded by it as a kind of hedge. Now it is rare except in graveyards; although there is a row of nkhadze still standing in Kasungu round the second football pitch (shortly before you reach the petrol stations on the main road). The nkhadze tree is also mentioned in the oldest document written in Chichewa, John Rebman's A Dictionary of the Kiniassa Language, compiled in about 1853-4 (but not published until 1877, and reprinted 1967; it can be viewed on the internet) by a German missionary living near Mombasa, Johannes Rebmann. He obtained all his material from an exslave who came originally from the village of Mphande, apparently near Ntchisi. Under the entry 'Mideme' (Rebmann's spelling of Miteme, the name of a village) he writes: 'Midéme, name of a country 1½ days N.W. of Mpande. The people of Mideme are famous for planting their nkadse-trees in very straight lines – wherefore one will say: diveni dipsare n-kadse Kimideme' (in modern spelling: tiveni, tibzare nkhadze chimiteme 'Come on, let's plant nkhadze trees in the Miteme way').

# Other euphorbias

The genus *Euphorbia* in fact contains an enormous range of species, about 2160 in all. Among other euphorbias are the poinsettia (Euphorbia pulcherrima) with its bright red flowers, which you can see for example near the fence of house 38 and elsewhere; there is a similar plant with white flowers near the dining-room door. The plant with large white flowers near the Music room corner and outside the Club is Euphorbia alba, and the hedge plant which makes a wonderful display of small white flowers in April and May is another euphorbia (it can be seen opposite the new wing of the boys' hostel, on the tuck shop path, opposite Landscape, in the hedge of house 37 and elsewhere). If you break off a stem of any of these, you will find the same poisonous and irritant milky latex. (If this gets on your hands, rub your hands in dust immediately to get it off.) Euphorbia is named after a Greek physician Euphorbus, who lived at the court of King Juba II of Numidia in the time of Augustus.

kapirapira (Flueggea virosa)

Also called *Securinega virosa*, white-berry bush, snowberry tree. A small tree with many stems. You can see one behind Landscape, next to the school fence, and another nearby as you walk from there along the fence towards Maintenance. The leaves are smallish and round and mottled in appearance. It looks at first as if it has thorns, but these are just broken off stalks, not very thorny. Banda and Salubeni give it the Chichewa name mserechete.

#### **OCHNACEAE**

# phatwe, mgundanguluwe (Ochna

schweinfurthiana)

Also known as the 'mickey mouse tree' or brick-red ochna, it has long oval olive-green leaves which have toothed edges, like a saw-blade. There is one by the road in front of the new wing of the boys' hostel; a small one near the lake, between the corner of the Headmaster's garden and the water-purifying plant; and another just outside the dining-hall door, in a group with a mwimbi and another tree. When it has fruit, the fruit is small and black, in groups of four, surrounded by red sepals. Banda and Salubeni give it the name mgundanguluwe, but locally it is called phatwe. They also noted *Ochna leptoclada* from this genus.

# RHIZOPHORACEAE (Mangrove family)

Banda and Salubeni noted *Cassipourea mollis* (onionwood) from this family. This tree has quite dense dark green foliage with lance-shaped leaves; but I have not yet found it.

# SALICACEAE (FLACOURTIACEAE) (Keiapple family)

### mtseche; malaza (Oncoba spinosa)

'Snuff-box tree'. There are three of these small trees (not recorded by Banda and Salubeni) in the centre of the lawn outside the back door of the Clinic. They have small fruits like miniature pomegranates hanging from them.

# nthudza; mtudza (Flacourtia indica)

This is quite a small tree. There is one just outside the Dining Hall (clinic side, next to a tree with a creeper growing up it). It can be recognised from its very soft velvety leaves. There is another by the road down from the Senior Housemaster's house; another at the Club junction, just in front of the bamboos; another at the far left corner of the hockey pitch. The fruit (called nthudza) looks like a small fig, and is edible.

# **FABACEAE (Pod-Bearing Trees)**

Up to 70% of the trees in Kasungu and Nkhotakota game reserves belong to the pod-bearing family,

Fabaceae (also called Leguminosae), which is divided into three sub-families: the Cassia sub-family (Caesalpinioideae), the Mimosa sub-family (Mimosoideae), and the Pea sub-family (Faboideae or Papilionoideae). Like bean plants, these trees bring fertility to the soil by fixing nitrogen with their roots, and so grow well in Malawi, where the fertility of the soil is constantly reduced by bright sunshine and heavy rain.

#### (a) Mimosoideae (Mimosa sub-family)

Trees in this sub-family have flowers with no petals (or only very small petals). The most common are acacia trees, which generally have flowers in little round fluffy balls (white or yellow), but the mthethe (*Acacia polyacantha*) has flowers in spikes. The acacias usually have lots of thorns, at least on their lower branches, although there are some (generally imported from Australia, apparently) which are thornless. Banda and Sabuleni recorded the following 7 different types:

Acacia amytheflowers orange-yellow thophylla or balls; small hooked thorns macrothyrsa Acacia hockii flowers yellow balls, short leaves; straight thorns in pairs; pods reddish brown; bark red or yellowishbrown, not powdery Acacia nilotica flowers yellow balls, short leaves; long whitish thorns in pairs; grey-green pods constricted between seeds: dark rough bark. flowers in white spikes, Acacia thorns hooked, on the trunk polyacantha also flowers like white balls Acacia gerrardii (Oct -Feb), bark dark grey or reddish; short spines Acacia flowers white balls (Nov rehmanniana Feb), lots of long straight thorns; powdery rusty-red bark Acacia sieberiana flowers white or cream or sieberana balls (Sep - Nov), long

# mzona (1) (Acacia xanthophloea?)

Those acacias with long straight thorns (minga) are known as mzona or minganzolo. These include *sieberana* and *rehmanniana*. However, the tall beautiful acacias on the left as you enter the dininghall garden with powdery yellow bark seem to be a different species, I believe *Acacia xanthophloea* (the name is Greek for 'yellow bark'). There are others near the side door of the Clinic, and at the junction on the ring road near the Clinic. One puzzle is that

thorns; papery bark

according to Palgrave, *Acacia xanthophloea* has flowers in September to November, but these trees produce their flowers (white at first, then turning yellow) in May or June. Another name for *A. xanthophloea* is mchezime.

#### mzona (2) (Acacia sieberana)

The 'paper-bark acacia' can be seen opposite flat 4. It has fearsome long straight thorns, and bark which peels off like fragments of paper.

#### mzona (3) (Acacia rehmanniana?)

There are also smaller mzona trees here and there, for example outside house 28 on the upper road. They have conspicuous long straight thorns. Perhaps these are *rehmanniana*.

#### **mthethe** (Acacia polyacantha)

This has flowers in spikes, not in balls. There is a fine specimen just outside the gate, and some others further down the road leading to the roundabout (they are the very tall trees looking like large pines). Another good specimen can be seen opposite the Senior Housemaster's house, and there is one near the lower dambo bridge.

# msangu (Acacia albida)

There is one of these trees near the back door of the clinic, not far from the anthill. Its branches are full of small thorns and zig-zag this way and that. In English it is called apple-ring acacia, since the pods look like a strip of apple peel. The flowers are in white spikes.

