



VEGETATION DESCRIPTIONS OF THE UPPER ZAMBEZI DISTRICTS OF ZAMBIA



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VEGETATION DESCRIPTIONS OF THE UPPER ZAMBEZI DISTRICTS OF ZAMBIA

BY

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LIST OF CONTENTS

	page
List of Contents	1
Introduction	2
Glossary of Local Terms	3
References & Further Reading	3
Acknowledgements	3
Map of Districts Covered	4
District Descriptions	
Balovale [Zambezi]	5
Kabompo	23
Kafue National Park	40
Kalabo	76
Mankoya [Kaoma]	87
Mongu-Lealui [Mongu]	92
Mwinilunga	106
Senanga	130
Sesheke	149
Victoria Falls [Livingstone]	180
List of Species with Updated Nomenclature	205

INTRODUCTION

During the late 1960s to early 1970s, Dennys Fanshawe, a senior Forester with the Zambia Forest Research Department based in Kitwe, produced 36 District-level or area-based habitat-based plant checklists from across Zambia. Based principally on his own observations, travels and collections, these represent a valuable source on information on both vegetation types and plant distribution. They have not been superseded in their comprehensive coverage. However, they are now difficult to access as they were produced as typescript or mimeographed reports and were not widely distributed. In addition, plant nomenclature has changed significantly, raising difficulties when the District accounts are used in conjunction with more recent lists.

During the biodiversity assessment component of the IUCN Zambezi Basin Wetlands Conservation and Resource Utilisation Project, carried out by the NGO partnership of the Biodiversity Foundation for Africa and the Zambezi Society from 1998 to 2000, lists pertaining to the upper Zambezi catchment, the Kafue National Park and the area around Victoria Falls/ Livingstone, were brought together. The idea was to make this valuable information more widely available to researchers in one place, and to provide updated nomenclature.

The District reports included here comprise all of what is now Western Province, part of North Western Province and a small part of Southern Province around Livingstone. District boundaries have changed since Fanshawe prepared the original reports, and Figure 1 shows their historic distribution, as used here. The order of presentation of reports is alphabetical, not geographical or chronological.

The area covered comprises the **B** division of Flora Zambesiaca (5 districts), the **W** division (2 districts, Kabompo and Mwinilunga) and the **S** division (Kafue National Park and Victoria Falls).

For historical purposes and because of numerous errors that are not readily corrected, such as with plant identification, the original District reports and lists are presented here with minimal editing. Minor changes have been made to the format to facilitate comparability, obvious spelling mistakes have been corrected, and metric measurements are given in brackets where imperial measurements were used. Some of the abbreviations used in the lists are not clear, and these have been left blank in the text. Original species nomenclature has been retained, although a complete list of all plant taxa cited is given at the end with updated names and species authorities whenever possible. Nomenclature follows that used in the recent Sabonet checklist of the plants of Zimbabwe (Mapaura & Timberlake 2004) and an unpublished Zambian checklist (Bingham 2010). For species not listed there, the African Plants Database (www.ville.ge.ch/cjb/bd/africa/index.php) has been used along with, for some families, present accepted usage at Kew.

It is hoped that this document will not only make Fanshawe's reports more easily accessible, but encourage further botanical and ecological work in this biodiversity-rich and fascinating part of the Zambezi Basin.

GLOSSARY OF LOCAL TERMS

Chipya – fire-induced savanna woodland with a well-developed grass layer, possibly derived from degradation of dry evergreen forest.

Dambo – shallow grassy depression or drainage channel, usually with seasonally-impeded drainage.

Mutemwa – *Baikiaea* forest or thicket woodland.

Boma – Government administrative district or centre within a town.

Miombo – woodland with a grassy understorey dominated by trees of *Brachystegia*, *Julbernardia* or *Isoberlinia* species.

Mavunda – dense *Cryptosepalum* forest or thicket woodland.

Mushitu – riverine, drainage line or swamp forest.

Mukusi – Lozi vernacular name for *Baikiaea plurijuga*

Kopje – a small rocky outcrop, usually composed of granite and somewhat isolated.

Munga – savanna woodland dominated by *Acacia* and *Combretum* species, named after the vernacular name for straight-thorned *Acacia* species.

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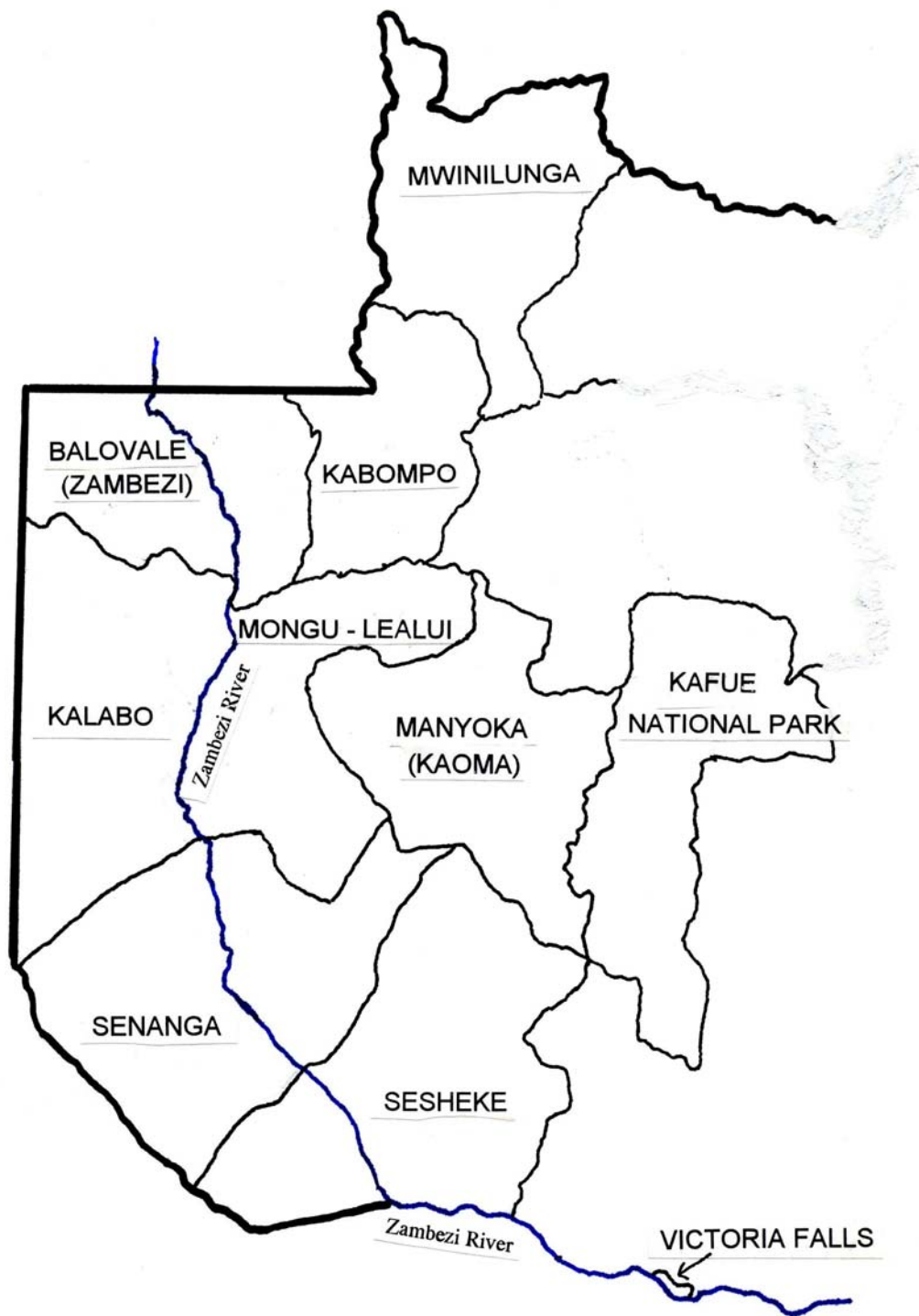
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Plant nomenclature (2010) was kindly updated by Iain Darbyshire (Acanthaceae), David Goyder (Asclepiadaceae, Apocynaceae), Alan Paton (Lamiaceae) and Brian Schrire (Leguminosae), all from the Royal Botanic Gardens, Kew.



Map showing districts in western Zambia as used by Fanshawe in his vegetation descriptions.

FOREST RESEARCH PAMPHLET No. 56, 1973**THE VEGETATION OF BALOVALE DISTRICT**

Balovale [Zambezi] District lies in the North Western Province between 13°00'–14°15' S and 22°00'–23°45' E. It has an area of 20,200 km² and is bounded on the north and west by Angola, on the south by Kalabo and Mongu districts, and on the east by Kabompo District.

The main rivers are the Lwitali in the east flowing to the Kabompo and the Makonda, Lunyuwe and Lunkunyi in the north east flowing to the Zambezi River. West of the Zambezi is flat plain country with slow meandering streams draining east and south.

West of the Zambezi is an area of flat watershed plains, east of the Zambezi the sand country is gently undulating. The western plains lie at 914 m above sea level, the eastern plains around 1070 m. There are very few hill features in the area apart from Chavuma hill rising to 1160 m and Chito hill near the Balovale–Kabompo boundary rising to 1220 m.

The district can be divided into two climatic regions: (a) the warmer but fairly wet areas of the east and northwest, and (b) the warmer drier area of the central and southwest. The mean annual rainfall is 1080 mm falling between November and March inclusive. The mean minimum temperature of the coldest month (July) is 8°C and the mean maximum temperature of the hottest month (October) is 33.5°C. Frost is common in the months of June and July especially in hollows associated with dambos.

The whole area is covered by a mantle of Kalahari sand except around Chavuma and along the main rivers where the sands have been eroded away to expose the underlying sandstones and shales of the Kundelungu series.

Plateau soils occur around Chavuma, the rest of the district is covered by Kalahari sands. The plateau soils are fairly shallow sandy clays ranging from pallid through yellow brown to reddish brown in colour. The sands are divided into contact and upland sands. The contact sands usually pallid clay sands. The upland sands are deep, well drained, coarse grained sands with a 10–12% clay + silt fraction, varying in colour from pallid to reddish brown.

The vegetation is more or less equally divided between dry evergreen forest and Kalahari woodland east of the Zambezi with large open plains, bush groups, scrub and poor Kalahari woodland west of the river. There is a small patch of miombo, hill miombo and *Marquesia macroura* forest on plateau soils at Chavuma. *Baikiaea* forest occurs in a few relic patches around Chitokoloki and in Balovale P.F.A.

Gallery woodland is well represented on the middle and lower reaches of the streams but rare on the headwaters and then mostly on the west bank. True swamp forest is known from one isolated patch on the west bank, although much of the gallery woodland is swamp/riparian woodland. Termite mounds are restricted to the miombo woodland around Chavuma and a few of the wider dambo margins.

The total woody flora is probably between 500–600 species, of which just under 500 have so far been recorded.

The following vegetation types occur in the district:

1. **Closed Forest**
 - A. Climatic
 1. Dry evergreen forest
 2. Dry deciduous forest
 - B. Edaphic
 1. Swamp forest
 2. Riparian forest
 - a) Moist dambos
2. **Open forest**
 1. Miombo woodland
 - (a) Hill miombo woodland
 2. Kalahari woodland
 - (a) Kalahari/miombo woodland
 - (b) *Burkea – Erythrophleum* woodland
 - (c) *Burkea – Diplorhynchus* scrub
 - (d) Suffrutex savanna
 - (e) Bush groups
 3. KS munga woodland
 - (a) dry dambos
3. **Vegetation of Termitaria**
 1. Miombo termitaria
4. **Grasslands**
 1. Dambo grassland
 2. Riverine grassland

1. CLOSED FOREST

1.A.1 Dry Evergreen Forest

This is a three-storey forest with an evergreen or semi-evergreen canopy around 24 m high, a discontinuous evergreen understorey, and a dense to very dense evergreen shrubbery of shrubs, scramblers and climbers.

The overwood is dominated usually by *Cryptosepalum exfoliatum* subsp. *pseudotaxus*, but frequently by *Brachystegia longifolia*, *B. spiciformis* or *Guibourtia coleosperma*, or by all four species in varying combinations. The *Brachystegia* rise above the *Cryptosepalum* level.

Characteristic shrubs, scramblers and small trees include *Alchornea occidentalis* (locally), *Baphia whitei*, *Bauhinia macrantha*, *Canthium captum*, *C. venosum*, *Chrysophyllum magalismontanum*, *Combretum celastroides*, *C. gossweileri*, *Copaifera baumiana*, *Diospyros undabunda*, *Memecylon sapinii*, *Paropsia brazzeana*, *Psorospermum baumii* and *Uvaria angolensis*.

Common climbers in the shrub layer include *Baissea wulfhorstii*, *Cassytha filiformis*, *Landolphia camptoloba*, *L. parvifolia*, *Secamone stuhlmannii* and *Strophanthus welwitschii*. There are virtually no canopy climbers.

Sub-shrubs are mostly *Aframomum bauriculatum* (especially in regrowth "mavunda"), *Chamaeclethra henriquesiana*, *Diospyros virgata*, *Leptactina benguelensis*, *Strobilanthis linifolia* and *Tricalysia angolensis*, with the succulent *Sansevieria kirkii*. Mosses and rain forest grasses like *Megastachya mucronata* occur in gaps.

A very degraded relic of *Marquesia* mavunda forest typical of Mwinilunga District occurs on gneiss-derived sandy soil near Chavuma. This is probably the southernmost occurrence of the *Marquesia* subtype. Only scattered patches of the mavunda thicket occur and Kalahari woodland species have invaded the understorey. *Marquesia macroura* is dominant.

1.A.2 Dry Deciduous Forest

Relic patches of *Baikiaea* forest occur around Chitokoloki and in the Balovale P.F.A. Under the higher rainfall (1120 mm as against 760 mm further south) of Kabompo District, *Baikiaea* has adapted to a semi-deciduous habit. The associated canopy species – *Acacia giraffae*, *Combretum collinum* and *Entandrophragma delevoiy* – are only occasional at best.

The commoner small trees include *Baphia massaiensis*, *Bersama abyssinica*, *Combretum celastroides*, *Pteleopsis anisoptera* and *Stereospermum kunthianum*.

Shrubs are chiefly *Acacia ataxacantha*, *Alchornea occidentalis*, *Bauhinia macrantha*, *Clerodendrum tanganyikense*, *Holarrhena pubescens*, *Indigofera rhynchocarpa* and *Tricalysia angolensis*.

The commonest climbers are *Baijsea wulfhorstii*, *Jasminum streptopus* and *Dioscorea praehensilis* (an invader).

Characteristic sub-shrubs are *Aframomum bauriculatum* (usually as a fringe), *Cissus crusei*, *Clerodendrum uncinatum*, *Hibiscus mastersianus* (invasive) and *Smilax kraussiana*.

The mutemwa thicket is found in various stages of regrowth which reflect the incidence and intensity of past fires:

- a) 3 m high mutemwa composed largely of *Alchornea occidentalis* and climbing *Dioscorea praehensilis* without *Aframomum bauriculatum*,
- b) 1.20–2.40 m high mutemwa, largely composed of *Alchornea* with some *Aframomum* at the lower levels,
- c) 1–1.20 m high dense mutemwa with *Alchornea* and *Aframomum* or *Nephrolepis undulata* fern all at the same level,
- d) 1 m high mutemwa with the *Aframomum* overtopping and hiding the *Alchornea* and other mutemwa species.

Obviously (a) is the least degraded and (d) the most degraded stage.

1.B.1 Swamp Forest

A solitary patch of true swamp forest occurs on a tributary of Kasinji River on the west bank. Canopy trees are chiefly *Manilkara obovata*, *Phoenix reclinata* palms, *Sterculia subviolacea*, *Syzygium cordatum* and *S. owariense*.

Common small trees include *Garcinia smeathmannii*, *Ochna multiflora* (locally) and *Voacanga thouarsii*, with *Ficus verruculosa* on the fringes.

Shrubs are chiefly *Canthium zanzibaricum*, *Cephaelis peduncularis*, *Desmodium repandum* (sub-shrub), *Diospyros lycioides*, *Dracaena camerooniana* and *Psychotria megistosticta* (dominant), with *Dissotis princeps*, *Ficus pygmaea*, *Plectranthus mirabilis* and *Solenostemon zambesiacus* on the fringes. *Sabicea laurentii* is the only common climber.

1.B.2 Riparian Forest

A dense riparian/swamp forest occurs on a few of the upper reaches of streams, especially on the west bank of the Zambezi River. On the middle and lower reaches of the Zambezi and other large rivers, the riparian strip is reduced to discontinuous woodland of *Syzygium guineense* subsp. *barotsense* with

Rhus quartiniana in the understory and *Phragmites* reeds and the odd *Salix subserrata* filling the gaps.

Tall trees are chiefly *Craibia affinis* (middle reaches), *Manilkara obovata* (middle reaches), *Parinari excelsa* (upper reaches), *Phoenix reclinata* palms, *Syzygium cordatum* (upper reaches) and *Syzygium guineense* subsp. *barotsense*.

Common small trees include *Clausena anisata*, *Gardenia imperialis*, *Oncoba spinosa*, *Rhus quartiniana* and *Salix subserrata*, with *Ficus verruculosa* on the fringes.

Shrubs are chiefly *Canthium zanzibaricum*, *Cephaelis peduncularis*, *Craterispermum laurinum*, *Embelia schimperi* and *Tricalysia andongensis*, with *Ficus pygmaea* on the fringes and *Phragmites* reeds in the gaps. Thicket patches consist largely of *Acalypha chirindica*, *Alchornea occidentalis*, *Combretum celastroides* and *Tarenna neurophylla*.

Climbers are mostly *Dioscorea praehensilis* (invasive), *Hippocratea africana*, *Jasminium fluminense*, *Mucuna poggei* (invasive), *Paullinia pinnata* and *Tacazzea apiculata*.

1.B.2(a) Moist Dambos

These are shrub–subshrub–herb–grass–sedge grasslands on moist or seepage dambos. Characteristic shrubs and sub-shrubs include *Conyza welwitschii*, *Ludwigia leptocarpa*, *Plectranthus mirabilis*, *Protea welwitschii*, *Sobubia ramosa*, *S. simplex* and *Syzygium guineense* subsp. *huillense* (dwarf form).

2. OPEN FOREST

2.1. Miombo Woodland

This is a small patch of the normal high rainfall *Brachystegia–Isoberlinia–Julbernardia* woodland on the plateau soils of the Chavuma area. Common tall trees include *Brachystegia boehmii*, *B. floribunda*, *B. longifolia*, *B. spiciformis*, *B. wangermeeana*, *Erythrophleum africanum*, *Isoberlinia angolensis*, *Julbernardia paniculata* and, locally, *Marquesia macrourea*.

Small trees are chiefly *Combretum fragrans* (locally), *Diospyros kirkii* (locally), *Pseudolachnostylis maprouneifolia*, *Terminalia brachystemma*, *Strychnos cocculoides*, *Uapaca kirkiana* and *U. nitida*.

Common shrubs include *Bauhinia petersiana*, *Ekebergia benguelensis*, *Hymenocardia acida*, *Memecylon flavovirens* and *Uapaca pilosa*.

Sub-shrubs are a feature of any miombo in this case especially *Adenodolichos punctatus*, *Cryptosepalum maraviense* (locally), *Diospyros virgata*, *Droogmansia pteropus*, *Indigofera sutherlandioides*, *Smilax kraussiana*, *Sphenostylis marginata*, *Strobilanthisopsis linifolia* and *Vernonia glaberrima*. Climbers are absent.

2.1(a) Hill Miombo Woodland

This scarcely differs from the plateau miombo except in species frequency and the addition of *Aloe chabaudii* and *Vellozia equisetoides* in the sub-shrub layer. It is restricted to the sandstone hills near Chavuma.

Common tall trees are mostly *Brachystegia longifolia*, *B. spiciformis*, *B. wangermeeana*, *Isoberlinia angolensis* and *Julbernardia paniculata*.

Small trees are occasional at best. Shrubs are chiefly *Acrocephalus rupestris*, *Schistostephium artemisiifolium* and *Uapaca pilosa*, subshrubs chiefly *Aloe chabaudii*, *Sphenostylis marginata*, *Strobilanthisopsis linifolia* and *Vellozia equisetoides*.

2.2 Kalahari Woodland

Kalahari woodland in one form or another covers most of the west bank and probably 50% of the east bank of the Zambezi River. East of the Zambezi the woodland is a mixture of *Brachystegia longifolia*, *B. spiciformis*, *Guibourtia coleosperma*, *Isoberlinia angolensis* and *Julbernardia paniculata*, with either the *Brachystegia* or *Julbernardia* dominant. Some of this woodland is of excellent quality. West of the Zambezi much of it is open plain and the remainder reduced by the ravages of fire to *Burkea*–*Erythrophleum* woodland, *Burkea*–*Diplorhynchus* scrub and suffrutex savanna.

2.2(a) Kalahari/Miombo Woodland

These are Trapnell's K3–5 woodlands with the dominants listed above widespread on the east bank. Small trees are chiefly *Baphia massaiensis*, *Diospyros batocana*, *Diplorhynchus condylocarpon*, *Hymenocardia acida*, *Olex obtusifolia* and *Terminalia brachystemma*.

The shrub and sub-shrub layers are extremely well developed in contrast to *Burkea*–*Erythrophleum* woodland. Common shrubs include *Bauhinia macrantha*, *Copaifera baumiana*, *Memecylon flavovirens*, *Paropsia brazzeana*, *Phyllocosmus lemaireanus*, *Tricalysia angolensis* and *Vernonia glaberrima*.

Sub-shrubs are chiefly *Chamaecitandra henriquesiana*, *Clerodendrum uncinatum* (locally), *Diospyros virgata*, *Hypoestes verticillaris*, *Lepidagathis microchila*, *Leptactina benguelensis*, *Rhynchosia castroi* (a ground creeper), *Smilax kraussiana*, *Strobilanthisopsis linifolia*, *Tricalysia cacondensis*, *Trichilia quadrivalvis* and the succulent *Sansevieria kirkii*. Climbers are restricted to *Cassytha filiformis*, *Jasminum streptopus* and *Strophanthus welwitschii*.

2.2(b) *Burkea* – *Erythrophleum* Woodland

This degraded variant has a restricted flora with *Burkea africana*, *Combretum collinum*, *Erythrophleum africanum*, *Parinari curatellifolia* and *Terminalia sericea* in the overwood, *Baphia massaiensis*, *Diplorhynchus condylocarpon* and *Olex obtusifolia* in the understorey, and *Bauhinia macrantha*, *Hymenocardia acida*, *Maprounea africana*, *Phyllocosmus lemaireanus* and *Waltheria indica* as the commonest shrubs. Sub-shrubs are the same for the suffrutex savanna but found mostly along the woodland margin.

2.2(c) *Burkea* – *Diplorhynchus* Scrub

This is K8 *Burkea*–*Erythrophleum* woodland reduced to the hardiest of fire hardy species with widely spaced trees, only 2.4–3 m high. Species are virtually restricted to *Burkea africana*, *Diplorhynchus condylocarpon*, *Hymenocardia acida* and *Maprounea africana*, with the odd relic *Combretum collinum* and *Erythrophleum africanum*. Sub-shrubs are the same as for suffrutex savanna and marginal K8 woodland.

2.2(d) Suffrutex Savanna

This is the ultimate reduction in the Kalahari woodland regression – a grass–sedge savanna dominated by suffrutices found on the open sand plains. *Parinari capensis* is strongly dominant. Other common suffrutices include *Annona stenophylla* subsp. *nana*, *Brackenridgea arenaria*, *Chamaecitandra henriquesiana*, *Cryptosepalum maraviense* (local), *Diospyros chamaethamnus* (very local), *Eugenia angolensis*, *Lannea gossweileri*, *Magnistipula eglandulosa*, *Ochna leptoclada*, *O. manikensis*, *O. pygmaea*, *Pygmaeothamnus zeyheri* (subdominant) and *Sapium oblongifolium*.

The vegetation on the Kalahari sands forms a fire-induced regression catena from *Baikiaea* forest or mavunda through Kalahari woodland, *Burkea*–*Erythrophleum* woodland, *Burkea*–*Diplorhynchus* scrub to *Parinari* suffrutex savanna.

2.2(e) Bush Groups

On the flat terrain of the west bank where sand plain merges with sand woodland, erosion and a fluctuating water table in the past have cut off small sections of *Burkea*–*Erythrophleum* woodland.

Erosion has left these bush groups slightly mounded, rising 30–60 cm above the plain level. Composition of these bush groups is the same as for *Burkea–Erythrophleum* woodland, or in some cases māvunda with the addition of dambo margin species, especially *Uapaca robynsii*, *U. nitida* and *Syzygium guineense* subsp. *huillense* (tree form), usually as a fringe around the base of the bush group.

Many of these bush groups carry clumps of juvenile *Raphia* palms, not juvenile *Phoenix* palms as on bush groups in Kalabo and Senega. The nearest stand of *Raphia farinifera* palms is some 800 km east of Balovale. It would seem that these palms are an Angolan species of *Raphia* for which as yet there is no specific name.

2.3 KS Munga Woodland

Many of the wider sand dambos carry the odd tree or group of trees normally associated with Trapnell's K12 *Acacia–Combretum–Terminalia* savanna (munga) woodland. Species noted on such sites include *Acacia polyacantha*, *A. sieberana*, *Combretum fragrans*, *Ficus sycomorus* and *Terminalia mollis*.

2.3(a) Dry Dambos

These are shrub–subshrub–herb–grass–sedge grasslands found on dry dambo margins. Characteristic shrubs and sub-shrubs include *Adenodolichos baumii*, *Annona stenophylla* subsp. *nana*, *Cryptosepalum maraviense* and *Lannea edulis*.

3. TERMITARIA

3.1 Miombo Termitaria

Termite mounds are restricted to the plateau soils of the Chavuma area and some of the steeper-sided dambos in sand country where the streams have cut down to the heavier soils of the Kundelungu series.

Common tall trees include *Acacia gerrardii*, *Boscia angustifolia*, *Combretum molle* and *Ziziphus mucronata*. Small trees are chiefly *Bauhinia petersiana*, *Euclea divinorum*, *E. schimperi*, *Haplocoelum foliolosum* and *Tarenna neurophylla*.

Common shrubs include *Dichrostachys cinerea*, *Diospyros lycioides*, *Phyllanthus guineensis* and the succulent *Sansevieria kirkii*. *Capparis tomentosa*, *Hippocratea africana* and *Landolphia parvifolia* are the most frequent climbers.

4. GRASSLAND

4.1 Dambo Grassland

The vegetation is a fairly dense mat of grasses, sedges and herbs and herbs 50–75 cm high with flowering culms to 160 cm high. The grasses are perennial bunch grasses, cushion-like or tussocky, with *Loudetia simplex* as the characteristic species.

The seepage heads of the small streams are surrounded by bog grassland. Here the grass mat is dense, of uneven height, composed largely of late flowering tussocky grasses to 3 m high. *Hyparrhenia bracteata* is the dominant and characteristic species.

4.2 Riverine Grassland

The perimeter zone is a narrow belt of *Hyparrhenia* grasses many different species. Bunch grasses typified by *Loudetia simplex* cover extensive areas of seasonally inundated plain.

Lagoons have dense, semi-floating beds of water grasses such as *Vossia cuspidata* and *Echinochloa* species. More permanent swamps carry *Cyperus* (sedge) or *Typha* (bulrush) beds. *Phragmites* reed beds fringe the streams and rivers.

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SPECIES LISTS

a – abundant, c – common, lf – locally frequent, o – occasional, lo – locally occasional, r – rare

VEGETATION OF KALAHARI SANDS

- K6 – *Baikiaea* forest
 K1 – "mavunda"
 K5 – Kalahari woodland
 K8 – *Burkea-Erythrophleum* woodland
 SK – suffrutex savanna
 P/M – *Marquesia* mavunda

	K6	K1	K5	K8	SK	P/M
<u>Tall trees:</u>						
<i>Acacia giraffae</i>	r-o					
<i>Azelia quanzensis</i>			r	r		r
<i>Albizia adianthifolia</i>		o-lf				
<i>Albizia antunesiana</i>			o	o		
<i>Albizia versicolor</i>	r	r				
<i>Amblygonocarpus andongensis</i>	r		o			o
<i>Baikiaea plurijuga</i>	c		lf			
<i>Borassus aethiopum</i>					lo	
<i>Brachystegia boehmii</i>			lo			
<i>Brachystegia longifolia</i>		o-lf	lc	lo		lo
<i>Brachystegia spiciformis</i>		lo-lf	lc	lo		lo
<i>Burkea africana</i>		lo	o	f-c		o
<i>Combretum collinum</i>	o	r	o	o-lf		o
<i>Cryptosepalum exfoliatum</i> subsp. <i>pseudotaxus</i>		la	r	r		r
<i>Entandrophragma delevoyi</i>	r-o					
<i>Erythrophleum africanum</i>	o	o	o	f-lc		o
<i>Ficus brachylepis</i>			r			
<i>Ficus fischeri</i>			r			
<i>Guibourtia coleosperma</i>	o	o-lf	o-lf	r-o		o
<i>Isoberlinia angolensis</i>			o-lf	lo		o
<i>Julbernardia paniculata</i>			la	lo		o
<i>Kigelia africana</i>	r		r			
<i>Lanea stuhlmannii</i>	r-o					
<i>Marquesia macroura</i>						a
<i>Parinari curatellifolia</i>	lo	l	lo-lf			o
<i>Peltoporum africanum</i>	r		r-o	lo		
<i>Pericopsis angolensis</i>		o	o	o		o
<i>Pterocarpus angolensis</i>	r	r-o	o	lo		o
<i>Riciodendron rautanenii</i>	lo		lo			
<i>Sclerocarya caffra</i>			r			
<i>Sterculia quinqueloba</i>			r-o			
<i>Strychnos potatorum</i>	r					
<i>Syzygium guineense</i> subsp. <i>afromontanum</i>		lo	lo			lo
<i>Terminalia sericea</i>	lo		lo	o-lf		
<u>Small trees:</u>						
<i>Anisophyllea boehmii</i>			r			
<i>Baphia whitei</i>		f				

	K6	K1	K5	K8	SK	P/M
<i>Baphia massaiensis</i>	f		f-lc	o-f		o-lf
<i>Bersama abyssinica</i>	o-lf	o	lo			lo
<i>Canthium captum</i>		lc				lo
<i>Cassipourea congensis</i>		r				r
<i>Chrysophyllum magalismsontanum</i>		o-lf				lo
<i>Combretum celastroides</i>	f	o-lf				
<i>Combretum psidioides</i>	o		o	o		o
<i>Combretum zeyheri</i>	o		o	o		o
<i>Cussonia kirkii</i>			r			r
<i>Dalbergia nitidula</i>			lo			
<i>Dialium engleranum</i>			lo			
<i>Diospyros batocana</i>		o	o-lf			o
<i>Diospyros undabunda</i>		o-lf				lo
<i>Diplorhynchus condylocarpon</i>	o	o	o-lf	f-lc		c-lf
<i>Ficus burkei</i>	r					
<i>Garcinia huillensis</i>			r-o			
<i>Hexalobus monopetalus</i>			lo			lo
<i>Markhamia obtusifolia</i>	lo		lo	lo		
<i>Markhamia acuminata</i>	o					
<i>Monotes adenophyllus</i>			r			
<i>Monotes glaber</i>			r-o			
<i>Olax obtusifolia</i>			o-lf	o-lf		
<i>Oldfieldia dactylophylla</i>			o	o	o	
<i>Phoenix reclinata</i>					r	
<i>Piliostigma thonningii</i>	lc		r-o			
<i>Pseudolachnostylis maprouneifolia</i>	lo		o	o		
<i>Pteleopsis anisoptera</i>	o-lf	lo				lo
<i>Schrebera trichoclada</i>			o	o		
<i>Stereospermum kunthianum</i>	lf		r			
<i>Strychnos cocculoides</i>		lo	o	o		o
<i>Strychnos pungens</i>		lo	o	o		o
<i>Swartzia madagascariensis</i>			o	o		
<i>Syzygium guineense</i> subsp. <i>huillense</i>			lo	lo	o-lf	
<i>Terminalia brachystemma</i>		o	o-lf	lo		o
<i>Uapaca kirkiana</i>			r	r		
<i>Uapaca nitida</i>			lo	lo		
<i>Uapaca robynsii</i>				lf		
<i>Uapaca sansibarica</i>				lo		
<i>Uvariastrum hexaloboides</i>			o			
<i>Zanha africana</i>			lo			
<i>Ziziphus mucronata</i>	r					
Shrubs:						
<i>Acacia ataxacantha</i>	o-lf					
<i>Acacia fleckii</i> (secondary)			lo			
<i>Alchornea occidentalis</i>	c	o-lf				
<i>Allophylus africanus</i>	o		o			
<i>Ancylanthos fulgidus</i>			lo	lo	lo	

	K6	K1	K5	K8	SK	P/M
Anisophyllea quangensis					r	
Annona senegalensis			lo			
Baphia bequaertii		o				
Bauhinia mendoncae		f-lc				
Bauhinia macrantha	f		f	o-lc		
Bridelia cathartica			r			
Bridelia duvigneaudii		lo				
Byrsocarpus orientalis	o	o	o	lo	o	
Canthium huillense			r-c			
Canthium venosum		lf				lo
Carissa edulis		r				
Chrysophyllum bangweolense			lo			
Clerodendrum myricoides			r			
Clerodendrum tanganyikense	o-lf	o-lf				
Combretum gossweileri		lc				
Copaifera baumiana		f	f	lo		o-lf
Dichapetalum thonneri		o-lf				
Dichrostachys cinerea	r		o	o		o
Diospyros lycioides	lo					
Dolichos pseudocajanus		o-lf				
Ekebergia benguelensis			o	o		
Erythrococca welwitschiana		r-lo				
Erythroxyllum emarginatum		lo				
Euclea dekindtii			lo		lo	
Eugenia bukobensis		r-lo				
Fagara trijuga	lo					
Flacourtia indica			o	o		
Friesodielsia obovata	lo					
Grewia decemovulata			lo	lo		
Grewia falcistipula			lo			
Hannoa chlorantha			lo			
Holarrhena pubescens	o-lf					
Holostylon baumii			lo			
Hymenocardia acida			o-lf	f-lc		lo
Indigofera rhynchocarpa	o-lf					
Indigofera subcorymbosa		lo				
Kotschya strobilantha			lo	lo		
Leonotis nepetifolia	lo		lo	lo		
Lepidagathis microchila		o-lf	o-lf			
Maprounea africana			o	o-lf		
Margaritaria discoidea		r	r			
Maytenus senegalensis			o	o		o
Memecylon flavovirens			o-lf			o
Memecylon sapinii		o-lf				o
Ochna pulchra		o	o	lo		o
Ozoroa nitida			r	r-o		
Ozoroa stenophylla			r			
Phyllanthus engleri	lo					

	K6	K1	K5	K8	SK	P/M
<i>Phyllocosmus lemaireanus</i>		o	o-lf	o-lf		lo
<i>Plectranthus esculentus</i>			r			r
<i>Plectranthus kapatensis</i>		r				
<i>Premna senensis</i>	r					
<i>Protea gagedi</i>			lo	lo		
<i>Protea welwitschii</i>					o-lf	
<i>Psorospermum baumii</i>		o-lf				lo
<i>Psorospermum febrifugum</i>			lo	lo		
<i>Psychotria pumila</i>			r			
<i>Raphia n.s. - juvenile</i>				f-lc		
<i>Rhus kirkii</i>		r	lo	lo		lo
<i>Rhus tenuinervis</i>	lo					
<i>Rothmannia englerana</i>			o			o
<i>Rytigynia orbicularis</i>		r	lo			
<i>Salacia bussei</i>			lo			
<i>Sapium cornutum</i>		lo	lo			
<i>Securidaca longepedunculata</i>		o	o	o		o
<i>Sida cordifolia</i>			lo	lo		
<i>Solanum panduriforme</i>	lo		lo	lo		
<i>Sphenostylis marginata</i>			lo	lo		
<i>Strobilanthopsis linifolia</i>		f	o-lf			o-lf
<i>Tapiphyllum n.s.</i>		r	r			
<i>Tricalysia angolensis</i>	lf	c-lf	lf	lo		o-lf
<i>Tricalysia myrtifolia</i>		lo				
<i>Triumfetta setulosa</i>	o	o	o	o		o
<i>Triumfetta dekindtiana</i>		o-lf	lo	lo		lo
<i>Uvaria angolensis</i>		lc				
<i>Vangueria infausta</i>	lo					
<i>Vangueria randii</i>	lo					
<i>Vangueriopsis lanciflora</i>			lo			
<i>Vernonia potamophila</i>		r				
<i>Vernonia glaberrima</i>			o-lf	lo		
<i>Vitex madiensis</i>			r-lo	lo		
<i>Vitex mombassae</i>	lo	lo	lo	lo		
<i>Waltheria indica</i>			o-lf	o-lf		
<i>Xeromphis obovata</i>			lo	lo		
<i>Ximenia americana</i>			lo			
<i>Ximenia caffra</i>			r			
<i>Xylopia odoratissima</i>		lo	lo	lo		lo
<i>Xylopia tomentosa</i>		lo				
Subshrubs:						
<i>Acalypha senensis</i>	lf					
<i>Acrocephalus sericeus</i>			lo		lo	
<i>Adenodolichos punctatus</i>			lo			
<i>Aframomum biauriculatum</i>	la	la				
<i>Alvesia rosmarinifolia</i>			lo			
<i>Annona stenophylla subsp. nana</i>				lf	lo	

	K6	K1	K5	K8	SK	P/M
<i>Asparagus africanus</i>			lo	lo	lo	
<i>Asparagus setaceus</i>	r-c					
<i>Aspilia mossambicensis</i>	lo					
<i>Becium angustifolium</i>				lo	lo	
<i>Becium obovatum</i>				lo	lo	
<i>Blepharis maderaspatensis</i>		o-f				
<i>Blepharis buchneri</i>	lo	o-lf				
<i>Brackenridgea arenaria</i>		o-lf		lf	lf	
<i>Cassia absus</i>	lo					
<i>Cassia meeli</i>	lo		lo			
<i>Cassia mimosoides</i>			lo	lo		
<i>Centemopsis gracilentia</i>		lo	lo			
<i>Chamaeclitandra henriquesiana</i>		o-lf	lf	lf	v.lf	o-lf
<i>Cissus crusei</i>	lo-lf					
<i>Clematopsis scabiosifolia</i>			r			
<i>Clerodendrum capitatum</i>	lo	lo				
<i>Clerodendrum formicarum</i>			lo			
<i>Clerodendrum uncinatum</i>	lf		lf			
<i>Crotalaria variegata</i>			r-lo			
<i>Cryptosepalum maraviense</i>				lf	la	
<i>Desmodium barbatum</i>		lo	lo			
<i>Diospyros chamaethamnus</i>				v.lf	v.lf	
<i>Diospyros virgata</i>		f	o-lf	lo		o-lf
<i>Dolichos kilimandscharicus</i>			lo			
<i>Dolichos magnificus</i>			r			
<i>Ectadiopsis oblongifolia</i>			r-c			
<i>Endostemon distifolius</i>			r-o			
<i>Entada nana</i>					r	
<i>Erythrina baumii</i>					r	
<i>Eugenia angolensis</i>				o-lf	lf	
<i>Euphorbia benthamii</i>		r				
<i>Fadogia fuchsioides</i>			lo			
<i>Fadogia monticola</i>				lo	lo	
<i>Fadogiella stigmatoloba</i>		lo	lo			
<i>Gardenia brachythamnus</i>	lo	o-lf				
<i>Gnidia buchananii</i>			lo	lo		
<i>Helichrysum kirkii</i>			lo			
<i>Hibiscus calyphyllus</i>	lo					
<i>Hibiscus lobatus</i>	o					
<i>Hibiscus mastersianus</i>	o-f					
<i>Hypoestes verticillaris</i>			o-lf	lo		lo
<i>Indigofera microcalyx</i>				lo		
<i>Indigofera sutherlandoides</i>			lo			
<i>Landolphia camptoloba</i>		c				o-lf
<i>Landolphia gossweileri</i>					r-lo	
<i>Lansea virgata</i>			lo			
<i>Lansea gossweileri</i>				lo	o-lf	
<i>Leptactina benguelensis</i>		o-lf	o-lf	lo		lo

	K6	K1	K5	K8	SK	P/M
Magnistipula eglandulosa					lf	
Myrsine africana			r-lo			
Neorautanenia mitis			lo			
Ochna katangensis				r	r	
Ochna leptoclada				o-lf	lf	
Ochna manikensis				lo	lf	
Ochna pygmaea				lo	lf	
Otiophora scabra		lo	lo			
Parinari capensis				lf	a	
Pavetta pygmaea			r			
Phyllanthus nummulariifolius		lo				
Phyllanthus welwitschianus			lo			
Plumbago zeylanica	lo					
Polygala arenicola			r	lo		
Polygala nematophylla		lo				
Polygala sphenoptera			r			
Protea micans			lo	lo	lo	
Psychotria kirkii			r			
Pygmaeothamnus zeyheri				lf	f-lc	
Rauvolfia nana		lo	lo			
Rhynchosia castroi			o-lf	lo		
Sansevieria kirkii		o-lf	o-lf	lo		
Sapium acetosella				r	r	
Sapium oblongifolium			lo	lf	o-lf	
Scoparia dulcis				lo	lo	
Smilax kraussiana	lf	lf	lf			o-lf
Sopubia mannii			lo			
Strophanthus angusii				r	r	
Strychnos gossweileri				lo	lo	
Tephrosia cephalantha		lo	lo	lo		lo
Tephrosia decora			lo	lo		
Thesium cinereum				lo	lo	
Tinnea vestita			r			
Tricalysia cacondensis			v.lf	o-lf		o-lf
Tricalysia suffruticosa			lf			lf
Tricalysia griseiflora		lo	lo			lo
Trichilia quadrivalvis			lf			lf
Tylosema fassoglensis					r	
Vernonia poskeana			lo			
<u>Climbers:</u>						
Adenia gummifera			r			
Ampelocissus africana	r					
Ampelocissus obtusata	lo		lo	lo		
Baijsea wulfhorstii	o-lf	f				
Cassytha filiformis		o-lf	o-lf			o-lf
Cissampelos mucronata				lo		
Cissampelos owariensis	r					

	K6	K1	K5	K8	SK	P/M
Combretum mossambicense	lo	r				
Cynanchum tetrapterum		r				
Dioscorea praezensilis	o	lo				
Helinus integrifolius				lo		
Hippocratea parvifolia	o					
Ipomoea verbascoidea		r				
Jasminum streptopus	lf		lf			
Landolphia parvifolia		lc				lf
Leptoderris nobilis		lo				
Paederia foetens	lo					
Rhopalopilia marquesii		r				
Secamone stuhlmannii		lf				
Strophanthus welwitschii		lf	lf			o-lf

RIPARIAN AND SWAMP FOREST

R – riparian S – swamp fr – fringe

	R	S		R	S
<u>Tall trees:</u>			<u>Small trees:</u>		
Acacia sieberiana - fr	lo		Bersama abyssinica	o	
Azelia quanzensis	r		Cassipourea gummiflua		r
Albizia versicolor	lo		Chrysophyllum magalismontanum	o	
Anthocleista liebrechtsiana	o	o	Clausena anisata	o-lf	
Apodytes dimidiata	r		Croton leuconeurus	o	
Bridelia micrantha	o	o	Dialium angolense	r	
Clerodendrum thyrsoideum		v.r	Ficus ingens	r	
Craibia affinis	f		Ficus verruculosa – fr, swamp fringe	o-lf	f
Diospyros mespiliformis	o		Garcinia huillensis	o	
Faurea saligna	r-o		Garcinia smeathmannii	o	o-lf
Ficus capensis	o	o	Gardenia imperialis	o-lf	o
Garcinia livingstonei	o		Gardenia spatulifolia	r-o	
Homalium abdessammadii	o		Ochna multiflora	v.lf	v.lf
Manilkara obovata	f	o-f	Oncoba spinosa	o-lf	
Mimusops zeyheri	o		Rhus longipes	o	
Nauclea pobeguinii	r		Rhus quartiniana	f-c	
Parinari excelsa	o-lf	lo	Salix subserrata	lc	
Phoenix reclinata	o-lf	f-lc	Schrebera alata	r	r
Rauvolfia caffra	o	o	Vincentella passargei	r	
Sapium ellipticum	lo		Voacanga thouarsii		o-lf
Sclerocarya caffra	r				
Sterculia subviolacea		f-c	<u>Shrubs:</u>		
Syzygium cordatum	lc	c	Acalypha chirindica	lf	
Syzygium guineense subsp. barotsense a			Acanthus montanus	r	
Syzygium owariense		c	Aframomum zambesiacum		r-lf
Xylophia aethiopica		o	Allophylus chaunostachys	o	
Xylophia katangensis		o	Antidesma venosum	o	o
			Canthium henriquesianum	o	o
			Canthium venosum	o	

	R	S		R	S
Canthium zanzibaricum	o-f	o-f	Sabicea africana		v.lf
Capparis tomentosa	lo		Sesbania sesban - fr		lo
Carissa edulis	lo		Solenostemon zambesiacus	o	o-lf
Cephaelis peduncularis	lf	o	Tarenna rhodesiaca	lo	
Clerodendrum violaceum		o	Tricalysia andongensis		o-lf
Craterispermum laurinum	lf		Tricalysia coriacea	lo	
Crotalaria cleomifolia	lo		Tricalysia myrtifolia	lo	
Desmodium repandum		lf	Urena lobata	lo	2dry
Desmodium salicifolium	o	o	Vangueria infausta	r	
Diospyros lycioides	o	o-lf			
Dissotis princeps - fr		lf	<u>Climbers:</u>		
Melastomastrum segregatum	lf		Abrus precatorius	lo	
Dombeya burgesiae	r		Adenia gummifera	lo	
Dombeya wittei	lo		Artabotrys monteiroae	o	o
Dracaena camerooniana		o	Cissampelos mucronata	o	
Embelia schimperi	o-lf		Cissus petiolata	o	o
Euclea schimperi	o		Dioscorea praehehensis		o-lf
Eugenia bukobensis	lo		Gymnema sylvestre	r-o	
Ficus pygmaea - fr	lf	lf	Hippocratea africana	lf	
Flacourtia indica	o		Ipomoea rubens	lo	lo
Kosteletzkya buettneri	lo		Jasminum fluminense		o-lf
Margaritaria discoidea	r		Merremia pterygocaulos	lo	
Maytenus buchananii	lo		Mikania cordata	lo	lo
Mimosa pigra	o		Mucuna poggei		o-lf
Osmunda regalis		r	Mussaenda arcuata	o	o
Oxyanthus speciosus	r		Opilia celtidifolia	lo	
Phragmites mauritianus	lc		Paullinia pinnata	f	
Phyllanthus mulleranus	o		Rhoicissus tridentata	lo	
Plectranthus mirabilis		lf	Sabicea laurentii		f
Polygala sphenoptera	lo		Secamone micrandra	lo	lo
Psychotria megistosticta		c	Strychnos lucens	lo	
			Tacazzea apiculata	f	

RIPARIAN THICKETTrees and shrubs:

Acalypha chirindica	f-lc	Grewia flavescens	o
Alchornea occidentalis	f	Haplocoelum foliolosum	o
Bridelia duvigneaudii	r-o	Markhamia obtusifolia	o
Byrosocarpus orientalis	o	Phyllanthus mulleranus	o
Canthium captum	o	Rytigynia umbellulata	r
Cassipourea congensis	r	Sansevieria kirkii	o-f
Combretum celastroides	o-f	Steganotaenia araliacea	o
Embelia schimperi	o	Strychnos potatorum	r
Euphorbia candelabrum	r	Tarenna neurophylla	f
Grewia bicolor	r	Tinnea rhodesiana	r

MIOMBO (PLATEAU AND HILL)

	Plateau Hill			Plateau Hill	
<u>Tall trees:</u>			<i>Terminalia mollis</i>	lo	
<i>Afzelia quanzensis</i>	o	o	<i>Uapaca nitida</i>	lo	lo
<i>Albizia antunesiana</i>	o-lf	o	<i>Vangueriopsis lanciflora</i>	lo	
<i>Amblygonocarpus andongensis</i>	r		<u>Shrubs:</u>		
<i>Brachystegia boehmii</i>	lf		<i>Acridocarpus katangensis</i>	r	
<i>Brachystegia longifolia</i>	f-lc	lf	<i>Acrocephalus rupestris</i>		o-lf
<i>Brachystegia spiciformis</i>	lc	lf	<i>Byrsocarpus orientalis</i>	o	o
<i>Brachystegia wangermeeana</i>	lo	o-lf	<i>Desmodium velutinum</i>	r	
<i>Burkea africana</i>	o	o	<i>Dichaetanthera rhodesiensis</i>		r
<i>Cryptosepalum exfoliatum</i>	lo		<i>Dichrostachys cinerea</i>	o	o
subsp. <i>pseudotaxus</i>			<i>Dolichos trinervatus</i>	lf	
<i>Erythrophleum africanum</i>	o-lf	lo	<i>Ekebergia benguelensis</i>	o-lf	lo
<i>Ficus brachylepis</i>	r		<i>Grewia decemovulata</i>	lo	
<i>Ficus sycomorus</i>	r		<i>Hymenocardia acida</i>	o-lf	lo
<i>Isoberlinia angolensis</i>	f-lc	lf	<i>Indigofera sutherlandioides</i>	lo	
<i>Julbernardia paniculata</i>	la	lf	<i>Maprounea africana</i>	lo	lo
<i>Parinari curatellifolia</i>	o	o	<i>Maytenus senegalensis</i>	lo	
<i>Pericopsis angolensis</i>	o	o	<i>Memecylon flavovirens</i>	o	o
<i>Pterocarpus angolensis</i>	o	o	<i>Ochna afzelii</i>		lo
<u>Small trees:</u>			<i>Ochna pulchra</i>	o	o
<i>Anisophyllea boehmii</i>	lo		<i>Ozoroa homblei</i>		lo
<i>Bauhinia petersiana</i>	lf	lo	<i>Paropsia brazzeana</i>	lo	
<i>Combretum psidioides</i>	o	o	<i>Plectranthus esculentus</i>	lo	
<i>Crossopteryx febrifuga</i>		lo	<i>Protea angolensis</i>	lo	
<i>Cussonia kirkii</i>		lo	<i>Psorospermum febrifugum</i>	o	
<i>Dalbergia nitidula</i>	o	o	<i>Schistostephium artemisiifolium</i>		o-lf
<i>Diplorhynchus condylocarpon</i>	o-lf	lo	<i>Strobilanthopsis linifolia</i>	o-lf	lf
<i>Faurea saligna</i>	r		<i>Tinnea rhodesiana</i>		lo
<i>Ficus ingens</i>		r	<i>Uapaca pilosa</i>	lf	lf
<i>Hexalobus monopetalus</i>	lo		<i>Vellozia equisetoides</i>		f-lc
<i>Lansea discolor</i>	lo	lo	<i>Vernonia amygdalina</i>	lo	
<i>Monotes katangensis</i>	r	o	<i>Vernonia glaberrima</i>	lo	lo
<i>Ochna schweinfurthiana</i>	o	o-lf	<i>Vernonia guineensis</i>		lo
<i>Olax obtusifolia</i>	lo	lo	<u>Subshrubs:</u>		
<i>Oldfieldia dactylophylla</i>	o-lf	lo	<i>Abrus pulchellus</i>	lo	
<i>Ozoroa reticulata</i>	lo		subsp. <i>suffruticosus</i>		
<i>Phyllocosmus lemaireanus</i>	lo		<i>Aloe chabaudii</i>		v.lf
<i>Pseudolachnostylis maprouneifolia</i>	o-lf	lo	<i>Cryptosepalum maraviense</i>	lf	
<i>Pteleopsis anisoptera</i>		lo	<i>Diospyros virgata</i>	lf	
<i>Rothmannia englerana</i>	lo	lo	<i>Fadogia fuchsioides</i>	lo	
<i>Securidaca longepedunculata</i>	lo		<i>Lansea edulis</i>	lo	
<i>Strychnos cocculoides</i>	o	o	<i>Leptactina benguelensis</i>	lo	
<i>Strychnos pungens</i>	o		<i>Smilax kraussiana</i>	lf	
<i>Strychnos spinosa</i>	o		<i>Sphenostylis marginata</i>	lf	o-lf
<i>Swartzia madagascariensis</i>	o	o	<i>Thesium cinereum</i>	lo	
<i>Terminalia brachystemma</i>	o-lf		<i>Tricalysia cacondensis</i>	o-lf	

MUNGA WOODLAND AND DAMBO

S – savanna, D – dry dambo, W – wet dambo

Trees:

S	Acacia polyacantha	lo
S	Acacia sieberana	lo
S	Combretum fragrans	f
S	Ficus sycomorus	lo
S	Terminalia mollis	lo

Shrubs:

D	Adenodolichos baumii	v.lf
D	Annona stenophylla subsp. nana	lf
D	Blepharis buchneri	lo
D	Combretum platypetalum	lo
W	Conyza welwitschii	lf
D	Cryptosepalum maraviense	lf
W	Dissotis canescens	lo
W	Eriosema psoraleoides	lo

D	Hibiscus rhodanthus	lo
D	Lannea edulis	o-lf
W	Ludwigia leptocarpa	lf
W	Plectranthus mirabilis	lf
W	Protea welwitschii	lf
D	Scoparia dulcis	lo
D	Sesamum alatum	r
D	Sesamum calycinum	lo
D	Sida alba	r
W	Sopubia ramosa	lf
W	Sopubia simplex	lc
W	Syzygium guineense subsp. huillense	lf
D	Temnocalyx obovatus	r
D	Thesium cinereum	lo
D	Tylosema fassoglensis	r
D	Urena lobata	lo

TERMITARIATall trees:

Acacia gerrardii	o-lf
Acacia polyacantha	lo
Azanza garckeana	lo
Boscia angustifolia	lf
Combretum molle	lf
Commiphora mollis	lo
Diospyros mespiliformis	lo
Euphorbia candelabrum	r
Ficus brachylepis	r
Ficus fischeri	r
Ficus sycomorus	r
Isobertia angolensis	r
Lonchocarpus capassa	lo
Mimusops zeyheri	lo
Sterculia quinqueloba	lo
Stereospermum kunthianum	lo
Strychnos potatorum	r
Ziziphus mucronata	o-lf

Small trees:

Bauhinia petersiana	lf
Bersama abyssinica	lo
Cassine aethiopica	lo
Combretum psidioides	lo
Combretum zeyheri	lo
Cordia goetzei	r
Cussonia kirkii	r
Erythrophleum abyssinica	lo
Euclea divinorum	f-lc
Euclea schimperi	lf

Ficus brachypoda	r
Ficus burkei	r
Ficus thonningii	r
Haplocoelum foliolosum	o-lf
Lannea discolor	lo
Maerua angolensis	r-lo
Markhamia obtusifolia	lo
Maytenus heterophylla	lo
Ozoroa reticulata	lo
Piliostigma thonningii	r
Pleurostyliya africana	r
Rhus longipes	lo
Steganotaenia araliacea	lo
Strychnos spinosa	r
Tarenna neurophylla	o-lf
Terminalia mollis	v.lo

Shrubs:

Achyranthes aspera	v.lf
Acokanthera oppositifolia	lo
Allophylus africanus	lo
Annona senegalensis	lo
Antidesma venosum	lo
Byrsocarpus orientalis	lo
Carissa edulis	r
Cassia singueana	lo
Clerodendrum capitatum	lo
Dichrostachys cinerea	o-lf
Diospyros lycioides	o-lf
Embelia schimperi	lo

Feretia aeruginescens	lo	Vepris termitaria	r
Friesodielsia obovata	lo	Vernonia amygdalina	lo
Gardenia jovis-tonantis	lo	Ximenia americana	lo
Grewia flavescens	lo		
Hibiscus calyphyllus	o-lf	<u>Climbers:</u>	
Maerua juncea	r	Adenia gummifera	r-o
Margaritaria discoidea	r	Asparagus racemosus	lo
Pavetta assimilis	lo	Capparis tomentosa	o-lf
Pavetta schumanniana	lo	Dioscorea praehensilis	lo
Phyllanthus guineensis	o-lf	Hippocratea africana	o-lf
Phyllanthus mulleranus	lo	Landolphia parvifolia	lf
Sansevieria kirkii	lf	Opilia celtidifolia	lo
Securinega virosa	lo	Rhoicissus tridentata	lo
Tricalysia congesta	r	Rhynchosia caribaea	r
Vangueria infausta	lo	Vigna frutescens	r

FOREST RESEARCH PAMPHLET No.55, 1973**THE VEGETATION OF KABOMPO DISTRICT**

Kabompo District lies within the North-Western Province and has area of 14,500 km². It is bounded on the north by Mwinilunga District, on the east by Mwinilunga and Kasempa Districts, on the south by Mankoya and Mongu Districts and on the west by Balovale District and Angola. The district lies between 12°30' and 14°00' S, and 23°30' and 24°45' E.

The main rivers, the Kabompo, West Lunga, Manyinga and Dongwe, are perennial and flow in a southerly direction, eventually into the Zambezi river. The topography is a gently undulating sand plain varying from 975 m above sea level in the south to 1158 m in the north. Kabompo is 1076 m above sea level. The plateau area in the extreme north of the district, along the upper reaches of the Manyinga and West Lunga rivers, is more dissected as here the Kalahari sand mantle has been eroded away to expose the rock of the Katanga system.

Climatically there is a wetter, cooler area in the north and a warmer but still wet area in the south. The mean annual rainfall falling between November and March is 1120 mm. The mean minimum temperature of the coldest month (June) is 7°C and the mean maximum temperature of the hottest month (October) is 33.5°C. Frost is common in the colder months of June-July, especially in hollows associated with dambos.

Almost the whole of the district is covered by a mantle of Kalahari sand. Along the main rivers the sand have been eroded away exposing sandstones and shales of the Kundelungu series of the Katanga system. The older gneisses and schists of the Basement complex are occasionally exposed in the far north.

There are two main classes of soils in the area: (a) plateau soils in the east and north, and (b) Kalahari sands over the rest of the district. The plateau soils are derived from the Kundelungu shales and sandstones. They are fairly shallow sandy clays ranging in colour from pallid through yellow brown to reddish brown.

The Kalahari sands can be divided into (a) contact sands, and (b) upland sands. The contact sands are usually pale coloured clay sands, but in the north change to reddish brown clay sands. The upland sands like the plateau soils vary from pallid to reddish brown and are deep, well drained and fairly coarse grained with a 10–12% silt + clay fraction.

The Kalahari sands are divided between dry evergreen forest, locally called mavunda, and Kalahari woodland, with a small area of open sand plain in the north west and a relic patch of *Baikiaea* forest near the Watopa pontoon. Narrow strips of miombo/Kalahari woodland occur along the northern boundary and the Dongwe River on the southern boundary. Gallery woodland is well represented on the middle and lower reaches of the rivers but rare on the headwaters. True swamp forest is only known from two isolated patches, one on the headwaters of the Lusongwa River and one on the Manyinga River. The total woody flora is probably around 600 species, of which 500 have so far been recorded.

The following vegetation types occur in the district:

1. Closed Forest**A. Climatic**

1. Dry evergreen forest
 - (a) Chipya woodland
2. Dry deciduous forest

B. Edaphic

1. Swamp forest
2. Riparian forest
 - (a) Moist dambos

2. Open Forest

1. Miombo woodland
2. Kalahari woodland
3. Munga woodland
 - (a) Dry dambos

3. Vegetation of Termitaria**4. Grasslands**

1. Dambo grassland
2. Riverine grassland

1. CLOSED FOREST**1.A.1 Dry Evergreen Forest**

This is a three-storey forest with an evergreen or semi-evergreen canopy around 24 m high, a discontinuous evergreen understorey, and a dense to very dense evergreen shrubbery of shrubs, scramblers and climbers.

The overwood is dominated usually by *Cryptosepalum exfoliatum* subsp. *pseudotaxus*, but frequently by *Brachystegia longifolia*, *B. spiciformis* or *Guibourtia coleosperma*, or by all four species in varying combination. The *Brachystegia* rise above the *Cryptosepalum* level.

Characteristic shrubs, scramblers and small trees include *Alchornea occidentalis* (locally), *Baphia whitei*, *Bauhinia macrantha*, *Canthium captum*, *C. venosum*, *Chrysophyllum magalimontanum*, *Combretum celastroides*, *C. gossweileri*, *Copaifera baumiana*, *Diospyros undabunda*, *Memecylon sapinii*, *Paropsia brazeana*, *Psorospermum baumii* and *Uvaria angolensis*.

Common climbers in the shrubs layer include *Baissea wulffhorstii*, *Cassytha filiformis*, *Landolphia camptoloba*, *L. parvifolia*, *Secomone stuhlmannii* and *Strophanthus welwitschii*. There are virtually no canopy climbers.

Subshrubs are mostly *Aframomum bauriculatum* (especially in regrowth mavunda), *Chamaeclitandra henriquesiana*, *Diospyros virgata*, *Leptactina benguelensis*, *Strobilanthisopsis linifolia* and *Tricalysia angolensis*, with the succulent *Sansevieria kirkii*. Mosses and rain forest grasses like *Megastachya mucronata* occur in gaps.

1.A.1.a Chipya Woodland

Two small pockets of a type of chipya woodland allied to Copperbelt chipya occur in the district on contact or plateau soils. *Isoberlinia angolensis* is dominant. Common canopy associates includes *Albizia adianthifolia*, *A. versicolor*, *Burkea africana*, *Combretum collinum*, *Erythrophleum africanum*, *Lannea stuhlmannii*, *Pericopsis angolensis*, *Terminalia mollis* and *T. sericea*.

Small trees are chiefly *Combretum psidioides*, *C. zeyheri*, *Diplorhynchus condylocarpon*, *Markhamia obtusifolia*, *Piliostigma thonningii* and *Pseudolachnostylis maprouneifolia*.

Common shrubs include *Alchornea occidentalis*, *Clerodendrum tanganyikense* and *Friesodielsia obovata*, with subshrubs *Adenodolichos punctatus*, *Sphenostylis marginata* and the chipya indicator *Aframomum biauriculatum*. There are no common climbers.

This vegetation would appear to be derived from dry evergreen forest by the invasion of fire-hardy elements after destruction or partial destruction of the forest by fire and/or cultivation.

1.A.2 Dry Deciduous Forest

A relic patch of *Baikiaea* forest occurs near the Watopa pontoon. Under the higher rainfall (1120 mm as against 760 mm further south) of Kabompo District, *Baikiaea* has adapted a semi-deciduous habit. The associated canopy species – *Acacia giraffae*, *Combretum collinum* and *Entandrophragma delevoyi* – are only occasional at best.

The commoner smaller tree include *Baphia massaiensis*, *Bersama abyssinica*, *Combretum celastroides*, *Pteleopsis anisoptera* and *Stereospermum kunthianum*.

Shrubs are chiefly *Acacia ataxacantha*, *Alchornea occidentalis*, *Bauhinia macrantha*, *Clerodendrum tanganyikense*, *Holarrhena pubescens*, *Indigofera rhynchocarpa* and *Tricalysia angolensis*.

The commonest climbers are *Baisea wulffhorstii*, *Jasminum streptopus* and *Dioscorea praehensilis* (an invader).

Characteristic sub-shrubs are *Aframomum biauriculatum* (usually as a fringe), *Cissus crusei*, *Clerodendrum uncinatum*, *Hibiscus mastersianus* (invasive) and *Smilax kraussiana*.

The mutemwa thicket is found in various stages of regrowth which reflects the incidence and intensity of past fires:-

- (a) 3 m high mutemwa composed largely of *Alchornea occidentalis* and climbing *Dioscorea praehensilis* without *Aframomum biauriculatum*,
- (b) 1.2–2.4 m high dense mutemwa, largely composed of *Alchornea* with some *Aframomum* at the lower level,
- (c) 1–1.2 m high dense mutemwa with *Alchornea* and *Aframomum* or *Nephrolepis undulata* fern, all at the same level,
- (d) 1 m high mutemwa with the *Aframomum* overtopping and hiding the *Alchornea* and other mutemwa species.

Obviously (a) is the least and (d) the most degraded stage.

1.B.1 Swamp Forest

This occurs in two small patches, one on the Lusongwa and the other on the Manyinga river. Common tall trees include *Ficus capensis*, *Homalium africanum*, *Ilex mitis*, *Manilkara obovata*, *Phoenix reclinata* palms, *Sterculia subviolacea* and *Syzygium cordatum*. *Clausena anisata* and *Ficus verruculosa* are common as small trees of the fringe.

Common shrubs comprise *Cephaelis peduncularis*, *Craterispermum laurinum*, *Desmodium repandum* (subshrubs), *Dracaena camerooniana* and *Hypoestes aristata* with *Dissotis princeps*, *Maesa lanceolata* and *Solenostemon zambesiacus* on the fringe.

Characteristic climbers include *Glycine wightii* (on the fringe), *Jasminum streptopus*, *Landolphia buchananii*, *Sabicea laurentii* and *Scutia myrtina*, with *Piper guineense* clinging to the boles of the large trees.

1.B.2 Riparian Forest

Dense evergreen mushitu covers the headwaters of some of the smaller streams, but thins out to a more open gallery woodland on the middle and lower reaches. On the middle reaches of the Kabompo River,

for instance, the woodland is fronted by *Syzygium guineense* subsp. *barotsense* and occasionally backed by thicket where high sand bluffs come down to the river. Elsewhere, the gallery woodland is reduced to *Syzygium* and *Rhus quartiniana* with *Phragmites* reeds and the old *Salix subserrata* in the gaps.

In the mushitu proper canopy trees include *Craibia affinis*, *Diospyros mespiliformis*, *Homalium abdessammadii*, *Manilkara obovata*, *Parinari excelsa*, groups of *Phoenix reclinata* palms, *Strychnos xantha* (unusual), *Syzygium cordatum* and *S. guineense* subsp. *barotsense*. *Rhus quartiniana*, *Salix subserrata* and *Voacanga thouarsii* of the middle reaches seem to be the only common small trees.

Shrubs are chiefly *Antidesma venosum*, *Canthium zanzibaricum*, *Cephaelis peduncularis*, *Craterispermum laurinum*, *Dracaena camerooniana*, *Embelia schimperii*, *Maesa lanceolata* and *Tricalysia angolensis*.

Characteristic climbers include *Dioscorea praehensilis* (invasive), *Hippocratea africana*, *Mucuna poggei* (invasive), *Paullinia pinnata* and *Tacazzea apiculata*, while *Caesalpinia welwitschiana* and *Entada gigas* are local rarities.

The thicket patches are made up largely of *Acalypha chirindica*, *Alchornea occidentalis*, *Combretum celastroides* and *Tarenna neurophylla*, with climbing *Dioscorea praehensilis* and succulent *Sansevieria kirkii*.

1.A.2.a Moist Dambos

There are shrub–subshrub–herb–grass–sedge grassland. Characteristic shrubs include *Dissotis canescens*, *Eriosema psoraleoides*, *Ludwigia leptoclada*, the showy blue-flowered *Plectranthus mirabilis*, *Protea welwitschii*, *Sopubia* sp. 3 and *Syzygium guineense* subsp. *huillense*.

2. OPEN FOREST

2.1 Miombo Woodland

This is the normal *Brachystegia–Isoberlinia–Julbernardia* woodland of the high rainfall belt. Common tall trees include *Brachystegia boehmii*, *B. floribunda*, *B. longifolia*, *B. spiciformis*, *B. wangermeeana*, *Erythrophleum africanum*, *Isoberlinia angolensis*, *Julbernardia paniculata* and, locally, *Marquesia macroura*.

Small trees are chiefly *Combretum fragrans* (locally), *Diospyros kirkii* (locally), *Pseudolachnostylis maprouneifolia*, *Terminalia brachystemma*, *Strychnos cocculoides*, *Uapaca kirkiana* and *U. nitida*.

Common shrubs include *Bauhinia petersiana*, *Ekebergia benguelensis*, *Hymenocardia acida*, *Memecylon flavovirens* and *Uapaca pilosa*.

Sub-shrubs are a feature of any miombo, in this case especially *Adenodolichos punctatus*, *Cryptosepalum maraviense* (locally), *Diospyros virgata*, *Droogmansia pteropus*, *Indigofera sutherlandioides*, *Smilax kraussiana*, *Sphenostylis marginata*, *Strobilanthes linifolia* and *Vernonia glaberrima*. Climbers are absent.

2.2 Kalahari Woodland

Most of the woodland on Kalahari sands falls into one or the other of Trapnell's groups K3 or K5, or is intermediate between the two groups. There are strictly miombo/Kalahari woodlands dominated by *Brachystegia longifolia*, *B. spiciformis*, *Cryptosepalum exfoliatum* subsp. *pseudotaxus* and *Guibourtia coleosperma*. These are also the common dominants of mavunda but in Kalahari woodland they occur in different proportions to those in mavunda.

Small trees are chiefly *Baphia massaiensis*, *Diospyros batocana*, *Diplorhynchus condylocapon*, *Olox obtusifolia* and *Terminalia brachystemma*.

Characteristic shrubs include *Adenodolichos baumii* (unusual), *Bauhinia macrantha*, *Copaifera baumiana*, *Ekebergia benguelensis*, *Hymenocardia acida*, *Memecylon flavovirens*, *Paropsia brazzeana*, *Tricalysia angolensis* and *Vernonia glaberrima*.

Sub-shrubs consist mostly of *Annona stenophylla* subsp. *nana*, *Clerodendrum uncinatum*, *Cryptosepalum maraviense*, *Diospyros virgata*, *Hypoestes verticillaris*, *Lepidagathis microchila*, *Rhynchosia castroi* (ground creeper), *Strobilanthes linifolia*, *Tricalysia cacondensis* and *Trichilia quadrivalvis* with the succulent *Sansevieria kirkii*. Climbers are occasional at best.

In restricted areas Kalahari woodland degrades to Trapnell's K8 *Burkea–Erythrophleum* woodland and down to *Diplorhynchus* scrub. In the understorey of the latter, *Parinari capensis* is strongly dominant, associated chiefly with *Annona stenophylla* subsp. *nana*, *Brackenridgea arenaria*, *Chamaeclitandra henriquesiana*, *Eugenia angolensis*, *Lannea gossweileri*, *Magnistipula eglandulosa*, *Ochna leptoclada*, *O. manikensis*, *O. pygmaea* and *Pygmaeothmanus zeyheri*.

2.3 Munga Woodland

The beginning of this open savanna type can be found on the wider dambos both in Kalahari sand and plateau country. Characteristic trees include *Acacia polyacantha*, *A. sieberiana*, *Combretum fragrans*, *Ficus sycomorus* and *Terminalia mollis*.

2.3.a Dry Dambos

These are shrub–subshrub–herb–grass–sedge grasslands. Characteristic shrubs and sub-shrubs include *Adenodolichos baumii*, *Annona stenophylla* subsp. *nana*, *Becium obovatum*, *Cryptosepalum maraviense*, colonies of *Smilax kraussiana* and *Triumfetta welwitschii*.

3. TERMITARIA

Termite mounds are largely restricted to plateau country, in miombo woodland and on dambo margins, but occasionally occur in the sand country on dambo margins where the streams have cut down to the Kundelungu soils.

The trees are chiefly *Acacia gerrardii*, *Boscia angustifolia*, *Combretum molle* and *Ziziphus mucronata*. Small trees are chiefly *Bauhinia petersiana*, *Euclea divinorum*, *E. schimperi*, *Haplocoelum foliolosum*, *Markhamia obtusifolia* and *Tarenna neurophylla*.

Shrubs are mostly *Allophylus africanus*, *Diospyros lycioides* and *Phyllanthus guineensis*; subshrubs chiefly *Dyschoriste verticillaris*, *Hibiscus calyphyllus* and *Ipomoea vernalis*. The succulents *Aloe greatheadii* and *Sansevieria kirkii* are locally common and there is also a new species of *Aloe* without a specific name. *Capparis tomentosa* and *Hippocratea africana* are the only common climbers.

4. GRASSLANDS

4.1 Dambo Grassland

The vegetation is a fairly dense mat of grasses, sedges and herbs 50–75 cm high with flowering culms 1–1.6 m high. The grasses are perennial bunch grasses, cushion-like or tussocky with *Loudetia simplex* as the characteristic species.

The seepage heads of the small streams are surrounded by bog grassland. Here the grass mat is dense, of uneven height, composed largely of late flowering tussocky grasses to 3 m high. *Hyparrhenia bracteata* is the dominant and characteristic species.

4.2 Riverine Grassland

The perimeter zone is a narrow belt of *Hyparrhenia* grasses of many different species. Bunch grasses typified by *Loudetia simplex* cover extensive area of seasonally inundated plain.

Lagoons have dense, semi-floating beds of water grasses such as *Vossia cuspidata* and *Echinochloa* species. More permanent swamps carry *Cyperus* (sedge) or *Typha* (bulrush) beds. *Phragmites* reed beds fringe the streams and rivers.

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SPECIES LISTS

a – abundant, c – common, f – frequent, lf – locally frequent, o – occasional, lo – locally occasional, r a rare

KALAHARI SAND WOODLANDK6 – *Baikiaea* forest

K1 – "mavunda"

K – Kalahari woodland

SK – suffrutex savanna

	K6	K1	K	SK
<u>Tall trees:</u>				
<i>Acacia giraffae</i>	lo			
<i>Azelia quanzensis</i>			o	
<i>Albizia adianthifolia</i>		lo		
<i>Albizia antunesiana</i>			o	
<i>Albizia versicolor</i>	r	lo		
<i>Amblygonocarpus andongensis</i>	r		o	
<i>Baikiaea plurijuga</i>	c		lf	
<i>Brachystegia boehmii</i>			lo	
<i>Brachystegia longifolia</i>		lf	c	
<i>Brachystegia spiciformis</i>		f-c	c	
<i>Brachystegia wangermeeana</i>			lc	
<i>Burkea africana</i>		o	o-lf	
<i>Combretum collinum</i>	o	o	o	
<i>Cryptosepalum exfoliatum</i> subsp. <i>pseudotaxus</i>		a	lo	
<i>Dialium englerianum</i>			lo	
<i>Entandrophragma devevoui</i>	lo			
<i>Erythrophleum africanum</i>	o	o	o	
<i>Guibourtia coleosperma</i>	lo	o-lf	o	
<i>Isoberlinia angolensis</i>			f-c	
<i>Julbernardia paniculata</i>			a	
<i>Kigelia africana</i>	r		lo	
<i>Lanea stuhlmannii</i>	r-o			
<i>Oldfieldia dactylophylla</i>			o	
<i>Parinari curatellifolia</i>		lo	o	
<i>Peltophorum africanum</i>	r		o	
<i>Pericopsis angolensis</i>		o	o	
<i>Pteleopsis anisoptera</i>	o-lf	lo		
<i>Pterocarpus angolensis</i>	r	o	o	
<i>Ricinodendron rautanenii</i>	lo		lo	
<i>Sclerocarya caffra</i>			r	
<i>Sterculia quinqueloba</i>			o	
<i>Stereospermum kunthianum</i>	o-lf		lo	
<i>Strychnos potatorum</i>	r			
<i>Syzygium guineense</i> subsp. <i>afromontanum</i>		o	o	
<i>Terminalia sericea</i>			lo	
<u>Small trees:</u>				
<i>Anisophyllea boehmii</i>			r	
<i>Baphia whitei</i>		f-c		
<i>Bersama abyssinica</i>	o-lf	o	o	

	K6	K1	K	SK
<i>Cassipourea congensis</i>		r		
<i>Chrysophyllum magalismontanum</i>		o-lf		
<i>Combretum celastroides</i>	o-lf	lo-lf		
<i>Combretum gossweileri</i>		lf		
<i>Combretum psidioides</i>	o		o	
<i>Combretum zeyheri</i>	o		o	
<i>Cussonia kirkii</i>			r	
<i>Dalbergia nitidula</i>			o	
<i>Diospyros batocana</i>		o-lf	o-f	
<i>Diospyros undabunda</i>		o-f		
<i>Diplorhynchus condylocarpon</i>	o	o	o-lf	
<i>Garcinia huillensis</i>			o	
<i>Hexalobus monopetalus</i>			o	
<i>Lanea discolor</i>			o	
<i>Markhamia obtusifolia</i>	o-lf		lo	
<i>Markhamia acuminata</i>	o			
<i>Monotes adenophyllus</i>			o	
<i>Monotes glaber</i>			o	
<i>Olex obtusifolia</i>			o-lf	
<i>Piliostigma thonningii</i>	lo		r	
<i>Pleurostyliia africana</i>			r	
<i>Pseudolachnostylis maprouneifolia</i>	lo		o	
<i>Rothmannia englerana</i>			o	
<i>Schrebera trichoclada</i>			o	
<i>Steganotaenia araliacea</i>			r-o	
<i>Strychnos cocculoides</i>		lo	o	
<i>Strychnos pungens</i>		lo	o	
<i>Swartzia madagascariensis</i>		o-lf	o-lf	
<i>Terminalia brachystemma</i>		o-lf	o-lf	
<i>Uapaca kirkiana</i>			r	
<i>Uapaca nitida</i>			r	
<i>Uapaca robynsii</i>				f
<i>Uvariastrum hexaloboides</i>				o
<i>Vangueriopsis lanciflora</i>				o
<i>Vitex madiensis</i>				o
<i>Vitex mombassae</i>			o	
<i>Zanha africana</i>			r-o	
<i>Ziziphus mucronata</i>				o
<u>Shrubs:</u>				
<i>Acacia ataxacantha</i>	o-lf			
<i>Acrocephalus sericeus</i>			lo	o-lf
<i>Adenodolichos baumii</i>			lf	
<i>Alchornea occidentalis</i>	f-lc	lo-lf		
<i>Allophylus cataractarum</i>	lo		o	
<i>Alvesia rosmarinifolia</i>			r	
<i>Ancylanthos fulgidus</i>				r
<i>Anisophyllea quangensis</i>			lo	
<i>Annona senegalensis</i>			lo	
<i>Asparagus africanus</i>			lo	lo

	K6	K1	K	SK
<i>Asparagus setaceus</i>	lo			
<i>Baphia bequaertii</i>		o-lf	lo	
<i>Baphia massaiensis</i> subsp. <i>obovata</i>	f-c		f	
<i>Bauhinia macrantha</i>	f	f	f	
<i>Bridelia cathartica</i>			r	
<i>Bridelia duvigneaudii</i>		lo		
<i>Byrsocarpus orientalis</i>	lo	lo	lo	
<i>Canthium captum</i>		f-lc		
<i>Canthium huillense</i>			o	
<i>Canthium venosum</i>		o-lf		
<i>Carissa edulis</i>		r		
<i>Chrysophyllum bangweolense</i>			o	
<i>Clematopsis scabiosifolia</i>			r	
<i>Clerodendrum capitatum</i>	lo	lo		
<i>Clerodendrum myricoides</i>			r	
<i>Clerodendrum tanganyikense</i>	o-lf	lf		
<i>Copaifera baumiana</i>		c	f-c	
<i>Dichapetalum thonneri</i>		o-lf		
<i>Dichrostachys cinerea</i>	r			
<i>Diospyros lycioides</i>	lo			
<i>Dolichos eriocaulos</i>		lo	lo	
<i>Dolichos kilimandscharicus</i>			lo	
<i>Dolichos pseudocajanus</i>		o-lf		
<i>Dolichos magnificus</i>			r	
<i>Ekebergia benguelensis</i>			o-lf	
<i>Erythrococca welwitschiana</i>		lo		
<i>Erythroxyllum emarginatum</i>		lo		
<i>Eugenia bukobensis</i>		r-o		
<i>Flacourtia indica</i>			o	
<i>Friesodielsia obovata</i>	lo			
<i>Grewia decemovulata</i>			o	
<i>Grewia falcistipula</i>			lo	
<i>Hannoa chlorantha</i>			lo	
<i>Helichrysum kirkii</i>			lo	
<i>Holarrhena pubescens</i>	o-lf			
<i>Holostylon baumii</i>			lo	
<i>Hymenocardia acida</i>			o-lf	
<i>Indigofera baumiana</i>			o	
<i>Indigofera microcalyx</i>			r	
<i>Indigofera rhynchocarpa</i>	o-lf			
<i>Indigofera subcorymbosa</i>		lo		
<i>Ipomoea verbascoidea</i>			r	
<i>Kotschya strobilantha</i>			lo	
<i>Lannea virgata</i>			o	
<i>Lepidagathis microchila</i>		lo	o-lf	
<i>Maprounea africana</i>			o	
<i>Margaritaria discoidea</i>		r	r	
<i>Maytenus senegalensis</i>			o	
<i>Memecylon favovirens</i>			o-lf	

	K6	K1	K	SK
Memecylon sapinii			lf	
Neorautanenia mitis				r
Ochna pulchra		o	o	
Ozoroa nitida			r	
Paropsia brazzeana		f	o-lf	
Pavetta assimilis			r	
Phyllanthus engleri	lo			
Plectranthus esculentus		r	r	
Plectranthus kapatensis		lo	o-lf	
Premna senensis	r			
Protea gagedii			lo	
Protea welwitschii				lf
Psorospermum baumii		o-lf		
Psorospermum febrifugum			o	
Psychotria pumila			r	
Rhus kirkii		lo	o	
Rhus tenuinervis	o			
Rytigynia orbicularis		lo	lo	
Salacia bussei			lo	
Sapium cornutum		lo	r	
Securidaca longepedunculata		o	o	
Sida cordifolia			lo	
Smilax kraussiana	lf	lo	lf	
Sphenostylis marginata			o-lf	
Strobilanthisopsis linifolia		lf	lf	
Tapiphyllum n.s.		r	r	
Tinnea vestita			lo	
Tricalysia angolensis	lf	o-lf	lf	
Tricalysia myrtifolia		lo		
Triumfetta setulosa	o	lo	lo	
Triumfetta dekindtiana		lo	lo	
Tylosema fassoglensis			r	
Urena lobata			r	
Uvaria angolensis		f-lc		
Vangueria infausta	lo			
Vernonia bellinghamii		lo		
Vernonia glaberrima			o-lf	
Vernonia poskeana			lo	
Waltheria indica			lo	
Xeromphis obovata			o	
Ximenia americana			lo	
Ximenia caffra			lo	
Xylopia odoratissima		lo	lo	
<u>Sub-shrubs:</u>				
Adenodolichos punctatus			lo	
Aframomum biauriculatum	la	la		
Annona stenophylla subsp. nana			lf	lf
Becium angustifolium			o-lf	o-lf
Becium obovatum			lo	lo

	K6	K1	K	SK
<i>Blepharis maderaspatensis</i>		o-lf		
<i>Blepharis buchneri</i>	lo	o-lf		
<i>Brackenridgea arenaria</i>		lo	lo	o-lf
<i>Centemopsis gracilentia</i>		lo	lo	
<i>Chamaeclitandra henriquesii</i>		o-lf	lo	lo
<i>Clerodendrum formicarum</i>			lo	
<i>Clerodendrum uncinatum</i>	o-lf		o-lf	
<i>Crotalaria variegata</i>			lo	
<i>Cryptosepalum maraviense</i>			lf	lf
<i>Desmodium barbatum</i>			lo	
<i>Diospyros chamaethamnus</i>			lf	lf
<i>Diospyros virgata</i>		lf	lf	
<i>Ectadiopsis oblongifolia</i>			lo	
<i>Endostemon dissitifolius</i>			lo	
<i>Entada nana</i>				r
<i>Erythrina baumii</i>				r
<i>Euclea dekindtii</i>			lo	lo
<i>Eugenia angolensis</i>			lo	o-lf
<i>Euphorbia benthamii</i>			r	
<i>Fadogia fuchsioides</i>			lo	
<i>Fadogia monticola</i>			lo	lo
<i>Fadogiella stigmatoloba</i>		lo	lo	
<i>Gardenia brachythamnus</i>	lo	lo	lo	
<i>Gnidia buchananii</i>			lo	lo
<i>Hibiscus calyphyllus</i>	lo			
<i>Hibiscus lobatus</i>	lo			
<i>Hibiscus mastersianus</i>	lf			
<i>Hypoestes verticillaris</i>			o-lf	
<i>Jasminum streptopus</i>	o-lf			
<i>Lansea gossweileri</i>			lo	lo
<i>Leptactina benguelensis</i>		o-lf	lo	
<i>Magnistipula eglandulosa</i>				lf
<i>Myrsine africana</i>			lo	
<i>Ochna katangensis</i>			r	r
<i>Ochna leptoclada</i>			lo	lo
<i>Ochna manikensis</i>			lo	lo
<i>Ochna pygmaea</i>			lo	lo
<i>Otiophora scabra</i>		lo	lo	
<i>Parinari capensis</i>			lf	a
<i>Pavetta pygmaea</i>			r	
<i>Phyllanthus nummularifolius</i>		lo		
<i>Phyllanthus welwitschianus</i>		r		
<i>Polygala arenicola</i>			lo	
<i>Polygala nematophylla</i>		r-lo		
<i>Protea micans</i>			lo	lo
<i>Psychotria kirkii</i>			r	
<i>Pygmaeothamnus zeyheri</i>			lf	lo
<i>Rauvolfia nana</i>		r-lo	r	
<i>Rhynchosia castroi</i>			lf	

	K6	K1	K	SK
<i>Sansevieria kirkii</i>		lf	o-lf	
<i>Sapium acetosella</i>			r	r
<i>Sapium oblongifolium</i>			o-lf	lo
<i>Scoparia dulcis</i>			r	r
<i>Sopubia mannii</i>			lo	
<i>Strychnos gossweileri</i>			r	lo
<i>Syzygium guineense</i> subsp. <i>huillense</i>			lf	lc
<i>Tephrosia cephalantha</i>		lo	lo	
<i>Tephrosia decora</i>			lo	
<i>Thesium cinereum</i>			lo	lo
<i>Tricalysia cacondensis</i>			o-lf	
<i>Tricalysia suffruticosa</i>			lo	
<i>Tricalysia griseiflora</i>		lo	lo	
<i>Trichilia quadrivalvis</i>			lf	
<u>Climbers:</u>				
<i>Adenia gummifera</i>			lo	
<i>Ampelocissus africana</i>	r			
<i>Ampelocissus obtusata</i>	lo		lo	
<i>Baijsea wulfhorstii</i>	f	f-lc		
<i>Cassytha filiformis</i>		o-lf	lo	
<i>Cissampelos mucronata</i>			lo	
<i>Cissampelos owariensis</i>	r			
<i>Cissus crusei</i>	o-lf			
<i>Combretum mossambicense</i>	lo	lo		
<i>Cynanchum tetrapterum</i>		r		
<i>Dioscorea praehensilis</i>	o		lo	
<i>Helinus integrifolius</i>			r	
<i>Landolphia camptoloba</i>		c		
<i>Landolphia parvifolia</i>		c		
<i>Leptoderris nobilis</i>		o-lf		
<i>Paederia foetens</i>	lo			
<i>Rhopalopilium marquesii</i>		r		
<i>Secamone stuhlmannii</i>		lo-lf		
<i>Strophanthus welwitschii</i>		lo-lf	lo	

SWAMP FOREST

fr – fringe

Tall trees:

<i>Anthocleista liebrechtsiana</i>	o
<i>Bridelia micrantha</i>	o
<i>Cassipourea gummiflora</i>	r
<i>Craibia affinis</i>	o
<i>Ficus capensis</i>	f
<i>Homalium africanum</i>	c
<i>Ilex mitis</i>	o-lf
<i>Manilkara obovata</i>	f-c
<i>Phoenix reclinata</i>	f-c
<i>Rauvolfia caffra</i>	o
<i>Sterculia subviolacea</i>	c

<i>Syzygium cordatum</i>	a
<i>Uapaca guineensis</i>	lo
<i>Xylocarpus katangensis</i>	o
<u>Small trees:</u>	
<i>Bersama abyssinica</i> - fr	o
<i>Clausena anisata</i>	o-lf
<i>Erythrina abyssinica</i> - fr	o
<i>Eugenia bukobensis</i>	o
<i>Ficus barteri</i>	r
<i>Ficus verruculosa</i> - fr	o-f
<i>Garcinia smeathmannii</i>	a

Gardenia imperialis	o	Dracaena camerooniana	c
Ochna multiflora	v.lf	Hypoestes aristata	f
Phyllanthus polyanthus	o	Maesa lanceolata - fr	o-lf
Rhus longipes - fr	o	Peddiea fischeri	o
		Solenostemon zambesiacus	o-lf
<u>Shrubs:</u>		<u>Climbers:</u>	
Antidesma venosum	o	Artabotrys monteiroae	o
Canthium henriquesianum	o	Glycine wightii - fr	lf
Carissa edulis	r	Jasminum streptopus	f
Cephaelis peduncularis	c	Landolphia buchananii	o-f
Clerodendrum violaceum - fr	o	Mikania scandens - fr	lf
Craterispermum laurinum	f-c	Piper guineense	f
Desmodium repandum	lf	Sabicea laurentii	o-f
Desmodium salicifolium - fr	lo	Scutia myrtina	o-f
Dissotis princeps - fr	lf		

RIPARIAN WOODLAND

fr – fringe

<u>Tall trees:</u>		<u>Shrubs:</u>	
Acacia sieberiana - fr	r	Clausena anisata	o
Azalia quanzensis	r	Croton leuconurus	o
Albizia versicolor	lo	Euclea schimperi	o
Anthocleista liebrechtsiana	o	Eugenia bukobensis	r-o
Apodytes dimidiata	o	Ficus burkei	o
Bridelia micrantha	o	Ficus craterostoma	r
Craibia affinis	f	Ficus ingens	r
Dialium angolense	r	Garcinia smeathmannii	lo
Diospyros mespiliformis	o-f	Gardenia imperialis	o
Ekebergia capensis	r	Gardenia spatulifolia	r
Faurea saligna	lo	Mallotus oppositifolius	lo
Ficus sycomorus - fr	r	Ochna multiflora	lo
Garcinia huillensis	o	Oncoba spinosa	o
Garcinia livingstonei	o	Rhus longipes	o
Homalium abdessammadii	o-lf	Rhus quartiniana	f-c
Lannea stuhlmannii	r	Salix subserrata	f
Manilkara obovata	o-lf	Schrebera alata	r
Mimusops zeyheri	o	Stereospermum kunthianum - fr	lo
Parinari excelsa	lf	Teclea nobilis	lo
Phoenix reclinata	lc	Voacanga thouarsii	o-lf
Rauvolfia caffra	o		
Sapium ellipticum	o		
Sclerocarya caffra - fr	r	Acalypha chirindica	lf
Sterculia quinqueloba - fr	r	Aframomum bauriculatum - fr	lo
Strychnos xantha	lf	Allophylus buchananii	o
Syzygium cordatum	c-a	Antidesma venosum	o-lf
Syzygium guineense subsp. barotsense	a	Blepharis buchneri	lf
Syzygium guineense subsp. riparium	lf	Byrsocarpus orientalis	o
Xylopiya aethiopica	r	Canthium henriquesianum	o
Xylopiya katangensis	lo	Canthium venosum	o
		Canthium zanzibaricum	f
		Carissa edulis	r
		Cephaelis peduncularis	lf
		Craterispermum laurinum	f
		Cremaspora triflora	r
		Crotalaria cleomifolia - fr	lo
		Desmodium salicifolium	o
<u>Small trees:</u>			
Bersama abyssinica	o		
Cassia abbreviata	r		
Cassine buchananii	lo		
Chrysophyllum magalismsontanum	o		

Dissotis princeps - fr	lf		
Dombeya claessensii	r		
Dombeya wittei	lo		
Dracaena camerooniana	o-lf		
Dyschoriste perrottetii	lf		
Embelia schimperi	o-lf		
Flacourtia indica	o		
Heliotropium indicum	lo		
Kosteletzkya buettneri	o		
Maesa lanceolata	o-lf		
Maytenus buchananii	lo		
Melastomastrum segregatum - fr	lf		
Microglossa pyrifolia	lo		
Mimosa pigra	o		
Oxyanthus speciosus	r		
Phragmites mauritianus	f-lc		
Phyllanthus mulleranus	o		
Plectranthus kapatensis	r		
Polygala sphenoptera	r		
Sesbania sesban - fr	lo		
Sida alba - fr	r		
Solenostemon zambeziacus	lo		
Tarenna rhodesiaca	o		
Tricalysia andongensis	o-lf		
Tricalysia myrtifolia	o		
Tricalysia coriacea	o		
Urena lobata	lo		
		<u>Climbers:</u>	
		Abrus precatorius	lo
		Adenia gummifera	lo
		Artabotrys monteiroae	o
		Caesalpinia welwitschiana	lf
		Cissampelos mucronata	o
		Cissus petiolata	o
		Dioscorea praehensilis	f
		Entada gigas	o-lf
		Gymnema sylvestre	o
		Hippocratea africana	o-lf
		Ipomoea rubens	o
		Jasminum dichotomum	o
		Jasminum fluminense	o
		Merremia pterygocaulos	o
		Mucuna poggei	o-lf
		Mussaenda arcuata	o
		Opilia celtidifolia	o
		Paullinia pinnata	f
		Rhoicissus tridentata	o
		Sabicea laurentii	o
		Secamone micrandra	o
		Strychnos lucens	o
		Tacazzea apiculata	f
		Tiliacora funifera	r

RIPARIAN THICKET

<u>Shrubs & small trees:</u>			
Acalypha chirindica	c	Rytigynia umbellulata	r
Alchornea occidentalis	f	Sansevieria kirkii	o-f
Bridelia duvigneaudii	r	Sida rhombifolia	r
Byrsocarpus orientalis	o-f	Steganotaenia araliacea	o
Cassipourea congensis	o	Strychnos potatorum	o
Combretum celastroides	o-f	Tarenna neurophylla	f
Embelia schimperi	o	Tinnea rhodesiana	r
Euphorbia candelabrum	r		
Friesodielsia obovata	o	<u>Climbers:</u>	
Grewia bicolor	r	Abrus precatorius	o
Grewia flavescens	o	Adenia gummifera	o
Haplocoelum foliolosum	o	Bonamia spectabilis	lo
Hyptis pectinata	lo	Caesalpinia welwitschiana	o-f
Margaritaria discoidea	r	Cissus petiolata	o
Markhamia obtusifolia	o-f	Dioscorea praehensilis	f
Phyllanthus mulleranus	o	Lepistemon owariense	lo
Rothmannia fischeri	r	Secamone micrandra	o

MIOMBO WOODLAND

<u>Tall trees:</u>			
Afzelia quanzensis	r	Amblygonocarpus andongensis	r
Albizia antunesiana	o	Brachystegia boehmii	lc
		Brachystegia floribunda	lf