# **chitongolo; chitongololo; mtanthanyerere** (Acacia amythethophylla or macrothyrsa)

There are several trees called 'mtanthanyerere', one of which is this, although the proper name is chitongolo or chitongololo. One of these can be seen in the Clinic circle (incorrectly labelled Peltophorum africanum – Palgrave notes that they are easy to confuse); there is another close by next to the chocolate berry tree on the short-cut path from Music to the Dining Hall, and another on the road down from CDT to the ring road (it is on the left, opposite the mmbale tree). These have flowers in little yellow balls, and fairly big leaves doubly divided. There are inconspicuous curved thorns on the branches. Like many of the trees in the Academy, several of these trees have a parasitic tree growing in the branches, called 'ulimbo', because bird-lime or glue is made from it. (There are at least two kinds of ulimbo, one with small leaves and red flowers, the other, more common, with large leaves and white flowers. At the gate of house 13 and on the path beside the Girls' Hostel, you can see trees with both types.)

**'lukina'; mtanthanyerere** (*Leucaena leucocephala*) This tree is not native but Mexican in origin; it has been widely planted throughout the tropics. The bark

is light grey and the leaves are finely divided like an acacia. The pods hang in bunches from near the top of the tree. There is one directly outside the door of Reception facing the Accounts, and three in house 31, one of them spreading over the road; another in the garden behind Landscape.

#### mphangala (Dichrostachys cinerea)

This is a small wiry tree with thin intertwining branches. There is one directly opposite the chapel, another outside the Senior Housemistress's house, another on the road in front of Maintenance, a small one next to the goal post by the tennis court, two others on the dambo path, near the electricity pole. The pods of this tree shrivel up into small clusters. It is also called chipangala, 'Chinese lanterns' and 'sickle bush'. In Yao this tree is called *chipisyaŵago* 'blunts the axe', because the wood is extremely tough.

# bead tree, false red sandalwood (Adenanthera pavonina)

The two trees outside the Library and one outside the lecture theatre also belong to the Mimosoideae; however, they are not Malawian, but from India, and planted for ornamental purposes. Their sickle-shaped pods shrivel up in the same way as Dichrostachys, but they contain bright red seeds. These seeds were once used by Indian goldsmiths for weighing gold (30 seeds = 11.5 grams); they can also be used as beads, or can be cooked. The wood is also valuable for firewood or furniture. Surprisingly, the seeds will not grow unless you first scratch them or boil them for a minute.

#### (albizia) (Albizia lebbeck)

This is an inroduced species. There is one at the corner near the CDT room, and another near the msambamfumu opposite Landscape. The leaves are divided into pinnae, which are again divided into 4 pairs of oval leaflets. In addition Banda and Salubeni noted three native kinds of albizia (antunesiana, harveyi, versicolor). Albizias have flowers without petals, in hemispherical sprays. I believe the tree between the petrol station and the Boys 2 Men welding shop is albizia, but am not sure which one. It has lots of large flat light-brown pods hanging down. Most albizias have quite large leaflets (harveyi is an exception).

From the Mimosoideae Banda and Salubeni also noted *Elephantorrhiza goetzei* (chamdima). This tree has acacia-like leaves. When the pods split open they have threads hanging from them. I do not know where to find it, however.

# (b) Caesalpinioideae (Cassia sub-family)

Amongst the famous trees of this sub-family are the brachystegias. These are the typical trees which are

found in Kasungu game park, and as you look at them in the Reception garden or on the lawn in front of the girls' hostel, it is not difficult to imagine elephants wandering amongst them. Banda and Salubeni recorded six different types:

Brachystegia boehmii	feathery leaves divided into 13-28 pairs of closely spaced leaflets; fairly large pods
Brachystegia longifolia	up to 16 pairs of small leaflets
Brachystegia utilis	5 to 12 pairs of leaflets, which are 2 - 4 cm long and more widely spaced than <i>B. boehmii</i> .
Brachystegia stipulata	has a pair of 'stipules' at base of each leaf, with a leafy 'auricle' round each; about 7 pairs of leaflets on each leaf.
Brachystegia spiciformis	about 4 pairs of leaflets, the outermost pair being the largest; large pods
Brachystegia manga	3 or 4 widely spaced pairs of oval leaflets, bluish green; pods hang downwards like raindrops.

The local names for these trees seem to vary according to which book you consult. Often the same name is used of several trees, or, conversely, the same tree has several names. 'Mombo' seems to refer to trees such as *boehmii*, *glaucescens*, *longifolia*, *microphylla*, *utilis* that have small leaflets; 'mvukwe' to those with leaflets a little larger. What all the brachystegias have in common is pods with a ridge down one side; these pods split into spirals explosively in the dry season, scattering their seeds.

# **mpapa** (Brachystegia spiciformis)

In B. spiciformis each 'leaf' is divided into 3-5 pairs of leaflets (usually 4); the leaflets are pointed and the pair furthest away from the branch is the widest. The classic B. spiciformis also has a little whisker in between the outermost pair of leaflets; none of the ones in the Academy seem to have this, however. You can see one of these trees easily, since the leaves are not too high, as you go from the library past the auditorium. There is another one easy to examine, with gnarled and twisted branches and the typical large pointed pods with a ridge at one side, at the upper corner of house no. 26. The last tree on the right as you go down from Reception towards Maths is an mpapa (although the leaves are way out of reach), and there are a number more in the dininghall garden, very tall and stately, which all come out into fresh leaves at the same time, about October. Outside the Senior Housemaster's garden (hostel side) is a type of *mpapa* slightly different from the others, since it has five to six pairs of leaflets on each leaf. (The name *mpapa* is also sometimes used for Afzelia quanzensis and for Brachystegia manga.

Banda and Salubeni use the name kamphoni for *B. spiciformis*, but *kamphoni* is more usually used for *Julbernardia globiflora*.)

# mombo, m'fendaluzi, nsendaluzi (Brachystegia boehmii)

Other names for this are chiombo and 'Prince-of-Wales' Feathers', as the leaves look rather like the feathers on a Victorian Prince-of-Wales' hat. This brachystegia is easy to recognise, since it looks as if the leaves have been cut into dozens of tiny leaflets with a pair of scissors. There is one on the left as you come out from Reception into the garden; and others are to be found at the corner of the ring-road opposite the Club junction. The name *mfendaluzi* refers to the fact that the bark can be stripped off this tree to obtain rope-fibres (*luzi*). One of the interesting things about this tree is that when the new leaves come out they are not green but brown in colour, as if they were about to fall.

#### msenga (Brachystegia utilis)

A tree similar to *mfendaluzi*, but not quite the same, can be seen in front of Accounts, and also there are two shading the staffroom khonde. There are not so many pairs of leaflets as the *mfendaluzi*, and the leaves are not so dark or dense. Locally this tree is called *msenga*. Perhaps it is *Brachystegia utilis*, in which case the more usual Chichewa names are kasumbuti or nzale.

#### **mvukwe** (Brachvstegia manga)

'Mvukwe' is the name given to the brachystegias with bluish leaves outside the Girls' Hostel, which are *Brachystegia manga* ('blue-leaved brachystegia'). There is also a tall one at the Headmaster's gate. There are three or four pairs of leaflets on each leaf. The pods of an *mvukwe* are not very large, and they hang down from the tree like black raindrops. Another name for *Brachystegia manga* is *msumbu*.

**bovu (bobvu, m'bovu)** (*Brachystegia longifolia*) Banda and Salubeni noted this tree in their list, but I have not been able to identify it as yet. Since in number of leaflets (9-12) it is intermediate between the mombo and the msenga, it is probably easy to mistake for one or the other.

#### **mfundabwi**; **mlotha** (*Brachystegia stipulata*)

These trees are not so well-known and are quite small in size. There is one opposite the junction by house 32, facing the three aloe plants, and another nearby, near the fence of house 26; another very small, in front of the bamboos near the Club; another opposite the bamboos outside the Headmaster's house, and another in the drive of house 22. The leaves are low enough for you to examine them carefully, and you can clearly see the little 'auricles' (like baby leaves) at the base of each leaf. This is the

only species of brachystegia to have these auricles. The leaflets are also quite large, sometimes even overlapping. The name mlotha or mfundabwi is given by Cliff Kalonga. The *Dictionary of Plant Names* and Banda and Salubeni call this tree 'bobvu', although bovu is more usually used for *Brachystegia longifolia*. The PLUS survey calls it mchenga or murotha.

#### **mtondo** (*Julbernardia paniculata*)

This tree is quite common in the Academy. It has very shiny bright green leaves, divided into about 4 pairs of leaflets (a bit larger than the brachystegias), and in May and June there are brown-coloured flowers above the leaves. There are three just behind the Greek theatre and many more elsewhere. This tree has a sturdy trunk which can be used for making mitondo (mortars).

# kamphoni (Julbernardia globiflora)

Like the mtondo, this often has brown flowers floating above the leaves; but the leaflets are smaller and more delicate than the mtondo, and not so shiny. There are five or six pairs of leaflets on each leaf. You can see one near the road just be the corner of the staffroom khonde, another (next to an mtondo) directly opposite the Senior Housemaster's house, and another at the nurses' houses junction (first tree on the right). The pods of this tree resemble those of mvukwe, but they have two grooves down the edge, not one.

# mpondo; mpando (Bauhinia petersiana etc.)

This tree has leaves with an ω-shape, which sometimes fold together like the leaves of a book. Often the flowers are white, but there are several planted with flowers which are pink, or like the one on the road just outside the staffroom khonde, with beautiful magenta flowers. They also have different sized leaves and beans. You can see them outside the Dining Hall, or by the path alongside the Girls' Hostel, and in many other places in the Academy. In English this tree is called 'orchid tree' or 'white bauhinia'. A certain website writes: 'The genus name "Bauhinia" honours herbalist brothers from the 16th century, Johann and Caspar Bauhin. They were identical twin brothers, making it a very apt name as the two lobes of the leaves, when folded together, are identical.'

# chitimbe or msekese (Piliostigma thonningii)

This has leaves like the mpondo, but more brittle. You can compare the trees side by side near the ringroad bridge not far from the girls' hostel. When this tree has big pods, it is known as msekese, because when you shake the pods they rattle. Another name is 'camel's foot', since the leaves are in the shape of a camel's footprint. There is a fine msekese opposite the Headmaster's house near the sausage tree and others near the Clinic. The old name for it was

*Bauhinia thonningii*, but it is now considered to belong to a different genus.

**kesiya, kesha (1)** (*Senna spectabilis* , fomerly called *Cassia spectabilis*)

This is not a native species, but is very commonly planted in Malawi. (Banda and Salubeni even found it here in 1979.) In English it is called 'cassia'. It is the short tree beside the lake (on the football pitch side) which produces garish yellow flowers throughout the rainy season. They have light green leaves. There are more of them in the upper housing road and lining the road out of Mtunthama as you approach the Anglican hospital. Formerly this tree and the two below were classified as *Cassia* but are now considered to belong to the *Senna* genus.

# kesiya, kesha (2) (Senna siamea, formerly Cassia siamea)

Another kind of cassia tree, also called 'kesiya' or 'kesha' in Chichewa, is the tall tree which lines the road on the right-hand side as you leave Mtunthama (starting opposite the 'Boys 2 Men' welding shop). The leaflets are much darker than the *Senna spectabilis*). It also produces yellow flowers in the rainy season, although not they are not so conspicuous as those of *Senna spectabilis*. I believe this is *Senna siamea*, but am not sure.

# **mtanthanyerere** (*Senna singueana*, formerly called *Cassia singueana*)

This is a native species, and quite a small tree, with leaflets smaller, lighter in colour and more delicate than those of the *Senna siamea*. There is one outside the back door of the Dining Hall (clinic side), next to a tree with a creeper growing up it. In English it is called 'winter cassia', since it produced deep yellow flowers from May onwards. The name mtanthanyere is also used for other trees.

#### mpatsachokolo (Senna petersiana)

Banda and Salubeni also found *Cassia petersiana* (now called *Senna petersiana*). This tree has more pointed leaflets; there is a possible example of this tree in the Anglican hospital grounds near the road junction.

#### msambamfumu (Afzelia quanzensis)

This tree (also known as 'lucky bean' or 'pod-mahogany') is very interesting; there is a fine one on the ring-road opposite the Landscape department, a large tree with branches that come down nearly to the ground. At first it looks a bit like an mpapa (mpapa is one of its names in fact), but the pods are heavier and fatter, without the ridged edge. These do not split open explosively, but open a crack to reveal beautiful chocolate-brown seeds, which have bright orange arils (caps). The seeds will grow if you plant them. The leaves are dark green and shiny. The name means 'bathing the chief', and according to Palgrave

an infusion of it was used for bathing to provide good luck before a hunt. There is another smaller msambambufu, without pods, in the middle of the lawn halfway between Music and the Dining Hall.

# m'bwemba (Tamarindus indica)

The name 'tamarind' comes from the Arabic 'tamr hindi' (Indian dates), since the dried fruit resembles dried dates. There are two small tamarinds (with a label) just outside the CDT room not far from where the security men keep their big dog. There is another tamarind near the fence of house 38.

# m'boma (Delonix regia)

This is an ornamental foreign tree, called m'boma (government tree) probably because it was planted around government offices. In English it is 'flamboyant', 'flame tree', or 'royal poinciana'. It has wide-spreading branches and bright red flowers. There is one of these trees in centre of the lawn outside the Library, a row of them down the road between the petrol station and the CCAP church, and about 15 of them round house 37!

# caesalpinia (Caesalpinia pulcherrima)

The caesalpinia itself, after which the sub-family is named, is just a small bush. It has a red flower with red whiskers growing out of it, and small green beans. You can see some on the bank behind the main football pitch (facing the road) – there is also a yellow version of the plant there – and there is one just at the corner of the Landscape building, on the right as you go in by the drive.

# Mauritius thorn (Caesalpinia decapetala)

Also called Cat's Claws or Mysore thorn. This is another kind of caesalpinia, and it is introduced from India. Unlike the other Caesalpinioideae it has lots and lots of tiny thorns. The flowers are yellow. You can see one of these trees behind the Maintenance building, about 10 feet from the fence. (Cliff tells me that it is called mlulu in Chichewa.)

#### (c) Faboideae (Papilionoideae) (Pea sub-family)

# m'banga (Pericopsis angolensis)

Also called muwanga. This is a very beautiful tree, which often has bright green pods which drip down, looking like pea-pods. In English it is called afrormosia (the old generic name, now changed to *Pericopsis*). There are some of these between the Headmaster's house and the swimming pool, and a beautiful one on the roadside just to the left of the Chapel entrance. There are also two others on the other side of the gate crossroad, which have no pods, but they can be recognised from the fact that the bark peels off in big strips. The leaves are compound, with oval leaflets, not in pairs, but alternately left and right, and a leaflet at the end.

#### mmbale (Erythrina abyssinica)

This is a most unusual and interesting tree. There is one just outside the boys' hostel (to the left of the path), and others on the road from CDT to the ring road (one on the right, the other on the left). In English it is called the red-hot-poker tree, because its flowers are on red spikes. The bark is incredibly deeply fissured, as if it had been painted by van Gogh; if you touch it you will notice small thorns everywhere. The leaves come in threes, and were apparently used as plates (*mbale*) in the old days. There is a young one of these trees on the walk from Music to Maths, with especially big leaves. Another name is mlindimila.