Brachystegia glaberrima	lo	<u>Shrubs:</u>	
Brachystegia longifolia	a	Acridocarpus katangensis	r
Brachystegia microphylla	lo	Annona senegalensis	lo
Brachystegia spiciformis	a	Bauhinia petersiana	lf
Brachystegia wangermeeana	lf	Desmodium velutinum	r
Burkea africana	o	Dichrostachys cinerea	o
Combretum collinum	o	Dolichos trinervatus	lo
Erythrophleum africanum	c-f	Ectadiopsis oblongifolia	o
Faurea saligna	o	Ekebergia benguelensis	o-lf
Isoberlinia angolensis	f-lc	Eriosema ellipticum	o-lf
Julbernardia paniculata	a	Flacourtia indica	o
Kigelia africana	r-c	Grewia decemovulata	lo
Marquesia macroura	lf	Heteromorpha trifoliata	r
Parinari curatellifolia	o	Hymenocardia acida	o-f
Pericopsis angolensis	o	Indigofera rhynchocarpa	lo
Pterocarpus angolensis	o	Indigofera sutherlandioides	o-lf
		Ipomoea vernalis	lo
<u>Small trees:</u>		Maprounea africana	o
Combretum fragrans	o-lf	Maytenus senegalensis	o
Combretum psidioides	o	Memecylon flavovirens	o-lf
Combretum zeyheri	o	Ozoroa nitida	lo
Cussonia kirkii	r	Plectranthus esculentus	r
Dalbergia nitidula	o	Protea angolensis	o
Diospyros kirkii	lf	Psorospermum febrifugum	c
Diplorhynchus condylocarpon		Rhus kirkii	o
Erythrina abyssinica	o	Schistostephium artemisiifolium	lo
Faurea speciosa	o	Securidaca longepedunculata	o
Ficus ingens	r	Smilax kraussiana	o-lf
Hexalobus monopetalus	o	Sphenostylis marginata	o-f
Lannea discolor	o	Strobilanthesis linifolia	f
Markhamia obtusifolia	o	Uapaca pilosa	lf
Monotes dasyanthus	o	Vernonia amygdalina	o
Monotes discolor	o	Vernonia glaberrima	o-lf
Monotes elegans	o	Xeromphis obovata	o
Monotes katangensis	o	Ximenia americana	o
Ochna afzelii	r	Ximenia caffra	r
Ochna schweinfurthiana	o		
Ozoroa reticulata	o	<u>Sub-shrubs:</u>	
Olax obtusifolia	lo	Abrus pulchellus subsp. suffruticosus	o-lf
Phyllocosmus lemaireanus	lo	Adenodolichos punctatus	lf
Piliostigma thonningii	o	Aeschynomene bracteosa	lo
Pseudolachnostylis maprouneifolia	o-lf	Aloe sp.	lf
Rothmannia englerana	o	Cryptosepalum maraviense	lf
Strychnos cocculoides	o-lf	Diospyros virgata	o-f
Strychnos innocua	o	Droogmansia platypus	lf
Strychnos pungens	o	Eugenia angolensis	o
Strychnos spinosa	o	Fadogia fuchsioides	o
Swartzia madagascariensis	o	Fadogia giorgii	o
Syzygium guineense subsp. huillense	lo	Lannea edulis	o
Terminalia brachystemma	o-lf	Leptactina benguelensis	o
Terminalia mollis	lo	Rhynchosia insignis	lo
Uapaca benguelensis	lo	Rhynchosia luteola	lo
Uapaca kirkiana	o-lf	Thesium cinereum	o
Uapaca nitida	o-lf	Tricalysia cacondensis	o
Uapaca sansibarica	lo	Tricalysia suffruticosa	o
Vangueriopsis lanciflora	o		

CHIPYA WOODLANDTall trees:

Acacia nigrescens	lo
Acacia polyacantha	lo
Azalia quanzensis	lo
Albizia adianthifolia	o-lf
Albizia versicolor	o-lf
Amblygonocarpus andongensis	lo
Burkea africana	o-lf
Combretum collinum	o-lf
Entandrophragma devevayi	r
Erythrophleum africanum	lf
Isoberlinia angolensis	f-lc
Kigelia africana	lo
Lanea stuhlmannii	o-lf
Lonchocarpus capassa	lo
Parinari curatellifolia	lo
Peltophorum africanum	lo
Pericopsis angolensis	o-lf
Pterocarpus angolensis	lo
Terminalia brachystemma	lo
Terminalia mollis	o-lf
Terminalia sericea	o-lf

Small trees:

Azanza garckeana	lo
Baphia massaiensis subsp. obovata	lo
Bersama abyssinica	lo
Cassia abbreviata	lo
Combretum fragrans	lo
Combretum psidiodes	o-lf
Combretum zeyheri	o-lf
Diplorhynchus condylocarpon	o-lf
Erythrina abyssinica	lo
Lanea discolor	lo
Markhamia obtusifolia	o-lf
Piliostigma thonningii	o-lf

Pseudolachnostylis maprouneifolia	o-lf
Schrebera trichoclada	lo
Stereospermum kunthianum	r
Strychnos cocculoides	lo
Strychnos spinosa	lo
Swartzia madagascariensis	lo
Vangueriopsis lanciflora	lo

Shrubs:

Alchornea occidentalis	o-lf
Antidesma venosum	lo
Bauhinia petersiana	lo
Cassia singueana	lo
Clerodendrum tanganyikense	lf
Dichrostachys cinerea	lo
Flacourtia indica	lo
Friesodielsia obovata	o-lf
Gardenia jovis-tonantis	lo
Hymenocardia acida	lo
Ipomoea verbascoidea	lo
Ipomoea vernalis	lo
Maprounea africana	lo
Maytenus senegalensis	lo
Securidaca longepedunculata	lo
Sphenostylis marginata	o-lf

Sub-shrubs:

Adenodolichos punctatus	lf
Aframomum biauriculatum	la
Fadogia monticola	lo
Rhynchosia insignis	lo

Climbers:

Ampelocissus obtusata	lo
Asparagus racemosus	lo

SAVANNA & SCRUB

all K12/U2

D – dry dambos

W – moist to wet dambos

Tall trees:

Acacia polyacantha	lo
Acacia sieberiana	lo
Combretum fragrans	f
Ficus sycomorus	lo
Kigelia africana	lo
Lonchocarpus capassa	lo
Terminalia mollis	o-lf

Shrubs:

Adenodolichos baumii	lf	D
Annona stenophylla subsp. nana	o-lf	D
Becium obovatum	o-lf	D
Blepharis buchneri	lo	D

Clerodendrum pusillum	r-o	D
Combretum platypetalum	lo	D
Conyza welwitschii	lo	W
Cryptosepalum maraviense	lf	D
Dissotis canescens	c	W
Eriosema psoraleoides	o	W
Eugenia angolensis	o-lf	D
Flemingia grahamiana	lo	W
Ipomoea vernalis	lf	D
Lanea edulis	o-lf	D
Ludwigia leptocarpa	lf	W
Plectranthus mirabilis	lf	W
Protea welwitschii	o-lf	W
Rhynchosia luteola	lo	D

Sesbania sesban	lo	W	Syzygium guineense subsp. huillense	lf	W
Smilax kraussiana	lf	D	Temnocalyx obovatus	r	D
Sopubia ramosa	lf	W	Thesium cinereum	o	D
Sopubia simplex	lf	W	Triumfetta welwitschii	lf	D
Sopubia welwitschii	lf	W	Urena lobata	lo	D
Sphenostylis marginata	lo	D			

TERMITARIA

Tall trees:

Acacia gerrardii	lf
Azanza garckeana	o
Boscia angustifolia	o-f
Combretum molle	f
Commiphora mollis	o
Diospyros mespiliformis	o
Euphorbia candelabrum	r
Ficus brachylepis	o
Ficus fischeri	o
Ficus sycomorus	r
Kigelia africana	o
Lonchocarpus capassa	o
Mimusops zeyheri	o
Peltoporum africanum	o
Sterculia quinqueloba	o
Stereospermum kunthianum	o
Strychnos potatorum	o
Ziziphus mucronata	o-f

Small trees:

Bauhinia petersiana	f
Bersama abyssinica	o
Cassine aethiopica	o
Combretum psidioides	o
Combretum zeyheri	o
Cordia goetzei	r
Cussonia kirkii	o
Diplorhynchus condylocarpon	r-o
Erythrina abyssinica	o
Euclea divinorum	f
Euclea schimperi	o-f
Ficus brachypoda	r
Landolphia parvifolia	lo
Opilia celtidifolia	o
Paullinia pinnata	o
Rhoicissus tridentata	o
Vigna frutescens	r

FOREST RESEARCH PAMPHLET No. 33, 1970**THE VEGETATION OF KAFUE NATIONAL PARK**

The Kafue National Park covers an area of 8650 square miles [22,400 km²] between 14°00'–16°40' S latitude and 25°15'–26°45' E longitude. It embraces parts of Kalomo, Namwala, Mumbwa and Kasempa districts. The western boundary is the border between Western [previously Barotse] Province and the Southern and North-Western provinces. It is the largest wildlife sanctuary in Africa.

One hundred and sixty miles [260 km] of the Kafue River flow within or along the eastern boundary of the park. This river with its chief right bank tributaries, Lunga, Lufupa, Lwansanza, Nusa and Nanzhila, is the dominant feature of the park. Two large areas of flood plain grassland, the Busanga Plain in the north and the Nanzhila Flats in the south offer extensive grazing facilities. The remainder of the park is covered with woodland of one sort or another from high quality Kalahari woodland along the northern boundary, through reasonable miombo and Kalahari woodland in the centre, to heavily degraded munga and mopane woodland in the south. A few, small steep-sided hills of porphyritic granite, e.g. Kaindabaila and Lubulanzuki, occur between Chonga and Ngoma and the odd sandstone and granite hill up to 400 ft [120 m] high around Ngoma, e.g. Iteshi Teshi and Kalala.

Apart from the hills the topography is greatly undulating to flat on the plains and riverine alluvial terraces. The central portion of the park is underlain by the south-western extension of the Kafue Hook granite massif and includes schist, gneiss, granite gneiss and granite of the Basement Complex. Rocks of the Katanga system, especially slates, quartzites and limestones, are found on the margins of the granite massif. North and south of the granite massif Karroo sediments are exposed in stream sections. These consist of shales, siltstones, recently concreted gravels and laterites of various types.

With the exception of the flood plain clays, the northern end of the park consists of sandy to loamy plateau soils, strongly leached and of low fertility. Dark grey alkaline clays occur throughout much of the Nanzhila drainage and to a smaller extent on the Nkala, Musa and Lwansanza rivers. The remainder of the park north and south of the granite area is covered by Kalahari sands. These are pallid or orange sands, usually moderately acid. they contain from 3–12% silt + clay and the content of fine sand ranges from 15–60%. They are not very fertile, the nitrogen content being particularly low, but they are well-drained.

The mean annual rainfall varies from 20 inches [510 mm] in the south to over 40 inches [1020 mm] in the north of the park. The annual mean temperature is 70°F [21°C], the mean maximum varying from 78°F [26°C] in July (the coldest month) to 92°F [33°C] in October (the hottest month). Relative humidity varies from 60% in the south to 65% in the north, seasonal variation being roughly 40% in the dry season to 80% in the wet season. Winds are predominantly light, easterly, blowing from the NE–SE quadrant 80% of the year. There are between 2900–3000 sunshine hours per annum varying from 9 hours per day in June–September to 5 hours per day in November–February.

Despite the low rainfall, the vegetation is very varied, covering as it does the greater part of four districts and 20 types. The woody flora is probably over 800 species. Over 750 woody species have already been recorded.

The following vegetation types occur in the park:

1. Closed Forest**A. Climatic****1. Dry deciduous forest**

- a) *Baikiaea* forest (K)
- b) Secondary *Baikiaea* forest
- c) *Pteleopsis* forest (K10)

B. Edaphic

1. Riparian woodland
 - a) Suffrutex savanna.

2. Open Forest with Grass**A. Woodland**

1. Miombo woodland
 - a) *Kirkia* woodland
2. Kalahari woodland
 - a) Suffrutex savanna
3. Mopane woodland
4. Munga woodland
 - a) Munga scrub
 - b) Suffrutex savanna

3. Termite Mound Vegetation

1. Mopane termitaria
2. Munga termitaria
3. Riparian termitaria

4. Grasslands

1. Dambo grassland
2. Riverine grassland
3. Flood plain grassland

1. CLOSED FOREST**1.A.1 Dry Deciduous Forest***1.A.1a Baikiaea Forest*

Baikiaea forest is a two-storeyed dry deciduous forest with an overwood of *Baikiaea plurijuga* (Zambian teak) and *Pterocarpus antunesi* in varying proportions and a dense thicket-like underwood – the mutemwa. *Lonchocarpus nelsi* is a frequent subdominant. Common small trees at the lower canopy level include *Baphia massaiensis* subsp. *obovata* and *Combretum celastroides*.

The mutemwa consists largely of *Acacia ataxacantha*, *Acalypha chirindica*, *Alchornea occidentalis*, *Citropsis daweana*, *Combretum elaeagnoides*, *Dalbergia martini*, *Grewia avellana*, *Popowia obovata*, *Tarenna luteola*, *Tricalysia alleni*, *Triumfetta dekindtiana* and the invasive *Waltheria indica*.

Herbs and sub-shrubs are mostly rainy season annuals but there are a few common perennials – *Achyranthes aspera*, *Blepharis maderaspatensis* and *Plumbago zeylanica*. *Baissea wulffhorsti* and *Hippocratea parviflora* are the only common climbers besides the more scandent of the mutemwa shrubs, e.g. *Combretum celastroides*.

The remaining *Baikiaea* forests in the park are all relics or old secondary *Baikiaea* forests. There are four remaining groups of forest around Ngoma of which the Ngoma Forest is the best preserved. There are also smaller relic forests on or near the western boundary. At one time there must have been many more forests or perhaps the present relics covered a far greater area judging by the amount of secondary *Baikiaea* forest in the park today.

1.A.1b Secondary Baikiaea Forest

Fire, cultivation and browsing by game, particularly elephant, degrade *Baikiaea* forest to an open woodland and finally scrub. At the same time the gaps are invaded by fire-hardy elements of the munga woodland on the surrounding flats to produce an *Acacia-Combretum-Terminalia* woodland

with *Baikiaea* forest relics. The immediate surround which presumably once carried primary *Baikiaea* forest is now covered with secondary *Baikiaea* forest.

Tall trees are chiefly *Acacia galpini*, *A. giraffae*, the occasional *Baikiaea plurijuga*, *Burkea africana*, *Combretum collinum*, *Erythrophleum africanum*, *Lonchocarpus capassa*, *Terminalia sericea* and *Xeroderris stuhlmanni*.

Common small trees include *Acacia flecki*, *Baphia massaiensis* subsp. *obovata*, *Combretum celastroides*, *C. psidioides*, *Croton gratissimus*, *Markhamia obtusifolia* and *Terminalia brachystemma*.

Shrubs are chiefly *Acacia ataxacantha*, *A. schweinfurthi*, *Bauhinia macrantha*, *Combretum elaeagnoides*, *Dalbergia martini* (locally) and *Grewia* species, with *Achyranthes aspera*, *Clerodendrum uncinatum* (a plant spread by cultivation), *Disperma crenatum*, *Hemizygia bracteosa*, *Justicia betonoides*, *Tephrosia cephalantha* and *Waltheria indica* as the more common sub-shrubs.

The few climbers are occasional at best. The presence of the climber *Combretum microphyllum* represents local invasion from the riparian woodland.

1.A.1c Pteleopsis Forest

Trapnell's K10 thicket is in fact a two-storeyed dry deciduous forest with an overwood of *Pteleopsis* and *Pterocarpus antunesi* in varying proportions and a thicket-like understorey indistinguishable from the mutemwa of *Baikiaea* forest. The resemblance is so strong that one is forced to conclude that this is *Baikiaea* forest without *Baikiaea*. *Baikiaea* demands a well-aerated soil.

The K10 forests lie along the margin of the Kalahari sand cap where the sand thins out and drainage becomes impeded as a result of the underlying heavy alluvial soils or conglomerate. *Baikiaea* has disappeared from these forests as a result of the deterioration in soil drainage conditions.

Tall trees include *Entandrophragma caudatum*, *Pteleopsis myrtifolia* and *P. anisoptera* besides *Pterocarpus antunesi*. Common small trees include *Baphia massaiensis* subsp. *obovata*, *Combretum celastroides*, *Croton gratissimus*, *Markhamia obtusifolia*, *Strychnos madagascariensis* and *Vitex payos*.

The characteristic mutemwa species are *Acacia schweinfurthi*, *Acalypha chirindica*, *Alchornea occidentalis*, *Baphia capparidifolia*, *Combretum elaeagnoides*, *Croton polytrichus*, *Dalbergia martini*, locally *Mundulea sericea* and *Popowia obovata*.

Common sub-shrubs include *Achyranthes aspera*, *Blepharis maderaspatensis*, *Dicliptera nemorum*, *Phaulopsis longifolia*, *Sansevieria deserti* (succulent) and *Triumfetta dekindtiana*. Climbers are mostly *Baissea wulforthi*, *Bonamia spectabilis*, *Hippocratea parviflora*, *Strychnos lucens*, *S. usambarensis* and *Tiliacora funifera*.

Pteleopsis forest degrades as a result of fire, cultivation and animal damage to a type of secondary forest indistinguishable from secondary *Baikiaea* forest except for the absence of relic *Baikiaea*.

Pteleopsis forest occurs on old sandbanks, on termite mounds in the Nanzila area, on sandstone-capped hills and on the fringes of the Kalahari sand northwards from Ngoma. It is invaded by riparian elements on the old riverine sand-banks.

1.B.1 Riparian Woodland

A more-or-less continuous strip of gallery woodland clothes the rivers, streams and permanent water holes. It is at its best around Kafue Hook and Kafwala where the shrub layer is absent but the landward side is protected by a dense deciduous thicket against encroaching fires.

In places between Iteshi Teshi and the Lufupa confluence and on the Lufupa River itself the gallery woodland is divided into two zones separated by a sandbank and a trough. The outer zone consists

almost exclusively of *Syzygium guineense* subsp. *barotsense* growing in the water, the inner of typical evergreen riparian species. This division of the gallery woodland is carried to extremes at Moshi and Ntemwa and probably elsewhere with the riparian elements restricted to termite mounds up to half a mile [0.8 km] from the river. It suggests that at these places the riparian woodland was once much more extensive and covered the area between the riparian termite mounds. Fire or possibly changes in the drainage have destroyed the woodland on the flats leaving only the woodland on the termitaria.

Common tall trees are reduced to *Garcinia livingstonei* and *Syzygium guineense* subsp. *barotsense* with occasional *Diospyros mespiliformis*, *Manilkara mochisia*, *M. obovata* and *Mimusops zeyheri*. *Terminalia sericea*, *Acacia* species and *Hyphaene* palm are locally common on the landward fringes.

Small trees are chiefly *Chrysophyllum magalismontanum*, *Oncoba spinosa*, *Rhus quartiniana* and *Tricalysia coriacea* with clumps of *Phoenix reclinata* palms and the local willow (*Salix subserrata*) in gaps.

Common shrubs include *Antidesma venosum*, *Baphia capparidifolia* in rocky places, *Canthium zanzibaricum*, *Diospyros lycioides*, *Dombeya wittei*, *Ficus capreifolia*, *F. pygmaea*, *Maytenus buchanani*, *Phyllanthus reticulatus* and *Tricalysia andongensis*, with *Phragmites mauritanus* reeds in gaps.

Characteristic climbers include *Artabotrys monteiroae*, *Cocculus hirsutus*, *Hippocratea africana*, *Jasminum fluminense*, *Mikania cordata* as a secondary invasive, *Paullinia pinnata*, *Tacazzea apiculata* and *Tiliacora funifera*.

I.B.1a Suffrutex savanna

Moist seepage dambos carry a vegetation of shrubs, suffrutices, grasses and sedges up to 5 feet [1.5 m] high. The species grow gregariously in small colonies or scattered. Common shrubs include *Eriosema psoraleoides*, *Gnidia kraussiana*, *Hyptis spicigera*, *Conyza welwitschi* and *Syzygium guineense* subsp. *huillense* with occasional groups of juvenile *Hyphaene ventricosa* palms.

2. OPEN FOREST

2.A.1 Miombo Woodland

Miombo woodland dominated by *Julbernardia paniculata* (Trapnell's P5) covers large areas in the north and centre of the park. The woodland is of poor quality with a relatively low canopy and occurs both on light and heavy plateau soils. It grades into Kalahari–miombo woodland also dominated by *J. paniculata* (Trapnell's K3) in the north of the park. Degradation of miombo woodland as the result of repeated heavy burning leads to invasion by munga elements and eventually to munga woodland.

In the north around the Busanga Plain patches of miombo have become isolated from the main block as the result of erosion and changes in drainage and now form bush groups. If the surrounding terrain has become waterlogged or is periodically inundated, the bush groups carry a fringe of riparian species e.g. *Canthium zanzibaricum* or moist dambo species, e.g. *Protea welwitschi*.

In general the common canopy trees are *Brachystegia floribunda*, *B. longifolia*, *B. spiciformis*, *B. taxifolia* (locally), *B. utilis*, *Isoberlinia angolensis* and *Julbernardia paniculata* (dominant). *Terminalia sericea* invades the fringes on sandier soils. *Isoberlinia*, *B. longifolia* and *B. spiciformis* normally only appear towards dambo margins, while *B. floribunda* and *B. utilis* only occur in the Mumbwa section east of the Kafue River.

Small trees are chiefly *Bauhinia petersiana*, *Dalbergiella nyasae*, *Diplorhynchus condylocarpon*, *Pseudolachnostylis maprouneifolia*, *Syzygium guineense* subsp. *macrocarpum*, *Uapaca kirkiana* and *U. nitida*. *Syzygium guineense* subsp. *huillense* and *Uapaca sansibarica* are dambo elements invading the miombo fringe.

Common shrubs include *Baphia massaiensis* subsp. *obovata* (on sandy soils), *Hymenocardia acida*, *Kotschyia strobilantha*, *Protea angolensis*, *Tricalysia angolensis* and *Uapaca pilosa*.

Sub-shrubs are a feature especially *Abrus pulchellus* subsp. *suffruticosus*, *Adenodelichos punctatus*, *A. rhomboideus*, *Clematopsis scabiosifolia*, *Combretum platypetalum*, *Desmodium barbatum*, *Diospyros virgata*, *Diplolophium zambesianum*, *Eriosema ellipticum*, *Helichrysum kirki*, *Hibiscus rhodanthus*, *Indigofera* species, *Ipomoea vernalis*, *Lannea edulis*, *Sphenostylis marginata*, *Strobilanthopsis linifolia* and *Triumfetta dekindtiana*. The few climbers are occasional at best and do not reach the canopy.

2.A.1a Kirkia Woodland

A well-marked ecotone between miombo and valley munga woodland dominated by *Kirkia acuminata* and *Julbernardia globiflora* occurs on the sandstone scarp fringing the Kafue River between Kalala and Iteshi Teshi. Similar vegetation occurs on the sandstone scarps fringing the Zambezi River in Gwembe valley and further east to Feira. The characteristic feature of this type of woodland is the presence of paper bark trees belonging to the genera *Albizia*, *Commiphora* and *Sterculia*. Besides the dominants *Brachystegia spiciformis* and *Erythrophleum africanum* are common canopy constituents, at least locally.

Small trees are chiefly *Combretum celastroides*, *Commiphora mossambicensis*, *C. ugogensis*, *Dalbergiella nyassae*, *Diplorhynchus condylocarpon*, *Euphorbia matabelensis*, *Pseudolachnostylis maprouneifolia* and *Vitex payos*.

Shrubs are few, mostly *Cissus cornifolia*, locally *Croton gratissimus*, *Holarrhena pubescens* and *Ochna pulchra*.

Similar vegetation occurs on the granite domes, e.g. *Kaiendabaila* by the Lufupa river. A *Euphorbia*-like succulent small tree – *Synadenium kirki* – is characteristic of this locality. Bare granite domes like Lubulanzuki Hill carry succulents like *Euphorbia fortissima*, *Aloe chabaudi* and *Aeolanthus myrianthus* and fibrous *Vellozia equisetoides*, mostly in rock crevices.

2.A.2 Kalahari Woodland

Kalahari woodland covers the greater part of the Kalahari sands in the park. Most of it is dominated by *Julbernardia paniculata* (Trapnell's K3) but there are small areas of *Brachystegia spiciformis* woodland (Trapnell's K5) and a tiny patch of *Guibourtia coleosperma* woodland (Trapnell's K7) on Nakalombe Hill. In places Kalahari woodland of the above types degrades to *Burkea-Erythrophleum* woodland (Trapnell's K8) and finally to suffrutex savanna as a result of fire. Most of the Kalahari woodland is of poor quality except on the northern boundary between Kabanga and Masoshi where there is an area of top quality K3 woodland.

Like the miombo, patches of Kalahari woodland have become isolated from the main block as a result of erosion and drainage changes and now form bush groups. However as the surrounding terrain is not waterlogged there are no riparian or moist dambo elements in the composition.

There is almost no difference between miombo woodland dominated by *Julbernardia* on the sandier plateau soils and K3 Kalahari woodland on Kalahari sands except in the composition of the shrub layer. The Kalahari woodland contains a few shrubs endemic to Kalahari sands like *Bauhinia urbaniana*, *Chameclitandra henriquesiana* and *Copaifera baumiana*.

In general characteristic tall trees include *Brachystegia longifolia*, *B. spiciformis*, *Burkea africana*, *Combretum collinum*, *Erythrophleum africanum*, *Isobertia angolensis*, *Julbernardia paniculata* and *Terminalia sericea* (particularly on the fringes).

The well-marked shrub layer contains mostly *Bauhinia urbaniana*, *Bridelia duvigneaudi*, *Byrsocarpus orientalis*, *Copaifera baumiana*, *Eriosema ellipticum*, *Grewia falcistipula*, *Kotschyia strobilantha*,

Paropsia brazzeana, *Sida cordifolia* and *Tricalysia angolensis*, with marginal *Syzygium guineense* subsp. *huillense* (invasive).

Sub-shrubs are a feature, especially *Annona stenophylla* subsp. *nana*, *Brackenridgea arenaria*, *Chamaeclethra henriquesiana*, *Combretum platypetalum*, *Cryptosepalum maraviense*, *Diospyros virgata*, *Eugenia angolensis*, *Fadogia monticola*, *Landolphia camptoloba*, *Ochna leptoclada*, *Parinari capensis*, *Pygmaeothamnus zeyheri*, *Sapium oblongifolium* and *Tricalysia cacondensis*. Climbers are few and occasional at best.

2.A.2a Suffrutex savanna

Suffrutex savanna on Kalahari sand is Trapnell's watershed grassland but it is dominated by suffrutices rather than grasses or sedge,s and drainage is free. It is in fact the ultimate stage in the degradation of Kalahari woodland, hence the characteristic species are those found in the suffrutex layer of Kalahari woodland. These species tend to persist for a long time after the shrubs and trees have been destroyed by fire.

The commoner suffrutices include *Annona stenophylla* subsp. *nana*, *Brackenridgea arenaria*, *Combretum platypetalum*, *Diospyros virgata*, *Eugenia angolensis*, *Gnidia kraussiana*, *Lannea edulis*, *L. gossweileri*, *Ochna manikensis*, *O. pygmaea*, *Parinari capensis* (the type species), *Pygmaeothamnus zeyheri* and *Syzygium guineense* subsp. *huillense*. Many of these species like *Ochna*, *Parinari*, *Pygmaeothamnus* and *Syzygium* are rhizomatous and grow gregariously in small to large colonies.

2.A.3 Mopane Woodland

Open, park-like tall mopane woodland is uncommon in the park. Most mopane trees are on or around termite mounds. Besides the strongly dominant mopane there are few common species – *Acacia nigrescens* in the canopy, *Acacia erubescens* and *Balanites aegyptiaca* as scattered small trees, the sprawling shrub *Boscia matabelensis* on low mounds, and the climbers *Cissus quadrangularis* and the python vine *Fockea multiflora*. Low relic termite mounds carry colonies of *Sansevieria deserti* and *Boscia matabelensis* and little else.

2.A.4 Munga Woodland

An extremely variable series of secondary vegetation types varying from almost closed to very open woodland, from comparatively tall to low woodland to scrub. It may be dominated by *Acacia*, *Combretum* or *Terminalia* species, or any mixture of all three genera. Munga woodland is dynamic and tends to invade and eventually replace all other vegetation types with which it comes in contact. Ecotones occur on the contact notably with mopane in the south, miombo in the north and centre, and dry deciduous forest and Kalahari woodland on the fringes of the Kalahari sand cap. Termite mounds are a feature of munga woodland area but their vegetation cover is treated separately (see under termite mound vegetation).

Munga woodland is characteristic of the flood plains along the Kafue River and its tributaries. Soils vary from the loose sand of comparatively recent sand banks to impervious clays, some of which contain limestone nodules. Purity of stand is quite a feature of munga woodland especially with *Acacia* species and may well be the result of fire and drainage conditions. Seasonal flooding encourages purity of stand and fire has probably helped by reducing competition. There are pure or almost pure stands of *Acacia albida*, *A. pilispina*, *A. polyacantha*, *A. seyal* and *A. sieberana*. There are even pure stands of *Combretum imberbe*.

In general characteristic tall trees are *Acacia albida*, *A. nigrescens*, *A. polyacantha*, *A. robusta*, *A. sieberana*, *Albizia harveyi*, *Ficus sycomorus* and *Terminalia mollis*, with occasional groves of *Hyphaene ventricosa* palms.

Common small trees include *Acacia seyal*, *Bauhinia petersiana*, *Combretum ghasalense* (the type tree), *Dalbergiella nysae*, *Diplorhynchus condylocarpon* and *Piliostigma thonningi*, with *Maytenus senegalensis* and *Dichrostachys cinerea* as the commoner shrubs.

Sub-shrubs are chiefly *Ipomoea vernalis* and the dambo suffrutices like *Gnidia*, *Hibiscus*, *Lannea* and *Ozoroa*. Climbers are uncommon.

2.A.4a Munga scrub

Ten feet [3 m] high open munga scrub covers a large area in the central section of the park on black cracking clay containing limestone modules. The composition is restricted to seven tree species, namely *Acacia nilotica*, *A. seyal*, *Bauhinia petersiana*, *Combretum ghasalense*, *Diospyros kirki*, *Piliostigma thonningi* and *Terminalia stenostachya*, with a ground cover of scattered woody *Ipomoea vernalis*, *Lannea edulis* and *Conyza welwitschi*, and herbaceous *Hygrophila pilosa* and *Sphaeranthus humilis*.

2.A.4b Suffrutex Savanna

Dry to semi-moist, non-seepage dambos carry a vegetation of suffrutices, grasses and sedges from 2 inches to two feet [5–60 cm] high. Common suffrutices include *Annona stenophylla* subsp. *nana*, *Combretum platypetalum*, *Gnidia kraussiana*, *Hibiscus rhodanthus*, *Ipomoea vernalis*, *Lannea edulis*, *Ozoroa nigricans*, *Parinari capensis* (sandy dambos), *Sesamum calycinum*, *Sopubia welwitschi* and *Vernonia roseni*, with occasional colonies of juvenile *Hyphaene* palms 3–4 foot [90–120 cm] high.

3. TERMITE MOUND VEGETATION

3.1 Mopane Termitaria

The vegetation of termite mounds in the mopane belt is a mixture of munga and mopane elements forced to retreat to termite mounds as a result of flooding of long duration. It has the habit of closed munga woodland.

Tall trees are chiefly *Acacia nigrescens*, mopane (*Colophospermum mopane*), *Commiphora mollis* and *Kirkia acuminata*. Common small trees include *Acacia erubescens*, *Balanites aegyptiaca*, *Euclea divinorum*, *Gardenia resiniflua*, *Markhamia acuminata* and *Ziziphus mucronata*.

Shrubs are a feature especially *Acacia schweinfurthi*, *Boscia matabelensis*, *Canthium frangula*, *Cissus cornifolia*, *Combretum elaeagneides*, *Croton gratissimus*, *C. menyharthi*, *Euphorbia espinosa*, *Maerua parvifolia*, *Plectranthus cylindraceus* and *Steganotaenia araliacea*.

Ipomoea shirambensis is the only common climber. The succulents *Aloe chabaudi* and especially *Sansevieria deserti* are abundant.

3.2 Munga Termitaria

Termite mounds are a striking feature of the alluvial flats, usually with a surround of munga woodland. Occasionally even the fire-hardy munga elements are destroyed and the termite mounds remain with a skeletal vegetation almost exactly like that of munga scrub. The vegetation of munga termitaria is otherwise almost exactly like that of munga woodland, except on waterlogged terrain when the mounds carry a fringe of riparian species like *Rhus*, *Syzygium* or *Phoenix* palms.

Tall trees are chiefly *Acacia robusta*, *Albizia harveyi*, *Commiphora mollis*, *Lonchocarpus capassa* and *Ziziphus mucronata* with local stands of *Hyphaene ventricosa* palms.

Common small trees include *Albizia anthelmintica*, *Azanza garckeana*, *Bauhinia petersiana*, *Combretum ghasalense*, *Cordia goetzei*, *Croton gratissimus*, *Euclea divinorum*, *Markhamia obtusifolia* and *Steganotaenia araliacea*.

Characteristic shrubs include *Acacia schweinfurthi*, *Acalypha chirindica*, *Capparis tomentosa* (the type species), *Combretum elaeagnoides*, *Phyllanthus reticulatus* and *Popowia obovata*.

3.3 Riparian Termitaria

Termite mounds carrying evergreen riparian vegetation occur on the river banks within the gallery woodland strip or on alluvial flats once covered by riparian woodland from which the woodland disappeared, as at Moshi and Ntemwa. The physiognomy is that of riparian woodland.

Characteristic tall trees are *Diospyros mespiliformis*, *Garcinia livingstonei*, *Manilkara mochisia*, *M. obovata* and *Mimusops zeyheri*. Common small trees are chiefly *Oncoba spinosa*, *Rhus quartiniana* and *Syzygium guineense* subsp. *huillense* with local stands of *Phoenix reclinata* (wild date palms).

Shrubs are a feature especially *Acalypha chirindica*, *Baphia capparidifolia*, *Canthium zanzibaricum*, *Diospyros lycioides*, *Maytenus buchanani* and *Phyllanthus reticulatus*. The commonest climbers are *Hippocratea africana*, *Paullinia pinnata*, *Tacazzea apiculata* and *Tiliacora funifera*. The succulent *Sansevieria deserti* forms local colonies.

4. GRASSLANDS

4.1 Dambo Grassland

The sandy dambos carry a short wiry grassland dominated by *Loudetia simplex*, *Monocymbium cerasiiforme*, *Eragrostis* species (love grass), *Setaria* species (Timothy grass), *Themeda triandra*, *Trachypogon spicatus* and *Tristachya superba*.

4.2 Riverine Grassland

The black calcareous clay flood plains carry a tall tussock grassland especially of *Hyparrhenia rufa* (thatching grass), *Jardinia angolensis*, *Chloris gayana* and *Setaria mombassana* (Timothy grass).

4.3 Floodplain Grassland

The floodplain grasslands of the Susanga and Nanzila Flats carry *Echinochloa stagnina* and *E. pyramidalis* (Antelope grass) or *Vossia cuspidata* (Hippo grass) associated with *Leersia hexandra* and *Oryza longistaminata* (wild rice grass).

Reed/sedge swamps occur here and there with *Pharagmites mauritanus* reeds, *Typha domingensis* bulrushes or tall sedges like *Cyperus articulatus* and *Cladium mariscus*.

SPECIES LISTS

a – abundant, c – common, lf – locally frequent, o – occasional, lo – locally occasional, r – rare, lc – locally common, f – frequent, v – very, v.lo – very locally occasional

VEGETATION OF KALAHARI SANDSK6 – *Baikiaea* forestK10 – *Pteleopsis* forestK6/12 – *Baikiaea* / *Acacia-Combretum*K – *Baikiaea* forestR/K10 – *Commiphora-Combretum* on sand/red loams

	K6	K10	K6/12	K	R/K10
<u>Tall trees:</u>					
<i>Acacia galpinii</i>			lf		
<i>Acacia giraffae</i>	r	r	lf		
<i>Adansonia digitata</i>		r			
<i>Afzelia quanzensis</i>		lf		lo	
<i>Albizia adianthifolia</i>		r			lo
<i>Albizia amara</i>				r	
<i>Albizia antunesiana</i>				lo	
<i>Amblygonocarpus andongensis</i>			lo	lo	
<i>Baikiaea plurijuga</i>	a	o-lf	lo		
<i>Berchemia discolor</i>	r	r			
<i>Brachystegia longifolia</i>				lf	
<i>Brachystegia spiciformis</i>				c-la	
<i>Burkea africana</i>			o-lf	f-lc	
<i>Combretum collinum</i>	lo	f	lf	lo	
<i>Dalbergia boehmii</i>		r			
<i>Dialium englerianum</i>		r		r	
<i>Diospyros abyssinica</i>		r			r
<i>Diospyros mespiliformis</i>		lo	lo		lo
<i>Drypetes gerrardii</i>		r			
<i>Entandrophragma caudatum</i>	lo	lf			
<i>Erythrophleum africanum</i>		f	lf		
<i>Erythrophleum suaveolens</i>		r			
<i>Euphorbia candelabrum</i>		r	lo		
<i>Faurea saligna</i>				r	
<i>Ficus brachylepis</i>		r			
<i>Ficus burkei</i>		r			
<i>Ficus fischeri</i>		o-lf			
<i>Ficus natalensis</i>					r
<i>Ficus stuhlmannii</i>		lo			
<i>Garcinia livingstonei</i>		r			lo
<i>Guibourtia coleosperma</i>				lo	
<i>Hyphaene ventricosa</i>				lo	
<i>Isoberlinia angolensis</i>				lf	
<i>Julbernardia paniculata</i>				f-lc	
<i>Kigelia africana</i>		r			
<i>Lannea stuhlmannii</i>		lo			
<i>Lonchocarpus capassa</i>		lo	lf	lo	
<i>Lonchocarpus nelsii</i>	o-lf	lo			

	K6	K10	K6/12	K	R/K10
Manilkara mochisia		r			lo
Manilkara obovata		r			lo
Mimosops zeyheri		r			lo
Parinari curatellifolia				lo	
Peltophorum africanum	lo	lo	lo	lo	
Pericopsis angolensis		lf		lo	
Pseudolachnostylis maprouneifolia		o-lf	o-lf	lo	
Pteleopsis anisoptera	lo	lf			
Pteleopsis myrtifolia		lo			
Pterocarpus angolensis		lo		lo	
Pterocarpus antunesii	o-lf	lf			r
Pterocarpus rotundifolius		lo			
Ricinodendron rautanenii		lo	lf	lo	
Sclerocarya caffra		lo			
Sterculia africana		r			
Strychnos potatorum	r	lo			
Terminalia sericea	lo	o-lf	f-lc	lo	
Trichilia emetica			r		
Xeroderris stuhlmannii	r	lo	lf		
<u>Small trees:</u>					
Antidesma venosum		r			
Bersama abyssinica		lo		r	
Boscia albitrunca	lo	lo	lo	lo	
Brachystegia bakeriana				r	
Canthium vulgare		r			
Cassia abbreviata	lo	lo	lo		
Cassine aethiopica		r			r
Chrysophyllum bangweolense				lo	
Chrysophyllum magalismontanum		r			o-lf
Citropsis daweania	lf	lo	r		
Combretum celastroides	lf	lc	lf		
Combretum elaeagnoides	c	f	c-la		
Combretum molle		lo			
Combretum psidioides		lo	lf	lo	
Combretum zeyheri		lo	lo	lo	
Commiphora angolensis		lo			
Commiphora mollis		o-lf			
Commiphora mossambicensis		r			
Commiphora pyracanthoides	r	lo	r		
Commiphora ugogensis		r			
Cordia pilosissima		r			
Cordia goetzei		lo			
Crossopteryx febrifuga				lo	
Croton gratissimus	lo	o-lf	lf		
Cryptosepalum exfoliatum				r	
Dalbergia nitidula		lo			
Dalbergiella nyassae		lf	lo	lo	
Dialium angolense		r			lo
Diospyros batocana				o-lf	

	K6	K10	K6/12	K	R/K10
<i>Diospyros undabunda</i>				r	
<i>Entada abyssinica</i>			r	r	
<i>Euclea divinorum</i>		r			
<i>Fagara trijuga</i>	lo	lo			
<i>Garcinia huillensis</i>				lo	
<i>Gardenia jovis-tonantis</i>		r			
<i>Gardenia spatulifolia</i>	r	lo			
<i>Grewia bicolor</i>		r			
<i>Haplocoelum foliolosum</i>	r-lo	lo			
<i>Hexalobus monopetalus</i>	r	lo			
<i>Hymenocardia acida</i>		o-lf	lo	o-lf	
<i>Lannea discolor</i>				lo	
<i>Maprounea africana</i>				lo	
<i>Markhamia acuminata</i>	lo	lo	lo		
<i>Markhamia obtusifolia</i>	o-lf	lf	lf		
<i>Monotes dasyanthus</i>				r	
<i>Monotes glaber</i>				o-lf	
<i>Monotes redheadii</i>				r	
<i>Ochna pulchra</i>			r	lo	
<i>Ochna schweinfurthiana</i>		lo		lo	
<i>Olax obtusifolia</i>				lo	
<i>Oldfieldia dactylophylla</i>				lo	
<i>Rhus longipes</i>		r			
<i>Rhus tenuifolia</i>	lo	lo	lo		
<i>Rothmannia engleriana</i>				lo	
<i>Rothmannia fischeri</i>	r	lo			
<i>Sapium schmitzi</i>				r	
<i>Schrebera trichoclada</i>	r	lf	lo		
<i>Securidaca longepedunculata</i>	r	lo	lo	lo	
<i>Stereospermum kunthianum</i>				lo	
<i>Strychnos cocculoides</i>				lo	
<i>Strychnos madagascariensis</i>	lo	o-lf	lo		
<i>Strychnos pungens</i>				lo	
<i>Strychnos spinosa</i>			lo	lo	
<i>Swartzia madagascariensis</i>			lo	lo	
<i>Syzygium guineense</i> subsp. <i>huillense</i>				r	
<i>Syzygium guineense</i> subsp. <i>macrocarpum</i>				o-lf	
<i>Tarenna neurophylla</i>	r	lo		lo	
<i>Terminalia brachystemma</i>		o-lf	lf	o-lf	
<i>Uapaca kirkiana</i>				lo	
<i>Uapaca nitida</i>				lo	
<i>Vangueria infausta</i>	r	lo	lo	lo	
<i>Vangueria randii</i>				r	
<i>Vangueriopsis lanciflora</i>		lo	lo	lo	
<i>Viridivia suberosa</i>				r	
<i>Vitex madiensis</i>				lo	
<i>Vitex mombassae</i>				lo	
<i>Vitex payos</i>	r	lf	lo	r	
<i>Ximenia americana</i>	r	lo	lo		

	K6	K10	K6/12	K	R/K10
<i>Ximenia caffra</i>	r	lo	lo	lo	
<i>Xylopia odoratissima</i>			r	r	
<i>Zanha africana</i>				lo	
<i>Ziziphus abyssinica</i>			lo		
<i>Ziziphus mucronata</i>			lo	lo	
Shrubs:					
<i>Abutilon ramosum</i>		v.lo			
<i>Acacia ataxacantha</i>	f	lo	lf		
<i>Acacia fleckii</i>	lo	lf	lf		
<i>Acacia schweinfurthii</i>		lf	lf		
<i>Acalypha chirindica</i>	lf	lf	lo		
<i>Alchornea occidentalis</i>	lf	lf	lo		
<i>Allophylus africanus</i>	lo	lo			
<i>Allophylus whitei</i>	r				
<i>Alvesia rosmarinifolia</i>			lo	r	
<i>Ancylanthos rubiginosus</i>				lo	
<i>Baphia capparidifolia</i>		lf			lo
<i>Baphia massaiensis</i> subsp. <i>obovata</i>	f	f-c	f		
<i>Bauhinia macrantha</i>	o-lf	lf	lf		
<i>Bauhinia urbaniana</i>				lf	
<i>Boscia mossambicensis</i>		r			
<i>Bridelia cathartica</i>				lo	
<i>Bridelia duvigneaudi</i>				r	
<i>Byrsocarpus orientalis</i>	lo	o-lf	lo	lo	
<i>Canthium burttii</i>	lo	lo	lo		
<i>Canthium captum</i>		r			
<i>Canthium frangula</i>	lo	lo	lo		
<i>Canthium huillense</i>				lo	
<i>Canthium lactescens</i>		r			lo
<i>Canthium martinii</i>		r			
<i>Canthium zanzibaricum</i>		r			o-lf
<i>Cassia singueana</i>			lo		
<i>Cassipourea</i> n.s.	r	lo			
<i>Clerodendrum capitatum</i>	lo	lo	lo	lo	
<i>Clerodendrum glabrum</i>		r			
<i>Clerodendrum myricoides</i>	lo	lo			
<i>Combretum engleri</i>	o-lf				
<i>Combretum ghasalense</i>				lo	
<i>Copaifera baumiana</i>				v.lf	
<i>Crossandra spinescens</i>		r			
<i>Crotalaria flavicarinata</i>	lo	lo	lo	lo	
<i>Croton polytrichus</i>		lf			
<i>Croton scheffleri</i>	lo	lo			
<i>Dalbergia martinii</i>	lf	lf	o-lf		
<i>Desmodium velutinum</i>		r			
<i>Dichrostachys cinerea</i>	lo	lo	o-lf	lo	
<i>Diospyros virgata</i>			lo	o-lf	
<i>Diplorhynchus condylocarpon</i>				lf	
<i>Dolichos ellipticus</i>				lo	

	K6	K10	K6/12	K	R/K10
Dolichos pseudocajanus				r-lo	
Dolichos trinervatus				lo	
Ekebergia benguelensis				lo	
Eriosema ellipticum				lf	
Eriosema psoraleoides			lo		
Erythroocca menyharthi	r	lo	r		
Erythroxyllum emarginatum				lo	
Euclea dekindtii				lo	
Euclea schimperi		r			lo
Euphobia espinosa		r			
Fadogia fuchsoides				lo	
Feretia aeruginescens		r			
Flacourtia indica	r	lo	lo	lo	
Grewia avellana	lf	lo			
Grewia falcistipula				lo	
Grewia flavescens	lo	lo	lf	lo	
Grewia monticola			lo	lo	
Grewia pachycalyx				r	
Grewia retinervis	lo		lf	lo	
Hibiscus dongolensis		r			
Hibiscus mastersianus				o-lf	
Hibiscus mehowi				lo	
Holarrhena pubescens				r	
Holostylon baumii				lo	
Hoslundia opposita			r		
Humularia bequaerti				lo	
Indigofera ormocarpoides	lo	lo			
Indigofera podocarpa				lf	
Indigofera rhynchocarpa				lo	
Indigofera sutherlandioides				o-lf	
Kotschya strobilantha				lo	
Lannea virgata				r	
Lantana rhodesiensis	r	lo	lo	lo	
Leonotis nepetifolia	lo	lo	lo		
Lepidagathis microchila				lo	
Maerua juncea		r			
Melhania acuminata				lo	
Memecylon flavovirens				lo	
Mundulea sericea		v.lf			lo
Nidorella resedifolia				lo	
Ochna afzelioides		r			
Paropsea brazzeana			lo	lo	
Pavetta assimilis	lo	lo			
Pavetta cataractarum		r			
Pavetta lasiopeplus					r
Pavetta schumanniana				lo	
Phyllanthus discoideus	lo	lo			
Phyllanthus engleri		lo	r	r	
Plectranthus candelabrifomis	v.lo				