# **chimphakasa** (*Philenoptera violacea*, formerly called *Lonchocarpus capassa*)

Also known as mnswanswa, mpakasa, and 'raintree'. There are two of these trees (rather eaten by termites) on the left-hand side as you approach the gate and another on the right. Their leaves are a dusky colour. There is another one just outside the gate, on the left as you go out, which is rather unusual as it has leaves of different sizes, and a small one on the drive of house 22. An infusion of this tree, made from the two different sized leaves, was apparently once used if a woman wanted to have twins.

# mkulasinga (Dalbergia nitidula)

There is a small one of these near the road to the nurses' houses; it is on the right, just next to the kamphoni. 'nitidula' means 'shiny', and the leaflets are glossy, and half-folded down the middle. The English name is 'glossy flat bean'.

# mlombwa (Pterocarpus angolensis)

In English, 'African teak'. Banda and Salubeni found this in 1979, but it seems to have disappeared from the Academy since then. The pods of this tree are disk shaped, with a wavy wing all round, and they hang on the tree like badges, making it easy to recognise. You can see some by the roadside between Nkhotakota and the Nkhotakota pottery, and others on the Lilongwe road a couple of miles north of Mponela. The name *pterocarpus* means 'winged fruit'.

# phuluphulu; pulupulu (Ormocarpum bibracteum)

This is a small shrub which can be seen near the road in front of Maintenance. It has compound leaves with small leaflets. The leaves can be cooked as a relish apparently. There is another one by the fence of the Senior Housemaster's garden, and another right at the back of the hockey pitch, near the fence by the golf tee. The leaflets are small and soft. The fruit (a tiny ring-shaped pod) is hidden in light-brown petals. Banda and Salubeni didn't note this tree, but *Ormocarpum kirkii* (called lunemela in Chichewa), so I may be mistaken; but local people

refer to this one as phuluphulu, which the books say is *Ormocarpum bibracteum*.

Other trees of the Faboideae (Papilionoideae) subfamily noted by Banda and Salubeni are *Adenodolichos punctatus, Eriosema ellipticum* (njadza), *Eriosema psoraleoides, Mucuna stans* (chitedze), and *Swartzia madagascariensis* (kampango, snake bean).

#### MORACEAE (Mulberry and fig family)

#### **kachere** (Ficus natalensis)

This is the 'strangler fig' which seeds itself in the fork of another tree, then puts down roots which join together and kill the host tree. There is a good example of this just outside the corner of the Headmaster's house (on the side facing the gate), where a kachere has almost killed an mtondo; another opposite the second basketball court, where a kachere is strangling an mthethe. The huge fig tree outside the tuck shop is another kachere – note its sinister aerial roots, like strong drainpipes – although no host tree is visible. Some kacheres are just ordinary trees, though, like the one just outside the Dining Hall (on the left of the path), or the three near the side door of the Clinic (one of them on an anthill); these have smaller leaves than the one by the tuck shop. Banda and Salubeni say the kachere is Ficus burkei, but according to Palgrave, Ficus natalensis covers a number of closely related species, including burkei.

There is another kind of kachere in the dark shady triangle between houses 21 and 22. It has huge dark green leaves and a multitude of strong sinister-looking aerial roots; perhaps this is *Ficus ingens*.

#### mkuyu (Ficus sycomorus)

I believe this is the 'sycamore fig'. It is easy to recognise. There are several, with X-shaped trunks, opposite the junction on the ring road near the lower dambo bridge, and another near the upper dambo bridge. The leaves are nearly triangular, and cupped, almost into trumpet shapes. The fruits are called nkhuyu, and are eaten despite the fact that they are all infested with a certain kind of small wasp.

# maliposi (Morus spp.)

The mulberry surprisingly belongs to the same family as the fig. There is one at the beginning of the path between houses 27 and 28, often with boys climbing in it, and another nearby behind house 21. The leaves of the mulberry are quite different from the fig trees; they are large and toothed and have a different vein-structure.

#### **CUCURBITACEAE** (Cucumber family)

chinkhupule; sipanji (Luffa aegyptiaca)

The sponge-gourd is a vine rather than a tree. It can be seen if you walk from the potting shed in Landscape down towards the school fence; it is at the end of the path on the left. The name 'chinkhupule' refers to the cucumber-shaped fruits rather than the tree itself. These fruits are made into loofahs for bathing.

#### RHAMNACEAE (Buffalo-thorn family)

kankhande (Ziziphus mucronata or Z. abyssinica) Banda and Salubeni found both species growing here in 1979, but it is not clear which is which. (Abyssinica is the 'jujube', while mucronata is called 'buffalo thorn'.) There is one in the Clinic circle, with a label, just at the corner where, coming from CDT, you turn right for the Clinic; another on the lawn behind classroom 4. There is another opposite the first basketball court, another near the Club turn off. The leaves are shiny and asymmetrical, the foliage is dense and there are lots of thorns. (Z. abyssinica is now regarded as a subspecies of Z. mucronata)

**chipembere** (*Catunaregam spinosa*, formerly called *Xeromphis obovata*)

This is just a small shrub really. There is a very small example on the dambo path, very close to the *Dichrostachys cinerea*. It is only about a metre tall and has dangerous thorns above each leaf. (Xeromphis is put by Palgrave in the Rubiaceae family, but has now been reclassified.) In English the tree is 'thorny bone apple'.

# **CARICACEAE** (Papaya family)

#### mpapaya (Carica papaya)

Papaya or pawpaw trees can be seen growing in the Chinese vegetable garden and in many of the houses of the Academy. They have a tall straight stem, with all the leaves and fruit at the top. The female tree has fruit, the male has flowers. You can see a male and female side by side behind the petrol station on the right as you leave Kasungu. In America the fruit is called papaya, since pawpaw is apparently the name of another fruit.

#### **MORINGACEAE** (Moringo family)

#### **chamwamba** (Moringa oleifera)

This is not a Malawian tree but Indian. Two of them can be seen just outside the post office, on the right-hand side. In English they are called moringo, also drumstick tree, or horseradish tree. Their pods look like drumsticks, and split into three parts. The leaves are delicate, doubly compound, with small oval leaflets, which are easily rubbed off. The branches break easily. One of the employees in the TIL shop, Oscar, tells me that the leaves are made into an

infusion for stomach complaints. Apparently the root tastes of horseradish (*you* try it first!).

# **DIPTEROCARPACEAE** (Monotes family)

# **mkalakate** (Monotes africanus?)

The monotes has fruits which have four or five wings, and look like flowers. There are two at the junction to the Girls' Hostel (left-hand side, near a bougainvillea bush); they have ulimbo growing in them; also one behind the hockey pitch, right at the back, left-hand side, near the school fence. I believe that the tall tree go up the road to the Club, next to the msolo on the left, is also an mkalate, but the leaves are too high to check. When you touch the leaves, they feel very dry. The fruit has five little petals round it, like a star. Whether this is *Monotes africanus* (a species noted by Banda and Salubeni) or *Monotes glaber* (the name given in Shorter) I am note sure.

# MALVACEAE (Hibiscus and mallow family)

#### mtowo (Azanza garckeana)

Called 'snot apple' in English. This tree is hard to find. It is in the area opposite the Chinese garden, just near where a telephone cable crosses the road, near the two little white huts of the sewage plant; it is in a thicket just behind the trumpet-bush hedge close to the road. It is a smallish tree with leaves mostly with three lobes.

# usufu (Ceiba pentandra)

This is the kapok or silk-cotton tree. It is not native to Malawi, but was planted for cotton near the lakeshore. There are two examples in the Academy, one in the corner of the lawn opposite the 2nd basketball court, and the other in the corner just near the gate. They have tall slightly wiggly conical trunks armed with fierce-looking thorns. The seeds, when they break out of the pods, have silky hairs attached which are used for making kapok. It is a close relative of the baobab tree, and grows in the same districts. (Formerly Bombacaeae family, now regarded as part of the Malvaceae, according to the APG classification.)

#### **thedza** (*Grewia pachycalyx*)

Cliff says there are some near his house in Mtunthama, near the Mphonongo road, but I have not seen them. (Formerly Tiliaceae, now considered part of the Malvaceae.)

#### mgoza (Sterculia africana)

In English, 'African star-chestnut'. These trees have very large five-pointed leaves. There is one near the gate (just behind the chimpakasa trees), and another on the lawn between the Headmaster's house and the swimming pool; another taller one opposite the basketball court. None of these have fruits, but on

the Ntchisi road near Malomo you can see a big mgoza with fruits a bit like baobab fruits. (Formerly Sterculiaceae, now considered part of the Malvaceae.)

# ANACARDIACEAE (Mango family)

#### mtatu (Allophylus africanus)

This tree is very rare locally; it has three leaflets on each leaf-stalk (sometimes there is a fourth or fifth leaflet, but smaller). There is one very near the gate, in the lawn opposite the first basketball court. It is also called msawasawa or kafupakachimbwi.

# kaumbu, chiumbu (Lannea discolor)

This tree, called 'live-long' in English, can be seen near the water treatment plant, directly in front of the naphini. You can also see it right in front of the Clinic, with a label (now illegible). The leaf has a fairly long stalk and is divided into 3 or 4 pairs of large leaflets, with an extra leaflet at the end. It is used for medicinal purposes; among other things, it contains a red sap which is traditionally used in cases of anaemia or in childbirth.

# mango (Mangifera indica)

There is an orchard of mangoes of different varieties diagonally opposite Maintenance, and several other trees here and there around the Academy. Mangoes are also popular outside the Academy, and often are the only trees standing when everything else has been cut down. The leaves at first look a bit like the leaves of a mwimbi. The very large tree at the Maintenance crossroads is a mango.

# mtukumphako (Ozoroa insignis)

This tree (the 'tropical resin tree') can be seen in the Clinic circle. It has long dark green leaves, light green below, with parallel veins and a little pointed bristle at the end, and clusters of small black fruit, looking like currants. Another name is nchiyere.

# m'fula (Sclerocarya caffra)

A good example of this tree (called 'marula' in South Africa) can be found on the road to the outside primary school, on the left, near a tall Acacia polyacantha. It has leaves consisting of about 7 pairs of leaflets, plus a terminal leaflet, and round fruit about 3.5 cm in diameter. The fruit is not usually eaten (although it can be made into an alcoholic drink or into jam), but the seeds (inside the stone) are. You can see that people have been cutting off bark for use as a remedy for dysentery. (Palgrave has an interesting note on this tree.) There is another mfula, although without fruit, on the road outside Landscape, near the corner facing the kitchen, and another on the road near the Chinese garden. One of the characteristics of an m'fula is the swellings often found on the lower part of the trunk.

#### **BURSERACEAE** (Myrrh family)

#### **khobo** (Commiphora africana)

In English, 'poison-grub commiphora'. The name khobo is also used for frangipani, but really belongs to this tree. I have not seen them in the Academy, but there are some in Kaphaizi village, e.g. behind the little shop you pass just before you reach the graveyard.

#### **MELIACEAE** (Mahogany family)

#### m'bawa (Khaya nyasica)

African mahogany. The landscape department have planted a lot of these trees round the Academy. There is one near the road outside the girls' hostel, with a label attached. The trunk is light grey, and tall and smooth. If you try to shake it, you will find it is very solid. There is a very tall big one in the Headmaster's garden (near the fence on the chapel side). Some of these trees have black growths on their trunks. The fruits are interesting and decorative (you will find fruits on the ground on the lawn between the headmaster's house and the entrance road); they split into four quarters, each quarter containing a seed.

#### senderela (Toona ciliata)

The English name is 'toon tree', less correctly cedrela (the cedrela is actually a different tree of the same family). It is imported from tropical Asia. The leaves are divided into very regular leaflets. reminding one of the teeth of a comb; not unlike the cassia leaves, but they are larger and more crinkly; also there are no yellow flowers. To compare the two trees side by side you can look outside house no. 16. There are some on the right alongside the road as you approach Kasungu and others in the town itself, for example outside the shops next to the post office. There are others (together with indiya and m'bawa trees) in the small wood behind Maintenance. The foliage is very beautiful, making the trees look like the romantic trees which decorate many an eighteenth-century English print.

#### indiya (Melia azedarach)

This is the Indian neem tree. There is one in the centre of the lawn outside the dining hall, and another outside the music room. Typically it has long thin bare branches with a bunch of foliage right at the end, looking a bit like a feather duster. There are two kinds of neem tree, the wild neem (*Azadirachta indica*, formerly called *Melia azadirachta*) and the cultivated neem (*Melia azadirachta*). Which this one is I am not sure, since some of the pictures on the internet showing this tree call it *Azadirachta indica*. Another name for *Melia azedarach* is 'China berry'. (It is sometimes referred to as 'Persian lilac', although this name is also used for another tree, *Syringa x persica*, so this name is confusing.) You

can see several of these trees on the road outside the Anglican hospital, and others in various villages on the road to Kasungu, looking as if groups of chambermaids holding long feather dusters were having a gossip.

# mzilu (Ekebergia benguellensis)

I believe this is the tree to the right of the mpsimpsa, on the other side of the path, as you go from the Music room to the Dining Hall. It has compound leaves with four pairs of big leaflets plus one at the end. It is also called mleko. (The label of this tree, now hard to read, says *Ekebergia capensis*, but the *capensis* has pointed leaflets, while this one has more rounded ones, so it must be *benguellensis*.)

# **RUTACEAE** (Citrus family)

You will find an orchard of oranges (*Citrus sinensis*), grapefruits (*Citrus paradisiaca*, mnyumwa) in the Chinese vegetable garden (near the chicken farm); and there is also a fine grapefruit tree in the garden of house no. 1; there are also lemons (*Citrus limon*) in some of the gardens. There are more oranges near the road below the Senior Housemaster's house, and in the garden of house 18.

# **SAPINDACEAE** (Litchi family)

### kangaluche, mdzakaka (Zanha africana)

There is one in the middle of the lawn of house 37. This is a remarkable tree, in fact, since it more or less the only native tree for some distance around: it is also surprising that it is still flourishing, since people come and cut off bits of bark to cure headaches. It has small orange-coloured fruits, a bit like apricots. In fact Banda and Salubeni did not record Zanha africana, but only Zanha golungensis (called mkwikwi in Chichewa). Zanha golungensis has smooth, rather than hairy, leaves and fruit; the one in the garden of house 37 may be *golungensis*, I am not sure, but everyone calls it kangaluche or mdzakaka. There are some more of these trees in the wood behind the KA primary school (near the track leading to the golf course, between the two overhead electric wires).

#### (litchi) (Litchi sinensis)

There is an orchard of Chinese litchi trees near the ring road opposite Maintenance. No doubt these were planted by the Taiwanese experts who came to set up the Chinese garden when the school was new.

#### EBENACEAE (Ebony family)

#### **mkulo** (Diospyros kirkii)

Called 'pink diospyros' in English. This is the small tree at the corner of the Senior Housemistress's house, facing the water treatment plant. The twigs, broken off, are used as toothbrushes. There are two others, with very dark green leaves, near the wall behind the Girls' Hostel, to the left of the anthill, and just in front of an mfendaluzi. There is another, with only a few very large leaves, just in front of the nurses' houses (on the right hand-side, near the yellow oleander hedge).