	K6	K10	K6/12	K	R/K10
<i>Plectranthus esculentus</i>			lo		
<i>Plectranthus kapatensis</i>		lo			
<i>Pleurostyliya africana</i>		r			
<i>Plumbago zeylanica</i>	lf		lo		
<i>Popowia obovata</i>	o-lf	lf	o-lf	lo	
<i>Premna senensis</i>	r	lo			
<i>Protea angolensis</i>				lo	
<i>Protea gagedi</i>				lo	
<i>Protea petiolaris</i>				lo	
<i>Pseudarthria hookeri</i>		lo		lo	
<i>Psorospermum baumi</i>				r	
<i>Psorospermum febrifuga</i>				lo	
<i>Rhus kirkii</i>				lo	
<i>Rytigynia orbicularis</i>				v.lo	
<i>Rytigynia umbellulata</i>		lo			
<i>Salacia luebberti</i>				r	
<i>Sansevieria desertii</i>		lf			lf
<i>Sansevieria scabrifolia</i>		lo		lo	
<i>Securinega virosa</i>		lo			
<i>Sesamum calycinum</i>			lo		
<i>Sida cordifolia</i>	lo	lo	lf	lo	
<i>Sphedamnocarpus angolensis</i>		r		r	
<i>Tapiphyllum discolor</i>				lo	
<i>Tarenna luteola</i>	o-lf	lo	lo		
<i>Temnocalyx obovatus</i>				lo	
<i>Thunbergia crispa</i>				lo	
<i>Tinnea vestita</i>				lo	
<i>Tinnea zambesiaca</i>		lo			
<i>Tricalysia allenii</i>	o-lf	lo	lo		
<i>Tricalysia angolensis</i>				o-lf	
<i>Tricalysia congesta</i>		r			
<i>Triumfetta dekindtiana</i>	lf	lf		lo	
<i>Vepris termitaria</i>		r			
<i>Vepris zambesiaca</i>		r			
<i>Vernonia bellinghami</i>				r	
<i>Vernonia colorata</i>				lo	
<i>Vernonia glabra</i>				lo	
<i>Waltheria indica</i>	lf	lf	lf	lo	
<i>Wissadula rostrata</i>		lo			lo
<i>Xeromphis obovata</i>	lo	lo	lo		
<u>Sub-shrubs:</u>					
<i>Acalypha allenii</i>			lo	lo	
<i>Acalypha senensis</i>				lo	
<i>Achyranthes aspera</i>	lf	lf	lf		
<i>Aframomum bauriculatum</i>		o-lf		o-lf	
<i>Annona stenophylla</i> subsp. <i>nana</i>				lf	
<i>Aspilia mossambicensis</i>				lo	
<i>Astripomoea malvacea</i>				lo	
<i>Barleria kirkii</i>		r			

	K6	K10	K6/12	K	R/K10
<i>Blepharis maderaspatensis</i>	lf	lf	lf		
<i>Brackenridgea arenaria</i>				lo	
<i>Cassia mimosoides</i>				lo	
<i>Centemopsis gracilentia</i>				lo	
<i>Chamaeclitandra henriquesiana</i>				o-lf	
<i>Cissus cornifolia</i>		r		lo	
<i>Clematopsis scabiosifolia</i>				lo	
<i>Clerodendrum ternatum</i>				lo	
<i>Clerodendrum uncinatum</i>	lo		o-lf	lo	
<i>Combretum platypetalum</i>			lo	lo	
<i>Crotalaria variegata</i>				lo	
<i>Crotalaria virgulata</i>	r				
<i>Cryptosepalum maraviense</i>				o-lf	
<i>Desmodium barbatum</i>		r		lo	
<i>Dichapetalum rhodesiacum</i>				r	
<i>Dicliptera nemorum</i>		lf			
<i>Diodia scandens</i>				lo	
<i>Dicoma anomala</i>				r	
<i>Diospyros chamaethamnus</i>				v.lf	
<i>Diplolophium zambesinum</i>				lo	
<i>Disperma crenatum</i>			lf		
<i>Dolichos densiflorus</i>				lo	
<i>Dolichos rupestris</i>				r	
<i>Ectadiopsis oblongifolia</i>				lo	
<i>Eminia holubi</i>				lo	
<i>Eugenia angolensis</i>				lo	
<i>Euphorbia systyloides</i>				r	
<i>Fadogia monticola</i>				o-lf	
<i>Gardenia brachythamnus</i>	lo	lo	o-lf	lo	
<i>Gardenia subacaulis</i>				lo	
<i>Gnidia buchananii</i>				lo	
<i>Gnidia kraussiana</i>				r	
<i>Grewia decemovulata</i>		lo	lo	lo	
<i>Hemizygia bracteosa</i>	lo		lf	o-lf	
<i>Hermannia angolensis</i>			r		
<i>Hermannia glandulosa</i>				r	
<i>Hibiscus lobatus</i>	lo	lo			
<i>Hypoestes verticillaris</i>	lo	lo	o-lf	lo	
<i>Indigofera fanshawei</i>				r	
<i>Indigofera quarrei</i>				lo	
<i>Indigofera trita</i>				r	
<i>Justica betonicoides</i>	lo	lf	lf	lo	
<i>Landophia camptoloba</i>				v.lo	
<i>Lannea edulis</i>				lo	
<i>Lannea gossweileri</i>				lo	
<i>Leptactina benguelensis</i>				lo	
<i>Monechma debile</i>	lo				
<i>Myrsine africana</i>				lo	
<i>Ochna leptoclada</i>				lo	

	K6	K10	K6/12	K	R/K10
<i>Ochna pygmaea</i>				lo	
<i>Ocimum urticifolium</i>			r		
<i>Otiophora scabra</i>				r	
<i>Parinari capensis</i>			lo	o-lf	
<i>Phaulopsis longifolia</i>		lf			lo
<i>Phyllanthus maderaspatensis</i>	lo	lo	lo		
<i>Phyllanthus virgulatus</i>				r	
<i>Phyllanthus welwitschianus</i>				lo	
<i>Pleiotaxis eximia</i>				r	
<i>Pollichia campestris</i>			lo		
<i>Polygala kalaxariensis</i>				r	
<i>Polygala sphenoptera</i>		lo	lo		lo
<i>Psychotria kirkii</i>				r	
<i>Psychotria spithamea</i>			lo	lo	
<i>Pupalia lappacea</i>	lo		lo		
<i>Pycnostachys dewildemaniana</i>				lo	
<i>Pygmaeothamnus zeyheri</i>			lo	lo-lf	
<i>Rhynchosia floribunda</i>		r			
<i>Rhynchosia holosericea</i>				o-lf	
<i>Sapium oblongifolium</i>				lo	
<i>Sopubia welwitschii</i>				lo	
<i>Strobilanthesis linifolia</i>				lo	
<i>Strychnos gossweileri</i>				lo	
<i>Tephrosia cephalantha</i>	lo	lo	lf	lo	
<i>Tephrosia longipes</i>				lo	
<i>Tricalysia cacondensis</i>			lo	lo	
<i>Tricalysia suffruticosa</i>				lo	
<i>Trichodesma hockii</i>			o-lf		
<i>Trichodesma zeylanicum</i>			lo		
<i>Triumfetta angolensis</i>				r	
<i>Triumfetta heliocarpa</i>				lo	
<i>Triumfetta tomentosa</i>	lo	lo	lo		
<i>Triumfetta trichocarpa</i>	r				
<i>Vernonia poskeana</i>				lo	
<u>Climbers:</u>					
<i>Abrus precatorius</i>		lo			lo
<i>Adenia gummifera</i>		lo			
<i>Adenia senensis</i>		lo			
<i>Ampelocissus africana</i>				lo	
<i>Ampelocissus obtusata</i>				lo	
<i>Ancylobothrys amoena</i>			lo		
<i>Aristolochia petersiana</i>		r			
<i>Artabotrys monteireae</i>			r		
<i>Asparagus aspergillus</i>		r			
<i>Asparagus racemosa</i>		lo			
<i>Baissea wolfhorsti</i>	o-lf	o-lf			
<i>Bonamia spectabilis</i>	lo	lf	lo		
<i>Capparis fascicularis</i>		r			
<i>Capparis tomentosa</i>	lo	lf	lo		

	K6	K10	K6/12	K	R/K10
<i>Cardiospermum halicacabum</i>	lo		lo		
<i>Carissa edulis</i>		lo			
<i>Cassytha filiformis</i>				lo	
<i>Cissampelos mucronata</i>				r	
<i>Cissampelos owariensis</i>		lo			
<i>Cissus integrifolia</i>			lo		
<i>Clematis brachiata</i>	lo		lo		
<i>Cocculus hirsutus</i>			lo		
<i>Combretum microphyllum</i>		lo	lo		lf
<i>Combretum mossambicense</i>	lo	lo	lo		
<i>Cyclantheropsis parviflora</i>		r			
<i>Dalbergia fischeri</i>		r			
<i>Cyphostemma congestum</i>	lo				
<i>Dioscorea bulbifera</i>		r			
<i>Dioscorea dumetorum</i>		lo	lo		
<i>Dioscorea hirtiflora</i>	lo		lo		
<i>Gymnema sylvestre</i>		lo			
<i>Helinus integrifolius</i>		lo	lo		
<i>Hippocratea africana</i>					lo
<i>Hippocratea parviflora</i>	o-lf	lf	lo		
<i>Ipomoea shirambensis</i>		lo			
<i>Ipomoea verbascoidea</i>	lo	lo	lo	lo	
<i>Jasminum streptopus</i>	lo	lo	lo	lo	
<i>Lablab niger</i>		r			
<i>Landophia kirkii</i>		lo			
<i>Landophia parvifolia</i>	lo	lo		lo-lf	
<i>Maerua friesii</i>	lo	lo			
<i>Mucuna glabrialata</i>	r		lo		
<i>Paederia foetens</i>		r			
<i>Pergularia n.s.</i>			r		
<i>Pentarrhinum insipidum</i>	r		r		
<i>Rhynchosia caribea</i>	lo				
<i>Rhynchosia hirta</i>			lo		
<i>Secamone erythradenia</i>	lo	lo			
<i>Strophanthus kombe</i>	r	r			
<i>Strophanthus welwitschii</i>				lo	
<i>Strychnos lucens</i>		lf			lo
<i>Strychnos usambarensis</i>		o-lf			r
<i>Tiliacora funifera</i>	r	lf		lo	lo
<i>Uvaria angolensis</i>		lo			

RIPARIAN VEGETATION

Tall trees:

<i>Acacia albida</i>	o-lf	<i>Albizia glaberrima</i>	lo
<i>Acacia galpinii</i>	r	<i>Albizia versicolor</i>	lo
<i>Acacia sieberiana</i>	lo	<i>Apodytes dimidiata</i>	r
<i>Albizia adianthifolia</i>	r	<i>Bridelia micrantha</i>	v.lo
<i>Albizia brevifolia</i>	r	<i>Combretum imberbe</i>	lo
		<i>Craibia affinis</i>	r

Dialium angolense	r	Rhus quartiniana	o-lf
Diospyros mespiliformis	lo	Salix subserrata	lf
Erythrophleum suaveolens	r	Scolopia zeyheri	r
Ficus capensis	lo	Tarenna neurophylla	lo
Ficus ingens	lo	Tricalysia coriacea	lf
Ficus sycomorus	lo	Turraea nilotica	lo
Gardinia livingstonei	lf	Ximenia americana	lo
Homalium abdessammadii	lo	Ximenia caffra	lo
Hyphaene ventricosa	o-lf	Ziziphus mucronata	lo
Khaya nyasica	r-v.lo		
Lannea stuhlmannii	lo	<u>Shrubs:</u>	
Lonchocarpus capassa	f	Acacia hebeclada	v.lo
Manilkara mochisa	v.lo	Acacia schweinfurthii	o-lf
Manilkara obovata	v.lo	Acalypha ornata	v.lo
Mimusops zeyheri	lo	Achyranthes aspera	lf
Rauvolfia caffra	r	Baphia capparidifolia	v.lf
Sapium ellipticum	lo	Bridelia cathartica	lo
Sclerocarya caffra	lo	Byrsocarpus orientalis	lo
Strychnos potatorum	lo	Canthium henriquesianum	lo
Syzygium cordatum	o-lf	Canthium zanzibaricum	o-lf
Syzygium guineense subsp. barotsense	lc	Carissa edulis	lo
Terminalia sericea	lf-lc	Cassia singueana	lo
Trichilia emetica	lo	Conyza persicifolia	r
		Crotalaria kapirensis	r
<u>Small trees:</u>		Cyperus alternifolius	v.lf
Acacia pilispina	v.lo	Desmodium salicifolium	lo
Albizia anthelmintica	lo	Dichrostachys cinerea	lo
Allophylus africanus	lo	Dicliptera verticillata	lo
Antidesma venosum	lf	Diospyros lycioides	o-lf
Azanza garckeana	lo	Dombeya wittei	o-lf
Bauhinia tomentosa	r	Dyschoriste perrotteti	v.lo
Bersama abyssinica	lo	Erythrocca menyharthi	r
Cassia abbreviata	lo	Euclea schimperi	lo
Cassine aethiopica	lo	Ficus capreifolia	o-lf
Cassine buchananii	lo	Ficus pygmaea	lf
Chrysophyllum magalismontanum	lf	Flacourtia indica	lo
Citropsis daweana	lo	Gomphostigma virgatum	r
Combretum hereroense	lo	Grewia pachycalyx	lo
Cordia goetzei	lo	Hibiscus caesius	r
Croton leuconurus	o-lf	Hibiscus calyphyllus	lo
Croton megalobotrys	lo	Indigofera arrecta	v.lo
Dalbergia melanoxylon	r	Kosteletzkya buettneri	lo
Ekebergia capensis	v.lo	Lippia javanica	lo
Erythrina abyssinica	lo	Ludwigia octovalvis	r
Ficus thonningii	lo	Maesa lanceolata	lo
Gardenia spatulifolia	lo	Maytenus buchananii	lf
Mallotus oppositifolius	r	Maytenus senegalensis	lo
Nuxia oppositifolia	r	Mimosa pigra	lo
Olex dissitiflora	lo	Myrica conifera	r
Olea africana	r	Nidorella resedifolia	lf
Olea capensis	r	Oncoba spinosa	lf
Oxyanthus speciosus	lo	Pavetta cataractarum	r
Pappea capensis	lo	Phragmites mauritianus	lc
Phoenix reclinata	f-lc	Phyllanthus reticulatus	lf
Pleurostyliya africana	lo	Pluchea dioscoridis	lo
Rhus longipes	lo	Popowia obovata	lo

Premna senensis	lo	Cissus integrifolia	lo
Pseudarthria hookeri	lo	Clematis brachiata	lo
Psychotria spithamea	lo	Cocculus hirsutus	o-lf
Rytigynia umbellulata	v.lo	Combretum microphyllum	o-lf
Securinega virosa	lo	Combretum mossambicense	lo
Sesbania microphylla	lo	Dolichos africanus	r
Sesbania sesban	lf	Glycine wightii	o-lf
Sphenostylis marginata	r	Gymnema sylvestre	lo
Tricalysia andongensis	lf	Hippocratea africana	lf
Tricalysia angolensis	lo	Ipomoea rubens	o-lf
Tricalysia congesta	r	Ipomoea verbascoidea	lo
Urena lobata	lo	Jasminum fluminense	o-lf
Walafria angolensis	lo	Lepistemon owariense	r
Wissadula rostrata	lo	Maerua friesii	r
		Merremia pterygocaulos	lo
<u>Climbers:</u>		Mikania cordata	lf
Abrus precatorius	lo	Mucuna pruriens	o-lf
Adenia gummifera	lo	Neorautanenia mitis	lo
Ampelocissus africana	lo	Paederia foetens	lo
Artabotrys brachypetala	r	Paullinia pinnata	lf
Artabotrys monteiroae	lf	Pterolobium stellatum	lo
Asparagus racemosus	lo	Rhoicissus tridentata	lo
Asparagus setaceus	r	Secamone micrandra	r
Canavalia virosa	lf	Stephania abyssinica	v.lo
Capparis tomentosa	lf	Tacazzea apiculata	o-lf
Cardiospermum halicacabum	lo	Tiliacora funifera	lf
Cassytha filiformis	lo	Triaspis macropterum	r
Cissampelos mucronata	lo		

SUFFRUTEX SAVANNA

	Riparian	Kalahari	Munga
<u>Shrubs:</u>			
Acrocephalus callianthus	r		
Acrocephalus sericeus	lo	lo	
Adenodolichos rhomboideus			lo
Aeschynomene indica	lo		
Aeschynomene schimperi	r		
Agathisanthermum bojeri	lo		lo
Alvesia rosmarinifolia		lo	
Annona stenophylla subsp. nana		o-lf	lf
Astripomoea malvacea		r	
Becium obovatum		lo	lo
Blepharis buchneri			lo
Brackenridgea arenaria		o-lf	
Cassia meelii	r		
Clematopsis scabiosifolia		lo	
Combretum platypetalum		f	lc
Conyza welwitschii	lf		
Desmodium salicifolium	lo		
Diospyros virgata		lf	
Diplolophium zambesianum		o-lf	
Entada nana		r	

	Riparian	Kalahari	Munga
Eriosema pauciflorum		v.lo	
Eriosema psoraleoides	lf		
Eugenia angolensis		lf	lo
Gnidia buchananii		lo	
Gnidia chrysantha			r
Gnidia dekindtiana			lo
Gnidia kraussiana	lf	o-lf	lf
Gnidia macrorrhiza			lo
Gomphocarpus glaucophyllus			r
Heliotropium indicum			r
Heliotropium ovalifolium			lo
Hermannia angolensis		r	
Hibiscus rhodanthus			lf
Hyphaene ventricosa (juveniles)	lf	lf	lf
Hyptis spicigera	lc		
Indigofera congesta			r
Ipomoea vernalis			la
Kanahia laniflora		r	
Lannea edulis		o-lf	lf
Lannea gossweileri		o-lf	
Ochna manikensis		lf	
Ochna pygmaea		lf	
Ozoroa nigricans			lf
Parinari capensis		la	lc
Protea madiensis	lo	v.lo	
Protea welwitschii	lf		
Pycnostachys stuhlmannii	lo		
Pygmaeothamnus zeyheri		lf	
Scoparia dulcis		r	r
Sesamum calycinum			lf
Sesbania microphylla	lo		
Sopubia angolensis	r	r	
Sopubia ramosa	lc		
Sopubia welwitschii	la		la
Sutera elegantissima	r		
Syzygium guineense subsp. huillense	lc	o-lf	
Temnocalyx obovatus		r	
Thesium cinereum			lo
Thesium fastigiatum			lo
Tylosema fassoglensis			r
Vernonia roseni			lf

MIOMBO WOODLAND

	Miombo	Kirkia	Hill
<u>Tall trees:</u>			
Adansonia digitata			r
Azelia quanzensis	r	r	
Albizia antunesiana	o		

	Miombo	Kirkia	Hill
<i>Albizia tanganyikensis</i>		lo	v.lo
<i>Bailiaea plurijuga</i>			v.lf
<i>Brachystegia floribunda</i>	lf		
<i>Brachystegia longifolia</i>	lc		
<i>Brachystegia manga</i>	lo		
<i>Brachystegia spiciformis</i>	lc	v.lf	
<i>Brachystegia taxifolia</i>	lf		
<i>Brachystegia utilis</i>	lf		
<i>Brachystegia wangermeeana</i>	lo		
<i>Burkea africana</i>	r		
<i>Combretum collinum</i>		lo	
<i>Commiphora marlothii</i>			lo
<i>Commiphora mossambicensis</i>		o-lf	lf
<i>Commiphora ugogensis</i>			v.lf
<i>Diospyros mespiliformis</i>		r	
<i>Entandrophragma caudatum</i>			v.lo
<i>Erythrophleum africanum</i>	lo	o-lf	
<i>Faurea saligna</i>	o		
<i>Ficus brachylepis</i>			r
<i>Ficus brachypoda</i>	r		
<i>Ficus ingens</i>	r		
<i>Hyphaene ventricosa</i>	r		
<i>Isoberlinia angolensis</i>	la		
<i>Julbernardia globiflora</i>		a	la
<i>Julbernardia paniculata</i>	d		
<i>Kirkia acuminata</i>		f-lc	lc
<i>Monotes discolor</i>	lo		
<i>Monotes katangensis</i>	lo	r-lo	lo
<i>Parinari curatellifolia</i>	o	lo	
<i>Peltoporum africanum</i>	lo	r	
<i>Pericopsis angolensis</i>	o	lo	
<i>Pteleopsis anisoptera</i>		r	
<i>Pterocarpus angolensis</i>		o	lo
<i>Sclerocarya caffra</i>			lo
<i>Sterculia africana</i>		lo	lo
<i>Terminalia sericea</i>	lf	lo	
<u>Small trees:</u>			
<i>Acacia gerrardii</i>	lo		
<i>Acacia macrothyrsa</i>	lo		
<i>Anisophyllea boehmii</i>	o		
<i>Bauhinia petersiana</i>	o-lf		
<i>Boscia angustifolia</i>		r	
<i>Combretum celastroides</i>		o-f	
<i>Combretum zeyheri</i>	o	lo	
<i>Cordia pilosissima</i>			r
<i>Cordia goetzei</i>			lo
<i>Crossopteryx febrifuga</i>		lo	lo
<i>Dalbergia nitidula</i>	o	lo	lo
<i>Dalbergiella nyassae</i>	f-lc	o-lf	o-lf

	Miombo	Kirkia	Hill
Diospyros batocana	lo		
Diospyros kirkii	lo		
Diplorhynchus condylocarpon	f-lc	c	f-lc
Dombeya rotundifolia	lo		
Entada abyssinica	r		
Euclea divinorum			lo
Euphorbia matabelensis		c-la	lc
Faurea speciosa	lo		
Ficus sonderi		r-lo	lo
Ficus stuhlmannii			r
Garcinia huillensis			lo
Hymenodictyon floribundum			r
Lanea discolor	lo	lo	
Lonchocarpus capassa	lo	lo	
Markhamia acuminata		r	
Memecylon flavovirens	lo		
Ochna gambleoides	v.r		
Ochna pulchra	lo		
Ochna schweinfurthiana	lo		
Olax dissitiflora		r	r
Oldfieldia dactylophylla	lo		
Ozoroa reticulata	lo		
Phyllocosmus lemaireanus	lo		
Pseudolachnostylis maprouneifolia	r	o-lf	
Pterocarpus rotundifolius			lo
Rothmannia engleriana	o	lo	
Schrebera trichoclada		lo	lo
Securidaca longepedunculata	o	lo	
Strychnos cocculoides	o		
Strychnos innocua	o	lo	lo
Strychnos pungens	o		
Strychnos spinosa	l		
Swartzia madagascariensis	o		
Syzygium guineense subsp. huillense	lf		
Syzygium guineense subsp. macrocarpum	o-lf		
Tarenna neurophylla		r	r
Terminalia brachystemma	lo		
Uapaca benguelensis	lo		
Uapaca kirkiana	lf		
Uapaca nitida	lf		
Uapaca sansibarica	lf		
Uvariastrum hexaloboides	lo		
Vangueriopsis lanciflora	lo		
Viridivia suberosa	r		
Vitex payos		o-lf	
Zanha africana	lo	r	r
Shrubs:			
Acalypha chirindica		lo	lo
Acrocephalus rupestris	lo		

	Miombo	Kirkia	Hill
<i>Aeschynomene trigonocarpa</i>	r		r
<i>Alvesia rosmarinifolia</i>	r		
<i>Baphia massaiensis</i> subsp. <i>obovata</i>	lc	lo	
<i>Bridelia cathartica</i>	lo	lo	lo
<i>Byrsocarpus orientalis</i>	o	lo	lo
<i>Canthium huillense</i>	lo		
<i>Capparis tomentosa</i>		r	
<i>Clematopsis scabiosifolia</i>	o-lf		
<i>Cissus cornifolia</i>		o-lf	
<i>Commiphora pyracanthoides</i>		lo	r-lo
<i>Crossandra spinescens</i>		lo	r
<i>Croton gratissimus</i>			o-lf
<i>Desmodium velutinum</i>	r	r	
<i>Dichrostachys cinerea</i>	lo	lo	
<i>Diospyros lycioides</i>			lo
<i>Diplophium zambesianum</i>	o-f		lf
<i>Dolichos trinervatus</i>	lo		
<i>Ekebergia benguelensis</i>	lo		
<i>Embelia schimperi</i>	r		
<i>Eriosema ellipticum</i>	f-c		
<i>Erythrococca trichogyne</i>	r		
<i>Euclea natalensis</i>			r
<i>Euphorbia fortissima</i>			lc
<i>Flacourtia indica</i>	lo	lo	
<i>Gardenia jovis-tonantis</i>	lo		
<i>Grewia decemovulata</i>	lo		
<i>Grewia monticola</i>		r	
<i>Hexalobus monopetalus</i>	lo	lo	lo
<i>Hippocratea indica</i>		lo	
<i>Holarrhena pubescens</i>		v.lf	lo
<i>Hymenocardia acida</i>	o-lf	lo	
<i>Iboza riparia</i>			lo
<i>Indigofera atriceps</i>	lo		
<i>Indigofera podocarpa</i>	lf		
<i>Indigofera quarrei</i>	lf		
<i>Indigofera rhynchocarpa</i>	lo		
<i>Indigofera sutherlandioides</i>	lf		
<i>Inula glomerata</i>	lo		
<i>Kotschya strobilantha</i>	lf		
<i>Maprounea africana</i>	o	lo	
<i>Maytenus senegalensis</i>	lo		
<i>Melhania acuminata</i>			lo
<i>Ochna cinnabarina</i>			r
<i>Olax obtusifolia</i>	lo	lo	
<i>Ozoroa nitida</i>	lo		
<i>Paropsia brazzeana</i>	lo		
<i>Pavetta assimilis</i>		r	
<i>Pavetta schumanniana</i>	lo		lo
<i>Phyllanthus discoideus</i>	v.lo		

	Miombo	Kirkia	Hill
<i>Phyllanthus engleri</i>		r	
<i>Plectranthus esculentus</i>	lo		
<i>Protea angolensis</i>	o-lf		
<i>Protea gagedi</i>	o-lf		
<i>Protea petiolaris</i>	r		
<i>Pseudarthria hookeri</i>		r	
<i>Rhynchosia floribunda</i>	lo		
<i>Steganotaenia araliacea</i>		lo	lo
<i>Synadenium kirkii</i>			v.lf
<i>Tapiphyllum velutinum</i>		r	
<i>Tarenna luteola</i>			lo
<i>Tinnea rhodesiana</i>			lo
<i>Tricalysia angolensis</i>	o-f	lo	
<i>Turbina shirensis</i>			lo
<i>Uapaca pilosa</i>	lf		
<i>Vellozia equisetoides</i>			lc
<i>Vernonia bellinghamii</i>			lo
<i>Vernonia colorata</i>			lo
<i>Vernonia glaberrima</i>	lo		
<i>Vernonia adoensis</i>			lo
<i>Vitex madiensis</i>	lo		
<i>Vitex mombassae</i>	lo		
<i>Waltheria indica</i>		lo	
<i>Xeromphis obovata</i>	lo	lo	lo
<i>Ximenia americana</i>		lo	
<i>Ximenia caffra</i>		lo	
<u>Sub-shrubs:</u>			
<i>Abrus pulchellus</i> subsp. <i>suffruticosus</i>	o-lf		
<i>Acalypha senensis</i>	lo		
<i>Adenodolichos punctatus</i>	lf		
<i>Adenodolichos rhomboideus</i>	lf		
<i>Aeolanthus myrianthus</i>			v.lf
<i>Aframomum biauriculatum</i>	v.lf		
<i>Aloe chabaudi</i>			lf
<i>Annona stenophylla</i> subsp. <i>nana</i>	lo		
<i>Cassia quarrei</i>	r		
<i>Centemopsis gracilentia</i>	lo		
<i>Clerodendrum buchneri</i>	lo		
<i>Clerodendrum pusillum</i>	lo		
<i>Combretum platypetalum</i>	lf		
<i>Crotalaria cylindrocarpa</i>	r		
<i>Desmodium barbatum</i>	o-lf		
<i>Diospyros virgata</i>	lf		
<i>Ectadiopsis oblongifolia</i>	lo		
<i>Fadogia fuchsioides</i>	lo		
<i>Fadogia monticola</i>	lo		
<i>Fadogia triphylla</i>	lo		
<i>Gnidia buchananii</i>	lo		
<i>Gnidia kraussiana</i>	v.lo		

	Miombo	Kirkia	Hill
Gnidia macrorrhiza	r		
Gomphocarpus glaucophyllus	r		
Helichrysum kirkii	lf		
Hibiscus rhodanthus	lf		
Hypoestes verticillaris	f	o-f	
Ipomoea vernalis	lf		
Justicia betonica	o-lf		
Lannea edulis	lf		
Lannea virgata	r		
Leptactina benguelensis	o		
Myrsine africana	lo		
Ochna leptoclada	o	r	
Pentas herbacea			lo
Protea madiensis	lo		
Protea micans	o		
Pycnostachys dewildemanni			lo
Rhynchosia insignis	lo		
Sansevieria scabrifolia			lo
Sopubia mannii	lf		
Sphenostylis marginata	o-lf		o-lf
Strobilanthis linifolia	lf		
Strychnos gossweileri	v.lf		
Tephrosia elata	lo		
Tephrosia longipes	lo		
Tephrosia paniculata		lo	
Thesium cinereum	lo		
Tricalysia cacondensis	v.lf		
Tricalysia dekindtiana	o-lf	o-lf	lf
Vernonia nestor	lo		
Vernonia stenocephala	lo		
<u>Climbers:</u>			
Ampelocissus africana			r
Ampelocissus obtusata	lo		
Artabotrys monteiroae		r	
Cassytha filiformis	lo		
Combretum mossambicense			lo
Ipomoea shirambensis		lo	
Paederia foetens			r
Stephania abyssinica	r		
Thunbergia crispa	r		

MOPANE WOODLAND

Tall trees:

Acacia nigrescens	o-lf
Adansonia digitata	lo
Colophospermum mopane	a
Lannea stuhlmannii	lo
Terminalia stuhlmannii	r

Small trees:

Acacia erubescens	o-lf
Balanites aegyptiaca	f-k
Fagara trijuga	lo

<u>Shrubs:</u>		<u>Climbers:</u>	
Boscia matabelensis	c	Cissus quadrangularis	f
		Fockea multiflora	f

MUNGA VEGETATION

U – high grass-woodland, U2 – upper valley soils, K12 – transitional Kalahari sands, U/K10 – see Trapnell's original reports.

	U	U2	K12	U/K10
<u>Tall trees:</u>				
Acacia albida	lf			r
Acacia giraffae	v.lf			
Acacia goetzei subsp. goetzei	v.lo			
Acacia goetzei subsp. microphylla	v.lo			
Acacia macrothyrsa	r			
Acacia nigrescens	lf			lo
Acacia polyacantha	lf			
Acacia robusta	v.lf	v.lo		lo
Acacia sieberiana	lf	lo		lo
Adansonia digitata	lo			lo
Azelia quanzensis	lo		lo	
Albizia adianthifolia	lo			r
Albizia amara			o-lf	
Albizia antunesiana		v.lo		
Albizia harveyi	o-lf			lo
Albizia versicolor	lo	v.lo		lo
Amblygonocarpus andongensis	lo			
Borassus aethiopum	o-v.lf			
Burkea africana	o-lf		lf	
Colophospermum mopane	lo			
Combretum collinum	o-lf		lo	
Combretum imberbe	o-lf			
Commiphora angolensis				v.lo
Commiphora mollis	lo			
Dalbergia boehmii	lo		r	
Diospyros mespiliformis			lo	
Entandrophragma caudatum				lo
Erythrina abyssinica	lo			
Erythrophleum africanum	o-lf		lf	
Euphorbia candelabrum				lo
Ficus fischeri	lo		lo	
Ficus sycomorus	o-lf			
Hyphaene ventricosa	lf			
Isoberlinia angolensis	v.lo			
Kigelia africana	lo		lo	
Lanea stuhlmannii	lo			
Lonchocarpus capassa	lf		lo	
Parinari curatellifolia	lo			

	U	U2	K12	U/K10
<i>Peltophorum africanum</i>	lo		lo	
<i>Pericopsis angolensis</i>	o-lf		o-lf	
<i>Piliostigma thonningii</i>	lf	v.lf		
<i>Pseudolachnostylis maprouneifolia</i>	o-lf		lo	
<i>Pterocarpus rotundifolius</i>	r			
<i>Schrebera tricholclada</i>	o-lf			
<i>Stereospermum kunthianum</i>			r	
<i>Terminalia mollis</i>	o-lf	v.lf	lo	
<i>Terminalia sericea</i>	f-lc		o-lf	
<i>Xeroderris stuhlmannii</i>	lo		lo	
<u>Small trees:</u>				
<i>Acacia erubescens</i>	lo		lo	
<i>Acacia hebeclada</i>	v.lo		lo	
<i>Acacia nilotica</i>	lo	v.lf		
<i>Acacia pilispina</i>	v.lo			
<i>Acacia seyal</i>	lo	v.lf		
<i>Albizia anthelmintica</i>	lo			
<i>Antidesma venosum</i>	lo			
<i>Balanites aegyptiaca</i>	lo			lo
<i>Cassia abbreviata</i>	lo		lo	
<i>Combretum apiculatum</i>	lo			
<i>Combretum elaeagnoides</i>			lo	
<i>Combretum ghasalense</i>	f-lc	v.lf	lf	
<i>Combretum hereroense</i>	lo			
<i>Combretum molle</i>			lo	
<i>Combretum zeyheri</i>	lo		lo	
<i>Commiphora angolensis</i>			lo	
<i>Commiphora mollis</i>	lo			
<i>Cordia pilosissima</i>	lo			
<i>Cordia goetzei</i>	lo			lo
<i>Crossopteryx febrifuga</i>	lo	lo	lo	
<i>Croton gratissimus</i>				lo
<i>Croton megalobotrys</i>	lo			
<i>Dalbergia melanoxylon</i>	lo			
<i>Dalbergia nitidula</i>	lo			
<i>Dalbergiella nyassae</i>	f-lc	lo		
<i>Diospyros kirkii</i>	lo	v.lf		
<i>Diospyros lycioides</i>	lo		lo	
<i>Diplorhynchus condylocarpon</i>	o-lf	lo	lo	
<i>Dombeya kirkii</i>	r			
<i>Entada abyssinica</i>	r			
<i>Euclea divinorum</i>	lo			lo
<i>Ficus rhodesiaca</i>	lo			
<i>Gardenia spatulifolia</i>	lo		lo	
<i>Hexalobus monopetalus</i>	lo			
<i>Holarrhena pubescens</i>	lo			
<i>Hymenocardia acida</i>	lo		lo	
<i>Lannea discolor</i>	lo			
<i>Markhamia acuminata</i>			lo	lo

	U	U2	K12	U/K10
Markhamia obtusifolia	lo		lo	
Ochna afzelii	r			
Ochna pulchra			lo	
Olax dissitiflora	r			
Ozoroa reticulata	lo			
Securidaca longepedunculata	lo		lo	
Steganoaenia araliacea	lo		lo	
Strychnos spinosa	lo		lo	
Swartzia madagascariensis	lo		lo	
Terminalia brachystemma	lo			lo
Terminalia stenostachya		v.lf		
Terminalia trichopoda	r			
Vitex madiensis	lo		lo	
Ziziphus abyssinica	lo		lo	
Ziziphus mucronata	lo			
Shrubs:				
Abutilon ramosum	lo			
Acacia schweinfurthii				lo
Aerva lanata	lo			
Ancylanthos bainesi	r			
Baphia massaiensis subsp. obovata	lo		o-lf	
Bauhinia petersiana	o-lf	v.lf		
Blumea brevipes	lo			
Byrsocarpus orientalis	lo			
Cassia singueana	lo			
Clerodendrum wildii	r			
Combretum engleri			lo	
Crossandra spinescens	lo			
Dichrostachys cinerea	o-lf			
Disperma crenatum			lo	
Dolichos kilimandscharicus	lo			
Embelia schimperi	lo		lo	
Feretia aeruginescens			lo	
Flacourtia indica	lo		lo	
Grewia monticola			lo	
Hibiscus dongolensis	r			
Hyptis pectinata	lo			
Indigofera arrecta	lo			
Inula glomerata	r			
Ipomoea vernalis	lf	v.lf		
Jasminum stenolobum	lo	lo		
Lenotis nepetifolia	o-lf			
Lippia javanica	lo			
Maprounea africana	lo			
Maytenus senegalensis	lf			
Ozoroa nigricans	lo			
Ozoroa nitida	lo			
Pavetta senegalensis	lo	lo		
Phyllanthus engleri	lo			

	U	U2	K12	U/K10
<i>Phyllanthus reticulatus</i>	lo	lo		
<i>Premna senensis</i>	lo			
<i>Protea madiensis</i>	lo			
<i>Protea welwitschii</i>	lo			
<i>Sesamum calycinum</i>	lo		lo	
<i>Sida alba</i>	lo			
<i>Sphenostylis marginata</i>	lo			
<i>Tapiphyllum discolor</i>	lo			
<i>Tricalysia congesta</i>			lo	
<i>Vangueria randii</i>	r			
<i>Vepris zambesiaca</i>	r			
<i>Vernonia amygdalina</i>	lo			
<i>Vernonia glaberrima</i>			lo	
<i>Vernonia kirkii</i>	r			
<i>Vernonia thomsoniana</i>	lo			
<i>Xeromphis obovata</i>	lo		lo	
<u>Sub-shrubs:</u>				
<i>Acalypha allenii</i>	lo	lo		
<i>Acalypha ambigua</i>	lo			
<i>Acalypha senensis</i>	lo			
<i>Adenodolichos punctatus</i>	r			
<i>Adenodolichos rhomboideus</i>	lo			
<i>Astripomoea malvacea</i>	lo			
<i>Barleria subglobosa</i>			r	
<i>Becium obovatum</i>	lo			
<i>Blepharis buchneri</i>	o-lf			
<i>Clerodendrum uncinatum</i>			o-lf	
<i>Combretum platypetalum</i>	lo		lo	
<i>Conyza aegyptiaca</i>	lo			
<i>Conyza welwitschii</i>	lo	v.lf		
<i>Crotalaria gorensis</i>	lo			
<i>Crotalaria kapirensis</i>	lo			
<i>Crotalaria ochroleuca</i>	lo			
<i>Desmodium barbatum</i>			lo	
<i>Dicliptera verticillata</i>	lo			
<i>Epaltes alata</i>	lf	lf		
<i>Eugenia angolensis</i>	lo			
<i>Fadogia giorgi</i>	lo			
<i>Fadogia triphylla</i>	lo			
<i>Gnidia kraussiana</i>	lf			
<i>Heliotropium indicum</i>	lo			
<i>Heliotropium ovalifolium</i>	o-lf			
<i>Hermannia glanduligera</i>	lo	lo		
<i>Hibiscus rhodanthus</i>	lf			
<i>Indigofera colutea</i>	r			
<i>Indigofera congesta</i>	r			
<i>Justica betonica</i>	lo			
<i>Justica betonicoides</i>	lo			
<i>Lannea edulis</i>	o-lf	v.lf		

	U	U2	K12	U/K10
Ruellia prostrata	r			
Vernonia roseni	o-lf	o-lf		
<u>Climbers:</u>				
Ampelocissus africana		lo		
Asparagus racemosus	lo		lo	
Cocculus hirsutus	lo		lo	
Combretum mossambicense	o-lf		lo	
Cyphostemma congestum	lo			
Dioscorea dumetorum			lo	
Dioscorea quartinianum	lo			
Dolichos axillaris	lo			
Helinus integrifolius			lo	
Mucuna pruriens	lo			
Rhynchosia floribunda	lo			
Rhynchosia minima	lo			
Rhynchosia resinosa	lo			
Rhynchosia sublobata	lo			

TERMITE MOUND VEGETATION

P/A – plateau (miombo) anthills, S/A – mopane anthills, U/A – munga anthills, R/A – riparian anthills

	P/A	S/A	U/A	R/A
<u>Tall trees:</u>				
Acacia galpinii			lo	
Acacia gerrardii	lo			
Acacia nigrescens		lf	lf	lo
Acacia polyacantha			lo	
Acacia robusta		lo	lf	
Acacia sieberiana			lo	lo
Adansonia digitata		lo	r	
Albizia adianthifolia				r
Albizia amara		lo		
Albizia harveyi			o-lf	
Albizia versicolor			lo	
Apodytes dimidiata				r
Aporrhiza nitida				r
Berchemia discolor			lo	lo
Bridelia micrantha				r
Chaetacme aristata				r
Colophospermum mopane		lc		
Combretum collinum			lo	
Combretum imberbe			lo	
Combretum molle	o-lf		lo	
Commiphora africana			lo	
Commiphora edulis		r		
Commiphora mollis	lo	lf	lf	lo
Commiphora pyracanthoides	lo	lo		

	P/A	S/A	U/A	R/A
<i>Craibia affinis</i>				r
<i>Dialium angolense</i>				r
<i>Diospyros mespiliformis</i>		lo	o-lf	lo
<i>Euphorbia candelabrum</i>	lo	lo	lo	lo
<i>Ficus sonderi</i>	r		lo	
<i>Ficus sycomorus</i>			o-lf	lo
<i>Ficus zambesiaca</i>			r	
<i>Garcinia livingstonei</i>				lo
<i>Homalium abdessammadii</i>				r
<i>Hyphaene ventricosa</i>			v.lf	lo
<i>Kigelia africana</i>			lo	r
<i>Kirkia acuminata</i>		lf		
<i>Lannea stuhlmannii</i>	lo			
<i>Lonchocarpus capassa</i>		lo	o-lf	lo
<i>Manilkara mochisia</i>		lo	lo	lo
<i>Manilkara obovata</i>				lo
<i>Mimusops zeyheri</i>			r	lo
<i>Parinari curatellifolia</i>	lo			
<i>Parinari excelsa</i>				r
<i>Peltoporum africanum</i>			lo	
<i>Rauvolfia caffra</i>				r
<i>Sclerocarya caffra</i>			lo	
<i>Sterculia africana</i>	lo		lo	
<i>Strychnos potatorum</i>			lo	lo
<i>Syzygium guineense</i> subsp. <i>barotsense</i>				r
<i>Trichilia emetica</i>			lo	lo
<i>Xeroderris stuhlmannii</i>			lo	
<i>Zanha africana</i>	r			
<u>Small trees:</u>				
<i>Acacia erubescens</i>		lf	r	
<i>Acacia nilotica</i>		lo	lo	
<i>Acacia pilispina</i>			lo	
<i>Acokanthera oppositifolia</i>				r
<i>Albizia anthelmintica</i>			lf	lo
<i>Allophylus africanus</i>			lo	lo
<i>Antidesma venosum</i>	r		lo	lo
<i>Azanza garckeana</i>	lo		lf	lo
<i>Balanites aegyptiaca</i>		lf	lo	lo
<i>Bersama abyssinica</i>			lo	lo
<i>Boscia albitrunca</i>	lo			
<i>Boscia angustifolia</i>		lo	o-lf	
<i>Boscia salicifolia</i>				r
<i>Canthium lactescens</i>				r
<i>Cassia abbreviata</i>		lo	lo	lo
<i>Cassine aethiopica</i>		lo	lo	lo
<i>Chrysophyllum magalismsontanum</i>				lo
<i>Citropsis daweani</i>			r	
<i>Combretum elaeagnoides</i>		o-lf	o-lf	
<i>Combretum ghasalense</i>			lf	lo

	P/A	S/A	U/A	R/A
Combretum hereroense			lo	
Commiphora mossambicensis			r	
Commiphora pteleifolia			r	
Cordia ovalis			r	
Cordia goetzei			lf	lo
Cordia pilosissima			lo	r
Croton gratissimus		lf	lf	lo
Dalbergia melanoxylon		lo	lo	r
Dalbergiella nyassae		lo		
Diospyros kirkii				r
Diospyros lycioides			lo	lf
Diospyros sensnsis			r	
Dombeya kirkii				r
Dombeya rotundifolia	lo		lo	
Entada abyssinica			r	
Erythrina abyssinica			lo	
Erythroxyllum zambesiicum		lo		
Euclea divinorum	lo	lf	o-lf	lo
Euclea schimperi				lo
Excoecaria bussei	r			
Gardenia jovis-tonantis				r
Gardenia resiniflua		lf		
Gardenia spatulifolia		lo	lo	lo
Grewia bicolor			lo	lc
Hexalobus monopetalus	r			
Hymenocardia acida			lo	r
Hymenodictyon parvifolium		lo		
Lanea discolor	lo	lo	lo	
Maerua angolensis			lo	
Markhamia acuminata		lf	lo	
Markhamia obtusifolia			o-lf	
Maytenus buechananii				lf
Maytenus heterophylla	lo		lo	lo
Olax dissitiflora		lo		r
Oxytenanthera abyssinica			lo	
Ozoroa reticulata			r	
Phoenix reclinata				lf
Phyllanthus discoideus				r
Piliostigma thonningi				r
Premna senensis			lo	lo
Protea welwitschii				r
Pseudolachnostylis maprouneifolia			lo	lo
Rhus longipes				lo
Rhus quartiniana				lf
Rhus tenuinervis			r	
Sapium ellipticum				r
Scolopia zeyheri				r
Steganotaenia araliacea	lo	lf	lf	
Stereospermum kunthianum			lo	

	P/A	S/A	U/A	R/A
<i>Syzygium guineense</i> subsp. <i>huillense</i>				lf
<i>Syzygium guineense</i> subsp. <i>macrocarpum</i>	lo			
<i>Tarenna neurophylla</i>			lo	
<i>Terminalia mollis</i>			o-lf	lo
<i>Terminalia stuhlmannii</i>		lo		
<i>Tricalysia coriacea</i>				lo
<i>Turraea nilotica</i>				r
<i>Uapaca sansibarica</i>				lo
<i>Ximenia americana</i>	lo	lo		lo
<i>Ziziphus mucronata</i>	lo	lf	o-lf	lo
<u>Shrubs:</u>				
<i>Abutilon angulatum</i>			lo	
<i>Acacia ataxacantha</i>		lo		
<i>Acacia schweinfurthii</i>		lf	lf	o-lf
<i>Acalypha chirindica</i>			lf	lf
<i>Acalypha ornata</i>				lo
<i>Aerva lanata</i>			o-lf	
<i>Asparagus longicladus</i>		r		
<i>Asparagus setaceus</i>				lo
<i>Baphia capparidifolia</i>				lf
<i>Baphia massaiensis</i> subsp. <i>obovata</i>	lo			lo
<i>Bauhinia petersiana</i>			lf	lo
<i>Boscia matabelensis</i>		lf		
<i>Boscia mossambicensis</i>		lo	lo	
<i>Byrsocarpus orientalis</i>			lo	lo
<i>Canthium frangula</i>	lo	lf		
<i>Canthium huillense</i>			lo	
<i>Canthium zanzibaricum</i>				o-lf
<i>Cassia singueana</i>			lo	lo
<i>Cissus cornifolia</i>		lf		
<i>Clerodendrum capitatum</i>	lo			
<i>Clerodendrum wildii</i>			r	
<i>Croton menyharthi</i>		lf		
<i>Desmodium gangeticum</i>			r	r
<i>Desmodium salicifolium</i>				lo
<i>Dichrostachys cinerea</i>	lo		lo	lo
<i>Diricletia pubescens</i>		lo		
<i>Duranta repens</i>			r	
<i>Ehretia obtusifolia</i>	lo		lo	
<i>Embelia schimperi</i>			lo	
<i>Erythrococca menyharthi</i>		lo		
<i>Euphorbia espinosa</i>		o-lf		
<i>Euphorbia transvaalensis</i>			lo	
<i>Feretia aeruginescens</i>		lo	lo	lo
<i>Ficus pygmaea</i>				lo
<i>Flacourtia indica</i>			lo	lo
<i>Grewia flavescens</i>	lo	lo	lo	
<i>Grewia monticola</i>		lo	lo	
<i>Grewia pachycalyx</i>		lo		lo

	P/A	S/A	U/A	R/A
<i>Grewia schinzii</i>		lo		r
<i>Heteromorpha trifoliata</i>	lo			
<i>Hibiscus caesius</i>				r
<i>Hibiscus calyphyllus</i>				lo
<i>Hibiscus dongolensis</i>			lo	
<i>Hibiscus lobatus</i>	lo			
<i>Hibiscus panduriformis</i>			lo	
<i>Hibiscus vitifolius</i>		lo	r	
<i>Hoslundia opposita</i>			r	
<i>Indigofera podocarpa</i>	lo			
<i>Ipomoea vernalis</i>		lo	lo	
<i>Jasminum stenolobum</i>			r	
<i>Leonotis nepetifolia</i>			o-lf	lo
<i>Lippia javanica</i>			lo	lo
<i>Lycium persicum</i>			r	
<i>Maerua juncea</i>		lo	lo	
<i>Maerua parvifolia</i>		lf		
<i>Maerua prittwitzii</i>		lo		
<i>Maprounea africana</i>	r			
<i>Maytenus senegalensis</i>	lo		lo	lo
<i>Momordica cardiospermoides</i>		r		
<i>Ocimum urticifolium</i>			lo	r
<i>Oncoba spinosa</i>			r	lf
<i>Ozoroa nigricans</i>				r
<i>Pavetta assimilis</i>	lo	lo	lo	
<i>Pavetta cataractarum</i>				r
<i>Pavetta lasiopeplus</i>		lo		
<i>Phyllanthus muelleranus</i>			lo	lo
<i>Phyllanthus reticulatus</i>			lf	lf
<i>Popowia obovata</i>	lo	o-lf	lf	lo
<i>Pseudarthria hookeri</i>			lo	lo
<i>Securinega virosa</i>			lo	lo
<i>Sesbania microphylla</i>				lo
<i>Sesbania sesban</i>				o-lf
<i>Sida alba</i>			lo	lo
<i>Strophanthus nicholsoni</i>		lo		
<i>Tarenna luteola</i>		lo	r	r
<i>Tragia okanyua</i>	r			
<i>Tricalysia allenii</i>			lo	
<i>Tricalysia andongensis</i>				lo
<i>Typha domingensis</i>		v.lf		
<i>Uapaca pilosa</i>	lo			
<i>Urena lobata</i>				lo
<i>Vepris termitaria</i>				r
<i>Vepris zambesiaca</i>			r	
<i>Vernonia adoensis</i>			lo	
<i>Vernonia aurantiaca</i>			lo	
<i>Wissadula rostrata</i>				r

	P/A	S/A	U/A	R/A
<u>Sub-shrubs:</u>				
Acalypha senensis			lo	
Achyranthes aspera				lf
Aloe chabaudi		lc		
Barleria kirkii			lo	
Barleria spinulosa			lo	
Dicliptera verticillata			lf	lo
Disperma crenatum		o-lf	lo	
Dyschoriste trichocalyx		lc		
Justicia betonica			lo	
Plectranthus cylindraceus		lf		
Rhynchosia insignis			lo	
Rhynchosia minima			lo	
Rhynchosia resinosa	lo			
Ruspolia decurrens			lo	
Sansevieria desertii	lf	lc	lf	v.lf
Sansevieria scabrifolia	lf		lf	
Tephrosia paniculata		lo	lo	
Vellozia humilis		r		
<u>Climbers:</u>				
Abrus precatorius			lo	lo
Adenia gummiifera	lo		lo	
Ampelocissus africana			lo	lo
Artabotrys monteiroae				lo
Asparagus racemosus		lo	lo	lo
Capparis tomentosa	lo	o-lf	f-lc	lf
Carissa edulis			lo	lo
Cissampelos mucronata				lo
Cissus integrifolia			lo	lo
Cissus quadrangularis		lo	r	
Clematis brachiata			lo	lo
Cocculus hirsutus		lo	o-lf	lo
Combretum microphyllum			o-lf	
Combretum mossambicense		lo	lo	lo
Commicarpus plantagineus			lo	r
Cyclantheropsis parviflora		lo	r	
Dioscorea dumetorum		lo		lo
Dioscorea sylvaticum		lo	r	
Fockea multiflora		lf	r	
Glycine wightii				o-lf
Gymnema sylvestre		lo	lo	lo
Helinus integrifolius			lo	
Hippocratea africana				o-lf
Hippocratea indica			lo	lo
Ipomoea kituiensis		o-lf		
Ipomoea rubens				o-lf
Ipomoea shirambensis		lf	o-lf	
Ipomoea verbascoidea		lo	lo	
Jasminum fluminense				lf

	P/A	S/A	U/A	R/A
Merremia pterygocaulos				lo
Opilia celtidifolia				lo
Paullinia pinnata				o-lf
Pterolobium stellatum				lo
Rhoicissus tridentata				lo
Strychnos lucens				lo
Tacazzea apiculata				o-lf
Tiliacora funifera				lf
Tinospora caffra		lo		
Triaspis macropteron				lo
Turbina shirensis		o-lf		

FOREST RESEARCH PAMPHLET NO. 22, 1969**THE VEGETATION OF KALABO DISTRICT**

Kalabo District lies west of the Zambezi River in the NW corner of Barotseland between east longitudes 22°00'–23°15' and south latitudes 13°45'–16°15'. It is bounded on the north by Balovale [Zambezi], on the east by Mongu, on the south by Senanga District, and the western boundary is the international boundary with Portuguese Angola.