# **BORAGINACEAE** (Heliotrope and forget-menot family)

#### cordia (Cordia abvssinica)

This tree, the large-leaved cordia, has been planted in the corner of the football field (there are two at the top of the steps from the boys' hostel), also facing the lake behind the small car park, and there are two others on the lawn between the Clinic and the ring road. In April it has clusters of small white thimble-shaped flowers which look like patches of snow. There appears to be no generally used Chichewa name. (The Dictionary of Plant Names in Malawi gives eight different names, but none of them appear in the other books.)

# **APOCYNACEAE** (Oleander family)

# thombozi (Diplorhynchus condylocarpon)

(The accent is on *tho*-, as in 'Thomas'.) In English: 'horn-pod tree' or 'wild rubber'. There are some of these trees on the girls' hostel lawn near the start of the path to the water-treatment plant, one with a group of three trunks together; there are a couple more on the other side of the path. ). The fruits come in pairs like little curved wings which are easy to recognise. If you break off a leaf or the fruit, a white sticky latex comes out, which can be used as glue (traditionally girls undergoing initiation used to use it to decorate their heads with different coloured powder). There is another, tall, thombozi at the back corner of the Auditorium, facing the lake.

#### **mwimbi** (Rauvolfia caffra)

It is also called the 'quinine' tree (although it doesn't produce quinine). There are lots of these trees about, and they grow quickly. You will see one as you enter the Reception garden, on the left. The dark-green leaves shoot out like a rocket in the firework display, a bit like the leaves of a mango; there is another one in the corner near the English classrooms, and several others lining the road near the Anglican clinic. A characteristic of the bark is that it often looks as if someone has cut the trunk and branches transversely using a sharp knife. There seem to be two slightly different varieties; both types can be seen side by side on the roadside opposite the Anglican hospital; the bark and leaves are slightly different.

#### **heji** (Thevetia peruviana)

'Heji' is yellow oleander, the ubiquitous hedging plant with yellow flowers (found for example in front of the Headmaster's house, or round the Senior Housemistress's house). The name 'heji' is from the English 'hedge'. All parts of the tree are poisonous, but especially the seeds. There is also a pink version of this tree. (There is another hedging plant with yellow flowers, *Tecoma stans* – see under Bignoniaceae; the heji has narrow leaves, and does not have pods. You can see both together on the upper side of house no. 26.)

#### 'khobo' (Plumeria spp.)

Another tree of this family is frangipani, which is sometimes known as 'khobo' (although properly speaking khobo is a different tree, *Commiphora africana*). This tree can be planted easily by breaking off a branch. It has flowers with a slight perfume, with five petals. There are some with different coloured petals outside the Senior Housemaster's house; another outside house 19 and elsewhere. The name *Plumeria* comes from the 17th-century botanist Charles Plumier, and 'frangipani' is the name of a 16th-century Italian marquess who marketed a perfume made from the flowers. The tree is a native of central America.

# LOGANIACEAE (Strychnos family)

# mteme; mmwaye (Strychnos spinosa)

In English 'elephant orange' or 'spiny monkeyorange'. You will see one opposite the basketball court, with large green fruit, the size of oranges, and several others nearby. There are others in the beds in the two lawns in front of the dining hall, and another in front of the new wing of the boys' hostel. The fruit are called 'maye' (singular 'dzaye'). They are edible, but very sour. The name *spinosa* is given because this species has hooked thorns on the branchlets.

### mkonkhomwala (Strychnos innocua)

One of these trees can be seen in the area opposite the bamboos at the corner of the Headmaster's house. It looks similar to the *S. spinosa* but with smaller fruit and no thorns. The fruit are about golfball sized and dark green, and the leaves are shaped like spoons.

# RUBIACEAE (Gardenia family)

machende a kalulu (*Multidentia crassa*, formerly *Canthium crassum*)

The Chichewa name for this tree means 'hare's testicles', because the fruit (which looks like a small green tomato) has little twin seeds inside. It looks very similar to the mvilu (see below), so it is possible that my informants have confused them. There is what seems to be a machende a kalulu at the edge of the dambo opposite house no. 20 (it has stripy bark from the lichen growing on it). Locally it is also known as mabotomu a kalulu.

#### mvilu, msilu, mbilima (Vangueria infausta)

Also caller wild medlar. It looks very similar to the machende a kalulu, but its fruit has four little seeds inside it. There are some of these (with fruit) just to the left of the road to the nurses' houses (close by the small anthill near the junction). You can see another one right outside the Senior Housemaster's house (near the frangipani). The leaves are big and soft and velvety and sometimes have growths on them. The ripe fruits taste like prunes.

From the same family Banda and Salubeni also noted: *Gardenia ternifolia* (*G. jovis-tonantis*) (largeleaved common gardenia); *Pavetta crassipes* (manjaatali); *Psychotria eminiana*; *Tapiphyllum cinerascens*. I am told that some manjaatali can be found near the Anglican clinic. Note that some trees formerly put in the Rubiaceae family are now classified as Rhamnaceae.

#### **BIGNONIACEAE** (Jacaranda family)

### mvunguti (Kigelia africana)

The 'sausage' tree. This is tree is very easy to recognise because of the big sausage-like fruits which hang from it on strings. There is one directly opposite the Headmaster's house, and others for example in the Clinic circle and outside Maintenance. The leaves of this tree are surprisingly hard and brittle. There is a young one on the Clinic road near the junction, without leaves, but which can be recognised by the hard, brittle leaves. Juice from the fruits rubbed on parts of the body is supposed to make them larger.

mseŵa; mwanambewe (Markhamia obtusifolia) This tree, in English 'golden bean tree', is distinguished by its very long thin pods, up to two feet long. There are some on the lawn opposite the first basketball court, another nearby next to the fence, another two just outside the fence (close to the mphangala tree. It has big leaves, about 5 pairs of leaflets per leaf, plus a terminal leaflet.

# mseŵa; katsogole (Markhamia zanzibarica)

This is another type of mseŵa, which has fewer pairs of leaflets (three pairs plus a terminal leaflet, the first pair smallest, and the terminal leaflet the largest); in English 'bean tree'. Several of these, with different sized leaves, can be seen between Landscape and the Dining Hall, near the clump of white euphorbia bushes behind the Clinic. There is another one, with either two or three pairs of leaflets, and many stems, by the junction nearly opposite the CDT room.

African tulip tree (*Spathodea campanulata*) This is the tree with big red flowers, like flames. There is one just by the steps down from Reception; another near the corner of the Clinic, and others elsewhere. The leaves of most or all of these

spathodeas in the Academy seem to be diseased. There are some very tall spathodeas in Dedza. The flowers come out in April and May. It is also called flame of the forest, Nandi flame, African flame tree, or fountain tree. However, although it is found in Kenya, it is not the same, I think, as the flame tree in the title of Elspeth Huxley's book 'The Flame Trees of Thika'. The name *Spathodea* comes from the Greek word *spathē*, which means a rod used for beating down the threads of the warp when weaving, no doubt because of the rods which protrude from the tops of the trees.

#### jacaranda (Jacaranda mimosifolia)

The jacaranda is actually a South American tree, planted for ornamental purposes not only in the Academy but also on the road near the Mtunthama roundabout and elsewhere. In October it is covered with purple petals which fall to the ground in a heap. You can see some jacarandas behind the library and near the boys' hostel. The seeds are in a small purse-like capsule, which must be prised open, like an oyster.

# yellow trumpetbush (Tecoma stans)

Also called 'yellow bells' and 'yellow elder'. It is the national flower of the Bahamas. This tree is one of the two yellow-flowered hedging plants (the other being the yellow oleander); it has yellow flowers and also green beans in clusters. You can see it for example behind house 26, or lining the road opposite the Chinese garden and Maintenance. The leaves are wider than those of yellow oleander.

**purple vine** (*Clytostoma binatum* or *purpureum*) This is the plant which produces masses of purple flowers on the side of the lake near the Headmaster's house, also near the Music room and elsewhere. It is a vine rather than a tree, since it needs the support of another tree. It originates in Brazil.

#### LAMIACEAE

#### mpsimpsa (Vitex doniana)

In English it is called 'chocolate berry'. There is one of these trees on the left as you take the short cut from the Music room car park to the dining-hall; it has a label. The leaves come in star-shaped bunches of five. The fruit is black and turns your mouth black if you eat itBanda and Salubeni do not mention *Vitex doniana* but only *Vitex mombassae* (apparently in the dambo area); however, from the fact that the fruit are oval rather than round, this seems to be *Vitex doniana*, as the label says.

From this family Banda and Salubeni also noted *Clerodendrum myricoides* (now called *Rotheca myricoides*) (mtsukaana, blue cat's whiskers) and *Vitex cuneata* I am told that there are some mtsukaana outside, near the Anglican church.

#### **VERBENACEAE** (Verbena family)

# (Lantana spp.)

There is a lantana just outside the back door of the Reception building, on the Accounts office side; it has lots of tiny thorns along the stems. There is another at the edge of the wood opposite the Clinic turn off. Banda and Salubeni noted both *Lantana trifolia* and *Lantana rhodesiensis*. The leaves of this tree smell like Vix and are collected by herbalists as chest medicine.

#### **chanzi** (*Lippia javanica*)

Some chanzi may be seen behind Maintenance; it is a small shrub with strong smelling leaves traditionally used to deter mosquitoes; the stems are used for making maize-granaries. There is some more in the wood behind the Senior Housemaster's house. Banda and Salubeni also found a species of chanzi called *Lippia asperifolia*. This shrub is also mentioned in Rebman's dictionary of 1853. He says: 'chansi n. (cha) (pl. psanzi). The name of a small tree, with which they brush the walls and roofs of their cottages, the scent keeping off mosquitoes.' (*psanzi* is apparently Rebman's spelling of *bzanzi*, but today no plural is used. Plurals in bz- instead of z-, common in Rebman's dictionary, are nowadays characteristic of the Nkhoma dialect.)

# malaina (Gmelina arborea)

This is a tree from Burma and India, which is planted in large numbers outside the village primary school. (Inside the Academy there is a row between houses 37 and 38.) It has large spade-shaped leaves. When the flowers and leaves first come out it is very pretty, but soon it starts to drop squishy fruit, which have a strong smell.

**'julanta'** (*Duranta repens* or *Duranta erecta*) This tree, called 'golden dew-drop' or 'pigeon berry', is the attractive hedging plant with purple flowers and bright orange berries. The berries are poisonous, however. These trees can be seen for example used as a hedge in the Landscape department; or at the corner of the road between houses 32 and 33.

# Chinese hat (Holmskioldia sanguinea)

This is an attractive plant of Himalayan origin, called 'Chinese hat', 'cup and saucer', 'parasol flower', or 'Mandarin's hat' in English. It has beautiful dusky red flowers with a flat circular calyx with a narrow tube coming out of it. You can see one near the Clinic as you walk down from the dining hall (next to the clump of bamboos); others at the corner opposite house 19.

# **SOLANACEAE**

#### cup of gold (Solandra maxima)

This Mexican vine, with huge yellow flowers, can be seen along the wall as you walk from the Music room to Maths and climbing up the broken brachystegia in the middle of the path. The Solanaceae family also contains tobacco (*Nicotiana*) and gooseberries (*Physalis*).

# APIACEAE (UMBELLIFERAE) (Carrot and parsley family)

#### **mpoloni** (Steganotaenia araliacea)

This tree is called the 'carrot tree', since it smells of carrots. There is a small one near the junction to the nurses' houses (on the left hand side, very close to a nthudza tree). The mpoloni has light green leaves with jagged edges. Boys hollow out bits of this tree and use them for pop-guns, so another name is 'pop-gun tree'.

#### ARALIACEAE (Ivy and cussonia family)

#### mbwabwa (Cussonia arborea)

This tree, the 'octopus cabbage tree', is an unusual one. There is a full-grown tree in the Girls' Hostel, which you can see over the roof from the side path. There is another one in the middle of the lawn opposite the first basketball court, a small one directly opposite the Chapel, a tall thin one near the fence opposite the second basketball court, and some in the wood to the left of the Club, consisting of single stems with some leaves at the top. Each leaf is like a spray of six or seven leaflets, joined at the top (a bit like a papaya, but with the leaflets flopping down), and it has flowers which look like a cluster of long strings, attracting flies. According to Palgrave, in Malawi the wood of this tree is used to make xylophone keys, which produce beautiful liquid notes.

#### ASTERACEAE (Vernonia family)

# futsa (Vernonia spp.)

Banda and Salubeni noted *Vernonia adoensis*, *V. podocoma*, *V. shirensis*. There is a futsa bush on the left as you approach the upper dambo bridge (just in front of the acacias), and lots more at the far end of the hockey pitch (both at the back and on the right-hand side), some of them quite large. There are some small ones in the dambo opposite house 19 (near the corner). The leaves are shaped like spearheads. Often they have white flowers a bit like thistles. There are some other trees which are called 'futsa' with very large leaves, behind the fig tree on the far side of the road between the lower dambo bridge and the Clinic turn-off, presumably a different species.

#### **ARAUCARIACEAE**

Norfolk Island pine (Araucaria heterophylla)

The Christmas-tree-shaped tree at the entrance to Landscape is I believe a Norfolk Island pine (a relative of the well-known 'monkey puzzle tree'), which originally comes from Norfolk Island, near New Zealand.

# **CUPRESSACEAE** (Cypress family)

This family contains cypress trees and junipers, as well as the famous Mulanje cedar (mkungudza). There are two cypresses (one damaged when another tree nearby was felled) just outside the chapel. Their leaves are flattish fronds. Other trees of this family (but I am uncertain which species) are planted in the upper housing road, for example in houses 30 and 31.

#### **PINACEAE** (Pine family)

This family contains pine trees, of which two can be seen on the upper housing road near house 35. Their leaves are dark-green needles.

#### **PUZZLING TREES**

- 1. The tree in the corridor outside room 3.
- 2. Tree with several stems outside the Music Room.
- 3. The tree with big pointed dark green leaves in the thicket opposite the Chinese garden, near the mtowo (perhaps a kind of mango?).
- 4. The tree near the *Ozoroa insignis* in the middle of the Clinic circle. It has narrow leaves and according to Cliff Kalonga is called mfwentha. Possibly it is a kind of *Rhus*.
- 5. A small tree near the fence of house 26 not far from the junction. (There is another one halfway between the Anglican hospital and the church, on the right of the path.) It has quite large soft leaves very soft leaves. Locally it is called matobera and it has round green fruit called nthobera. Villagers apparently use the leaves for loo-paper.
- 6. A beautiful tree near the Senior Housemaster's house (hostel side, near the mmwaye), with leaves consisting of four pairs of small oval leaflets plus a terminal leaflet, and small pink flowers. Cliff says it is called kamphulu, but this name is not in any other book
- 7. kanung'unung'u: There is a tall one of these on the path between the Landscape department's potting shed and the perimeter fence, and two others nearby The leaves are difficult to see but are very finely divided. You can see some smaller versions of this tree behind the tennis court, near the locked gate in the outer fence. It has small thorns and flat pods which get narrower between the seeds, and the leaves are doubly compound with very small leaflets, soft and tending to fold together. Evidently it belongs to the Fabaceae, but which species I do not know.
- 8. mbewe: possible *Ozoroa reticulata*. On the path from the SDA church to Malawi housing.