The chief topographical feature is the almost total absence of relief. There are high sand scarps only in the east-central and south east of the district extending west to Liumba Hill, south along the Simunyange Plain, and inland as far as Sihole. The rivers are separated by low interfluves of permeable sand which carry the district's woodlands.

The two main rivers, apart from the Zambezi, the Lungwebungu and the Luanginga, are navigable into Angola, as is the Zambezi within the district. Other main rivers are the Luambimba, and the northern and southern Luete. The natural drainage, especially in the south-west, is often non-existent. Canals are common in the south-east.

The climate must be very similar to that of Mongu District. The winds are easterly during the dry season and westerly during the rains. The rainfall averages between 33–38 inches [838–965 mm] per annum between November and March with a peak in mid-December, and troughs at the end of December, late January and mid-February. Radiation frosts are common in depressions in the cold season.

The geology of the district is unknown as it is covered by a uniform blanket of Kalahari sand. Outside Zambia the Kalahari sands are underlain by rocks of the Karoo system. The sands are a Pleistocene deposit, the erosion product of the weak Upper Karoo sandstones. They vary from pallid to orange in colour, are moderately acid and contain 3–12% silt + clay. The sands are not very fertile, the nitrogen content being particularly low where the humus has been disturbed by cultivation.

Kalabo, both floristically and ecologically, is the poorest district in Zambia. The total woody flora consists of less than 400 species. This is hardly surprising as almost three-quarters of the district is sand plain or floodplain.

Native gardening is widespread both in the woodland and on seepage dambo margins, and is becoming more so with rising population and consequent land pressure. In places the land fallow is reduced to two years and cassava crops are left to coppice in place of cutting new gardens.

The more interesting ecological features of the district are the *Brachystegia bakerana* frost hollows south of Kalabo boma with their uncanny resemblance to dwarf teak areas, the drowned and partly drowned woodland, and the bush groups. All observers agree that the water table has been rising for some years now and is still rising. The areas of drowned and partly drowned woodland are the direct result.

Hyphaene palm juveniles are common locally on very low mounds, presumably weathered termite mounds, e.g. east of Kalabo boma. Namboma Forest Reserve is of interest for its ± 60 year old coppice pole crop of *Baikiaea* and *Guibourtia* – but the area is being steadily destroyed by gardening.

The following vegetation types occur in the district:

1. Closed Forest

A. Edaphic

1. Swamp woodland

2. Riparian woodland
 - (a) Seepage dambo

2. Open Forest

1. Kalahari woodland
 - a) Suffrutex savanna (SK 5.6)
2. Munga woodland
 - (a) Dry dambo

3. Termitaria

1. Munga termitaria
2. Munga/Riparian termitaria (bush groups)

4. Grasslands

1. Floodplain

1. CLOSED FOREST

1.A.1 Swamp Woodland

Small areas of floodplain (lagoon margins or ponded rivers) where the water level is at or immediately below the surface during the dry months carry a vegetation distinct from riparian woodland, which can best be classed as swamp woodland. It is a relic community with a very reduced flora.

The total flora comprises an overwood of *Gardenia imperialis* and *Syzygium cordatum*, an understorey of *Psychotria djumaensis* and *Tricalysia coriacea* with tangles of climbing *Lygodium microphyllum* fern and *Sabicea laurenti*, and a shrub layer composed of colonies of *Coleus shirensis* and the royal fern *Osmunda regalis*.

1.A.2 Riparian Woodland

A narrow strip of gallery woodland commonly fringes the main rivers. This varies from a dense continuous strip of trees and shrubs as on the Lungwebungu River, to a discontinuous strip of the same with *Phragmites* reeds in the gaps, to a more or less continuous strip of reeds punctuated by the odd tree as on the Zambezi River. The canopy is only 30 feet [9.2 m] high at best.

Canopy trees are very largely *Syzygium guineense* subsp. *barotsense* with *Acacia polyacantha* (a secondary invasive as on the Namboma River), *Anthocleista liebrechtsiana*, *Rhus quartiniana* and locally, especially near Nasilele village, *Nauclea pobeguini*.

Common shrubs include *Antidesma venosum*, scrambling *Canthium zanzibaricum*, *Diospyros lycioides*, *Maytenus senegalensis*, *Phyllanthus reticulatus* and *Tarenna rhodesiaca*. *Dissotis princeps* and *Ficus pygmaea* make up most of the sub-shrub layer. *Embelia schimperi* (a rather surprising component) and *Tacazzea apiculata* are the only common climbers.

1.A.2a Seepage Dambo

Seepage dambos with their ample supply of moisture all the year round and comparatively good drainage, have a distinctive vegetation of sedges, grasses, herbs (especially orchids) and the odd shrub, particularly *Gnidia chrysantha* and *G. kraussiana*, *Nidorella welwitschi* and *Sopubia ramosa*.

2. OPEN FOREST

2.1 Kalahari Woodland

Kalahari woodland, in one form or another, covers the interfluves from the tops of the flat ridges to dambo and plain margins to flat low-lying perennially-inundated country as on the Angolan border. It can be vaguely separated into Trapnell's K3, K5, K7 and K8, with the first three subtypes on the well-drained land and K8 usually where the drainage is impeded or partly impeded.

K3 is found only in the north east, north of the Lungwebungu River opposite the Kabompo River mouth. It is characterised by the presence of *Brachystegia longifolia*. The canopy reaches 35–40 feet [10–12 m] high on the best quality, but 25 feet [7.7 m] is the average, with 5–6 feet [150–180 cm] boles.

K5, characterised by the presence of *Brachystegia spiciformis*, covers the most populous and heavily gardened area of the district. It extends from the Boma as far west as the Ngombe stream and south to a point about 20 miles [32 km] from Kalabo. Below the Ndoka River, this subtype is broken up by lower lying belts of K7 with a *Brachystegia bakerana* understorey.

K7, characterised by *Baikiaea* and *Guibourtia* without *Brachystegia*, is the most widespread woodland in the district. It occurs more or less uninterruptedly from Sikongo to the confluence of the Ndoka and southern Lueté rivers. The canopy has a maximum height of 50 feet [15 m] with a mean of 40 feet [12.2 m] to a 25 feet [7.6 m] minimum. A degraded variant occupies areas of impeded drainage in the upper Southern Lueté where the mortality of trees due to fire and drowning amounts to 60% of the stocking.

K8, characterised by the absence of *Baikiaea* and *Guibourtia*, and the dominance of *Burkea* and *Erythrophleum*, is widespread in Kalabo fringing the great plains of the west. It is common in the flat, low-lying perennially inundated country of the Angolan frontier. It flanks the valleys of the Luachi, Luanginga and the Luambimba rivers. At best the canopy is 30–35 feet [9.2–10.7 m] high, at worst on the fringes of the Lubelele plain 25 feet [7.6 m] high. Woodland marginal to seepage dambos is a mixture of K7 and K8 with *Guibourtia*, *Baikiaea*, *Burkea* and *Parinari*. There is a tendency for the formation of evergreen thicket with *Landolphia camptoloba* and *Copaifera baumiana* on seepage dambo margins, often invaded by *Syzygium guineense* subsp. *huillense*.

In the Kalonga–Ndoka–Lukona part of the district, *Brachystegia bakerana* occurs pure or as an almost pure understorey to Kalahari woodland. It also occurs in circular belts fringing the waterlogged pans of east central Kalabo. In certain places, notably east of Nembwalushi Reserve, it occurs almost pure in a stunted form (4 ft high [1.2 m]) in elliptical-shaped depressions which are obviously frost hollows. *Copaifera* is frequent in such depressions at the 4 foot level and there is the odd emergent 10–20 feet [3–6.1 m] high of species like *Burkea*, *Erythrophleum* and *Pterocarpus*. These depressions are almost exactly like the dwarf *Baikiaea* depressions in S.W. Sesheke district, but in the Kalabo depressions *Baikiaea* is absent.

Drowned woodland is a feature of the district, usually the K8 subtype as *Burkea* and *Erythrophleum* are most tolerant of the flooding which is due to the rising water table. Fire is usually a secondary factor. In places all the trees have been killed, in others the woodland has been drastically thinned and there is now a dense carpet of grass below the remaining trees.

Canopy species of Kalahari woodland as a whole are chiefly *Baikiaea plurijuga*, *Brachystegia longifolia* (locally in K3), *B. spiciformis* (K5), *Cryptosepalum exfoliatum* subsp. *pseudotaxus*, *Burkea africana*, *Erythrophleum africanum*, *Guibourtia coleosperma*, *Parinari curatellifolia*, *Pterocarpus angolensis* and locally *Ricinodendron rautanenii* (probably an invader spread by man and animals).

Common understorey trees include *Baphia massaiensis* subsp. *obovata*, *Brachystegia bakerana*, *Combretum zeyheri*, *Diospyros batocana*, *Diplorhynchus condylocarpon*, *Hymenocardia acida*, *Ochna pulchra*, *Pseudolachnostylis maprouneifolia*, *Strychnos pungens* and *Terminalia brachystemma*. Kalabo District appears to be the meeting ground of the northern rough-barked and southern smooth-barked forms of *Ochna pulchra*.

Shrubs are chiefly *Copaifera baumiana* with *Bauhinia macrantha*, locally juvenile *Phoenix* palms (between Sikongo and the southern Lueti River), *Paropsia brazzeana* and *Sapium cornutum*.

Sub-shrubs become dominant on the ground floor in marginal K8 or K7/8 woodland especially *Aframomum bauriculatum*, *Annona stenophylla* subsp. *nana*, *Chamaeclitandra henriquesiana*,

Brackenridgea arenaria, *Dichapetalum rhodesicum*, *Diospyros virgata*, *Gardenia brachythamnus*, *Lannea gossweileri*, *Napoleona gossweileri* (the commonest suffrutex in the woodland), *Ochna leptoclada*, *Parinari capensis*, *Smilax kraussiana* (marginal only), *Tephrosia cephalantha* and *Tricalysia cacondensis*.

Climbers are few and restricted to the ground or forming tangles in the shrub layer. *Baissea wulfhorsti*, *Landolphia camptoloba* and *Strophanthus welwitschi* are common. *Baissea* is widely distributed, *Landolphia* and *Strophanthus* mostly marginal or forming thickets.

2.1.a Suffrutex Savanna

The transition from K8 woodland to suffrutex savanna is marked by sparse, stunted *Diplorhynchus* 6–10 feet [1.8–3.1 m] high, with occasional *Pterocarpus*, *Terminalia sericea* or *Maprounea africana*. This transition scrub fringes most of the plains in Kalabo, though not continuously. In the west, particularly north of the northern Luete River flanking the Angolan frontier, it forms extensive belts of semi-plain which grade out to true plain and retreat back to scrub again in a confusing and uncertain succession.

The real suffrutex savanna, which covers all the inland plains situated above the true floodplain level, is very extensive in Kalabo. It extends to the wide upland milapo of the south-western streams and the huge expanse of the Liuwa/Litawa with its western, northern and north-eastern extensions. It is characterised by the absence of tree growth and the dominance of suffrutices as found on the fringes of K8 woodland. It is in fact the end product of degradation in the Kalahari woodland catena. For a list of the common suffrutices see under marginal K8 woodland.

2.2 Munga Woodland

2.2.a Dry Dambo

Dry dambos are found in the narrow, elongated upper river valleys where the rivers have not yet achieved maturity. The vegetation is a mixture of shrubs, suffrutices and grasses, the whole distinct from suffrutex savanna, although some species like *Annona* and *Lannea* are common to both types.

Common suffrutices include *Annona stenophylla* subsp. *nana*, *Brackenridgea arenaria*, *Eriosema psoraleoides*, *Gnidia kraussiana*, *Hyphaene* palm juveniles, *Indigofera microcalyx*, *Lannea gossweileri*, *Pygmaeothamnus zeyheri*, *Scoparia dulcis* and *Syzygium guineense* subsp. *huillense*.

3. TERMITARIA

3.1 Munga termitaria

Termite mounds are few and far between and restricted to the plains (Simunyango, Mataba, etc.) and margins of the interfluves where there is an appreciable silt + clay content in the soil. They carry a limited variety of small trees, shrubs, sub-shrubs and climbers and, locally, *Borassus*, *Hyphaene* and *Phoenix* palms. Low mounds which appear to be the weathered relics of taller mounds, carry juvenile *Hyphaene* and occasionally juvenile *Phoenix* palms.

The taller trees are chiefly *Hyphaene* and *Phoenix*, and locally *Borassus* (possibly introduced) palms associated with *Markhamia obtusifolia*. Common shrubs include *Byrsocarpus orientalis*, *Dichrostachys cinerea*, *Diospyros lycioides*, *Phyllanthus reticulatus* and *Phytolacca dodecandra* (a rather unusual species on termitaria).

Sub-shrubs are chief *Achyranthes aspera*, *Eriosema psoraleoides*, the succulents *Sanseveria deserti* and *S. kirki* and *Vernonia glabra*. Climbers and scramblers which make up the bulk of the mound vegetation are chiefly *Capparis tomentosa* and *Hippocratea africana*, with some *Cissampelos mucronata*.

3.2 Munga/Riparian Termitaria

These are the bush groups of Trapnell and others, literally rounded clusters of bush separated by lower-lying grassland. The bush groups are formed by erosion of the interfluvial margins combined with a fluctuating water table which has produced secondary and tertiary drainage channels and so separated out chunks of the marginal Kalahari (K8) woodland. A high water table when present in the surrounding area, has led to invasion of the mounds by riparian and munga woodland (Trapnell's K12) species. There are indications from lone trees on the south west plains that the area was once covered by munga (K12) woodland. Some mounds were obviously once within the marginal Kalahari (K8) woodland but are now surrounded by munga and riparian species.

The most striking of those formations occurs in the south and south-west of the district from the Ndoka–southern Luete confluence west and south-west to the Mashu River and the Senanga line and beyond. The mounds here are elliptical in shape, 200–300 feet [61–92 m] long and 10–12 feet [3.1–3.7 m] high and separated by wide areas of grassland. Canopy trees are mostly *Azelia quanzensis*, *Burkea africana*, *Combretum zeyheri*, *Erythrophleum africanum*, *Parinari curatellifolia*, *Syzygium guineense* subsp. *huillense*, *Terminalia mollis*, *T. sericea* and *Ziziphus mucronata*. Common understorey trees include *Baphia massaiensis* subsp. *obovata*, *Diplorhynchus condylocarpon*, *Hymenocardia acida*, *Lanea discolor*, *Markhamia obtusifolia*, *Strychnos cocculoides* and *Terminalia brachystemma*.

Shrubs are represented by *Antidesma venosum*, *Capparis tomentosa*, *Dichrostachys cinerea*, *Diospyros lycioides*, *Euclea divinorum*, *Hyphaene* palm juveniles, *Maytenus senegalensis*, *Phoenix reclinata* palms and, locally, *Phyllanthus reticulatus* and *Securinega virosa*.

Sub-shrubs are chiefly *Achyranthes aspera*, *Combretum platypetalum*, *Dicliptera verticillata*, *Eriosema psoraleoides* and *Vernonia glabra*. The few common climbers are *Asparagus racemosus*, *Cissampelos mucronata* and *Hippocratea africana*.

North of the southern Luete River is an area of bush groups in which the surround consists of juvenile *Phoenix* palms which impart an unusual appearance to the bush group.

4. GRASSLANDS

4.1 Flood Plains

The true flood plains of the Zambezi River and lower reaches of its larger tributaries include in Kalabo the west bank portion of the Great Barotse plain with the estuarine Lungwebungu and Luanginga/Luambimba rivers, as well as the entire valley of the Luanginga in the district and the lower and middle extent of the northern Luete. It covers a landscape of interminable diffuse flatness inundated for half the year and difficult to penetrate at any time. Large parts of it are permanently wet, especially the confluence of the rivers with their braided complexes of lagoons and oxbows. Sandbanks above the general plain level occur here and there.

The odd tree or group of trees can be found, mostly *Acacia albida* with bushes of *Rhus quartiniana*. Otherwise the vegetation consists of moisture-loving shrubs and the ubiquitous *Phragmites* reed. Common shrubs include *Asocarydion mirabile*, *Dissotis princeps*, *Ficus pygmaea*, *Ludwigia leptocarpa*, *Maytenus senegalensis* (a small narrow leaved form), *Phyllanthus reticulatus*, *Tacazzea* (non-climbing variant) and, in the more permanent swamps, the bulrush *Typha angustifolia* subsp. *australis*.

The higher sandbanks bordering the rivers carry a herb/shrub vegetation including *Asparagus asiaticus*, *Cissampelos mucronata*, *Polygonum* spp., *Scoparia dulcis*, *Sutera elegantissima*, *Urena lobata* and *Walafrida angolensis*.

SUMMARY

Egging in the District Management Book for Kalabo District, sums up the vegetation as follows:

"The significant forest vegetation of Kalabo District consists of a small number of well defined types as follows:

- 1) In the north on upland soils between the Lungwebungu and Zambezi rivers *Cryptosepalum* persists in association with invading *Brachystegia longifolia*.
- 2) Between this locality and the ponded basin of the northern Luete River, there is an enormous expanse of grassland marginally above flood level which is traversed by the deep, slow SE-flowing tributaries of the Zambezi River, the Luambimba, Luanginga and Luachi. Flanking the great plains and growing best on the sandy interfluves between these rivers, is fair quality Kalahari woodland.
- 3) South of the northern Luete, extending almost to the Ndoka drainage and persisting beyond it, the high dunes and scarps of east central Kalabo, bear what was once good quality miombo/Kalahari woodland with *Brachystegia spiciformis* and an understorey of *B. bakerana*.
- 4) West of this area of deep sand on lower-lying country, indifferent K7 Kalahari woodland extends to the flats of the Angolan border grading into K8, scrub grassland and suffrutex savanna in the wide plains of that region and assuming strange formations where impeded or irregular drainage interferes with the succession.
- 5) In the south and south-west of the district between the Ndoka/southern Luete basin and the Mashi River, occur the curious elliptical bush groups marooned from one another by the caprice of the fluctuating ground water."

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SPECIES LISTS

a – abundant, c – common, f – frequent, lc – locally common, lf – locally frequent,
lo – locally occasional, o – occasional, r – rare, v.lf – very locally frequent

SWAMP WOODLAND

<u>Trees:</u>		<u>Sub-shrubs:</u>	
Gardenia imperialis	c	Coleus shirensis	lf
Syzygium cordatum	a		
<u>Shrubs:</u>		<u>Climbers:</u>	
Psychotria djumaensis	f	Lygodium microphyllum	lf
Tricalysia coriacea	o-f	Sabicea laurenti	r
		<u>Ferns:</u>	
		Osmunda regalis	l

RIPARIAN WOODLAND

<u>Canopy trees:</u>		<u>Sub-shrubs:</u>	
Acacia albida	lo	Mimosa pigra	lo
Acacia polyacantha	lf	Phragmites mauritianus	a
Anthocleista liebrechtsiana	f	Phyllanthus reticulatus	o-f
Croton leuconurus	r-o	Rhus longipes	lo
Ficus capensis	o	Sesbania sesban	o
Homalium abdessammadii	o-lf	Tarenna rhodesiaca	o-f
Nauclea pobeguini	v.lf	Tricalysia coriacea	o
Phoenix reclinata	o-lf		
Rhus quartiniana	f-c	<u>Sub-shrubs:</u>	
Salix subserrata	lo	Dissotis princeps	lf
Syzygium cordatum	lf	Dyschoriste perrotteti	lf
Syzygium guineense subsp. barotsense	a	Ficus pygmaea	lf
<u>Small trees and shrubs:</u>		<u>Climbers:</u>	
Antidesma venosum	o-f	Cissampelos mucronata	o
Canthium zanzibaricum	f	Embelia schimperi	o
Croton megalobotrys	lo	Ipomoea rubens	r
Diospyros lycioides	f	Jasminum fluminense	lf
Ficus verruculosa	lo	Mikania cordata	r
Garcinia smeathmannii	o	Mucuna pruriens	lo
Maytenus senegalensis	o-f	Tacazzea apiculata	f-c

KALAHARI WOODLAND & BUSH GROUPS

B = Lake Basin soils

K = Kalahari sands

KB = transitional soils

<u>Canopy trees:</u>		<u>Sub-shrubs:</u>	
B Acacia giraffae	lo	KB Amblygonocarpus andongensis	o
B Acacia nigrescens	lo	KB Baikiaea plurijuga	f-lc
B Acacia sieberiana	r	B Berchemia discolor	r
KB Afzelia quanzensis	o-lf	KB Brachystegia spiciformis	a
KB Albizia amara	r	KB Burkea africana	c
KB Albizia antunesiana	o	B Combretum imberbe	r
KB Albizia versicolor	r-o	KB Dialium englerianum	o-lf
		B Diospyros mespiliformis	r

KB Erythrophleum africanum	f	<u>Shrubs:</u>	
K Ficus fischeri	r	K Acacia ataxacantha	lo
B Ficus sycomorus	r	K Acacia fleckii	r
KB Guibourtia coleosperma	f	B Allophylus africanus	lo
B Kigelia africana	r	KB Ancyranthos bainesii	lo-lf
B Lonchocarpus capassa	lo	B Antidesma venosum	lo-lf
KB Parinari curatellifolia	f	KB Bauhinia macrantha	f-c
B Peltophorum africanum	lo	KB Bauhinia urbaniana	f
B Piliostigma thonningii	lo	KB Bridelia duvigneaudi	r
KB Pterocarpus angolensis	f	B Byrsocarpus orientalis	lo
K Ricinodendron rautanenii	lf	KB Canthium huillense	lo
KB Sclerocarya caffra	r	B Capparis tomentosa	lo
B Stereospermum kunthianum	r	B Carissa edulis	r
B Strychnos potatorum	lo	KB Cassia singueana	lo
KB Syzgium guineense subsp. barotsense	r	KB Chrysophyllum magalimontanum	lo
KB Syzgium guineense subsp. huillense	o-lf	K Combretum celastroides	r
B Terminalia mollis	lf	K Combretum engleri	lo
KB Terminalia sericea	lo	KB Copaifera baumiana	a
KB Ziziphus mucronata	lo	B Dalbergia melanoxylon	r
		B Dichrostachys cinerea	lo
<u>Understorey trees:</u>		B Diospyros lycioides	lo
B Acacia nilotica	r	K Erythrococca menyharthi	lo
KB Baphia massaiensis subsp. obovata	f-c	B Euclea divinorum	lo-lf
KB Bersama abyssinica	r	KB Flacourtia indica	o
K Brachystegia bakeriana	la	KB Grewia falcistipula	lo
K Chrysophyllum bangweolense	lo	KB Grewia flavescens	o
B Combretum hereroense	r	KB Grewia monticola	r
KB Combretum psidioides	o-f	KB Grewia retinervis	lo
KB Combretum zeyheri	f	KB Hannoa chlorantha	o
K Cryptosepalum exfoliatum		K Holostylon baumii	r
subsp. pseudotaxus	lo	KB Humularia megalophylla	r
KB Dalbergia nitidula	lo	B Hyphaene ventricosa	lc
KB Diospyros batocana	f-c	KB Kotschya strobilantha	lo
B Diospyros kirki	r	KB Maytenus senegalensis	c
KB Diplorhynchus condylocarpon	c	K Ochthocosmus lemairei	r
KB Hymenocardia acida	f-lc	B Ozoroa nitida	lo
KB Lannea discolor	c	KB Paropsia brazzeana	o-f
B Maerua angolensis	r	KB Pavetta assimilis	r
KB Maprounea africana	o-f	B Pavetta cataractarum	r
B Markhamia obtusifolia	o	K Pavetta schumanniana	lo
KB Monotes glaber	o	KB Phoenix reclinata	lf
KB Ochna pulchra	f-lc	B Phyllanthus mülleranus	lc
KB Olax obtusifolia	lo	B Phyllanthus reticulatus	lf
KB Oldfieldia dactylophylla	lo	B Popowia obovata	lo
KB Pseudolachnostylis maprouneifolia	o-f	KB Psorospermum febrifugum	o
KB Rhus tenuinervis	r	KB Rhus kirkii	r
KB Rothmannia englerana	r	KB Rytigynia orbicularis	lc
KB Schrebera trichoclada	lo	K Rytigynia umbellulata	r
KB Securidaca longepedunculata	c	K Sapium cornutum	lf
KB Strychnos cocculoides	lo	B Securinega virosa	lo
KB Strychnos pungens	o-lf	KB Sphedamnocarpus angolensis	r
B Strychnos spinosa	r	K Tapiphyllum velutinum	vr
KB Swartzia madagascariensis	o	KB Tricalysia alleni	lo
KB Terminalia brachystemma	o-f	KB Tricalysia angolensis	lo
KB Vangueriopsis lanciflora	o	K Uvaria angolensis	r
KB Xylopiya odoratissima	o	B Vernonia amygdalina	lo

KB Vernonia glaberrima	o-f	KB Lannea gossweileri	f-lc
KB Vernonia shirensis	r	KB Leptactina benguelensis	o-f
KB Vitex madiensis	r	KB Magnistipula eglandulosa	lf
KB Vitex mombassae	lo	K Monechma fimbriatum	r
KB Ximenia americana	r	KB Napoleona gossweileri	f-c
KB Ximenia caffra	lo	KB Nidorella microcephala	lo
		KB Ochna leptoclada	f
<u>Sub-shrubs:</u>		K Ochna pygmaea	r
KB Acalypha senensis	lo	KB Parinari capensis	lc
KB Achyranthes aspera	lo-lf	K Pavetta pygmaea	r
KB Aframomum bauriculatum	lf	B Peristrophe bicalyculata	r
KB Aloe zebrina	lo	KB Phyllanthus maderaspatensis	lo
KB Alvesia rosmarinifolia	lo	K Phyllanthus welwitschianus	r
KB Annona stenophylla subsp. nana	lf	K Pleiotaxis rogersi	r
KB Aspilia mossambicensis	r	K Polygala nematophylla	r
K Barleria kirkii	r	KB Psychotria buzica	lo
KB Blepharis maderaspatensis	lf	KB Psychotria kirkii	r
KB Brackenridgea arenaria	lf	KB Pygmaeothamnus zeyheri	lf
K Caloncoba suffruticosa	lo	KB Sansevieria kirkii	lo
K Centemopsis gracilenta	r	KB Sapium oblongifolium	r
KB Chamaecitandra henriquesiana	lf	KB Smilax kraussiana	lf
KB Clematopsis scabiosifolia	lo	B Sida alba	r
KB Clerodendrum capitatum	lo	KB Strobilanthesis linifolia	lo
K Clerodendrum ternatum	r	K Strychnos caespitosa	r
K Clerodendrum uncinatum	lo	KB Tephrosia cephalantha	o-f
KB Coleus esculentus	lo	KB Tinnea vestita	r
K Coleus kapatensis	r	KB Tricalysia cacondensis	o-f
B Combretum platypetalum	lo	KB Tricalysia suffruticosa	r
K Crotalaria variegata	o	B Triumfetta dekindtiana	lo
K Deinbollia fanshawei	r	B Vernonia glabra	lf
K Desmodium barbatum	r		
KB Dichapetalum rhodesicum	lo-lf	<u>Climbers:</u>	
B Dicliptera verticillata	lf	B Abrus precatorius	r
K Diospyros chamaethamnus	r	KB Ampelocissus africana	r
KB Diospyros virgata	o-f	KB Ampelocissus obtusata	lo
KB Diplolophium zambesianum	lo	KB Asparagus africanus	lo
KB Dolichos densiflorus	r	K Asparagus plumosus	r
B Eriosema pauciflorum	r	KB Asparagus racemosus	lo
B Eriosema psoraleioides	lf	K Baissea wulfhorsti	f
KB Eugenia angolensis	lo	KB Cardiospermum halicacabum	r
K Fadogia cienkowski	r	KB Cissampelos mucronata	lo
K Fadogia giorgi	r	B Cocculus hirsutus	lo
KB Fadogia monticola	lo	KB Combretum mossambicense	o
K Fadogia (5967)	r	KB Dioscorea hirtiflora	lo
K Gardenia brachythamnus	lf	KB Helinus integrifolius	r
K Gardenia subacaulis	r	B Hippocratea africana	lf
B Gnidia kraussiana	lo	K Ipomoea verbascoidea	r
K Hermannia angolensis	lo	KB Landolphia camptoloba	lc
KB Hermannia glanduligera	lf	B Rhoicissus tridentatus	r
B Hibiscus cannabinus	lo	K Rhynchosia holosericea (creeper)	r
KB Hypoestes verticillaris	lf	K Secamone micrandra	r
KB Indigofera sutherlandioides	lo	KB Strophanthus welwitschii	o-lf
K Indigofera griseoides	o	KB Tylosema fassoglensis	r
K Indigofera microcalyx	o-f		
KB Jasminum streptopus	lo		
KB Justicia betonicoides	lf		

<u>Shrubs:</u>		Gnidia kraussiana	o-f
Ancylanthos bainesii	lf	Hibiscus rhodanthus	lo
Protea madiensis	r	Lannea gossweileri	c
Protea welwitschii	lo	Magnistipula eglandulosa	f-c
		Napoleona gossweileri	lf
<u>Sub-shrubs:</u>		Ochna manikensis	lo
Annona stenophylla subsp. nana	f-c	Ochna pygmaea	lo
Becium angustifolium	lo	Parinari capensis	a
Becium obovatum	lo	Pygmaeothamnus zeyheri	c
Brackenridgea arenaria	f	Scoparia dulcis	lf
Diospyros chamaethamnus	r	Strychnos caespitosa	r
Eugenia angolensis	lo	Syzgium guineense subsp. huillense	c

DAMBOS

W – seepage dambo

<u>Sub-shrubs:</u>		Lannea gossweileri	f-c
Acrocephalus sericeus	lo	Magnistipula eglandulosa	o
Annona stenophylla subsp. nana	c	W Nidorella welwitschii	lf
Brackenridgea arenaria	f	Polygala nematophylla	r
Desmodium caffrum	r	Pygmaeothamnus zeyheri	lc
Eriosema pauciflorum	lo	Scoparia dulcis	o-f
Eriosema psoraleoides	o-f	Sesamum angustifolium	lo
W Gnidia chrysantha	lf	Sida alba	lo
Gnidia kraussiana	o-f	Sida cordifolia	lo
Gomphocarpus rostratus	r	W Sopubia ramosa	lf
Hermannia glanduligera	lf	Syzygium guineense subsp. huillense	f-c
Hyphaene (juvenile)	la	Thesium cinereum	lf
Indigofera capitata	lo	Thesium fastigiatum	lo
Indigofera griseoides	o-f	Urena lobata	o
Indigofera microcalyx	f	Vernonia glabra	o-f
Ipomoea obscura	r		

MUNGA TERMITARIA

<u>Canopy trees:</u>		Byrsocarpus orientalis	f
Acacia nilotica	r	Dalbergia melanoxylon	r
Acacia pilispina	r	Dichrostachys cinerea	o-f
Acacia sieberiana	r	Diospyros lycioides	f
Albizia antunesiana	lo	Ozoroa nitida	lo
Borassus aethiopum	r	Pavetta cataractarum	r
Ficus sycomorus	r	Phyllanthus reticulatus	o-f
Hyphaene ventricosa	lc	Phytolacca dodecandra	f-lc
Kigelia africana	r	Popowia obovata	lo
Lannea discolor	lo	Vernonia amygdalina	lo
Maerua angolensis	lo		
Markhamia obtusifolia	o-f	<u>Sub-shrubs:</u>	
Phoenix reclinata	lf	Achyranthes aspera	lf
Piliostigma thonningii	lo	Aerva lanata	lo
Terminalia mollis	lo	Eriosema psoraleoides	lf
		Sansevieria deserti	lf
<u>Small trees and shrubs:</u>		Sansevieria kirkii	lf
Acacia ataxacantha	lo	Sida cordifolia	lo
Allophylus africanus	lo	Triumfetta dekindtiana	lo
Antidesma venosum	o	Urena lobata	lo

Vernonia glabra	lf	Capparis tomentosa	a
		Cissampelos mucronata	o-f
<u>Climbers:</u>		Hippocratea africana	f-c
Asparagus africanus	lo	Rhoicissus tridentata	r
Asparagus racemosus	lo		

FLOODPLAIN

<u>Trees:</u>		Ficus pygmaea	c
Acacia albida	lo	Ficus verruculosa	lo
Combretum imberbe	r	Gomphocarpus rostratus	r
Rhus quartiniana	o-f	Kosteletzkya buettneri	lf
		Ludwigia leptocarpa	c
<u>Shrubs and sub-shrubs:</u>		Maytenus senegalensis	f-c
Aeschynomene indica	r	Nidorella welwitschii	lf
Ascocarydion mirabile	a	Phragmites mauritianus	c-a
Aspilia mossambicensis	lo	Phyllanthus reticulatus	lf
Desmodium salicifolium	r	Sesbania microphylla	r
Dissotis princeps	c	Tacazzea apiculata	c
Epaltes alata	lf	Triumfetta cordifolia	lo
Eriosema psoraleoides	o-f	Typha angustifolia	la

FOREST RESEARCH PAMPHLET (not published), 1964**THE VEGETATION OF MANKOYA DISTRICT**

Editor's Note: This District Report was never published or completed. The habitat lists were apparently never compiled, but a copy of Fanshawe's checklist with the recorded species ticked and their habitats indicated is available.

Mankoya is a large district almost entirely covered by sands of Kalahari type. It stretches from Sesheke in the south to the Dongwe River in the north, bordering Senanga and Mongu on the west and the Namwala, Mumbwa and Kasempa sections of the Kafue National Park (KNP) to the east.

The northeast tip of Kataba Forest (*Baikiaea* forest at its best) is inside the district and there are pockets of miombo woodland along the Luena River, the KNP boundary in the east and along the Lalafuta and Dongwe rivers. The Kalahari sands thin out as they approach the Dongwe, and a number of pockets of anomalous vegetation occur in this region. These include *Brachystegia bussei* woodland, *Julbernardia globiflora* scarp miombo, *Pteleopsis* chipya on Kalahari sands and Copperbelt type chipya with *Entandrophragma*.

The sand cover carries Kalahari woodland south of the Luena and along the Dongwe River, and dry evergreen forest (mavunda) north of the Luena River. In places on the contacts between sands and plateau soils it is very difficult to decide whether the woodland is Kalahari or miombo. The normal criterion of absence of anthills and presence of *Copaifera* on the sands, and vice-versa on miombo, breaks down in many places, but from the forestry standpoint, the difference is immaterial. The total woody flora is in the region of 700 species.

The following vegetation types occur in the district:

1. Closed Forest**A. Climatic**

1. Dry evergreen forest (mavunda)
2. Dry deciduous forest (mutemwa)

B. Edaphic

1. Riparian woodland

2. Woodland

1. Miombo woodland
2. Kalahari woodland
3. Chipya woodland
4. Savanna woodland
5. Scrub savanna

3. Termitaria

1. Anthills
2. Bush groups

1. CLOSED FOREST**1.A.1 Dry Evergreen Forest (mavunda)**

Mavunda covers most of the district between the Luena and Dongwe rivers. Nearly all of it is secondary in one stage or another between comparatively young regrowth and what appears to be almost mature mavunda. On the basis of the latter, seen between the Mwimba and Nsalashi streams

about 20 miles [32 km] south of the Dongwe River, the theoretically mature mavunda would have consisted of very large, spaced emergent *Brachystegia spiciformis* and *Guibourtia coleosperma* with subdominant *Cryptosepalum pseudotaxus* in pure stands in the gaps between the emergents, over a discontinuous layer of *Diospyros undabunda*, *Baphia obovata*, *Canthium captum* and saplings of the canopy species over a more-or-less dense thicket layer of shrubs and scramblers and climbers (the typical mavunda). Emergents lie at the 80 ft [24 m] level, *Cryptosepalum* at the 60–70 ft [18–21 m] level, *Diospyros*, etc. between 15–25 ft [5–8 m] high and the mavunda up to 10 ft [3 m] high. The pattern is very similar to that of mature *Baikiaea* forest. Incidentally, dry evergreen forest is a misnomer unless applied to the thicket layer only. Emergent and sub-dominant species are all semi-deciduous, at least in northern Mankoya. In general, tall trees besides those mentioned commonly include adventives like *Albizia adianthifolia*, *Brachystegia longifolia* and *Terminalia brachystemma*, with *Diospyros batocana* locally in the understory.

Common shrubs include *Acalypha chirindica* and *Alchornea occidentalis* (both local), *Bauhinia mendozæ*, *Chrysophyllum magalismontanum*, *Copaifera*, *Paropsia*, *Tricalysia angolensis* and, locally, *Uvaria angolensis*. Sub-shrubs are chiefly *Diospyros virgata*, *Leptactina*, *Strobilanthesopsis* and the succulent *Sansevieria kirkii*. Climbers of the thicket layer are chiefly *Cassytha*, *Combretum gossweileri* locally, *Landolphia camptoloba* and *L. parvifolia*.

Some of the seral stages of mavunda stand out clearly from the general melange. Burnt-out mavunda is a sea of *Aframomum* with the thicket species beginning to shoot again. A narrow strip of low dense *Cryptosepalum* characterises dambo margins on Kalahari sand, and in places bush groups (without anthills) associated with some of the mavunda thicket species. Behind the marginal mavunda is always Kalahari woodland. The odd pocket of *Pteleopsis*-dominated ex-mavunda with *Aframomum* on the ground occurs, looking like Trapnell's K11 chipya on sand.

Finally, where fire is too much for the mavunda, it behaves exactly like *Baikiaea* forest and degrades gradually to Kalahari woodland and eventually to suffrutex savanna.

1.A. 2. Dry Deciduous Forest (mutemwa), *Baikiaea*

A small part of Kataba Forest is included in the district. This is a two-storeyed forest with an open or closed canopy between 30–90 ft [9–27 m] high composed of *Baikiaea* and *Pterocarpus antunesii* in varying proportions. The invasive *Acacia giraffae* and *Combretum mechowianum* are widespread; *Entandrophragma caudatum* occurs locally. Sub-dominants include *Boscia albitrunca*, *Combretum angolensis*, *Croton gratissimus*, *Lonchocarpus nelsii*, *Strychnos innocua* and *S. stuhlmannii*. *Ficus fischeri*, a strangling fig, is conspicuous at Kataba in the exploited forest areas.

The mutemwa is a *Baphia–Bauhinia–Combretum–Dalbergia* complex 10–15 ft [3–5 m] high. Common shrubs include *Acacia ataxacantha*, *Baphia obovata*, *Bauhinia macrantha*, *Combretum celastroides*, *C. elaeagnoides*, *Dalbergia martinii*, *Dichrostachys*, *Grewia avellana*, *G. flavescens*, *Markhamia acuminata*, *M. obtusifolia* and *Popowia obovata*. There is a vaguely-defined understory to the mutemwa characterised by *Croton scheffleri*, *Grewia avellana* and *Erythrococca welwitschii*. The sub-shrubs *Achyranthes*, *Hypoestes verticillaris*, *Pupalia lappacea* and *Triumfetta annua* are common on the ground along with a large number of herbs, a few grasses and the odd sedge in the rainy season. Climbers, both woody and herbaceous (in the rains only), are occasional to frequent on the forest margins in the rainy season. A number of shrubs especially *Acacia ataxacantha*, *Bauhinia*, *Combretum celastroides* and *Dalbergia* are in fact scramblers and occasionally climb into the canopy.

1.B.1 Riparian Woodland

A narrow, more-or-less continuous belt of riparian woodland fringes the larger rivers where they flow through plateau country or are bordered by alluvial flats. Rivers flowing through the sand country are almost devoid of woody vegetation. *Syzygium cordatum* is characteristic of the upper reaches, *S. guineense* subsp. *barotsense* of the lower reaches. Gaps are filled with belts of *Phragmites* reeds, *Rhus* and *Salix*. Common tall trees besides those mentioned include *Apodytes*, *Bridelia micrantha*, *Homalium abdessammadii*, *Manilkara obovata* and groups of *Phoenix* palms. Small trees are chiefly *Chrysophyllum magalismontanum*, *Gardenia imperialis*, *Rhus quartiniana* and *Salix*.

Common shrubs are mostly *Alchornea occidentalis* (locally), *Canthium zanzibaricum*, *Diospyros lycioides*, *Ficus pygmaea* and *F. verruculosa*, *Maytenus senegalensis* and *Tricalysia andongensis*. *Paullinia* and *Tacazzea* are the only common climbers. Bamboo occurs rarely on the banks of the smaller streams on alluvial flats.

2. WOODLAND

2.1 Miombo Woodland

Pockets of miombo woodland occur along the Luena, Lalafuta and Dongwe rivers and along the KNP boundary. These are essentially *Brachystegia longifolia*, *B. spiciformis*, *Julbernardia paniculata* woodlands with pockets of *Isoberlinia angolensis* towards dambo margins. Small stands of almost pure *Brachystegia bussei* occur on the Luena and Dongwe, and *B. floribunda* is associated with the general mixture along the Dongwe River. *Julbernardia globiflora* occurs in a few isolated pockets along the Dongwe and Lalafuta where there are outcrops of ferricrete.

Where the Kalahari sands thin out along the Dongwe in particular, or on the granite sands of the KNP boundary, miombo woodland and Kalahari woodland are almost indistinguishable. The upper storey is the same in both cases. My own criterion for distinguishing the two types are (until I visited the Dongwe) the presence of anthills and absence of *Copaifera* in miombo, the absence of anthills and presence of *Copaifera* in Kalahari woodland. In places along the Dongwe even this criterion breaks down, anthills occur in Kalahari and *Copaifera* in miombo. Common small trees include *Diospyros kirkii*, the type tree of miombo in the district, *Diplorhynchus* and locally on the Luena, *Terminalia stenostachya*. Shrubs and suffrutices are chiefly *Adenodolichos punctatus*, *Annona stenophylla* (marginal), *Bauhinia petersiana*, *Cryptosepalum maraviense*, *Droogmansia platypus*, *Eriosema ellipticum*, *Ochna leptoclada* (abundant), *Sphenostylis* and *Vernonia glabra*.

Along the Dongwe where there is a shallow wash of sand over much of the miombo, *Landolphia parvifolia* forms a straggly carpet 2–3 ft [0.6–0.9 m] high over mile after mile of the miombo.

2.2 Kalahari Woodland

This is basically the same as miombo woodland in the North of the district and where the sand cover thins out almost indistinguishable, as along the Dongwe River. It is essentially *Julbernardia paniculata* woodland with *Brachystegia spiciformis* and *B. longifolia* in the north but only *B. longifolia* in the south. Other associated tall trees include *Burkea*, *Cryptosepalum pseudotaxus*, *Erythrophleum africanum*, *Guibourtia coleosperma* and *Isoberlinia angolensis*.