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- \* = now known by another name
- x = not yet found
- m = Malawian species

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Acacia albida	8 m	Dracaena spp.	4	Philenoptera violacea	12 m
Acacia amythethophylla	8 m	Duranta repens	17	Phoenix reclinata	4
Acacia polyacantha	8 m	Ekebergia benguellensis	15 m	Piliostigma thonningii	10 m
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Diospyros kirkii	15 m	Pericopsis angolensis	11 m		

Number of species found so far: 77 Malawian (including 23 Fabaceae) 50 foreign (including 8 Fabaceae)

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PINACEAE	18	
UMBELLIFERAE	18	
ARALIACEAE	18	
Persea americana	4	peyala
Dracaena	4	mchemani
Phoenix reclinata	4	kanjedza

Persea americana peyala 4

Cassipourea mollis Kamemenambuzi

msambamfumu (lucky bean/ pod mahogany, Afzelia quanzensis); Afzelia quanzensis

Ximenia americana (nonhairy) Ntengele

or X. caffra (hairy)

chisisyo (scented-pod acacia, Acacia nilotica); Acacia nilotica Acacia macrothyrsa mnkhumbu/chitongolombe

Acacia polyacantha mthethe (white thorn, Acacia polyacantha);

Acacia rehmanniana mtengo wa minga

mtsidzi Acacia sieberiana Afzelia quanzensis Msambafumu Albizia antunesiana mpefu/chisale/mpepe Albizia harvevi mkhalankhanga

Albizia versicolor mtangatanga/dululu (poison-pod albizia)

Allophylus africanus msawasawa Annona senegalensis Mpoza

Annona senegalensis mpoza (Annona senegalensis);

Annona stenophylla ssp. nana mpoza Bauhinia petersiana mpandula

Bauhinia thonningii or chitimbe (camel's foot, *Piliostigma thonningii or Bauhinia thonningii*);

Piliostigma thonnignii

Brachystegia boehmii mombo/njombo/chiombo/chiyombo/nsendaluzi/nakajombo

Brachystegia longifolia bovu, bobvu (Brachystegia longifolia)

Brachystegia manga mpapa Brachystegia spiciformis kamphoni Brachystegia stipulata bobvu Brachystegia utilis mombo, nzale Bridelia cathartica mtundi/kambulunje Canthium crassum machende a kalulu

Cassia petersiana, C. singueana mpatsachokolo (winter cassia, Cassia petersiana or singueana)?;

Cassia singueana

mtanthanyerere Clerodendrum myricoides now mtsukaana

called Rotheca myricoides

Combretum fragrans, molle, kadale\a- (*Combretum spp.*);

zevheri

Combretum molle kakunguni Commiphora pilosa = C. khobo

africana

Cussonia arborea mbwabwa (octopus cabbage tree, Cussonia arborea);

mbwabwa/chipombola/namphwaphwa Cussonia arborea

Cussonia arborea, Macaranga mbwabwa (octopus cabbage tree/ deadman's fingers);

capensis?

Dalbergia nitidula mkulasinga (glossy flat-bean, *Dalbergia nitidula*); Dichrostachys cinerea mpangala (sickle bush, *Dichrostachys cinerea*);

Diospyros kirkii mdima

Diplorhynchus condylocarpon thombozi\a- (Diplorhyncus condylocarpon);

Droogmansia pteropus mlungalunga Ekebergia benguelensis mleko

Elephantorrhiza goetzei chandima (Elephantorrhiza goetzei);

Eriosema ellipticum njadza

Eriosema psoraleoides

Faurea saligna chinsense

Faurea speciosa chinsense/chiyere/musese

Ficus burkei/thonningii kachere\a- (wild fig, Ficus burkei/thonningii);

Ficus sycomorus mkuyu

Flacourtia indica nthudza/ndawa/matyokolo

Grewia pachycalyx thenza\mi- (cross-berry, *Grewia pachycalyx*);

Julbernardia globiflora mchenga

Julbernardia paniculata mtondo\mi- (Julbernerdia paniculata; also Cordyla africana);

Kigelia africana mvunguti\mi- (sausage tree, Kigelia africana);

Lannea discolor kaumbu
Lantana trifolia nakasonde
Lecaniodiscus fraxinifolius mtalala
Lippia javanica chanzi
Lippia javanica chanzi, vumba
Mangifera indica mango/yembe

Markhamia obtusifolia msewa (golden bean tree, Markhamia obtusifolia);

Maytenus senegalensis mtsukamfuti

Monotes africanus mkalakate (Monotes africanus);

Mucuna stans chitedze

Ochna leptoclada

Ochna schweinfurthiana mgundanguluwe Ormocarpum kirkii lunemela, nansanganya

Ozoroa insignis mtukumbako (mtukumphako, Cliff says)

Parinari curatellifolia muula/maulusa Pavetta crassipes manja atali

Pericopsis angolensis muwanga\miw- (afrormosia, Pericopsis angolensis);

Protea angolensis chinsense

Psychotria eminiana

Pterocarpus angolensis mlombwa (African teak, *Pterocarpus angolensis*);

Sclerocarya caffra mfula\mi- (marula, Sclerocarya caffra);

Securinega virosa mserechete Sesamum angolense chewe

Steganotaenia araliacea mpoloni\mi- (carrot tree, Steganotaenia araliacea);

Stereospermum kunthianum kabvunguti, m'bvunguti, mvunguti

Strychnos innocua mkonkhomwala (Cliff says magonkhomwala or kabulukulu) Swartzia madagascariensis kampango (snake bean, *Swartizia madagascariensis*);

Syzygium guineense katope

Tapiphyllum cincerascens

Terminalia sericea naphini (silver terminalia, *Terminalia sericea*);

Terminalia stenostachya chikuliungu

Turraea nilotica msindira (bushveld honeysuckle tree) Uapaca kirkiana msuku (wild loquat, *Uapaca kirkiana*);

Uapaca nitida kasokolowe (*Uapaca nitida*)

Vangeria tomentosa mzilu Vernonia adoensis futsa

Vernonia shirensis

Vitex mombassae msipsya

Xerophyta splendens (see cheyo (Cliff adds chitsuto)

Vellozia splendens)

Ximenia caffra nthengele Zanha golungensis mkwikwi

Ziziphus abyssinica

Ziziphus mucronata kankhande (buffalo thorn/ wait-a-bit thorn, Ziziphus mucronata); chipembele

Xeromphis obovata (=

Catunaregam obovata)

Melia azedarach india (neem tree/ Persian lilac, Melia azederach); Combretum zeyheri mkute (large-fruited combretum, Combretum zeyheri); Syzygium cordatum nyowe (waterberry, Syzygium cordatum);

kankhande

Psorospermum febrifugum, ?Flueggea virosa, Diospyros

kirkii, D. lycoides, D. senensis

Pseudolachnostylis maprouneifolia

Bridelia cathartica Strychnos spinosa

msolo\mi- (duiker berry, *Pseudolachnostylis maprouneifolia*);

mtsiloti\mi- (Rhodesian holly, *Psorospermum febrifugum*)

ntundi, mbalambala m'mwaye/mtonga