Small trees are chiefly *Baphia obovata*, *Brachystegia bakeriana* (more often as a shrub on dambo margins), *Diospyros batocana*, *Diplorhynchus*, *Monotes glaber* (especially on dambo margins), *Olox obtusifolia*, *Oldfieldia*, *Pteleopsis anisoptera* and *Terminalia brachystemma*. Common shrubs include *Bauhinia mendonçae*, *Copaifera*, *Hymenocardia*, *Kotschyia* species, *Paropsia*, *Strobilanthesis* and *Tricalysia angolensis*. Sub-shrubs are a feature in the marginal subtypes, especially *Annona stenophylla*, *Brackenridgea*, *Chamaecitandra* (locally), *Cryptosepalum maraviense*, *Diospyros virgata*, *Gardenia brachythamnus*, *Myrsine*, *Parinari capensis*, *Sansevieria kirkii* and *Sapium oblongifolium*. Climbers are limited to *Cassytha* and *Landolphia parvifolia* which locally tends to form a carpet as it does in the sandier miombo woodland.

Low rounded anthills occur locally where the sand cover is thin but the vegetation on them is Kalahari woodland. Ferricrete formed from the upper layers of the underlying Karoo sandstone is frequently exposed on the margins of dambos. The vegetation on the ferricrete is still Kalahari woodland.

All the Kalahari woodland north of the Luena River is derived from the mavunda as a result of fire and invasion. That south of the Luena could be derived in part from mavunda, in part from *Baikiaea* forest. In places fringing the wider Kalahari sand plains, the Kalahari woodland has degraded to K8 *Burkea*–*Erythrophleum* woodland, and even *Diplorhynchus* scrub. In other places, chunks of woodland have become separated from the main block to give the appearance of bush groups. *Parinari curatellifolia*,

Protea welwitschii, *Syzygium guineense* subsp. *huillense* and *Uapaca* species are occasionally associated with such groups.

2.3 Chipya Woodland

Chipya woodland of the Copperbelt type occurs in a few isolated pockets on deep sandy soils around dambo heads. Some very large *Brachystegia spiciformis* occur in these pockets and even the odd *Entandrophragma deveoyi*. Common tall trees are chiefly *Brachystegia longifolia*, *B. spiciformis*, *Erythrophleum africanum* and *Isobertinia angolensis*. The understorey when present is largely *Combretum mechowianum* and *Terminalia mollis*. The shrub layer is very open with little common except *Clerodendrum tanganyikense*, *Adenodolichos punctatus* and *Sphenostylis*, with *Aframomum* as a ground cover, but no *Pteridium* or *Smilax*. There are no common climbers.

2.4 Savanna Woodland

Very similar woodland occurs on the wider flats in Kalahari sand country and alluvial flats in plateau country, Trapnell's K12 and U2 respectively. Most of it is along the Luena, Lalafuta and Dongwe and their tributaries. Common tall trees are include *Acacia polyacantha*, *A. sieberiana*, *Albizia amara*, *Erythrophleum africanum*, *Lonchocarpus capassa*, *Terminalia brachystemma* and *T. sericea*. Small trees are chiefly *Combretum ghasalense* (the type tree), *Diospyros kirkii*, *Diplorhynchus*, *Erythrina abyssinica*, *Markhamia obtusifolia*, *Piliostigma*, *Pseudolachnostylis* and locally *Terminalia stenostachya*. Common shrubs include *Bauhinia petersiana*, *Dichrostachys*, *Diospyros lycioides*, *Eriosema psoraleoides*, *Ozoroa* (8873), *Ipomoea vernalis*, *Maytenus senegalensis*, *Sphenostylis* and *Vernonia glaberrima*. Sub-shrubs are those commonly associated with dry dambos, especially *Adenodolichos punctatus*, *Annona stenophylla*, *Brackenridgea*, *Epaltes*, *Fadogia monticola*, *Lannea edulis* and *Triumfetta welwitschii*. *Asparagus racemosus* and *Dioscorea quartiniana* are the only common climbers.

2.5 Scrub Savanna

A somewhat similar type of vegetation occurs on dambos on Kalahari sand and on alluvial flats. It is divisible into shrub and sub-shrub savanna on dry and moist dambos and suffrutex savanna on Kalahari sand plains and dambos.

Dry dambos: Characteristic shrubs and sub-shrubs include *Annona stenophylla*, *Combretum platypetalum*, *Cryptosepalum maraviense*, *Eugenia angolensis*, *Ozoroa* (8873), *Lannea edulis*, *Parinari capensis* (in sandy places), *Pygmaeothamnus zeyheri*, *Sesbania microphylla*, *Triumfetta welwitschii* and *Vernonia glabra*.

Seepage dambos: Characteristic shrubs are *Asocarydion*, *Eriosema psoraleoides*, *Ficus pygmaea*, *Gnidia* species, *Syzygium guineense* subsp. *huillense* and the bulrush *Typha*.

Sand plains: Characteristic species include *Alvesia*, *Annona stenophylla*, *Brackenridgea*, *Cryptosepalum maraviense*, *Diospyros chamaethamnus*, *Eugenia angolensis*, *Lannea gossweileri*, *Ochna manikensis* and *O. pygmaea*, *Oldfieldia* (as a suffrutex), *Parinari capensis* (the type species), *Protea welwitschii*, *Pygmaeothamnus zeyheri*, *Sapium oblongifolium* and *Syzygium guineense* subsp. *huillense*.

Oddly enough, bracken (*Pteridium*) occurs on the sand plains but very rarely. *Becium homblei*, the copper indicator, occurs on both sand plains and dambos, but does not appear to indicate copper concentrations.

3 TERMITARIA

Anthill vegetation is restricted to the anthills in miombo and savanna woodland and on dambo margins. The low, rounded anthills occurring occasionally in Kalahari woodland do not carry anthill species. Anthills are of two types, tall, conical and inhabited usually without vegetation, except occasionally a *Boscia angustifolia* or large, low round, uninhabited with the typical anthill vegetation.

Tall trees are chiefly *Acacia gerrardii*, *Albizia amara*, *Combretum molle*, *Diospyros mespiliformis*, *Euclea divinorum* and *E. schimperi* (the type trees), *Manilkara mochisia* and *Ziziphus mucronata*. Small trees are chiefly *Allophylus africanus*, *Bauhinia petersiana*, *Croton gratissimus*, *Markhamia obtusifolia* and *Phoenix* palms. Common shrubs include *Acalypha chirindica*, *Capparis tomentosa*, *Diospyros lycioides* and the succulents *Aloe greatheadii*, *Sansevieria desertii* and *S. kirkii*. Climbers are few, mostly *Asparagus racemosus*, *Dioscorea quartiniana* and *Landolphia parvifolia* (locally).

Where the surrounding soil conditions are moist or seasonally flooded, dambo or savanna anthills tend to acquire a surround of riparian or dambo species and become bush groups. This riparian/dambo element consists largely of *Diospyros lycioides*, *Euclea schimperi*, *Parinari curatellifolia*, *Phoenix* palms, *Syzygium guineense* subsp. *huillense*, *Uapaca nitida* and *U. sansibarica*.

FOREST RESEARCH PAMPHLET NO. 23, 1969**THE VEGETATION OF MONGU – LEALUI DISTRICT**

Mongu District lies in North-Central Barotse Province between 23°00'–24°00' E longitude and 14°00'–15°45' S latitude. It is bounded on the west by the Zambezi River with Kalabo District on the other bank, on the north by the Kabombo River and Balovale District, on the east by Mankoya and on the south by Senanga District.

The district lies in the basin of the upper Zambezi River. The main rivers apart from the Zambezi are the Kabompo, Luena and Lui rivers. There are no hill features in the district apart from the low hills of the Kabompo Valley and a number of small rises on the flood plain escarpment. Otherwise the district is flat.

The Zambezi River dominates the landscape. Annually it floods its great alluvial plain, the Barotse Plain, creating from January till May a shallow inland sea to the west of Mongu. From the Kabompo mouth it meanders slowly south through its alluvium flanked by countless gulfs, lagoons, oxbows and subsidiary channels.

The hinterland between the Luena and the Lui rivers is broken up by wide rounded plains, many of them waterlogged and some up to 5 miles [8 km] wide. Dead or moribund trees are commonly seen round the fringes.

There are thus four distinct regions in the district:

1. Barotse Plain and Luena Flats
2. Northern woodlands between the Luena and Kabompo rivers
3. Central woodlands and plains between the Luena and the Lui rivers
4. Remote eastern woodlands beyond the Lui River.

The rainfall averages 38–40 inches [96–102 cm] per annum between November and March, with a peak in mid-December and troughs at the end of December, later January and mid-February. Radiation frosts are common in depressions in the cold season. The winds are easterly during the dry season and westerly during the rains.

The Kalahari sands are underlain by rocks of the Karoo System. The sands are a Pleistocene deposit, the erosion product of the weak Upper Karoo sandstones. They vary in colour from pallid to orange, are moderately acid and contain 3–12% silt + clay. The sands are not very fertile, the nitrogen content being particularly low where the humus has been disturbed by cultivation. There is no erosion problem as the country is so flat, but heavy population pressure in one or two areas has resulted in land degradation.

Damage by late fires is extensive especially in the central woodlands and the *Brachystegia* forests of the Lui drainage. Native gardening is widespread on the Barotse Plain, in the woodland and on seepage dambo margins and is becoming more so with the rising population and consequent land pressure. In places the land fallow is reduced to 2 years and cassava crops are left to coppice in place of cutting new gardens.

Mongu like Kalabo is floristically a poor district. The total woody flora is only about 500 species.

The following vegetation types are represented:

1. Closed Forest**A. Climatic**

1. Dry evergreen forest
 - a) *Cryptosepalum* forest
 - i) KS chipya
2. Dry deciduous forest
 - a) *Baikiaea* forest
 - i) *Pteleopsis* woodland

B. Edaphic

1. Swamp woodland
2. Riparian forest
 - a) Seepage dambo

2. Woodland

1. Miombo woodland
2. Kalahari woodland
3. Munga woodland
 - a) Dry dambo

3. Termitaria

1. Miombo termitaria
2. Munga termitaria

4. Grasslands

1. Floodplain

1. CLOSED FOREST**1.A.1a Dry Evergreen *Cryptosepalum* Forest**

This is the "mavunda" of NW Zambia, Trapnell's K1. It occurs almost pure in the NE where it crosses into the district from Mankoya between the Luena and Kabompo rivers. North and south of Lukula it is associated with Miombo/Kalahari woodland as far west as the Zambezi River. Mavunda even at its best is in the early stages of degrade with the upper storey invaded by *Brachystegia longifolia* and *B. spiciformis*.

Canopy dominants apart from the invasive *Brachystegia* species are *Cryptosepalum exfoliatum* subsp. *pseudotaxus* and *Guibourtia coleosperma*. Common small trees include *Raphia massaiensis* subsp. *obovata*, *Combretum psidioides*, *Diospyros batocana* and *D. undabunda* (the type tree of mavunda), *Hymenocardia acida*, *Ochna pulchra* and *Terminalia brachystemma*. These form a discontinuous understorey above the thicket. Shrubs of the dense thicket-like layer are chiefly *Bauhinia macrantha*, *Canthium captum* (virtually pure over small areas), *Chrysophyllum magalimontanum*, *Copaifera baumiana*, *Memecylon sapini*, *Paropsia brazzeana*, *Psorospermum baumi*, *Tricalysia revoluta* and *Xylopia odoratissima*.

Common sub-shrubs are *Bauhinia mendonçae*, *Diospyros virgata*, *Lepidagathis macrochila*, *Leptactina benguelensis* and *Strobilanthes linifolia*. Climbers and scramblers are confined to the thicket, especially *Baissea wulforthi*, *Canthium venosum*, *Landolphia camptoloba* and *L. parvifolia*, *Strophanthus welwitschi* and *Uvaria angolensis*. Grass is sparse and only rain forest grasses like *Bromuniola gossweileri* and *Panicum heterostachyum* are represented. Small gaps in the thicket layer frequently have a carpet of moss.

It seems likely that "mavunda" was once more widespread. In Mongu the present distribution of *Cryptosepalum* probably marks the original distribution of the "mavunda". Small relic patches of dense *Cryptosepalum* on dambo margins and the odd scattered examples of species like *Diospyros undabunda*, *Canthium captum* and *C. venosum* all point to this conclusion.

1.A.1a(i) KS Chipya

This is degraded *Cryptosepalum* forest, Trapnell's K11. It occurs only in Kikone and Mulondo Reserves in east-central Mongu between the Mulumba–Lukalanya drainage and Ndanda. It consists of tall closed canopy woodland over mavunda type thicket and occurs on "bracken" sands.

Canopy dominants are largely relic species like *Guibourtia* and *Syzygium guineense* subsp. *afromontanum* (present in "mavunda" in high rainfall areas) associated with invasive *Burkea africana*, *Erythrophleum africanum*, *Pterocarpus angolensis* and *Terminalia sericea*. In places *Baikiaea plurijuga* is associated suggesting that *Baikiaea* forest in the medium rainfall belt degrades to a very similar type of chipya.

The small tree understory is missing, or at least if present not well marked. The thicket is poorer in species but otherwise identical with "mavunda". *Canthium captum*, *C. venosum*, *Chrysophyllum magalimontanum*, *Clerodendrum tanganyikense*, *Landolphia camptoloba*, and *L. parvifolia* and *Uvaria angolensis* are common. *Bromuniola* and *Panicum* account for the sparse grass cover. This thicket layer, like that in "mavunda", is highly susceptible to fire and when burnt out is replaced temporarily by *Aframomum bauriculatum*. It does reappear however otherwise it would not be present in KS chipya which is fire degraded from mavunda.

1.A.2a Dry Deciduous Baikiaea Forest

Degraded relic *Baikiaea* "mutemwa" occurs chiefly in Namboma Forest Reserve between Situnda and the Lukau River. The large *Baikiaea* are moribund and stag-headed but in places there is a lot of pole growth, some of it apparently very fast grown. This is a medium rainfall belt and *Baikiaea* forest is no longer a dry deciduous forest – it is on its way to becoming a dry evergreen forest.

The thicket has vaguely sorted itself into three layers, of which only two are usually present in any one spot. The uppermost, very discontinuous layer is composed largely of invasive *Acacia ataxacantha*, *Baphia massaiensis* subsp. *obovata* and *Combretum celastroides*, the middle layer mostly of *Alchornea occidentalis*, *Bauhinia macrantha* and invasive *Markhamia obtusifolia*, and a bottom layer of *Croton scheffleri*. Climbing *Baijsea wulphorsti* is locally abundant and *Bauhinia* frequently acts like a climber. *Aframomum* occurs locally as a result of fire and this and *Nephrolepis undulata* fern form small colonies on the forest floor.

1.A.2a(i) Pteleopsis Woodland

A very small area of fire-degraded *Pteleopsis* woodland (Trapnell's K10) occurs near Peso near the Lukulu–Watopa road. The undergrowth is a degraded mutemwa-type thicket similar to the above and the overwood is a mixture of *Pteleopsis anisoptera* with KS invasives like *Burkea* and *Erythrophleum*.

1.B.1 Swamp Woodland

Small patches of swamp woodland occur along streams, in seepage dambos in the woodland belt and on the fringes of the Barotse Plain. The present relics consist of dense low (20–25 ft [6–8 m]) *Syzygium cordatum* and *Gardenia imperialis* over a dense shrub layer of *Coleus shirensis*, *Desmodium salicifolium* and *Ficus verruculosa*. Drainage channels within the swamp are often lined with clumps of the Royal Fern, *Osmunda regalis*. The climber *Ipomoea rubens* is generally abundant. Near habitations *Lantana camara* can be found invading the swamp.

1.B.2 Riparian Woodland

The upper reaches of the Luena River and the stream heads of all perennial streams carry a continuous fringe of gallery woodland 30 ft [9 m] high with the odd emergent tree. The fringe consists of *Syzygium cordatum* over *Bridelia micrantha*, and *Gardenia imperialis* over chiefly *Euclea schimperi* with *Desmodium salicifolium* and *Ficus pygmaea* as common subshrubs. *Artabotrys monteiroae* is the characteristic climber. Emergent trees include *Diospyros mespiliformis*, *Ficus capensis* and *Mimusops zeyheri*.

The sections of the Kabompo and Zambezi rivers within the district carry identical gallery woodlands very different to the above, forming a continuous fringe along the Kabompo but a degraded and highly discontinuous one along the Zambezi River.

Canopy species include *Acacia albida*, *Homalium abdessammadi* and *Syzygium guineense* subsp. *barotsense* with its feet in the water. *Rhus quartiniana* and *Sesbania sesban* are the commonest small trees and *Antidesma venosum*, *Desmodium salicifolium*, *Diospyros lycioides*, *Mimosa pigra* (in gaps), *Phyllanthus reticulatus* and *Urena lobata* are the commonest shrubs. Scrambling *Canthium zanzibaricum* and climbing *Tacazzea apiculata* are abundant. Gaps in the woody fringe are filled by *Phragmites mauritianus* reeds.

1.B.2a Seepage Dambos

Seepage dambos occur whenever the sand cap drops more or less sharply to the dambo. The vegetation consists of grasses, sedges, herbs, sub-shrubs, shrubs and even the odd tree species. *Syzygium guineense* subsp. *huillense* and *Phoenix reclinata* palms grow 10–15 ft [3–4.5 m] high. Common shrubs include the showy *Ascocarydion mirabile*, *Desmodium salicifolium*, *Eriosema psoraleoides*, *Ficus pygmaea*, *Myrica conifera*, *Protea welwitschi* and shrubby *Syzygium guineense* subsp. *huillense*.

2. WOODLAND

2.1 Miombo Woodland

Miombo woodland (Trapnell's P5) occurs in a very small (5 × 1 mile [8 × 1.6 km]) area in the Kabompo River Valley along the Lukulu–Watopa road on plateau/alluvial soil. Canopy dominants are chiefly *Brachystegia longifolia*, *Cryptosepalum exfoliatum* subsp. *pseudotaxus*, *Erythrophleum africanum*, *Guibourtia coleosperma*, *Isoberlinia angolensis* and *Julbernardia paniculata*. Common small trees include *Baphia massaiensis* subsp. *obovata*, *Brachystegia bakerana*, *Combretum zeyheri* and *Diplorhynchus condylocarpon*. *Cryptosepalum*, *Guibourtia* and *Brachystegia bakerana* are invaders from the surrounding Kalahari woodland.

2.2 Kalahari Woodland

Kalahari and Kalahari/Miombo woodlands cover the major part of the district. It is possible to distinguish areas of Trapnell's K3, K5, K7, K8, SK5 and SK6. Apart from the last three, which form the usual degrade catena towards the dambo margins, the rest of the well-drained woodland is markedly homogeneous and will be treated here as one broad type. The bulk of these Kalahari woodlands are regrowth in various stages as a result of native gardening.

The common canopy species are *Afzelia quanzensis* (especially in the north). *Brachystegia longifolia* (more or less uninterruptedly north of a line from the Kawaya plain to Mayankwa), *B. spiciformis* (in the east and centre, south of the Luena River and east of a line from Lipoda to Mwanalushi), *Burkea africana*, *Cryptosepalum exfoliatum* subsp. *pseudotaxus*, *Dialium englerianum*, *Erythrophleum africanum*, *Guibourtia coleosperma*, *Julbernardia paniculata* (in narrow belts along the Zambezi, Kabompo and Luena rivers and a few of the smaller streams), *Parinari curatellifolia*, *Pterocarpus angolensis*, *Ricinodendron rautaneii* (particularly around villages, missions and other settlements), *Syzygium guineense* subsp. *afromontanum* (very local and a mavunda relic) and *Terminalia sericea* (only on sandy dambo margins).

Of the above *Guibourtia*, *Pterocarpus* and *Brachystegia* species are the most widespread. *Burkea* and *Erythrophleum* only become obvious in the marginal K8. *Parinari* is occasionally pure on dambo margins. Over small areas any one or a mixture of these canopy species may be dominant.

Common small trees include *Baphia massaiensis* subsp. *obovata*, *Brachystegia bakerana* (restricted to the SW of the district especially in and around dambo heads – occasionally grows to timber size 2 ft diameter and 40 ft high [0.6 × 12 m]), *Combretum zeyheri*, *Diospyros batocana*, *Diplorhynchus condylocarpon*, *Hannoa chlorantha* (local especially around Namukashende), *Maprounea africana*,

Memecylon sapini, *Ochna pulchra* (the commonest understorey tree in the woodland), *Oldfieldia dactylophylla* (dambo margins), *Pseudolachnostylis maprouneifolia*, *Strychnos pungens*, *Terminalia brachystemma* and *Vangueriopsis lanciflora*.

Common shrubs include *Bauhinia macrantha* and *B. urbaniana*, *Copaifera baumiana*, *Kotschyia strobilantha* (dambo margins only), *Paropsia brazzeana*, *Psorospermum baumi*, *Tricalysia angolensis* and *Xylopi odoratissima*.

The bulk of the suffrutices found in Kalahari woodland are confined to the catenary strip on the gently sloping dry dambo margins in *Burkea* (K8) woodland, *Diplorhynchus* scrub (SK5) or *Suffrutex* savanna (SK6). Common species include *Ancylanthos rubiginosus*, *Annona stenophylla* subsp. *nana*, *Brackenridgea arenaria*, *Caloncoba suffruticosa*, *Chamaeclitandra henriquesiana*, *Diospyros virgata*, *Gardenia brachythamnus*, *Lannea gossweileri*, *Leptactina benguelensis*, *Magnistipula eglandulosa*, *Ochna leptoclada*, *Oldfieldia dactylophylla* (suffrutex form), *Parinari capensis* (the type species), *Protea welwitschi*, *Pygmaeothamnus zeyheri*, *Strobilanthisopsis linifolia*, *Tricalysia cacondensis* and *Triumfetta dekindtiana*. *Caloncoba*, *Chamaeclitandra*, *Diospyros*, *Gardenia*, *Leptactina*, *Ochna*, *Strobilanthisopsis*, *Tricalysia* and *Triumfetta* are woodland rather than savanna subshrubs.

Common climbers are *Baissea wulfhorsti*, *Cassytha filiformis*, *Landolphia camptoloba* and *Strophanthus welwitschi*. None of these ever reach the canopy, or very rarely.

Dense shrubberies of *Baphia* and *Bauhinia*, relic or regrowth from the marginal Kalahari woodland shrub layer, are found on the edge of the Barotse plain, particularly in areas of abandoned cultivation.

Where drainage is poor on the margin between Kalahari woodland and dambo, the K8 and SK5 subtypes sometimes form bush groups on low mounds. These are chunks of K8 woodland which have been isolated by erosion and a fluctuating water table.

2.3 Munga Woodland

A very open to almost closed woodland of *Acacia*, *Combretum* and *Terminalia* species occurs on the alluvial plains of the Kabompo River and the Zambezi River from the Kabompo mouth to south of Lukulu. Dominants include *Acacia albida*, *A. sieberana*, *Combretum ghasalense* and *Terminalia mollis*. *Acacia pilispina* occurs in pure groves to 40 ft high [12 m] with a closed canopy immediately north and south of Lukulu.

Common shrubs and small trees include *Diospyros lycioides*, *Mimosa pigra*, *Rhus quartiniana* and *Sesbania sesban*. Scrambling *Canthium zanzibaricum* and climbing *Tacazzea apiculata* are common. In places beneath the *Acacia pilispina* groves there is a mat of *Dyschoriste perrottetiana*. *Acacia albida* singly or in groups is scattered over the Barotse Plain, usually adjacent to the low mounds cultivated by the Africans. Presumably the Barotse Plain at one time carried somewhat similar vegetation.

2.3.a Dry Dambos

These carry a grass, sedge, herb, suffrutex vegetation. Common suffrutices include *Combretum platypetalum*, *Dissotis debilis*, *Epaltes alata*, *Eriosema pauciflorum* and *E. psoraleoides*, *Nidorella welwitschi* and *Vernonia glabra*.

3. TERMITARIA

3.1 Miombo Termitaria

These are of huge size and are restricted to the Miombo/Kalahari woodland in the Kabompo river valley. Canopy trees include *Diospyros mespiliformis* and *Manilkara mochisa* with the candelabra-like succulent *Euphorbia candelabrum*. Common small trees are *Boscia angustifolia*, *Dichrostachys cinerea*, *Maerua angolensis*, *Tarenna neurophylla* and *Ziziphus mucronata*. Shrubs are mostly

Bauhinia petersiana, *Byrosocarpus orientalis*, *Capparis tomentosa*, *Clerodendrum tanganyikense*, *Diospyros lycioides* and *Euclea schimperi*. The succulent *Aloe zebrina* is locally abundant.

3.2 Munga Termitaria

These occur on the alluvial flats of the Zambezi and Kabompo rivers or on dambo margins in Kalahari country. Dominants include *Albizia amara*, *Commiphora mollis*, *Lonchocarpus capassa* and *Sterculia quinqueloba* (a striking feature by the Lukulu–Watopa road). Common shrubs and small trees include *Allophylus africanus*, *Antidesma venosum*, *Byrsocarpus orientalis*, *Dichrostachys cinerea* (occasionally pure), *Diospyros lycioides*, *Euclea schimperi*, *Maerua angolensis*, juvenile *Phoenix reclinata* palms and *Phyllanthus reticulatus*. South of the Luena Flats munga termitaria only carry *Dichrostachys* and *Maerua* and little else.

4. GRASSLANDS

4.1 Floodplain

Edaphic grasslands of this type are a feature of the Barotse Plain and Luena Flats. They consist of a uniform mat of perennial bunch grasses with a leaf table at 4–6 ft high [1.2–1.8 m]. *Echinochloa pyramidalis* and *E. stagnina* are the characteristic grasses of the floodplain proper, with *Vossia cuspidata* where the flooding is deepest and most prolonged. Associated grasses include *Acroceras macrum*, *Digitaria abyssinica*, *Hemarthria altissima*, *Leersia hexandra*, *Oryza barthi*, *Panicum repens*, *Paspalum commersoni* and *Sacciolepis africana*. Permanent swamps carry *Ascocarydion mirabile*, *Cyperus papyrus*, *Phragmites mauritianus* reeds or *Typha angustifolia*, the bulrush.

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SPECIES LISTS

a – abundant, c – common, f – frequent, la – locally abundant, lf – locally frequent,
o – occasional, lo – locally occasional, r – rare; sa – sand

CRYPTOSEPALUM FOREST (K1)Canopy trees:

Brachystegia longifolia	f-lc
Brachystegia spiciformis	c-a
Burkea africana	o
Combretum mechowianum	o
Cryptosepalum exfoliatum	
subsp. pseudotaxus	c-a
Dialium engleranum	o
Erythrophleum africanum	o
Guibourtia coleosperma	o-lf
Julbernardia paniculata	lo
Parinari curatellifolia	o
Pteleopsis anisoptera	lo
Pterocarpus angolensis	o

Small trees:

Baphia massaiensis subsp. obovata	c
Bersama abyssinica	r
Chrysophyllum bangweolense	r-o
Combretum psidiodes	o-f
Combretum zeyheri	o
Diospyros batocana	f
Diospyros undabunda	f-c
Hannoa chlorantha	r
Hymenocardia acida	o-f
Ochna pulchra	f-c
Pseudolachnostylis maprouneifolia	o
Securidaca longepedunculata	o
Strychnos pungens	o
Terminalia brachystemma	o-lf
Uvariastrum hexaloboides	o
Vangueria infausta	o

Evergreen thicket shrubs:

Bauhinia macrantha	f
Bauhinia urbaniana	o-f
Bridelia duvigneaudii	o
Canthium captum	a
Canthium huillense	o
Chrysophyllum magalismontanum	c
Copaifera baumiana	c-a
Erythrococca menyharthii	r
Erythroxylum emarginatum	lo
Garcinia huillensis	r
Grewia falcistipula	o
Haplocoelum foliolosum	r
Memecylon sapini	o-f
Oldfieldia dactylophylla	o

Paropsia brazeana	f-o
Pavetta schumanniana	o
Psorospermum baumii	o-f
Rothmannia englerana	o
Rytigynia orbicularis	r
Tricalysia angolensis	o-f
Tricalysia revoluta	lf
Vitex madiensis	o
Ximenia americana	r
Ximenia caffra	r
Xylopia odoratissima	f

Sub-shrubs:

Barleria <i>s.n.</i>	o
Clerodendrum capitatum	lo
Clerodendrum tanganyikensis	o-lf
Crotalaria flavicarinata	o
Desmodium barbatum	lo
Diospyros virgata	o-f
Gardenia brachythamnus	lf
Hypoestes verticillaris	o
Kotschyia strobilantha	lo
Lepidagathis macrochila	o-f
Leptactina benguelensis	f
Octhocosmus lemaireanus	lo
Otiophora scabra	o
Pavetta pygmaea	r
Strobilathopsis linifolia	f-lc
Tephrosia cephalantha	o
Tinnea vestita	r
Tricalysia <i>s.n.</i>	r
Tricalysia cacondensis	lo
Triumfetta dekindtiana	o

Climbers and scramblers:

Baissea wulfhorsti	f
Canthium venosum	o-f
Cassytha filiformis	o
Combretum gossweileri	r
Jasminum streptopus	o
Landophia camptoloba	f-c
Landolphia parvifolia	c
Secamone stuhlmannii	o
Strophanthus welwitschii	o-f
Uvaria angolensis	a

Grasses:

Bromuniola gossweileri	lc
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KS CHIPYA

<u>Canopy trees:</u>		Memecylon sapini	o
Baikiaea plurijuga	lf	Phaulopsis longifolia	o-f
Burkea africana	o-lf	Solanum incanum – invasive	r
Erythrophleum africanum	f	Vitex madiensis	o
Erythrophleum suaveolens	r	Ximenia caffra	r-o
Guibourtia coleosperma	o		
Pterocarpus angolensis	o-lf	<u>Tall herb:</u>	
Syzygium guineense subsp. afromontanum	f-c	Aframomum biauriculatum	la
Terminalia sericea	o-lf		
<u>Shrubs and small trees:</u>		<u>Suffrutex:</u>	
Blepharis buchneri	lf	Tricalysia suffruticosa	r
Bridelia duvigneaudii	r-o		
Caloncoba suffruticosa	lo	<u>Climbers:</u>	
Canthium captum	o-f	Canthium venosum	f
Chrysophyllum magalismontanum	o-lf	Dioscorea hirtiflora	lo
Clerodendrum tanganyikense	lf	Jasminum streptopus	o
Coleus kapatensis	lo	Landolphia camptoloba	f-c
Grewia falcistipula	o	Landolphia parvifolia	f
Hibiscus mastersianus – invasive	lc	Secamone stuhlmannii	r-o
		Uvaria angolensis	f-c

BAIKIAEA MUTEMWA

<u>Shrubs and small trees:</u>		Sida cordifolia	o
Alchornea occidentalis	lc	Solanum panduriforme	lo
Baphia massaiensis subsp. obovata	f-c	Terminalia brachystemma	o-f
Bauhinia macrantha	f	Vangueria infausta	o-lf
Byrsocarpus orientalis	lo		
Clerodendrum capitatum	lo	<u>Climbers:</u>	
Combretum celastroides	lc	Acacia ataxacantha	lo
Combretum mechowianum	o-f	Bassea wulfhorsti	f-la
Croton scheffleri	lc	Ipomoea verbascoidea	lo
Grewia avellana	o	Jasminum streptopus	lo
Markhamia obtusifolia	o-lf		

SWAMP WOODLAND

<u>Canopy trees:</u>		Triumfetta cordifolia	lo
Gardenia imperialis	lf	Urena lobata	lo
Syzygium cordatum	a	Wissadula rostrata	r
<u>Shrubs:</u>		<u>Climbers:</u>	
Achyranthes aspera	r	Ipomoea rubens	o-f
Coleus shirensis	lf	Mucuna poggei	o
Desmodium salicifolium	f-lc		
Ficus verruculosa	lf	<u>Ferns:</u>	
Ludwigia stenorrhapha	lo	Osmunda regalis	lo

RIPARIAN WOODLANDCanopy trees:

Acacia albida	lo-lf
Acacia versicolor	o
Diospyros mespiliformis	lo
Ficus capensis	lo
Homalium abdessammadii	o
Kigelia africana	o
Lannea stuhlmanni	r-o
Lonchocarpus capassa	lo
Manilkara mochisa	r-o
Mimusops zeyheri	lo
Sclerocarya caffra	lo
Syzygium cordatum	a
Syzygium guineense subsp. barotsense	a

Small trees:

Antidesma venosum	f-c
Bridelia micrantha	lf
Croton leuconurus	o
Croton megalobotrys	r
Garcinia livingstonei	r
Gardenia imperialis	lf
Gardenia spatulifolia	r-o
Phoenix reclinata	r
Pleurostyliia africana	r
Rhus longipes	lo
Rhus quartiniana	f-lc
Salix subserrata	lo
Securinega virosa	r
Sesbania sesban	f
Tarenna rhodesiaca	r
Tricalysia andongensis	r

Shrubs:

Allophylus africanus	lo
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Byrsocarpus orientalis	o
Chrysophyllum magalimontanum	lo
Desmodium salicifolium	f
Diospyros lycioides	lf
Euclea schimperi	lo
Ficus pygmaea	lf
Flacourtia indica	r-o
Indigofera microcalyx	lf (sand)
Maytenus senegalensis	lo
Mimosa pigra	lc
Myrica conifera	lo
Oncoba spinosa	r
Phyllanthus reticulatus	f-c
Popowia obovata	lo
Premna senensis	r
Urena lobata	lf
Vernonia glabra	lf

Climbers:

Artabotrys monteiroae	lo
Canthium zanzibaricum	f
Cissampelos mucronata	o
Hippocratea africana	lo
Ipomoea rubens	o
Mucuna poggei	o
Paullinia pinnata	o
Phyllanthus mülleranus	r
Sabicea laurentii	r
Scutia myrtina	r
Tacazzea apiculata	f-c

Tall herbs:

Cyperus papyrus	lf
Phragmites mauritianus	c

SEEPAGE DAMBOShrubs:

Ascocarydion mirabile	lc
Cassia kirkii	r
Coleus shirensis	lo
Desmodium salicifolium	lf
Eriosema psoraleoides	o-f
Ficus pygmaea	f
Ficus verruculosa	lo
Myrica conifera	lf
Melstromastrum segregatum	lo
Phoenix reclinata	lf

Protea welwitschii	lf
Polygala gossweileri	r
Sesbania microphylla	lo
Sopubia welwitschii	r-o
Syzygium guineense subsp. huillense	lf-lc
Triumfetta cordifolia	lo
Urena lobata	lf

Climbers:

Dolichos africanus	r
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MIOMBO WOODLANDCanopy trees:

<i>Azelia quanzensis</i>	o-lf
<i>Erythrophleum africanum</i>	o-f
<i>Isobertia angolensis</i>	c-a
<i>Julbernardia paniculata</i>	f-c

Small trees:

<i>Acacia macrothyrza</i>	lo
<i>Anisophyllea boehmii</i>	o
<i>Bersama abyssinica</i>	o
<i>Diospyros kirkii</i>	o
<i>Diplorhynchus condylocarpon</i>	f
<i>Ochthocosmus lemaireanus</i>	o
<i>Ozorea reticulata</i>	o
<i>Pseudolachnostylis maprouneifolia</i>	f
<i>Rothmannia englerana</i>	o
<i>Schrebera trichoclada</i>	o

<i>Uapaca kirkiana</i>	lo
<i>Zanha africana</i>	o
<i>Ziziphus abyssinicus</i>	lo

Shrubs:

<i>Desmodium velutinum</i>	r
<i>Dichrostachys cinerea</i>	f
<i>Eriosema ellipticum</i>	o-f
<i>Holostylon baumi</i>	o
<i>Indigofera quarrei</i>	lo
<i>Ipomoea vernalis</i>	lo
<i>Phyllanthus discoideus</i>	lo

Suffrutices:

<i>Abrus pulchellus</i> subsp. <i>suffruticosus</i>	f
<i>Rhynchosia insignis</i>	o

KALAHARI WOODLANDCanopy trees:

<i>Acacia giraffae</i>	v.r
<i>Azelia quanzensis</i>	o-lf
<i>Albizia antunesiana</i>	o
<i>Albizia versicolor</i>	lo
<i>Amblygonocarpus andongensis</i>	o
<i>Baikiaea plurijuga</i>	lc
<i>Brachystegia longifolia</i>	lc
<i>Brachystegia spiciformis</i>	c-a
<i>Brachystegia wangermeeana</i>	r
<i>Burkea africana</i>	c-a
<i>Combretum mechowianum</i>	o-lf
<i>Cryptosepalum exfoliatum</i>	
subsp. <i>pseudotaxus</i>	lf-lc
<i>Dialium englerianum</i>	o-lf
<i>Erythrophleum africanum</i>	o-lf
<i>Ficus brachylepis</i>	r
<i>Ficus fischeri</i>	r
<i>Ficus rhodesiaca</i>	lf
<i>Ficus thonningii</i>	lf
<i>Guibourtia coleosperma</i>	o-f-lc
<i>Julbernardia paniculata</i>	lf
<i>Monotes glaber</i>	o
<i>Parinari curatellifolia</i>	o-lc
<i>Pteleopsis angolensis</i>	lo
<i>Pteleopsis anisoptera</i>	lo
<i>Pterocarpus angolensis</i>	o-lf
<i>Ricinodendron rautanenii</i>	v.lf
<i>Syzygium guineense</i> subsp. <i>afromontanum</i>	lf
<i>Terminalia sericea</i>	lf

<i>Bauhinia macrantha</i>	f-c
<i>Bauhinia urbaniana</i>	f
<i>Bersama abyssinica</i>	lo
<i>Brachystegia bakerana</i>	la
<i>Bridelia duvigneaudii</i>	lo
<i>Canthium captum</i>	lo
<i>Canthium huillense</i>	lo
<i>Chrysophyllum bangweolense</i>	lo
<i>Chrysophyllum magalimontanum</i>	lo
<i>Cissus cornifolia</i>	r
<i>Clerodendrum tanganyikense</i>	lf
<i>Combretum psidiodes</i>	o-f
<i>Combretum zeyheri</i>	o-f
<i>Copaifera baumiana</i>	c-a
<i>Dalbergia nitidula</i>	r
<i>Diospyros batocana</i>	f-c
<i>Diospyros undabunda</i>	lo
<i>Diplorhynchus condylocarpon</i>	c
<i>Ekebergia benguelensis</i>	r
<i>Erythrococca menyharthii</i>	r
<i>Erythroxyllum emarginatum</i>	r
<i>Flacourtia indica</i>	o
<i>Garcinia huillensis</i>	r
<i>Grewia falcistipula</i>	o-f
<i>Grewia flavescens</i>	r
<i>Grewia monticola</i>	lo
<i>Hannoa chlorantha</i>	o-lf
<i>Haplocoelum foliolosum</i>	r
<i>Hymenocardia acida</i>	c
<i>Indigofera sutherlandioides</i>	r
<i>Kotschyia strobilantha</i>	lf
<i>Lanea discolor</i>	o
<i>Lepidagathis macrochila</i>	o-lf

Shrubs and small trees:

<i>Baphia massaiensis</i> subsp. <i>obovata</i>	c-a
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Maprounea africana	f-c	Aspilia mossambicensis	r
Maytenus senegalensis	r	Barleria <i>s.n.</i>	lo
Memecylon sapini	lf	Blepharis buchneri	lf
Monotes angolensis	r	Bauhinia mendonçae	r
Monotes elegans	r	Brackenridgea arenaria	lc
Monotes katangensis	lo	Caloncoba suffruticosa	vlf
Ochna pulchra	a	Centemopsis gracilentia	r
Olax obtusifolia	lf	Chamaeclitandra henriquesiana	lc
Oldfieldia dactylophylla	lf	Clerodendrum ternatum	r
Ozoroa stenophylla	r	Clerodendrum uncinatum	o
Paropsia brazzeana	c	Coleus esculentus	r
Pavetta assimilis	r	Coleus kapatensis	r
Pavetta lasiopeplus	r	Crotalaria amoena	lo
Pavetta schumanniana	lo	Crotalaria flavicarinata	o
Phoenix reclinata	lo	Crotalaria variegata	o
Phyllanthus engleri	r	Cryptosepalum maraviense	vlf
Protea gagedi	r	Desmodium barbatum	lo
Protea petiolaris	r	Diplolophium zambesianum	r
Pseudolachnostylis maprouneifolia	c	Diospyros chamaethamnus	r
Psorospermum baumii	lf	Diospyros virgata	o-f
Psorospermum febrifugum	lo	Ectadiopsis oblongifolia	lo
Rothmannia engleriana	lo	Eugenia angolensis	lf
Rytigynia orbicularis	r	Fadogia monticola	lo
Sapium cornutum	r	Gardenia brachythamnus	lf
Schrebera trichoclada	lo	Hemizygia bracteosa	lo
Securidaca longepedunculata	o	Humularia megalophylla	lo
Steganotaenia araliacea	lo	Hypoestes verticillaris	o
Stereospermum kunthianum	r	Hyphaene ventricosa - seedlings	lo
Strychnos cocculoides	f	Indigofera griseoides	r
Strychnos pungens	f-c	Lanea gossweileri	lf
Strychnos spinosa	o-f	Leptactina benguelensis	o-f
Swartzia madagascariensis	o	Magnistipula eglandulosa	lf
Syzygium guineense subsp. huillense	v.lf	Napoleoa gossweileri	lf
Terminalia brachystemma	f-c	Nidorella microcephala	r
Tricalysia angolensis	lf	Ochna leptoclada	lf
Tricalysia revoluta	lo	Ochna richardsiae	r
Uapaca kirkiana	lo	Ochthocosmus lemaireanus	lc
Uapaca nitida	lo	Otiophora scabra	o
Uapaca robynsii	lf	Parinari capensis	la
Uvariastrum hexaloboides	lo	Pavetta pygmaea	r
Vangueria infausta	o	Phyllanthus maderaspatensis	lo
Vangueriopsis lanciflora	f	Phyllanthus welwitschianus	lo
Vernonia potamophila	r	Pleiotaxis rogersi	lo
Vernonia shirensis	r	Polygala gossweileri	lo
Vitex madiensis	o	Polygala nematophylla	lo
Vitex mombassae	o	Protea micans	lo
Ximenia americana	r-o	Psychotria kirkii	r
Ximenia caffra	o	Pygmaeothamnus zeyheri	lf
Xylopia odoratissima	o-f	Rhynchosia holosericea	lo
		Rothia hirsuta	r
<u>Sub-shrubs:</u>		Salacia bussei	vlf
Acalypha senensis	lo	Sapium oblongifolium	lo
Aloe zebrina	r	Scoparia dulcis	lf
Alvesia rosmarinifolia	lo	Sida cordifolia	lo
Ancylanthos rubiginosus	lf	Smilax kraussiana	lf
Annona stenophylla subsp. nana	lc	Sopubia welwitschii	lo

<i>Sphenostylis marginata</i> subsp. <i>erecta</i>	r	<i>Baissea wulfhorsti</i>	f-c
<i>Strobilanthesis linifolia</i>	o-f	<i>Bomania spectabilis</i>	r
<i>Strychnos caespitosa</i>	lf	<i>Canthium venosum</i>	lo
<i>Tephrosia cephalantha</i>	o	<i>Cardiospermum halicacabum</i>	lo
<i>Tephrosia s.n.</i>	lo	<i>Cassytha filiformis</i>	c
<i>Tinnea vestita</i>	r	<i>Cissampelos mucronata</i>	o
<i>Tricalysia cacondensis</i>	o-lf	<i>Combretum gossweileri</i>	r
<i>Tricalysia s.n.</i>	lr	<i>Combretum mossambicense</i>	r
<i>Triumfetta dekindtiana</i>	o-lf	<i>Helinus integrifolius</i>	r
<i>Tylosema fassoglensis</i>	r	<i>Ipomoea verbascoidea</i>	lo
<i>Vernonia glaberrima</i>	lo	<i>Jasminum streptopus</i>	o-lf
<i>Waltheria indica</i>	lo	<i>Landolphia camptoloba</i>	lf
<i>Xylopia tomentosa</i>	lf	<i>Landolphia parvifolia</i>	lo
<u>Climbers and scramblers:</u>		<i>Secamone stuhlmannii</i>	r
<i>Ampelocissus africana</i>	r	<i>Strophanthus welwitschii</i>	o-lf
<i>Ampelocissus obtusata</i>	r	<i>Thunbergia crispa</i>	r
<i>Asparagus racemosus</i>	lo	<i>Uvaria angolensis</i>	r

SUFFRUTEX SAVANNA

<u>Suffrutices:</u>		<i>Humularia megalophylla</i>	lo
<i>Alvesia rosmarinifolia</i>	lo	<i>Hyphaene ventricosa</i> - seedlings	o-lf
<i>Ancylanthus rubiginosus</i>	f-lc	<i>Landolphia gossweileri</i>	f-c
<i>Annona stenophylla</i> subsp. <i>nana</i>	f-c	<i>Magnispula eglandulosa</i>	lf
<i>Becium obovatum</i>	r-o	<i>Ochna manikensis</i>	lo
<i>Brackenridgea arenaria</i>	c-a	<i>Ochna pygmaea</i>	lo
<i>Diospyros chameathamnus</i>	r	<i>Ochna richardsiae</i>	r
<i>Dolichos densiflorus</i>	lo	<i>Oldfieldia dactylophylla</i>	lf
<i>Ectadiopsis oblongifolia</i>	lo	<i>Ozoroa nitida</i>	r
<i>Entada nana</i>	lo	<i>Parinari capensis</i>	a
<i>Eriosema pauciflorum</i>	r	<i>Protea welwitschii</i>	lf
<i>Eugenia angolensis</i>	lo	<i>Psychotria kirkii</i>	r
<i>Fadogia s.n.</i>	r	<i>Pygmaeothamnus zeyheri</i>	f-c
<i>Gnidia kraussiana</i>	r	<i>Rhus kirkii</i>	r
<i>Hibiscus rhodanthus</i>	r	<i>Strychnos caespitosa</i>	lo

MUNGA WOODLAND

<u>Canopy trees:</u>		<i>Entada abyssinica</i>	lo
<i>Acacia albida</i>	o-lf	<i>Flacourtia indica</i>	r
<i>Acacia polyacantha</i>	lo	<i>Gardenia spatulifolia</i>	r-o
<i>Acacia sieberiana</i>	a	<i>Heliotropium indicum</i>	lc
<i>Albizia harveyi</i>	lo	<i>Indigofera arrecta</i>	v.lf
<i>Ficus sycomorus</i>	r-o	<i>Mimosa pigra</i>	lf
<i>Lonchocarpus capassa</i>	o	<i>Pavetta lasiopeplus</i>	r
<i>Peltophorum africanum</i>	r-o	<i>Rhus quartiniana</i>	lf
<i>Terminalia mollis</i>	lc	<i>Sesbania sesban</i>	lf
<u>Shrubs and small trees:</u>		<i>Vernonia amygdalina</i>	r
<i>Acacia nilotica</i>	lo	<i>Vernonia glabra</i>	lf
<i>Allophylus africanus</i>	o	<i>Xeromphis obovata</i>	r
<i>Cleome hirta</i>	r	<u>Climbers:</u>	
<i>Combretum ghasalense</i>	lf	<i>Asparagus plumosus</i>	r
<i>Diospyros lycioides</i>	f	<i>Asparagus racemosus</i>	r-o

Canthium zanzibaricum	f	Jasminum fluminense	r
Cissampelos mucronata	o-f	Paullinia pinnata	lo
Ipomoea rubens	lo	Tacazzea apiculata	f

DRY DAMBOS AND PLAINS

<u>Suffrutices:</u>		Ipomoea vernalis	r
Acrocephalus gairdneri	lo	Lannea edulis	r
Combretum platypetalum	r	Nidorella welwitschii	lc
Epaltes alata	f-lc	Rhynchosia venulosa	lo
Eriosema psoraleoides	lf	Thesium fastigiatum	r
Eriosema pauciflorum	o-lf	Vernonia glabra	lf
Hermannia angolensis	lo	Vigna frutescens	lo
Indigofera congesta	lo		

ANTHILL VEGETATION

P – plateau woodland anthills, D – dambo margin, munga or riparian anthills

<u>Canopy trees:</u>		D Stereospermum kunthianum	lo
D Acacia sieberiana	lo	P Tarenna neurophylla	lf
D Albizia amara	lo	P Zizphus mucronata	lf
D Albizia harveyi	lo		
D Combretum imberbe	r	<u>Shrubs:</u>	
D Commiphora mollis	lf	D Aerva lanata	r
DP Diospyros mespiliformis	lo	D Allophyllus africanus	lf
P Euphorbia candelabrum	lf	P Bauhinia petersiana	lf
D Lonchocarpus capassa	lf	DP Byrsocarpus orientalis	lf
P Manilkara mochisia	lo	P Capparis tomentosa	lf
D Sterculia quinqueloba	lc	P Carissa edulis	lo
P Strychnos potatorum	r	P Clerodendrum capitatum	lo
		P Clerodendrum glabrum	lo
		P Clerodendrum tanganyikense	lf
<u>Small trees:</u>		DP Diospyros lycioides	f
D Antidesma venosum	lf	P Embelia schimperi	r
P Azanza garckeana	lo	DP Euclea schimperi	f
P Boscia angustifolia	lo	D Pavetta cataractarum	lo
P Boscia salicifolia	r	D Phyllanthus reticulatus	lf
P Combretum molle	lo	P Plumbago zeylanica	r
P Cordia n.s.	r	DP Popowia obovata	lo
P Cussonia kirkii	lo	P Premna senensis	lo
DP Dichrostachys cinerea	f	D Securinega virosa	lo
P Dombeya rotundifolia	r	D Vernonia aurantiaca	r
P Eleaodendron buchananii	lo	P Ximenia americana	lo
P Feretia aeruginescerus	r		
P Garcinia huillensis	lo	<u>Climbers:</u>	
P Gardenia jovis-tonantis	r	D Acacia ataxacantha	lo
P Hexalobus monopetalus	lo	P Adenia gummifera	r
DP Lannea discolor	o	D Gymnema sylvestre	r
DP Maerua angolensis	o-lf	D Jasminum fluminense	lo
P Maytenus heterophylla	lo		
P Mystroxydon aethiopicum	lo	<u>Succulents:</u>	
D Phoenix reclinata	lf	P Aloe zebrina	lf
P Phyllanthus discoideus	lo		

FLOODPLAINShrubs and tall herbs

Aeschynomene cristata

r

Ascocarydion mirabile

lc

Cyperus papyrus

la

Eriosema psoraleoides

o-lf

Kosteletzkyia buettneri

r

Ludwigia stenorraphe

lf

Melastromastrum segregatum

r

Phragmites mauritianus

la

Typha angustifolia

lc

Urena lobata

lo

FOREST RESEARCH PAMPHLET NO. 27, 1969**THE VEGETATION OF MWINILUNGA DISTRICT**

Mwinilunga District covers some 8,000 square miles [20,720 km²] of the Central African plateau in the north west corner of Zambia. It is bounded on the north by the Congo, on the west by Angola, on the east by Solwezi District, and on the south by Kabompo and part of Kasempa districts.

The northern boundary of the district is the watershed between the Zambezi and the Congo drainage systems. This is a fairly flat watershed with wide expanses of open watershed plain. The other main rivers are the west Lunga and the Kabompo. Almost all the streams are swift flowing in deep-sided valleys.

There are few prominent hill features in the district though there are numerous kopjes in the Lunga valley. Kalene Hill in the extreme north is probably the highest point, rising to over 5,000 ft [1525 m]. The southern parts of the district are some 1500 ft [458 m] lower. Distinct escarpments occur in places between the watershed and the deeper valley, e.g. the Kabompo gorge.

The mean annual rainfall, based on a 35 year period, is 54 inches [1370 mm]. It falls between November and April. December is the wettest month both in total rainfall and number of rainy days. The mean monthly temperature maximum is 81°F [27°C] and the minimum 55°F [13°C], with an absolute maximum of 94°F [34°C] and absolute minimum of 31°F [-0.6°C]. Frosts are normally very slight. The winds throughout most of the year are south-easterly.

The geology is complicated. Basic igneous rocks, especially granites, occur in the east and north west with the younger rock of the Kundelunga, Upper and Lower Roan in between, and the watersheds in the north and west capped by Kalahari sands.

The soils are either Kalahari sands or plateau soils. The Kalahari sands are deep and well-drained, and vary from buff on the contact soils to orange-red on the siltier soils. In the plateau group there are extensive occurrences of sheet laterite, lateritic gravel and quartz gravel on some of the ancient land surfaces, e.g. watersheds. Recent alluvium occurs in the lower Kabompo Valley. The middle Lunga Valley carries red or orange sandy clay loams derived from limestone. Chocolate to bright red clays derived from basic rocks are found near Matonchi. The pallid sandy silts found in the north west are derived from Karoo rocks and their associated granites.

The vegetation of the district is divided broadly between woodlands on Kalahari sand – mavunda, miombo/Kalahari woodland and the derived chipya woodland – and woodlands on plateau soils – miombo and LB chipya. The KS woodlands lie mostly along the Angolan and Congo borders. The plateau woodland lies in the north-west corner, in the south-centre and south-east. Watershed grasslands occur on the northern watersheds as far south as the Solwezi road. Bush groups occur along the lower Kabompo River.

The total woody flora is between 950 and 1000 species, the highest of any district in the territory, including over 50 woody species endemic to the district.

The following vegetation types are represented in the district :

1. Closed Forest**A. Climatic**

1. Dry evergreen forest
2. *Cryptosepalum* forest
 - (a) KS chipya
 - (b) Lake basin chipya
 - i) Chipya scrub

- B. Edaphic
 - 1. Swamp forest
 - 2. Riparian forest
 - (a) Seepage dambo
- 2. Open Forest with Grass**
 - 1. Miombo woodland
 - (a) Hill miombo
 - 2. Miombo / Kalahari woodland
 - (a) Watershed plain
 - (b) Dry dambo
- 3. Termitaria**
 - 1. Miombo / Kalahari termitaria
 - 2. Riparian termitaria
- 4. Grasslands**
 - 1. Dambo grassland
 - 2. Riverine grassland

1. CLOSED FOREST

1.A.2 *Cryptosepalum* Forest

This is Trapnell's K1, locally called mavunda, a type of dry evergreen forest characterised and frequently dominated by *Cryptosepalum exfoliatum* subsp. *pseudotaxus* restricted to the Kalahari sands and usually on the highest parts of the sandcap. It occurs in isolated pockets in the west north-west but covers extensive areas in the south-west of the district. The semi-evergreen canopy forms an almost continuous cover at 50–60 ft high [15–18 m] (top height 70–80 ft [21–24 m] in the best example), the understorey is discontinuous and semi-evergreen around 30–40 ft high [9–12 m] and the shrub layer is largely evergreen and dense to discontinuous at 4–20 ft high [1.2–6 m]. Ground cover is very sparse.

Common canopy species besides *Cryptosepalum* include *Albizia adianthifolia*, *Brachystegia floribunda*, *B. longifolia*, *B. spiciformis*, *Burkea africana*, *Erythrophleum africanum*, *Guibourtia coleosperma*, *Isobertia angolensis*, *I. tomentosa*, *Julbernardia paniculata*, *Marquesia acuminata*, *M. macroura*, *Pteleopsis anisoptera* and *Syzygium guineense* subsp. *afromontanum*. In the north west the dominants are usually the two *Marquesia* species, *Brachystegia spiciformis* and *Syzygium*. In the south west *Cryptosepalum*, the three *Brachystegia* and *Guibourtia* are dominant.

Small trees are represented chiefly by *Aidia micrantha*, *Chrysophyllum magalimontanum*, *Combretum celastroides*, *C. zeyheri*, *Diospyros batocana*, *D. undabunda*, *Pseudolachnostylis maprouneifolia*, *Sorindeia katangensis* and *Terminalia brachystemma*.

Common shrubs of the mavunda thickets include *Baphia whitei*, *B. bequaerti*, *Canthium captum* (the type species), *Coffea eketensis*, *Copaifera baumiana* (locally), *Craterispermum laurinum*, *Memecylon sapini*, *Paropsia brazzeana*, *Psychotria succulenta* and *Tricalysia angolensis*. *Harungana madagascariensis* and *Tecomaria capensis* are common on the fringes.

Subshrubs are chiefly the ubiquitous *Achyranthes aspera*, *Bauhinia mendoncea*, *Blepharis maderaspatensis*, *Clerodendrum* species, *Dolichos densiflorus*, *Indigofera* species, *Landolphia camptoloba* (sprawling to subscandent), *Myrsine africana*, *Psychotria heterostricta*, *Triumfetta dekindtinana* and *T. pedunculata* (on the fringes).

The scrambler element of the mavunda thicket consists largely of *Ancylobothrys amoena*, *Artabotrys monteiroae*, *Cathium venosum*, *Combretum celastroides*, *C. gossweileri*, *Landolphia kirki*, *L.*

parvifolia and *Uvaria angolensis*. The forest floor is bare or covered with mosses such as *Leucobryum perfalcatum*, *Campylopus chlorotrichus* and *Rhodobryum commersoni*, and patches of leaf litter. Sparse forest type grasses, e.g. *Bromuniola gossweileri* and *Megastachya mucronata*, occur in the more open places.

The Kalahari sands under mavunda are relatively bright coloured with humus staining in the top foot and of great depth.

1.A.2a Kalahari Sand Chipya Woodland / Lake Basin Chipya Woodland

These two types of vegetation are almost indistinguishable in the field. Both are derived directly from dry evergreen forest, or indirectly from Kalahari woodland. Kalahari sand (KS) chipya is the earlier, Lake Basin (LB) chipya the later stage of degradation due to fire, or cultivation which uses fire as a tool. The types on KS are intimately mixed with mavunda and miombo/Kalahari woodland (Trapnell's K2 and K3), often occurring as small islands in an otherwise well-timbered area, or as more extensive tracts in area of present or past high population. LB chipya also occurs on plateau soils – bright orange or brick-red deep sandy loams. The type here is restricted to the valley of the Upper Lunga and the dolerites of the extreme west near Matonchi Farm. The canopy is open to very open around 40 ft high [12 m] with a moderately dense understorey of small trees and sparse shrub layer.

In general, tall trees are chiefly *Albizia adianthifolia*, *Brachystegia glaberrima* (locally), *B. spiciformis*, *B. utilis*, *Burkea africana*, *Erythrophleum africanum* (the type species), *Guibourtia coleosperma*, *Isoberlinia angolensis* and *I. tomentosa*, *Marquesia acuminata* (in the north) and *Syzygium guineense* subsp. *afromontanum*. *Guibourtia* and *Syzygium* are still present in the early stages of Kalahari sand chipya but absent from the later stages of Lake Basin chipya.

Small trees are chiefly the *Combretums* (*C. celastroides*, *C. psidioides* and *C. zeyheri*), *Cussonia kirki*, *Diplorhynchus condylocarpon*, *Ochna pulchra*, *Oldfieldia dactylophylla*, *Pseudolachnostylis maprouneifolia*, *Syzygium guineense* subsp. *macrocarpum*, *Terminalia brachystemma* and *T. mollis* and the *Uapacas* (*U. kirkiana*, *U. nitida* and *U. sansibarica*).

Shrubs are few, mostly *Hymenocardia acida*, *Paropsia brazzeana* and *Tricalysia angolensis*. Sub-shrubs are more frequent, e.g. *Adenodolichos rhomboideus*, *Dissotis brazzae*, *Endostemon dissitifolius*, *Hypoestes verticillaris*, *Myrsine africana*, *Tetracera masuiana* (locally) and *Vernonia guineensis*, but especially the chipya indicators *Aframomum bauriculatum*, *Pteridium aquilinum* and *Smilax kraussiana*, of which one or more forms a complete carpet over most of the chipya woodland. Climbers are very restricted, only *Strophanthus welwitschi* is at all common.

1.A.2b.i Chipya Scrub

Chipya scrub is a low open woodland distinct from chipya woodland occurring on the catena between miombo/Kalahari woodland and dambo or watershed plain. Trees are rarely more than 30 ft high [9 m], usually 10–20 ft high [3–6 m]. It often occurs on the flat watersheds which are waterlogged periodically during the rainy season.

Emergent trees are few, mostly *Brachystegia longifolia*, *Burkea africana* and *Erythrophleum africanum*. Small trees which make up the bulk of the upper storey are chiefly *Combretum psidioides*, *Diplorhynchus condylocarpon*, *Ochna pulchra*, *Oldfieldia dactylophylla*, *Syzygium guineense* subsp. *huillense*, *Terminalia brachystemma*, *Uapaca kirkiana* and *U. robynsi* (the characteristic small tree/shrub of these areas).

Shrubs are represented by *Aeschynomene rubrofarinacea*, *Humularia bequaerti*, *Hymenocardia acida* (the type species), *Philippia benguelensis* (a heath-like shrub which also characterises these areas), *Pteridium aquilinum* (locally) and *Tricalysia angolensis*. Sub-shrubs are mostly *Acalypha stuhlmannii*, *Acrecephalus sericeus* and *Kotschya carsoni*, with invasive *Hibiscus hiernianus*. There are no climbers.

1.B.1 Swamp Forest

There are areas of edaphically-controlled forest at the heads of streams or in sumps where the water table is at or above ground level throughout the year. They occur in the north-east of the district, sometimes several hundred acres in extent. The canopy is dense and even, around 80 ft high [24 m] in the best examples. Most swamp forests are composed almost entirely of two or three dominant species. The characteristic tree is *Chrysophyllum magalismontanum*. Associates are chiefly *Mitragyna stipulosa* (locally), *Syzygium cordatum* (on the fringes), *S. owariense*, *Uapaca guineensis*, *Xylopia aethiopica* and *X. rubescens*.

Small trees are chiefly *Garcinia smeathmanni*, *Gardenia imperialis* and *Phoenix reclinata* palms, shrubs mostly *Cephaelis peduncularis*, *Dracaena camerooniana* and *Triumfetta cordifolia* (on the fringes). Sub-shrubs are represented by pure stands of *Aframomum angustifolium*, *Hypoestes aristata* and *H. triflora*, with *Coleus shirensis* on the fringes. *Dalbergia malangensis* appears to be the only common climber.

In places fire has destroyed sections of these forests in spite of the high water table, but in almost every case copious regeneration of the dominants is to be seen.

1.B.2 Riparian Forest

Gallery forest clothes most of the streams, at least in their upper reaches, with strips 30–250 yards wide [27–230 m]. The composition is very rich, especially in the north and north-west where many endemic species from the Congo and Angola occur. There are no real dominants as in swamp forest, but some species are more common than others. The commoner tall trees are *Albizia adianthifolia*, *Bridelia micrantha*, *Cleistanthus milleri*, *Craibia affinis*, *Newtonia aubrevillei* (local), *Syzygium cordatum* (the type tree), *S. guineense* subsp. *barotsense*, *S. owariense* and *Uapaca guineensis*, the last two especially where riparian approaches swamp forest.

Small trees are chiefly *Diospyros lycioides*, *Drypetes gerrardi*, *Erythroxylum emarginatum*, *Gardenia imperialis*, *Phoenix reclinata* palms, *Psychotria succulenta*, *Rhus anchietae*, *R. longipes* and *Salix subserrata* on the lower reaches.

Shrubs are abundant, chiefly *Acalypha chirindica* (on the fringes), *Chaetocarpus africanus* (locally), *Coffea eketensis*, *Craterispermum laurinum*, *Dissotis princeps* (on the fringes), *Gaertnera paniculata*, *Maesa lanceolata*, *Pauridiantha holsti*, *Peddiea fischeri*, *Rytigynia umbellulata*, *Sorindeia katangensis*, *Tricalysia angolensis*, with *Triumfetta dekindtiana* and *Urena lobata* on the fringes. *Phragmites* reeds line the streams in the lower reaches.

Sub-shrubs are not so common, mostly *Achyranthes aspera*, *Coleus shirensis* and *Coleus* sp. (8485), *Dicliptera nemorum*, *Myrsine africana*, *Psychotria heterosticta* with *Tephrosia elata* on the fringes.

Climbers are well represented, especially *Canthium gueinzi* and *C. venosum*, *Combretum gossweileri*, *Dalbergia malangensis*, *Leptoderris goetzei* and *L. nobilis*, *Mucuna poggei* (the itchy bean on the fringes or secondary), *Rutidea olenotricha*, *Tetracera alnifolia* and *Uvaria angolensis*.

Mwinilunga still possesses examples of the complete riparian fringes which no longer exist in any other district. The Isombo stream in the north-west is a case in point. Riparian vegetation stretches from the stream bank right up the slope to the point where moisture availability becomes a limiting factor and Kalahari woodland takes over. Between the gallery and Kalahari woodland lies a sharp dividing line.

1.B.2a Seepage Dambo

Moist or wet dambos carry a vegetation of shrubs, suffrutices, herbs, grasses and sedges, the shrubs 6–8 ft high [1.8–2.4 m], the sub-shrubs 2–3 ft high [0.6–0.9 m]. Common shrubs include *Ascocarydion mirabile* (in pure stands), *Dissotis princeps*, *Eriosema psoraleoides*, *Kotschyia africana*, *Protea welwitschi*, *Sesbania sesban* and *Triumfetta cordifolia*.

Sub-shrubs are chiefly *Dissotis canescens*, *Gnidia kraussiana*, *Nidorella welwitschi*, *Sopubia* species and *Syzygium guineense* subsp. *huillense*.

2. OPEN FOREST WITH GRASS

2.1. Miombo Woodland

Miombo woodland on plateau soil occurs chiefly in the north-west, south centre and south-east of the district. This is typical *Brachystegia–Isoberlinia–Julbernardia* woodland, usually in admixtures of two or more of the dominants, but occasionally dominated by one species over small areas.

Dominants include *Brachystegia boehmi*, *B. floribunda*, *B. glaberrima*, *B. longifolia*, *B. spiciformis*, *B. utilis* and *B. wangermeeana* (locally), *Isoberlinia angolensis* and *I. tomentosa*, *Julbernardia paniculata* and *Marquesia macroura*. Even *Julbernardia globiflora* occurs in a pocket in the south-east corner, quite a way outside its previously known range.

Small trees are chiefly *Cussonia kirki*, *Diospyros batocana*, *Diplorhynchus condylocapon*, *Pseudolachnostylis maprouneifolia*, *Syzygium guineense* subsp. *macrocarpum* and *Uapaca kirkiana* and *U. nitida*.

Common shrubs include *Dichrostachys cinerea*, *Eriosema ellipticum*, *Heteromorpha trifoliata*, *Humularia bequaerti*, *Kotschya aeschynomoides*, *Protea angolensis*, *P. gaguedi*, *Salacia rhodesiaca* and *Tricalysia angolensis*.

Sub-shrubs are numerous, especially *Aframomum bauriculatum*, *Clitoria kaessneri*, *Cryptosepalum maraviense*, *Desmodium barbatum*, *Diplolophium zambesianum*, *Fadogia triphylla*, *Hypoestes verticillaris*, *Indigofera* species, *Myrsine africana*, *Pleiotaxis rogersi*, *Pteridium aquilinum* (bracken fern) and *Vernonia* species. The few climbers are occasional at best.

2.1.a Hill Miombo

Hills are not a feature of the district, apart from the 5,000 ft high [1525 m] sandstone Kalene Hill in the north. But kopjes are quite common in the Lunga valley and most of the rivers have rocky escarpments bordering part of their route, for instance the Kabompo Gorge. Kalene Hill is covered with miombo woodland, but the vegetation of the kopjes and scarp slopes is peculiar to such sites.

Characteristic small trees and shrubs of rocky sites include *Dichaetanthera rhodesiensis*, *Elephantorrhiza goetzei*, *Euphorbia sereti* (peculiar to Kabompo gorge), *Hymenodictyon floribundum*, *Iboza riparia*, *Ozoroa pwetoensis*, *Tecomaria capensis*, *Tinnea rhodesiana* and *Vellozia equisetoides*.

Characteristic sub-shrubs include *Aeolanthus myrianthus* (which produces the essential oil-nindi), *Aloe mzimbana* and *Barleria crassa*.

2.2. Miombo / Kalahari Woodland

This is represented in Mwinilunga District chiefly by Trapnell's K2 woodland. It is Miombo/Kalahari woodland rather than Kalahari woodland with *Brachystegia*, *Isoberlinia* and *Julbernardia* species among the canopy dominants besides the species typical of Kalahari woodland.

At its best development, canopy height reaches 90 ft [27 m]. The trees are well-grown and straight-boled. They occur on the sand caps on either side of the Lunga River and on the better-drained areas in the north-west. Over extensive areas the stands are fairly uniform.

Canopy dominants include the *Brachystegias*, *B. longifolia*, *B. spiciformis*, *B. utilis* and *B. wangermeeana*, *Albizia adianthifolia*, *Burkea africana*, *Cryptosepalum exfoliatum* subsp. *pseudotaxus*, *Erythrophleum africanum*, *Guibourtia coleosperma*, *Isoberlinia angolensis*, *I. tomentosa*, *Julbernardia paniculata*, *Marquesia acuminata* and *M. macroura*, *Pteleopsis anisoptera* and *Pterocarpus angolensis*.

Small trees with two exceptions are typical of miombo woodland, namely *Anisophyllea boehmi*, *Brachystegia puberula* (endemic to the district), *Combretum zeyheri*, *Diospyros batocana*, *Diplorhynchus condylocarpon*, *Monotes* species and *Pseudolachnostylis maprouneifolia*, *Terminalia brachystemma*, *Uapaca kirkiana*, *U. nitida* and *U. sansibarica*. The *Brachystegia* and *Terminalia* species are KS species.

The shrub layer is sparse except where there are relic mavunda thickets, mostly *Baphia massaiensis* subsp. *obovata*, *Hymenocardia acida*, *Paropsia brazzeana* and *Tricalysia angolensis*.

The sub-shrub layer is rich with species like *Clerodendrum triplinerve*, *Desmodium barbatum*, *Fadogia triphylla*, *Hypoestes verticillaris*, *Indigofera sutherlandioides*, *Landolphia camptoloba*, *Leptactina benguelensis*, *Myrsine africana*, *Parinari capensis* (on the fringes) and *Triumfetta angolensis*, with the chipya indicators *Afromomum bauriculatum*, *Pteridium aquilinum* (bracken fern) and *Smilax kraussiana* forming a continuous carpet singly or in conjunction over most of the woodland. *Canthium venosum* of the relic thickets is the only common climber.

The contact between Miombo/Kalahari and Miombo woodland is marked by belts of *Monotes* species, *Uapaca sansibarica* and *Protea* species, which are more-or-less absent from the woodland proper.

2.2.a Watershed Plain

There are flat or slightly convex slopes found on the watersheds with a high percentage of low woody plants and sparse grasses. The woody flora is rich. Many of the woody species genera found in the woodland are represented here by species which grow more than a foot [0.3 m] high, e.g. *Parinari*, *Magnistipula*, *Syzygium*, *Entada*, *Ochna*, *Xylopia*, *Garcinia*, *Combretum*, etc. Most have massive and extensive woody rootstocks. The soils show a well defined "gley" layer at 4–6 ft [1.2–1.8 m] deep where grasses are scarce and peat and humus rare in the profile, or 2–4 ft [0.6–1.2 m] deep where grass and peat are more abundant. The watershed plains are restricted to the north of the district, north of the Solwezi road.

Many shrubs have strayed from the chipya scrub of KS woodland on to the margins of the watershed plains. The commonest of them are *Diplorhynchus condylocarpon*, *Hymenocardia acida*, *Oldfieldia dactylophylla*, *Protea welwitschi* and *Uapaca robynsi*. *Hymenocardia* and *Oldfieldia* occur throughout the plains.

Common suffrutices include *Acalypha stuhlmanni*, *Acrocephalus sericeus* and allied species (occasionally so abundant as to form a blue haze when in flower in May), *Annona stenophylla* subsp. *nana*, *Brackenridgea arenaria*, *Combretum platypetalum*, *Humularia bequaerti*, *Lannea edulis*, *Parinari capensis* and *Syzygium guineense* subsp. *huillense*.

2.2.a Dry Dambos

Dry dambos mostly occur in the south of the district. These are shrub, suffrutex, herb, grass, sedge grasslands with shrubs to 6 ft [1.8 m] high and suffrutices to 3 ft [0.9 m] high. *Acacia polyacantha* tends to be invasive on their margins.

Common shrubs are *Protea welwitschi* and the bracken fern *Pteridium aquilinum*. Characteristic suffrutices include *Annona stenophylla* subsp. *nana*, *Combretum platypetalum*, *Lannea edulis*, *Microglossa angolensis*, *Rytigynia lewisi* (local) and *Tetracera masuiana*. The vegetation is very like that of watershed plains.

3. TERMITARIA

3.1 Miombo / Kalahari Termitaria

Termitaria are prominent both in the miombo and miombo/Kalahari woodlands and on dambo margins. There is little difference in mound vegetation on the different sites.

Common tall trees are chiefly *Boscia angustifolia* (one on every third termite mound), *Combretum molle*, *Erythrina abyssinica*, *Euphorbia candelabrum*, *Markhamia obtusifolia* and *Ziziphus mucronata*, and the small trees *Cussonia kirki* (especially on miombo termitaria) and the bamboo *Oxytenanthera abyssinica*.

Shrubs are commonly represented by *Acalypha chirindica*, *Clerodendrum tanganyikense* and *Pavetta schumanniana*, sub-shrubs by the spotted leaf *Aloe greatheadi*, *Hypoestes verticillaris* and the succulent *Sansevieria kirki*. The only common climber is *Vernonia aurantiaca*.

3.2 Riparian Termitaria

Bush groups, i.e. munga termitaria, with a partial or complete surround of riparian or dambo species as a result of a permanently moist surround or lower Kabompo River.

The vegetation of the mounds is very similar to the above but the fringes are characterised by the following species – *Garcinia huillensis*, *Antidesma venosum*, *Phoenix reclinata* palms, *Rhus quartiniana* among the trees and *Allophylus africanus*, *Canthium zanzibaricum*, *Diospyros lycioides*, *Phyllanthus reticulatus* and *Sesbania sesban* among the shrubs. The climber *Tacazzea apiculata* is locally frequent.

4. GRASSLANDS

4.1 Dambo Grassland

The vegetation is a moderately dense mat of grasses sedges and herbs 20–30 inches [0.5–0.8 m] high, with flowering culms 3–5 ft [0.9–1.5 m] high. The grasses are perennial bunch-grasses, cushion-like or tussocky, with *Loudetia simplex* as the characteristic species.

The seepage heads of the small streams are surrounded by bog grassland. Here the herb mat is dense, of uneven height, composed largely of late flowering tussocky grasses to 9 ft [2.7 m] high. *Hyparrhenia bracteata* is the dominant and characteristic species.

4.2 Riverine Grassland

The perimeter zone is a narrow belt of *Hyparrhenia* grasses of many different species. Bunch grasses typified by *Loudetia simplex* cover extensive areas of seasonally inundated plain.

Lagoons have dense semi-floating beds of water grasses such as *Vossia cuspidata* and *Echinochloa* species. More permanent swamps carry *Cyperus* (sedge) or *Typha* (bulrush) beds. *Phragmites* reed beds fringe the large streams and the Kafue River.

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SPECIES LISTSKey to vegetation types:

P	Miombo woodland	H	Rock outcrops
K1	<i>Cryptosepalum</i> dry evergreen forest	A	Anthills
K	Kalahari woodland	T	Thicket
R	Riparian forest	D	Dambo
S	Swamp forest	SK	Watershed grassland

a – abundant, c – common, lf – locally frequent, o – occasional, lo – locally occasional, r – rare

MAVUNDA (K1) & KALAHARI WOODLAND (K)Canopy trees:

K	<i>Azelia quanzensis</i>	lo	K1	<i>Cassipourea congensis</i>	lo
K1.K	<i>Albizia adianthifolia</i>	o-lf	K1.K	<i>Chrysophyllum bangweolense</i>	lo
K	<i>Amblygonocarpus andongensis</i>	lo	K1.K	<i>Chrysophyllum magalismontanum</i>	o-lf
K1.K	<i>Brachystegia longifolia</i>	o-lc	K	<i>Combretum acutifolium</i>	r
K1.K	<i>Brachystegia floriounda</i>	o-lf	K1	<i>Combretum celastroides</i>	o-lf
K1.K	<i>Brachystegia spiciformis</i>	f-lc	K1.K	<i>Combretum psidioides</i>	lo
K	<i>Brachystegia utilis</i>	lf	K1.K	<i>Combretum zeyheri</i>	o-lf
K	<i>Brachystegia wangermeeana</i>	lf	K1.K	<i>Craterosiphon quarrei</i>	lo
K1.K	<i>Burkea africana</i>	o-lf	K	<i>Dalbergia nitidula</i>	lo
K1.K	<i>Combretum mechowianum</i>	lo	K1.K	<i>Diospyros batocana</i>	o-lf
K1.K	<i>Cryptosepalum exfoliatum</i>		K1.K	<i>Diospyros undabunda</i>	o-lf
	subsp. <i>pseudotaxus</i>	f-lc	K	<i>Diplorhynchus condylocarpon</i>	lf
K1.K	<i>Dialium englerianum</i>	lo	K1	<i>Drypetes gerrardii</i>	lo
K1.K	<i>Erythrophleum africanum</i>	o-lf	K1.K	<i>Ekebergia benguelensis</i>	lo
K1.K	<i>Faurea saligna</i>	lo	K1	<i>Ficus dekdekana</i>	lo
K1.K	<i>Guibourtia coleosperma</i>	v.lf	K1	<i>Ficus (3288)</i>	r
K1.K	<i>Isoberlinia angolensis</i>	lf	K1.K	<i>Garcinia huillensis</i>	lo
K1.K	<i>Isoberlinia tomentosa</i>	lf	K1	<i>Garcinia punctata</i>	v.lo
K1.K	<i>Julbernardia paniculata</i>	f-lc	K1.K	<i>Hannoa chlorantha</i>	v.lo
K1.K	<i>Lannea stuhlmannii</i>	lo	K1	<i>Haplocoelum foliolosum</i>	lo
K1.K	<i>Marquesia acuminata</i>	o-lc	K	<i>Maprounea africana</i>	lo
K1.K	<i>Marquesia macroura</i>	o-lf	K	<i>Monotes adenophyllus</i>	lo
K1.K	<i>Parinari curatellifolia</i>	lo	K1.K	<i>Monotes autennei</i>	lo
K1.K	<i>Parinari excelsa</i>	lo	K	<i>Monotes dasyantha</i>	lo
K1.K	<i>Pteleopsis anisoptera</i>	lo-lf	K	<i>Monotes elegans</i>	lo
K1.K	<i>Pterocarpus angolensis</i>	o-lf	K	<i>Monotes glaber</i>	lo
K1.K	<i>Ricinodendron rautanenii</i>	r-lo	K	<i>Monotes katangensis</i>	o-lf
K	<i>Sclerocarya caffra</i>	r	K1.K	<i>Monotes redheadii</i>	r
K1	<i>Syzygium guineense</i>		K1	<i>Ochna afzelioides</i>	lo
	subsp. <i>afromontanum</i>	o-lf	K1.K	<i>Ochna pulchra</i>	lo
K1.K	<i>Terminalia sericea</i>	lo	K1.K	<i>Ochthocosmus lemaireanus</i>	lo
K1	<i>Xylopia aethiopica</i>	r	K1	<i>Oldfieldia dactylophylla</i>	lo
K	<i>Ziziphus mucronata</i>	lo	K1	<i>Olea capensis</i>	lo
			K1	<i>Pleurostyliya africana</i>	lo
			K1.K	<i>Protea petiolaris</i>	lo
			K1.K	<i>Pseudolachnostylis maprouneifolia</i>	o-lf
			K1	<i>Rothmannia engleriana</i>	lo
			K1.K	<i>Schreberia trichoclada</i>	lo
			K1	<i>Sorindeia katangensis</i>	o-lf
			K	<i>Strychnos innocua</i>	lo
			K1	<i>Strychnos pungens</i>	lo
			K	<i>Swartzia madagascariensis</i>	lo

Small trees:

K1	<i>Aidia micrantha</i>	o-lf
K1.K	<i>Anisophyllea boehmii</i>	o-lf
K1	<i>Apodytes dimidiata</i>	r
K1.K	<i>Bersama abyssinica</i>	lo
K	<i>Brachystegia puberula</i>	v.lf
K1	<i>Bridelia micrantha</i>	r

K1	<i>Tabernaemontana angolensis</i>	lo	K1.K	<i>Memecylon sapini</i>	o-lf
K1	<i>Tarenna pavetoides</i>	lo	K1	<i>Ochna puberula</i>	r
K1	<i>Teclea nobilis</i>	lo	K1	<i>Olinia usambarensis</i>	r
K1.K	<i>Terminalia brachystemma</i>	o-lf	K1.K	<i>Ouratea andongensis</i>	v.lo
K1	<i>Tricalysia mytifolia</i>	lo	K1	<i>Ouratea hierni</i>	r
K	<i>Uapaca banguelensis</i>	lo	K1	<i>Ouratea welwitschii</i>	v.lo
K	<i>Uapaca kirkiana</i>	lf	K1.K	<i>Paropsia brazzeana</i>	lf
K	<i>Uapaca nitida</i>	lf	K1	<i>Pavetta assimilis</i>	lo
K	<i>Uapaca sansibarica</i>	o-lf	K1	<i>Peddiea fischeri</i>	lo
K1.K	<i>Uvariastrum hexaloboides</i>	lo	K1.K	<i>Phyllanthus discoideus</i>	lo
K1.K	<i>Vangueriopsis lanciflora</i>	lo	K1	<i>Phyllanthus polyanthus</i>	r
K1	<i>Vitex fischeri</i>	r	K1	<i>Pittosporum mannii</i>	r
<u>Shrubs:</u>			K1	<i>Popowia gracilis</i>	lo
K1	<i>Alchornea occidentalis</i>	v.lo	K1	<i>Protea madiensis</i>	lo
K	<i>Allophyllus africanus</i>	r	K1	<i>Psychotria succulenta</i>	o-lf
K	<i>Ancylanthos bainesi</i>	r-lo	K1	<i>Rawsonia lucida</i>	lo
K	<i>Ancylanthos fulgidus</i>	r	K1	<i>Rothmannia whitfieldi</i>	lo
K	<i>Ancylanthos rubiginosus</i>	lo	K1	<i>Rytigynia umbellulata</i>	lo
K1	<i>Aulacocalyx jasminiflora</i>	lo	K1.K	<i>Sapium cornutum</i>	lo
K1.K	<i>Baphia bequaerti</i>	o-lf	K1.K	<i>Securidaca longepedunculata</i>	lo
K	<i>Baphia massaiensis</i> subsp. <i>obovata</i>	o-v.lf	K1	<i>Tecomaria capensis</i>	lf
K1	<i>Baphia whitei</i>	o-lf	K1	<i>Thecacoris trichogyne</i>	lo
K	<i>Bridelia cathartica</i>	lo	K	<i>Tinnea rhodesiana</i>	r
K1.K	<i>Bridelia duvigneaudi</i>	lo	K1.K	<i>Tricalysia angolensis</i>	o-lf
K1.K	<i>Byrsocarpus orientalis</i>	lo	K1	<i>Tricalysia revoluta</i>	v.lo
K1	<i>Canthium captum</i>	lf	K1.K	<i>Vangueria infausta</i>	lo
K1.K	<i>Canthium huillense</i>	v.lo	K1	<i>Vitex madiensis</i>	lo
K1	<i>Canthium schimperanum</i>	lf	K1.K	<i>Vitex mombassae</i>	lo
K1	<i>Cephaelis peduncularis</i>	v.lo	K1	<i>Vitex payos</i>	r
K1	<i>Coffea eketensis</i>	f-k	K	<i>Xeromphis obovata</i>	lo
K1	<i>Copaifera baumiana</i>	v.lc	K1.K	<i>Ximenia americana</i>	lo
K1	<i>Craterispermum laurinum</i>	o-lf	K	<i>Ximenia caffra</i>	lo
K1	<i>Cremaspora triflora</i>	lo	K1.K	<i>Xylopia odoratissima</i>	r
K	<i>Dichrostachys cinerea</i>	lo	<u>Sub-shrubs:</u>		
K1	<i>Diospyros lycioides</i>	lo	K	<i>Abrus pulchellus</i> ssp. <i>suffruticosus</i>	lo
K	<i>Dombeya burgessiae</i>	r-lo	K	<i>Acalypha allenii</i>	lo
K1	<i>Embelia schimperii</i>	r	K1	<i>Achyranthes aspera</i>	o-lf
K1	<i>Enneastemon schweinfurthii</i>	lo	K	<i>Acrocephalus sericeus</i>	lo
K	<i>Eriosema ellipticum</i>	lo	K	<i>Acrocephalus (3223)</i>	lo
K1.K	<i>Erythrococca menyharthii</i>	r-lo	K	<i>Aeschynomene baumi</i>	lo
K1	<i>Erythrococca welwitschiana</i>	r-lo	K1.K	<i>Afromomum biauriculatum</i>	f-lc
K1	<i>Erythroxyllum emarginatum</i>	lo	K	<i>Agathisanthemum bojeri</i>	lo
K1.K	<i>Fadogiella stigmatoloba</i>	lo	K	<i>Aloe milne-redheadi</i>	v.lo
K1	<i>Gaertnera paniculata</i>	lo	K1.K	<i>Alvesia rosmarinifolia</i>	lo
K	<i>Gardenia spatulifolia</i>	lo	K	<i>Asparagus africanus</i>	lo
K	<i>Grewia falcistipula</i>	lo	K1	<i>Barleria nyassana</i>	lo
K1	<i>Grewia flavescens</i>	lo	K	<i>Barleria (3222)</i>	r
K1.K	<i>Harungana madagascariensis</i>	o-lf	K1	<i>Barleria crassa</i>	lo
K1.K	<i>Heinsia crinita</i>	lo	K1	<i>Bauhinia mendonçae</i>	o-lf
K1.K	<i>Hymenocardia acida</i>	o-lf	K	<i>Becium obovatum</i>	lo
K1	<i>Indigofera subcorymbosa</i>	lo	K1.K	<i>Blepharis maderaspatensis</i>	v.lf
K	<i>Kotschya aeschynomenooides</i>	lo	K	<i>Byrsocarpus coccineus</i>	r
K1.K	<i>Kotschya strobilantha</i>	lo	K	<i>Cassia absus</i>	lo
K1	<i>Memecylon buchananii</i>	lo	K	<i>Cassia meelii</i>	lo
K1.K	<i>Memecylon flavovirens</i>	lo	K	<i>Cassia mimosoides</i>	lo

K1.K	<i>Centemopsis gracilentia</i>	lo	K1.K	<i>Lepidagathis macrochila</i>	v.lo
K	<i>Chamaeclitandra henriquesiana</i>	v.lo	K1.K	<i>Leptactina benguelensis</i>	o-lf
K	<i>Cissus crusei</i>	r	K	<i>Mechowia grandiflora</i>	r
K	<i>Clerodendrum buchneri</i>	lo	K1.K	<i>Melastomastrum capitatum</i>	r
K	<i>Clerodendrum capitatum</i>	lo	K1	<i>Monechma</i> (3429)	r
K	<i>Clerodendrum milne-redheadi</i>	lo	K1.K	<i>Myrsine africana</i>	lf
K1.K	<i>Clerodendrum tanganyikensis</i>	o-lf	K	<i>Ochna confusa</i>	lo
K1.K	<i>Clerodendrum triplinerve</i>	o-lf	K	<i>Ochna katangensis</i>	r
K	<i>Clerodendrum uncinatum</i>	v.lo	K	<i>Ochna leptoclada</i>	lo
K	<i>Coleus esculentus</i>	lo	K1.K	<i>Otiophora scabra</i>	lo
K1.K	<i>Coleus kapatensis</i>	lo	K	<i>Parinari capensis</i>	v.lf
K	<i>Combretum platypetalum</i>	lo	K1.K	<i>Pavetta pygmaea</i>	lo
K1.K	<i>Crotalaria amoena</i>	lo	K	<i>Pavonia hirsuta</i>	lo
K1	<i>Crotalaria densicephala</i>	lo	K1	<i>Phaulopsis longifolia</i>	lo
K1.K	<i>Desmodium barbatum</i>	o-lf	K1	<i>Phyllanthus maderaspatensis</i>	lo
K	<i>Desmodium velutinum</i>	lo	K1.K	<i>Phyllanthus nummulariifolius</i>	lo
K1.K	<i>Diodia scandens</i>	lo	K	<i>Phyllanthus welwitschianus</i>	lo
K1.K	<i>Diospyros virgata</i>	lo	K	<i>Pleiotaxis eximia</i>	lo
K1	<i>Dissotis</i> (3452)	r	K1.K	<i>Polygala arenicola</i>	lo
K	<i>Dissotis</i> (3238)	r	K1	<i>Polygala nematophylla</i>	r
K1.K	<i>Dolichos densiflorus</i>	o-lf	K	<i>Protea haemantha</i>	r
K1	<i>Dolichos ellipticus</i>	lo	K	<i>Protea micans</i>	lo
K	<i>Dolichos linearifolius</i>	v.lo	K1.K	<i>Psychotria kirkii</i>	lo
K	<i>Dolichos trinervatus</i>	lo	K1.K	<i>Psychotria heterosticta</i>	lf
K	<i>Dolichos</i> (1325)	r	K	<i>Psychotria spithamea</i>	lo
K1.K	<i>Dolichos</i> (8332)	r	K	<i>Psychotria</i> (3428)	lo
K	<i>Droogmansia platypus</i>	lo	K	<i>Pteridium aquilinum</i>	c
K	<i>Ectadiopsis oblongifolia</i>	lo	K1.K	<i>Rauvolfia nana</i>	r
K	<i>Endostemon obtusifolius</i>	r	K1.K	<i>Rhus kirkii</i>	lo
K	<i>Euclea dekindti</i>	r	K	<i>Salacia bussei</i>	r
K	<i>Eugenia angolensis</i>	lo	K1.K	<i>Sansevieria kirkii</i>	v.lo
K1	<i>Euphorbia benthamii</i>	r	K	<i>Sapium oblongifolium</i>	lo
K	<i>Fadogia cienkowski</i>	v.lo	K	<i>Schistostephium artemisiifolium</i>	lo
K	<i>Fadogia erythrophloea</i>	r	K	<i>Scoparia dulcis</i>	r
K	<i>Fadogia triphylla</i>	o-lf	K	<i>Sida cordifolia</i>	lo
K1.K	<i>Garcinia buchneri</i>	v.lo	K	<i>Smilax kraussiana</i>	o-lf
K1.K	<i>Gardenia brachythamnus</i>	v.lo	K	<i>Sphenostylis marginata</i>	
K	<i>Gardenia subacaulis</i>	lo		subsp. <i>erecta</i>	lo
K	<i>Gnidia dekindtiana</i>	r	K1.K	<i>Strobilathopsis linifolia</i>	lo
K1.K	<i>Grewia avellana</i>	lo	K1.K	<i>Tapiphyllum</i> (8980)	
K	<i>Grewia decemovulata</i>	lo	K	<i>Temnocalyx obovatus</i>	v.lo
K1.K	<i>Grewia falcistipula</i>	lo	K	<i>Tephrosia cephalantha</i>	lo
K1	<i>Hibiscus hiernianus</i>	lo	K1	<i>Tephrosia dasyphylla</i>	lo
K	<i>Hypoestes verticillaris</i>	o-lf	K	<i>Tetracera masuiana</i>	lo
K1	<i>Indigofera emarginella</i>	o-lf	K	<i>Tricalysia cacondensis</i>	lo
K1	<i>Indigofera emarginelloides</i>	o-lf	K1.K	<i>Tricalysia griseiflora</i>	r
K	<i>Indigofera podocarpa</i>	lo	K1	<i>Tricalysia</i> (8347)	r
K1	<i>Indigofera rhynchocarpa</i>	lo	K.K1	<i>Tricalysia suffruticosa</i>	lo
K1.K	<i>Indigofera sutherlandioides</i>	o-lf	K	<i>Trichilia quadrivalvis</i>	r
K1.K	<i>Jasminum streptopus</i>	lo	K1	<i>Triumfetta annua</i>	o-lf
K1.K	<i>Landolphia camptoloba</i>	lf	K1.K	<i>Triumfetta angolensis</i>	lf
K1.K	<i>Landolphia gossweileri</i>	lo	K1.K	<i>Triumfetta dekindtiana</i>	o-lf
K	<i>Lannea gossweileri</i>	r	K1	<i>Triumfetta pedunculata</i>	o-lf
K	<i>Lannea virgata</i>	r	K	<i>Vernonia poskeana</i>	lo
K	<i>Lantana rhodesiansis</i>	lo	K1.K	<i>Waltheria indica</i>	lo
K	<i>Leonotis nepetifolia</i>	lo	K	<i>Wissadula rostrata</i>	lo

K1.K	<i>Xylopia tomentosa</i>	v.lf	K	<i>Dioscorea hirtiflora</i>	v.lf
			K	<i>Dioscorea praeheasilis</i>	lo
			K	<i>Dioscorea quartiniana</i>	lo
	<u>Climbers:</u>		K1	<i>Dioscorea schimperana</i>	r
K	<i>Ampelocissus africana</i>	lo	K1	<i>Ipomoea verbascoidea</i>	lo
K	<i>Ampelocissus obtusata</i>	lo	K1	<i>Landolphia kirkii</i>	v.lf
K1	<i>Ancylobothrys amoena</i>	lf	K1	<i>Landolphia parvifolia</i>	lf
K1	<i>Artabotrys monteiroae</i>	lf	K1	<i>Leptoderris nobilis</i>	lo
K	<i>Baijsea wulfhorsti</i>	v.lo	K1	<i>Rhopalopilium marquesii</i>	lo
K1.K	<i>Canthium gueinzii</i>	lo	K	<i>Rhynchosia holosericea</i>	lo
K1.K	<i>Canthium venosum</i>	o-lf	K1	<i>Rutidea olenotricha</i>	lo
K1.K	<i>Cassytha filiformis</i>	lo	K1	<i>Sabicea angolensis</i>	r
K	<i>Ceropegia stenantha</i>	r	K1	<i>Secamone stuhlmannii</i>	lo
K	<i>Cissampelos mucronata</i>	r	K1	<i>Secamone parvifolia</i>	lo
K1	<i>Cissampelos owariensis</i>	lo	K1.K	<i>Strophanthus welwitschii</i>	lo
K1	<i>Clematis brachiata</i>	r	K1	<i>Toxocarpus brevipes</i>	r
K1	<i>Combretum gossweileri</i>	lf	K	<i>Tylosema fassoglensis</i>	v.lo
K1	<i>Combretum mossambicense</i>	lf	K1	<i>Uvaria angolensis</i>	o-lf
K1	<i>Dichapetalum thonneri</i>	r			
K1	<i>Dictyophleba lucida</i>	lo			

CHIPYA WOODLAND AND SCRUB

C – chipya woodland I – chipya scrub

Tall trees:

C	<i>Acacia nigrescens</i>	lo
C	<i>Acacia polyacantha</i>	lo
C	<i>Azelia quanzensis</i>	lo
C	<i>Albizia adianthifolia</i>	o-lf
C	<i>Albizia versicolor</i>	lo
C	<i>Amblygonocarpus andongensis</i>	lo
C	<i>Anisophyllea boehmii</i>	lo
C	<i>Brachystegia glaberrima</i>	o-lf
I	<i>Brachystegia longifolia</i>	lf
C	<i>Brachystegia spiciformis</i>	lf
C	<i>Brachystegia utilis</i>	o-lf
C	<i>Bridelia micrantha</i>	r
C.I	<i>Burkea africana</i>	lf
C.I	<i>Combretum mechowianum</i>	lo
C	<i>Dialium angolense</i>	r
C	<i>Entandrophragma devevayi</i>	r
C	<i>Erythrina abyssinica</i>	lo
C.I	<i>Erythrophleum africanum</i>	lf
C	<i>Ficus brachypoda</i>	r
C.	<i>Guibourtia coleosperma</i>	o-lf
C	<i>Isoberlinia angolensis</i>	lf
C	<i>Isoberlinia tomentosa</i>	lf
C	<i>Kigelia africana</i>	lo
C	<i>Lannea stuhlmannii</i>	lo
C	<i>Lonchocarpus nelsii</i>	lo
C	<i>Marquesia acuminata</i>	lf
C.I	<i>Parinari curatellifolia</i>	lo
C	<i>Pericopsis angolensis</i>	lo
C	<i>Pteleopsis anisoptera</i>	lo
C.I	<i>Pterocarpus angolensis</i>	lo
C	<i>Sterculia quinqueloba</i>	r

Small trees

C	<i>Syzygium guineense</i>	
	subsp. <i>afromontanum</i>	o-v.lf
C	<i>Terminalia sericea</i>	lo
C	<i>Trema orientalis</i>	r
C	<i>Zanha africana</i>	lo
C	<i>Acacia hockii</i>	r
C.I	<i>Albizia antunesiana</i>	lo
C	<i>Antidesma venosum</i>	r-lo
C	<i>Canthium vulgare</i>	lo
C	<i>Chrysophyllum bangweolense</i>	lo
C	<i>Combretum apiculatum</i>	lo
C	<i>Combretum celastroides</i>	f-lc
C	<i>Combretum ghasalense</i>	lo
C.I	<i>Combretum psidioides</i>	lf
C	<i>Combretum zeyheri</i>	o-lf
C	<i>Cussonia kirkii</i>	lf
C	<i>Dalbergia nitidula</i>	lo
C	<i>Diospyros batocana</i>	lo
C.I	<i>Diplorhynchus condylocarpon</i>	o-lf
C	<i>Dombeya rotundifolia</i>	lo
C	<i>Ekebergia benguelensis</i>	lo
C	<i>Faurea speciosa</i>	lo
C	<i>Gardenia jovis-tonantis</i>	lo
C	<i>Harungana madagascariensis</i>	o-lf
C	<i>Hexalobus monopetalus</i>	lo
C	<i>Lannea discolor</i>	lo
C	<i>Magnistipula bangweolensis</i>	r-lo
C	<i>Markhamia obtusifolia</i>	lo
I	<i>Monotes adenophyllum</i>	lo
I	<i>Monotes angolensis</i>	lo
I	<i>Monotes dasyanthus</i>	lo

C.I	Monotes discolor	lo	C	Maytenus senegalensis	lo
C.I	Monotes elegans	lo	C	Memecylon flavovirens	lo
C	Ochna afzelii	lo	C	Mussaenda arcuata	r
C.I	Ochna pulchra	o-lf	C	Paropsia brazzeana	lf
C	Ochna schweinfurthiana	lo	C	Pavetta schumanniana	lo
I	Ochthocosmos lemairianus	lo	C.I	Philippia benguelensis	v.lf
C	Olax obtusifolia	lo	C	Phyllanthus muelleranus	lo
C.I	Oldfieldia dactylophylla	lf	C.I	Protea madiensis	lo
C	Oxytenanthera abyssinica	v.lf	C	Pseudarthria hookeri	lo
C	Piliostigma thonningii	lo	C	Psorospermum febrifugum	lo
C.I	Protea petiolaris	lo	C	Salacia rhodesiana	lo
C	Pseudolachnostylis maprouneifolia	o-lf	C	Sapium cornutum	lo
C	Pterocarpus chrysothrix	r	I	Strophanthus (3139)	r
C	Schreberia trichoclada	lo	C	Tecomaria capensis	lo
C.I	Securidaca longepedunculata	lo	C.I	Tricalysia angolensis	o-lf
C	Stereospermum kunthianum	r-lo	C	Vernonia thomsoniana	r
C	Strychnos cocculoides	lo	C.I	Vitex madiensis	lo
C	Strychnos innocua	lo	C	Ximena americana	lo
C	Strychnos pungens	lo			
C	Strychnos spinosa	lo			
C.I	Swartzia madagascariensis	lo			
C	Syzygium guineense				
	subsp. macrocarpum	o-lf			
C	Syzygium guineense				
	subsp. huillense	lf			
C.I	Teminalia brachystemma	lf			
C	Terminalia mollis	lf			
C	Uapaca benguelensis	lo			
C.I	Uapaca kirkiana	lf			
C	Uapaca nitida	lf			
I	Uapaca roysii	la			
C	Uapaca sansibarica	o-lf			
C	Uvariastrum hexaloboides	lo			
C	Vangueria infausta	lo			
C.I	Vangueriopsis lanciflora	lo			
	<u>Shrubs:</u>			<u>Sub-shrubs:</u>	
I	Aeschynomene mimosoides	lo	C	Acalypha senensis	lo
I	Aeschynomene rubrofarinacea	o-lf	I	Acalypha stuhlmannii	o-lf
C	Annona senegalensis	lo	I	Acrocephalus sericeus	lf
C	Baphia bequaerti	lo	C	Adenodolichos rhomboideus	v.lf
C	Baphia massaiensis subsp. obovata	lo	I	Aeschynomene bracteosa	lo
C	Bridelia duvigneaudi	lo	C.I	Afromomum biauriculatum	lc
C	Byrsocarpus orientalis	lo	C	Annona stenophylla ssp. longipetiolata	lo
C	Canthium crassum	r-lo	C	Asparagus plumosus	r-lo
C	Canthium huillense	lo	C	Becium obovatum	lo
C	Dichrostachys cinerea	lo	C	Blepharis buchneri	lo
C	Embelia schimperi	r	I	Brackenridgea arenaria	lo
C	Ensete homblei	r	I	Cassia mimosoides	lo
C	Harrisonia abyssinica	r	C	Clematopsis homblei	lo
C	Heteromorpha trifoliata	lo	C	Clematopsis scabiosifolia	lo
I	Humularia bequaerti	lf	C	Clerodendrum tanganyikense	lo
C.I	Hymenocardia acida	f-lc	C	Clerodendrum triplinerve	lo
I	Kotschyia strobilantha	lo	I	Coleus esculentus	r
C	Leonotis leonurus	lo	I	Combretum platypetalum	lo
C	Lippia plicata	r	C	Crotalaria amoena	lo
			C	Diodia scandens	lo
			C	Dissotis brazzae	lf
			C	Dissotis (3330)	lo
			C	Dissotis (3474)	lo
			I	Ectodiopsis oblongifolia	lo
			I	Ectodiopsis producta	lo
			C	Endestemon distifolius	o-lf
			I	Eriosema ellipticum	r-lo
			C	Eriosema englerianum	lo
			C	Eriosema montanum	lo
			C	Eupatorium africanum	lo
			C	Eugenia angolensis	lo
			C	Fadogia monticola	lo
			C	Fadogia triphylla	lo
			C	Gnidia kraussiana	lo
			C	Hibiscus acetosella	lo
			C	Hibiscus cannabinus	lo

I	<i>Hibiscus hiernianus</i>	o-lf	C	<i>Rhynchosia resinosa</i>	lo
C	<i>Hibiscus shirensis</i>	lo	C	<i>Rhynchosia verdecikii</i>	lo
C	<i>Hypoestes verticillaris</i>	lf	C.I	<i>Smilax kraussiana</i>	f
C	<i>Indigofera longebarbata</i>	lo	I	<i>Syzygium guineense</i> subsp. <i>huillense</i>	o-lf
C	<i>Ipomoea verboscoidea</i>	lo	C	<i>Tetracera masuiana</i>	lf
I	<i>Kotschya carsonii</i>	v.lf	I	<i>Thesium cinereum</i>	lo
I	<i>Kotschya</i> (3138)	lo	C	<i>Tinnea vestita</i>	lo
C	<i>Leptactina benguelensis</i>	lo	C	<i>Vernonia cistifolia</i>	lo
C	<i>Mellera lobulata</i>	r	C	<i>Vernonia glaberrima</i>	lo
C	<i>Myrsine africana</i>	o-lf	C.I	<i>Vernonia incompta</i>	o-lf
C	<i>Ocimum americanum</i>	lo	C.I	<i>Vernonia turbinella</i>	lo
C	<i>Ocimum suave</i>	lo	C	<i>Waltheria indica</i>	lo
C	<i>Phyllanthus macranthus</i>	lo			
C	<i>Phyllanthus welwitschianus</i>	lo		<u>Climbers:</u>	
C	<i>Pleiotaxis pulcherrima</i>	lo	C	<i>Leptoderris nobilis</i>	lo
C	<i>Protea micans</i>	lo	C	<i>Rhynchosia albiflora</i>	r
C.I	<i>Pteridium aquilinum</i>	a	C	<i>Strophanthus welwitschii</i>	o-lf
C	<i>Rhus kirkii</i>	lo			

RIPARIAN AND SWAMP FOREST

R – riparian S – swamp f – fringe

Tall trees:

R.f	<i>Acacia polyacantha</i>	v.lf	R	<i>Khaya nyasica</i>	r-lo
R	<i>Azelia bipindensis</i>	r	R	<i>Klainedoxa gabonensis</i>	r
R	<i>Alangium chinense</i>	v.r	R	<i>Lannea stuhlmannii</i>	lo
R	<i>Albizia adiathifolia</i>	o-lf	S	<i>Macaranga schweinfurthii</i>	v.lo
R	<i>Albizia versicolor</i>	lo	R.S	<i>Manilkara obovata</i>	lo
R	<i>Anthocleista schweinfurthii</i>	r-lo	R	<i>Marquesia acuminata</i>	v.lo
R.S	<i>Anthocleista vogelii</i>	r	R	<i>Mimusops zeyheri</i>	lo
R	<i>Apodytes dimidiata</i>	lo	S	<i>Mitragyna stipulosa</i>	o-lf
R	<i>Beilschmiedia ugandensis</i>	r	R	<i>Nauclea pobeguini</i>	r
R.f	<i>Brachystegia spiciformis</i>	v.lo	S.R	<i>Neoboutonia africana</i>	lo
R	<i>Bridelia micrantha</i>	o-lf	R	<i>Newtonia aubrevillei</i>	v.lf
R.S	<i>Cassipourea gummiflua</i>	r	R	<i>Pachystela brevipes</i>	r
R.S	<i>Chrysophyllum magalismsontanum</i>	v.lf	R.S	<i>Parinari excelsa</i>	lo
R	<i>Cleistanthus milleri</i>	v.lf	R	<i>Podocarpus milanjanus</i>	r
R	<i>Craibia affinis</i>	o-lf	S	<i>Polyscias fulva</i>	r
S	<i>Dacryodes edulis</i>	r	R	<i>Pteleopsis anisoptera</i>	lo
R	<i>Dialium angolense</i>	lo	R	<i>Pycnanthus angolensis</i>	r
R	<i>Diospyros mespiliformis</i>	lo	R.S	<i>Pygeum africanum</i>	r
R	<i>Ekebergia capensis</i>	r	R.S	<i>Raphia farinifera</i>	lo
R	<i>Eriocoelum lawtonii</i>	r	R.S	<i>Rauvolfia caffra</i>	lo
S	<i>Erythrina excelsa</i>	r-lo	R	<i>Samanea leptophylla</i>	v.lo
R	<i>Erythrophleum suaveolens</i>	v.lo	R	<i>Schrebera alata</i>	r
R.S	<i>Fagara macrophylla</i>	v.lo	R	<i>Sclerocarya caffra</i>	r
R	<i>Faurea saligna</i>	lo	R	<i>Staudtia gabonensis</i>	r
R	<i>Ficalhoa laurifolia</i>	r	R	<i>Strychnos potatorum</i>	lo
R	<i>Ficus capensis</i>	lo	S	<i>Symphonia globuliflora</i>	v.lo
R	<i>Ficus craterostema</i>	lo	S.R	<i>Syzygium cordatum</i>	o-lf
R	<i>Ficus cyathistipula</i>	lo	R	<i>Syzygium guineense</i>	
R	<i>Garcinia punctata</i>	v.lo		subsp. <i>barotsense</i>	lf
R	<i>Hannea kitombetombe</i>	r	S.R	<i>Syzygium owariense</i>	o-lf
R	<i>Homalium abdessammadi</i>	lo	R	<i>Sterculia africana</i>	r
S.R	<i>Homalium africanum</i>	lo	R	<i>Trema orientalis</i>	lo
S.R	<i>Ilex mitis</i>	o-lf	R	<i>Trichilia emetica</i>	lo
			R	<i>Trichoscypha silveirana</i>	r

R.S	<i>Uapaca guineensis</i>	o-lf	R	<i>Nuxia congesta</i>	r
R	<i>Xylopia acutiflora</i>	r	R	<i>Ochna afzelii</i>	lo
S.R	<i>Xylopia aethiopica</i>	lo	R	<i>Ochna multiflora</i>	v.lo
R	<i>Xylopia katangensis</i>	lo	R	<i>Olea capensis</i>	v.lo
S.R	<i>Xylopia rubescens</i>	lo	R	<i>Olinia usambarensis</i>	r
<u>Small trees:</u>			R	<i>Ouratea densiflora</i>	r
R	<i>Agauria salicifolia</i>	lo	R	<i>Oxyanthus speciosus</i>	lo
R	<i>Aidia micrantha</i>	lo	R.S	<i>Phoenix reclinata</i>	o-lf
R	<i>Anthocleista liebrechtsiana</i>	r	R	<i>Pittosporum mannii</i>	lo
R	<i>Antidesma venosum</i>	lo	R	<i>Pleurostyliya africana</i>	lo
R.S	<i>Antidesma vogelianum</i>	lo	R	<i>Psorospermum baumii</i>	lo
R.S	<i>Aporrhiza nitida</i>	lo	R	<i>Pseudagrostistachys ugandensis</i>	r
R	<i>Beilschmiedia gilberti</i>	r	R	<i>Psychotria megistosticta</i>	r
R	<i>Bersama abyssinica</i>	lo	R	<i>Psychotria succulenta</i>	o-lf
R.S	<i>Canthium glabriflorum</i>	lo	R.S	<i>Rapanea melanophloeos</i>	lo
R	<i>Canthium vulgare</i>	lo	R.S	<i>Rhus anchietae</i>	o-lf
R	<i>Cassia abbreviata</i>	lo	R	<i>Rhus longipes</i>	o-lf
R	<i>Cassipourea congoensis</i>	lo	R	<i>Rhus quartiniana</i>	lo
R.S	<i>Clausena anisata</i>	v.lo	R	<i>Rinorea welwitschii</i>	r
R	<i>Croton leuconeurus</i>	lo	R	<i>Rothmannia engleriana</i>	lo
R	<i>Cyathea dregei</i>	r	R	<i>Rothmannia fischeri</i>	lo
R	<i>Diospyros abyssinica</i>	r-lo	R	<i>Rothmannia whitfieldii</i>	lo
R	<i>Diospyros hoyleana</i>	r	R	<i>Salix subserrata</i>	o-lf
R	<i>Diospyros lycioides</i>	o-lf	R.S	<i>Sapium ellipticum</i>	lo
R	<i>Dovyalis macrocalyx</i>	r	S	<i>Schefflera abyssinica</i>	r
R	<i>Dracaena reflexa</i>	v.lo	R	<i>Scolopia stolzii</i>	r
R	<i>Drypetes gerrardi</i>	o-lf	S.R	<i>Sterculia subviolacea</i>	r
R	<i>Elaeodendron buchananii</i>	r	S.R	<i>Tabernaemontana angolensis</i>	lo
R	<i>Erythrina abyssinica</i>	lo	R	<i>Tarenna pavettoides</i>	lo
R	<i>Erythroxyllum emarginatum</i>	o-lf	R	<i>Tarenna rhodesiaca</i>	lo
R	<i>Eugenia bukobensis</i>	r	R	<i>Teclea nobilis</i>	lo
R	<i>Euphorbia candelabrum</i>	lo	R	<i>Tricalysia coriacea</i>	lo
R	<i>Ficus ardisioides</i>	r	R	<i>Tricalysia myrtifolia</i>	lo
R	<i>Ficus barberi</i>	r	R	<i>Uapaca sansibarica</i>	o-v.lf
R	<i>Ficus (3288)</i>	lo	S	<i>Uvariopsis congensis</i>	r.r
R	<i>Ficus (3289)</i>	lo	R	<i>Vepris stolzii</i>	r
R	<i>Garcinia huillensis</i>	lo	<u>Shrubs:</u>		
R.S	<i>Garcinia smeathmanni</i>	o-lc	R	<i>Acacia chirindica</i>	o-lf
R	<i>Garcinia volkensis</i>	lo	R.S	<i>Achyrospermum serratum</i>	r
R.S	<i>Gardenia imperialis</i>	o-lf	R	<i>Alchornea hirtella</i>	lo
R	<i>Harrisonia abyssinica</i>	r	R.f	<i>Alchornea occidentalis</i>	lo
R.Sf	<i>Harungana madagascariensis</i>	o-lf	R	<i>Allophylus chaunostachys</i>	lo
R.f	<i>Hymenodictyon floribundum</i>	lo	R.S	<i>Allophylus didymadenius</i>	lo
R.S	<i>Ixora rhodesiaca</i>	r	R.f	<i>Anthospermum (3119)</i>	r
R.f	<i>Lanea discolor</i>	lo	R	<i>Aulacocalyx jasminiflora</i>	lo
R	<i>Leptaulis zenkeri</i>	r	R	<i>Baphia capparidifolia</i>	lo
R	<i>Linociera nilotica</i>	r	R	<i>Bertiera angusiana</i>	v.lo
R	<i>Maesobotrya n.s.</i>	v.lo	R.f	<i>Bridelia duvigneaudi</i>	lo
R	<i>Magnistipula (3379)</i>	r	R.S	<i>Brillantaisia madagascariensis</i>	r
R.f	<i>Markhamia obtusifolia</i>	lo	R	<i>Byrsocarpus orientalis</i>	lo
R	<i>Maytenus acuminata</i>	v.lo	R.S	<i>Canthium anomocarpum</i>	lo
R	<i>Maytenus buchananii</i>	lo	R.f	<i>Canthium captum</i>	lo
R	<i>Maytenus undata</i>	r	R	<i>Canthium zanzibaricum</i>	lo
R	<i>Memecylon (3891)</i>	r	R	<i>Carissa edulis</i>	lo
S.R	<i>Myrica conifera</i>	lo	R.f	<i>Cassia didymobotrya</i>	r

R.S	<i>Cephaelis peduncularis</i>	lf	S	<i>Phyllanthus polyanthus</i>	r
R	<i>Chaetocarpus africanus</i>	o-lf	R	<i>Phyllanthus reticulatus</i>	lo
R	<i>Chrysobalanus atacorensis</i>	r	S	<i>Piper capense</i>	lo
R	<i>Chassalia cristata</i>	lo	R	<i>Popowia gracilis</i>	lo
R	<i>Clerodendrum quadrangulatum</i>	lo	R	<i>Popowia oliveriana</i>	r
R	<i>Clerodendrum violaceum</i>	lo	R.f	<i>Pseudarthria hookeri</i>	f-lo
R	<i>Cliffortia nitidula</i>	v.lo	R	<i>Psychotria djumaensis</i>	lo
R.f	<i>Clutia abyssinica</i>	r	R	<i>Rawsonia lucida</i>	lo
R	<i>Coffea eketensis</i>	o-lf	R	<i>Rhamnus prinoides</i>	r-lo
R	<i>Craterispermum laurinum</i>	o-lf	R	<i>Ritchiea gossweileri</i>	r
R	<i>Cremaspora triflora</i>	lo	R	<i>Rubus apetalus</i>	lo
R.f	<i>Crotalaria cleomifolia</i>	lo	R	<i>Rubus rigidus</i>	lo
R	<i>Desmodium salicifolium</i>	lo	R	<i>Rytigynia umbellulata</i>	o-lf
R.f	<i>Dissotis princeps</i>	lf	R	<i>Salacia elegans</i>	r
S	<i>Dissotis romiana</i>	r	R	<i>Sapium cornutum</i>	lo
R	<i>Dombeya burgessiae</i>	lo	S.R	<i>Scutia myrtina</i>	lo
R	<i>Dombeya rotundifolia</i>	r	R	<i>Sesbania sesban</i>	lo
R	<i>Dombeya wittei</i>	v.lo	R	<i>Sherbournia bignoniiflora</i>	r
R.S	<i>Dracaena camerooniana</i>	lf	R	<i>Sorindeia katangensis</i>	o-lf
R	<i>Embelia schimperi</i>	lo	R	<i>Strychnos robynsi</i>	v.lo
R	<i>Enneastemon schweinfurthi</i>	lo	R.f	<i>Tecomaria capensis</i>	lo
R.f	<i>Eriosoma buchananii</i>	lo	R	<i>Thecacoris trichogyne</i>	v.lo
R	<i>Erythrococca welwitschii</i>	r	R	<i>Toddalia asiatica</i>	r
R	<i>Euclea schimperi</i>	lo	R	<i>Tricalysia andongensis</i>	o-lf
R	<i>Ficus asperifolia</i>	lo	R	<i>Tricalysia (3277)</i>	lo
R	<i>Ficus pygmaea</i>	lo	S.Rf	<i>Triumfetta cordifolia</i>	lf
R	<i>Flacourtia indica</i>	lo	R.f	<i>Triumfetta dekindtiana</i>	o-lf
R	<i>Gaertnera paniculata</i>	lf	R.f	<i>Triumfetta pedunculata</i>	lf
R.f	<i>Halleria lucida</i>	r	R.f	<i>Urena lobata</i>	lf
R	<i>Heinsia crinita</i>	r	R.f	<i>Vernonia ampla</i>	lo
R.f	<i>Heteromorpha trifoliata</i>	lo	R	<i>Vernonia glabra</i>	lo
R	<i>Hypericum roeperanum</i>	r	R.f	<i>Vernonia shirensis</i>	lo
R	<i>Indigofera glaucifolia</i>	lo	R.f	<i>Vernonia leucocalyx</i>	v.lf
R	<i>Indigofera subcorymbosa</i>	lo			
S.f	<i>Kosteletzkya begoniifolia</i>	r		<u>Sub-shrubs:</u>	
R	<i>Landolphia camptoloba</i>	lo	R	<i>Achyranthes aspera</i>	o-lf
R.S	<i>Leea guineense</i>	r	R.f	<i>Aeschynomene heurokeana</i>	lo
R.f	<i>Ludwigia stenorrhaphae</i>	lo	R.S	<i>Aframomum angustifolium</i>	lc
R	<i>Maesa lanceolata</i>	o-lf	R.f	<i>Aframomum biauriculatum</i>	lc
R	<i>Maytenus senegalensis</i>	o	R	<i>Argyrolobium tomentosum</i>	r
R	<i>Memecylon buchananii</i>	lo	R	<i>Aspilia mossambicensis</i>	lo
R	<i>Memecylon flavovirens</i>	lo	R	<i>Blechnum tabulare</i>	r
R	<i>Memecylon sapini</i>	lo	R.f	<i>Blepharis buchneri</i>	lo
R	<i>Mimosa pigra</i>	v.lo	R	<i>Clerodendrum buchneri</i>	lo
S	<i>Mussaenda angolensis</i>	r	R	<i>Clerodendrum capitatum</i>	lo
R	<i>Mussaenda arcuata</i>	lo	R	<i>Coleus scaposus</i>	r
R	<i>Ouratea hierni</i>	r	R.Sf	<i>Coleus shirensis</i>	lf
R	<i>Ouratea welwitschii</i>	lo	R.f	<i>Coleus (8485)</i>	v.lf
R.f	<i>Panicum adenophorum</i>	v.lf	R.f	<i>Crotalaria caudata</i>	lo
R	<i>Pauridiantha holstii</i>	o-lf	R.f	<i>Crotalaria subcapitata</i>	lo
R	<i>Pavetta assimilis</i>	lo	R.f	<i>Crotalaria orthoclada</i>	lo
R	<i>Pavetta nitidula</i>	r	R	<i>Cyperus alternifolius</i>	lo
R	<i>Peddiea fischeri</i>	o-lf	R.S	<i>Desmodium adscendens</i>	lo
R.f	<i>Phragmites mauritianus</i>	v.lc	R.S	<i>Desmodium repandum</i>	lo
R	<i>Phyllanthus discoideus</i>	lo	R.f	<i>Dicliptera nemorum</i>	o-lf
R.S	<i>Phyllanthus muelleranus</i>	lo	R	<i>Diodia scandens</i>	lo

R	<i>Dissotis rotundifolia</i>	r	R	<i>Dichapetalum crassifolium</i>	r
S	<i>Dissotis</i> (3370)	r	R	<i>Dichapetalum thonneri</i>	lo
R	<i>Dissotis</i> (3383)	lo	R	<i>Dichapetalum whitei</i>	r
R	<i>Dyschoriste verticillaris</i>	lo	R	<i>Dictyophleba lucida</i>	lo
R	<i>Hibiscus hiernianus</i>	lo	R	<i>Dicranopteris linearis</i>	v.lo
S	<i>Hypoestes aristata</i>	v.lf	R	<i>Dioscorea baya</i>	r
R.S	<i>Hypoestes triflora</i>	lf	R.f	<i>Dioscorea cochleari-apiculata</i>	lo
R	<i>Jasminum streptopus</i>	lo	R	<i>Entada gigas</i>	lo
R.f	<i>Kosteletzkya buetteri</i>	lo	R	<i>Ficus tremula</i>	r
R.f	<i>Melastromastrum capitatum</i>	lo	R	<i>Glycine javanica</i>	lo
R.f	<i>Melastromastrum segregatum</i>	r	R	<i>Gongronema taylori</i>	r
R	<i>Mellera lobulata</i>	lo	R	<i>Gymnema sylvestre</i>	lo
R	<i>Mellera submutica</i>	lo	R	<i>Helinus mystacinus</i>	lo
R	<i>Myrsine africana</i>	o-lf	R.f	<i>Hibiscus rostellatus</i>	r
R	<i>Olax gambecola</i>	r	R	<i>Hippocratea africana</i>	lo
R	<i>Oreocanthus</i> sp.	r	R	<i>Hippocratea pallens</i>	r
R	<i>Orthosiphon</i> (3467)	r	R.Sf	<i>Ipomoea pharbitiformis</i>	lo
R	<i>Osmunda regalis</i>	lo	R.f	<i>Ipomoea verbascoidea</i>	lo
R	<i>Otiophora scabra</i>	lo	R.f	<i>Ipomoea</i> (3348)	r
R	<i>Pavetta pygmaea</i>	lo	R	<i>Jasminum dichotomum</i>	lo
R	<i>Pavetta redheadii</i>	r	R	<i>Jasminum fluminense</i>	lo
R	<i>Pavetta</i> (3224)	lo	R	<i>Jasminum abyssinicum</i>	lo
R	<i>Phaulopsis longifolia</i>	lo	R	<i>Jasminum bakeri</i>	lo
R	<i>Phyllanthus retinervis</i>	lo	R	<i>Landolphia buchananii</i>	lo
R.f	<i>Phyllanthus</i> (3337)	lo	R	<i>Landolphia parvifolia</i>	lo
R.f	<i>Polygala exelliana</i>	v.lf	R	<i>Landolphia rufescens</i>	r
R	<i>Popowia n.s.</i>	v.r	R	<i>Lepistemon owariense</i>	lo
R	<i>Psychotria hererosticta</i>	f	R	<i>Leptoderris goetzei</i>	lf
R	<i>Psychotria linearispala</i>	lo	R	<i>Leptoderris nobilis</i>	o-lf
R.f	<i>Pycnostachys schliebeni</i>	r	S	<i>Lygodium microphyllum</i>	v.lo
R.f	<i>Tephrosia elata</i>	o-lf	R	<i>Merremia pterygocaulos</i>	lo
R.f	<i>Tephrosia paniculata</i>	lo	R	<i>Mezoneuron angolense</i>	r
S.R	<i>Vausagesia africana</i>	r	R	<i>Microglossa pyrifolia</i>	lo
<u>Climbers:</u>			R	<i>Mikania cordata</i>	lo
R	<i>Abrus pulchellus</i>	lo	R	<i>Mikaniopsis tanganyikensis</i>	lo
R	<i>Adenia gummifera</i>	lo	R.f	<i>Mucuna poggei</i>	o-lf
R	<i>Adenia lobata</i>	lo	R	<i>Paullinia pinnata</i>	lo
S	<i>Agelaea heterophylla</i>	r	R	<i>Piper guineense</i>	r
R	<i>Ancylobotrys amoena</i>	lo	R	<i>Rhaphiostylis beninensis</i>	lo
R	<i>Ancylobotrys n.s.</i>	lo	R.S	<i>Rhoicissus tridentata</i>	lo
R	<i>Aphanostylis mannii</i>	r	R	<i>Rhopalopilia marquesii</i>	lo
R	<i>Artabotrys monteiroae</i>	lo	R.f	<i>Rhynchosia caribea</i>	v.lf
R	<i>Caesalpinia welwitschiana</i>	r	R	<i>Rutidea olenotricha</i>	lf
S	<i>Calamus deerratus</i>	r	R	<i>Rutidea smithii</i>	r
R	<i>Canthium gueinzi</i>	f	R	<i>Sabicea angolensis</i>	v.lo
R	<i>Canthium venosum</i>	f	R	<i>Sabicea laurenti</i>	lo
R	<i>Chrysophyllum welwitschii</i>	r	R	<i>Salacia chlorantha</i>	r
R	<i>Cissampelos owariensis</i>	lo	R	<i>Salacia congolensis</i>	r
R	<i>Cissus petiolata</i>	lo	R	<i>Salacia pynaerti</i>	r
R	<i>Clematis brachiata</i>	lo	R	<i>Secamone micrandra</i>	lo
R	<i>Combretum gossweileri</i>	v.lf	R	<i>Secamone stuhlmannii</i>	lo
R	<i>Craterosiphon scandens</i>	r	R	<i>Smilax kraussiana</i>	lo
R	<i>Culcasia scandens</i>	r	R	<i>Solanum terminale</i>	r
R	<i>Dalbergia arbutifolia</i>	r	R	<i>Stephania abyssinica</i>	lo
S.R	<i>Dalbergia malagensis</i>	v.lf	R	<i>Strophanthus gardeniiflorus</i>	lo
			R	<i>Strophanthus welwitschii</i>	lo

R	<i>Strychnos angolensis</i>	lo	S.R	<i>Uvaria edulis</i>	r
R	<i>Strychnos lucens</i>	lo	R	<i>Vanilla polylepis</i>	lo
R	<i>Tacazzea apiculata</i>	lo	R	<i>Vernonia aurantiaca</i>	lo
R	<i>Tetracera alnifolia</i>	v.lf	R	Acanthaceae (3365)	
R	<i>Urera cameroonensis</i>	r	R	Annonaceae (3456)	
R	<i>Uvaria angolensis</i>	o-lf			

MIOMBO AND HILL MIOMBO

Tall trees:

P	<i>Afzelia quanzensis</i>	r	P.H	<i>Diplorhynchus condylocarpon</i>	o-lf
P	<i>Albizia adianthifolia</i>	lo	P	<i>Dombeya rotundifolia</i>	lo
P.H	<i>Albizia antunesiana</i>	lo	H	<i>Entada abyssinica</i>	r
P	<i>Amblygonocarpus andongensis</i>	lo	P	<i>Erythrina abyssinica</i>	lo
P.H	<i>Brachystegia boehmii</i>	f	P	<i>Faurea speciosa</i>	lo
P.H	<i>Brachystegia floribunda</i>	f-lc	P	<i>Garcinia huillense</i>	lo
P	<i>Brachystegia glaberrima</i>	f-lc	P	<i>Gardenia jovis-tonantis</i>	lo
P.H	<i>Brachystegia longifolia</i>	f-lc	P	<i>Gardenia spatulifolia</i>	lo
P.H	<i>Brachystegia spiciformis</i>	f-lf	P	<i>Hexalobus monopetalus</i>	lo
P.H	<i>Brachystegia utilis</i>		H	<i>Hymenodictyon floribundum</i>	lo
P	<i>Brachystegia wangermeeana</i>	v.lf	P	<i>Lanea discolor</i>	lo
H	<i>Burkea africana</i>	r	P	<i>Magnistipula bangweolensis</i>	lo
P	<i>Combretum mechowianum</i>	lo	P	<i>Monotes adenophyllus</i>	lo
P	<i>Erythrophleum africanum</i>	lo	P	<i>Monotes africanus</i>	lo
P.H	<i>Faurea intermedia</i>	r	P	<i>Monotes autennei</i>	lo
P	<i>Faurea saligna</i>	lo	P	<i>Monotes discolor</i>	lo
P.H	<i>Ficus brachypoda</i>	lo	P	<i>Monotes elegans</i>	lo
P	<i>Ficus fischeri</i>	r	P	<i>Monotes glaber</i>	lo
P	<i>Ficus sycomorus</i>	r	P	<i>Ochna afzelii</i>	lo
H	<i>Ficus sonderi</i>	r	P	<i>Ochna schumanniana</i>	lo
P	<i>Isoberlinia angolensis</i>	lf	P	<i>Ochthocosmus lemaireanus</i>	lo
P	<i>Isoberlinia tomentosa</i>	lf	P	<i>Olox obtusifolia</i>	lo
P	<i>Julbernardia globiflora</i>	v.lf	P	<i>Ozoroa reticulata</i>	lo
P	<i>Julbernardia paniculata</i>	c-lo	P	<i>Piliostigma thonningii</i>	lo
P	<i>Kigelia africana</i>	lo	P	<i>Protea petiolaris</i>	lo
P	<i>Marquesia macroura</i>	o-lf	P	<i>Protea rupestris</i>	r
P.H	<i>Parinari curatellifolia</i>	lo	P	<i>Pseudolachnostylis maprouneifolia</i>	o-lf
P	<i>Peltophorum africanum</i>	r	P	<i>Rothmannia engleriana</i>	lo
P	<i>Pericopsis angolensis</i>	lo	P	<i>Rothmannia fischeri</i>	r
P	<i>Pterocarpus angolensis</i>	lo	P	<i>Schrebera trichoclada</i>	lo
H	<i>Sterculia quinqueloba</i>	r	P	<i>Strophanthus (3139)</i>	r
P	<i>Syzygium guineense</i>		P	<i>Strychnos cocculoides</i>	lo
	subsp. <i>afromontanum</i>	lo	P	<i>Strychnos innocua</i>	lo
P.H	<i>Zanha africana</i>	r	P	<i>Strychnos pungens</i>	lo
			P	<i>Strychnos spinosa</i>	lo
			P	<i>Swartzia madagascariensis</i>	lo
			H	<i>Syzygium guineense</i> ssp. <i>macrocarpum</i>	o-lf

Small trees:

P	<i>Anisophyllea boehmii</i>	lo	P	<i>Terminalia mollis</i>	lo
P	<i>Bersama abyssinica</i>	lo	H	<i>Tessmannia burtii</i>	r
P	<i>Combretum molle</i>	lo	P	<i>Uapaca banguelensis</i>	lo
P.H	<i>Combretum psidioides</i>	lo	P	<i>Uapaca kirkiana</i>	lf
P	<i>Combretum zeyheri</i>	lo	P	<i>Uapaca nitida</i>	lf
P	<i>Craterosiphon quarrei</i>	lo	P.H	<i>Uapaca pilosa</i>	lo
P	<i>Cussonia kirkii</i>	o-lf	P	<i>Uapaca robynsii</i>	lo
P.H	<i>Dalbergia nitidula</i>	lo	P	<i>Uapaca sansibarica</i>	lo
P	<i>Diospyros batocana</i>	o-lf	P	<i>Uvariastrium hexaloboides</i>	lo

P	<i>Vangueriopsis lanciflora</i>	lo	P	<i>Vangueria infausta</i>	lo
			H	<i>Vellozia equisetoides</i>	v.lf
<u>Shrubs:</u>					
P	<i>Acridocarpus katangensis</i>	r	P	<i>Vernonia amygdalina</i>	lo
P	<i>Adenodolichos baumii</i>	lo	P	<i>Vernonia glaberrima</i>	lo
P	<i>Aeschynomene rubrofarinacea</i>	lo	P	<i>Vernonia shirensis</i>	lo
H	<i>Aeschynomene pararubrofarinacea</i>	r	P	<i>Vernonia thomsoniana</i>	lo
P	<i>Annona senegalensis</i>	lo	P	<i>Vitex madiensis</i>	lo
P	<i>Baphia bequaertii</i>	lo	P	<i>Vitex mombassae</i>	lo
P	<i>Bridelia duvigneaudi</i>	lo	P	<i>Waltheria indica</i>	lo
P.H	<i>Canthium crassum</i>	lo	P	<i>Ximenia americana</i>	lo
P	<i>Canthium huillense</i>	v.lo	H	<i>Xylopia odoratissima</i>	v.lo
P	<i>Canthium lactescens</i>	r	<u>Sub-shrubs:</u>		
P	<i>Canthium vulgare</i>	lo	P	<i>Abrus pulchellus</i> subsp. <i>suffruticosus</i>	lo
P	<i>Chrysophyllum bangweolense</i>	lo	P	<i>Acalypha allenii</i>	lo
P	<i>Conyza persicifolia</i>	r	P	<i>Acalypha ambigua</i>	lo
H	<i>Dichaetanthera rhodesiensis</i>	r	P	<i>Adenodolichos bussei</i>	r
P	<i>Dichrostachys cinerea</i>	o-lf	P	<i>Adenodolichos punctatus</i>	lo
P	<i>Dolichos kilimandscharicus</i>	lo	P	<i>Adenodolichos rhomboideus</i>	lo
P	<i>Dolichos pseudocajanus</i>	lo	P	<i>Adenodolichos</i> (3340)	v.lo
P	<i>Dolichos trinervatus</i>	lo	H	<i>Aeolanthus myrianthus</i>	v.lf
P	<i>Ekebergia benguelensis</i>	lo	H	<i>Aeolanthus ukamensis</i>	v.lo
H	<i>Elephantorrhiza goetzei</i>	r	P	<i>Aerva leucura</i>	lo
P	<i>Embelia schimperi</i>	lo	P	<i>Aeschynomene abyssinica</i>	lo
P	<i>Eriosema ellipticum</i>	o-lf	P	<i>Aeschynomene bracteosa</i>	lo
P	<i>Eriosema englerianum</i>	lo	P	<i>Aeschynomene nyassana</i>	lo
H	<i>Erythrococca n.s</i>	r	P	<i>Aeschynomene tenuirama</i>	lo
H	<i>Euphorbia sereti</i>	v.lf	P	<i>Afromomum biauriculatum</i>	la
P	<i>Fadogiella stigmatoloba</i>	lo	P	<i>Aloe buettneri</i>	lo
P	<i>Heteromorpha trifoliata</i>	o-lf	P	<i>Aloe christiani</i>	lo
P.H	<i>Holostylon baumii</i>	lo	H	<i>Aloe mzimbana</i>	v.lf
P.H	<i>Humularia bequaerti</i>	v.lf	P	<i>Aloe nuttii</i>	lo
P	<i>Hymenocardia acida</i>	f	P	<i>Alvesia rosmarinifolia</i>	lo
H	<i>Iboza riparia</i>	v.lf	P	<i>Asparagus africanus</i>	lo
P	<i>Kotschya aeschenomenoides</i>	o-lf	P	<i>Asparagus plumosus</i>	lo
P	<i>Kotschya strigosa</i>	lo	H	<i>Barleria crassa</i>	v.lo
P	<i>Kotschya strobilantha</i>	lo	P	<i>Barleria descampsi</i>	v.lo
P	<i>Leonotis nepetifolia</i>	lo	P	<i>Barleria</i> (3298)	lo
P	<i>Maprounea africana</i>	lo	P	<i>Becium homblei</i>	lo
P	<i>Memecylon flavovirens</i>	lo	P	<i>Becium obovatum</i>	lo
P	<i>Mucuna stans</i>	v.lo	H	<i>Berkheya</i> (3151)	v.lo
P	<i>Oxytenanthera abyssinica</i>	v.lf	P	<i>Clematopsis homblei</i>	lo
H	<i>Ozoroa pwetoensis</i>	v.lo	P	<i>Clematopsis scabiosifolia</i>	lo
H	<i>Panicum adenophorum</i>	v.lo	P	<i>Clerodendrum buchneri</i>	lo
P	<i>Pavetta schumanniana</i>	lo	P	<i>Clerodendrum capitatum</i>	lo
P	<i>Protea angolensis</i>	o-lf	P	<i>Clerodendrum milne-redheadi</i>	lo
P	<i>Protea gagedi</i>	o-lf	P	<i>Clerodendrum pusillum</i>	r
P.H	<i>Pseudarthria hookeri</i>	lo	P	<i>Clitoria kaessneri</i>	o-lf
P	<i>Psorospermum febrifugum</i>	lo	P	<i>Coleus esculentus</i>	lo
P	<i>Salacia rhodesiaca</i>	v.lf	P	<i>Crotalaria cylindrocarpa</i>	lo
P	<i>Sapium cornutum</i>	lo	P	<i>Crotalaria florida</i>	lo
P	<i>Securidaca longepedunculata</i>	lo	P	<i>Crotalaria lachnophora</i>	lo
P	<i>Sida rhombifolia</i>	lo	P	<i>Cryptosepalum maraviense</i>	o-lf
H	<i>Tecomaria capensis</i>	v.lo	P	<i>Cussonia corbisieri</i>	lo
H	<i>Tinnea rhodesiana</i>	v.lo	P	<i>Desomdium barbatum</i>	o-lf
P	<i>Tricalysia angolensis</i>	lf	P	<i>Desmodium helenae</i>	lo

P	Desmodium tanganyikense	lo	H	Orthosiphon (3467)	r
P	Diospyros virgata	lo	P.H	Otiophora scabra	lo
P	Diplophium zambesianum	o-lf	P	Pleiotaxis eximia	lo
P	Dolichos ellipticus	lo	P	Pleiotaxis fulva	lo
P	Droogmansia pteropus	lo	P	Pleiotaxis pulcherrima	lo
P	Ectodiopsis oblongifolia	lo	P	Pleiotaxis rogersi	o-lf
P	Endostemon dissitifolius	lo	P	Protea micans	lo
P	Eupatorium africanum	lo	P	Psychotria eminiiana	lo
P	Fadogia erythrophloea	r	P	Psychotria humilis	lo
P	Fadogia fuchsoides	lo	P	Pteridium aquilinum	lc
P	Fadogia giorgi	lo	P.H	Rhus kirkii	lo
P	Fadogia katangensis	lo	P	Rhynchosia imbricata	r
P	Fadogia monticola	lo	P	Rhynchosia resinosa	lo
P	Fadogia odorata	r	P	Schistostephium	lo
P	Fadogia triphylla	o-lf	P	Sphenostylis marginata	lo
P	Gardenia subacaulis	lo	P	Strobilanthesis linifolia	lo
P	Grewia decemovulata	lo	P	Tephrosia dasyphylla	lo
P	Helichrysum angustifronsomum	v.lo	P	Tephrosia decora	lo
P	Helichrysum kirkii	lo	P.H	Tephrosia elata	lo
P.H	Helichrysum milne-redheadi	v.lo	P	Tinnea vestita	lo
P	Hypoestes verticillaris	o-lf	P	Tricalysia cacondensis	lo
P	Indigofera capitata	lo	P	Tricalysia suffruticosa	lo
P	Indigofera dendroides	lo	P	Triumfetta dekindtiana	lo
P	Indigofera emarginella	o-lf	P	Vernonia incompta	lo
P	Indigofera emarginelloides	o-lf	P	Vernonia poskeana	lo
P	Indigofera podocarpa	o-lf	P	Vernonia nestor	lo
P	Indigofera quarrei	lo	P	Vernonia polysphaera	lo
P.H	Indigofera rhynchocarpa	o-lf	P	Vernonia stenocephala	lo
P.H	Indigofera setiflora	lo	P	Vernonia (3132)	v.lf
P	Indigofera sutherlandioides	o-lf	P	Vernonia (3124)	v.lf
P	Inula glomerata	lo			
P	Jasminum streptopus	lo		<u>Climbers:</u>	
P	Justicia betonicoides	lo	P	Cassytha filiformis	lo
P	Lantana rhodesiensis	lo	P	Clematis welwitschii	lo
P	Leptactina benguelensis	lo	P	Dolichos africanus	lo
P	Microglossa angolensis	lo	P	Landolphia kirkii	lo
P	Myrsine africana	v.lf	P.H	Landolphia parvifolia	lo
P	Ochna confusa	lo	H	Leptoderris nobilis	lo
P	Ochna leptoclada	lo	P	Rhus caribea	v.lo
P	Ochna richardsiae	lo			

TERMITARIA VEGETATION

Tall trees:

	Albizia adianthifolia	lo		Fagara chalybea	r
B	Albizia amara	lo		Ficus brachylepis	lo
	Boscia angustifolia	f-c		Ficus dekdekana	lo
	Boscia cauliflora	lo		Ficus fischeri	lo
	Boscia salicifolia	lo		Ficus persicifolia	lo
B	Combretum molle	lf		Ficus sonderi	lo
	Dalbergia boehmii	r		Ficus wakefieldii	lo
	Diospyros abyssinica	r		Ficus (3288)	lo
B	Diospyros mespiliformis	lo	B	Garcinia huillensis	lo
B	Erythrina abyssinica	o-lf		Lannea discolor	lo
	Euphorbia candelabrum	o-lf	B	Lannea stuhlmannii	lo
			B	Lonchocarpus katangensis	lo

	Markhamia obtusifolia	o-lf		Clerodendrum capitatum	lo
B	Mimusops zeyheri	lo		Clerodendrum tanganyikense	o-lf
	Pappea ugandensis	r	B	Dichrostachys cinerea	lo
B	Peltophorum africanum	lo	B	Diospyros lycioides	lo
	Pleurostylia africana	r	B	Embelia schimperi	lo
	Pteleopsis anisoptera	lo	B	Euclea schimperi	lo
	Pterocarpus chrysothrix	r	B	Feretia aeruginescens	lo
	Sterculia quinqueloba	lo	B	Flacourtia indica	lo
	Stereospermum kunthianum	lo		Grewia flavescens	lo
	Strychnos potatorum	lo	B	Harungana madagascariensis	o-lf
B	Ziziphus mucronata	o-lf		Lantana trifolia	lo
				Pavetta assimilis	lo
	<u>Small trees:</u>			Pavetta schumanniana	f
	Acacia hockii	r		Phyllanthus guineensis	lo
	Acokanthera oppositifolia	lo	B	Phyllanthus muelleranus	lo
B	Antidesma venosum	lo	B	Phyllanthus reticulatus	lo
B	Azanza garckeana	lo		Popowia obovata	lo
	Bersama abyssinica	lo		Rhynchosia (3307)	lo
	Cassia abbreviata	lo		Securinega virosa	lo
	Cussonia kirkii	f	B	Sesbania sesban	v.lo
	Dombeya rotundifolia	lo		Vepris termitaria	r
	Euclea divinorum	r		Vernonia amygdalina	lo
	Gardenia jovis-tonantis	lo		<u>Sub-shrubs:</u>	
	Haplocoelum foliolosum	lo		Acalypha senensis	l
	Maerua angolensis	lo	B	Achyranthes aspera	lo
	Maerua kirkii	r	B	Aerva leucura	lo
	Maytenus heterophylla	lo		Aloe greatheadii	v.lf
	Mystroxyton aethiopicum	lo		Dicliptera verticillaris	lo
	Ochna afzeliioides	lo		Hibiscus calyphyllus	lo
B	Oxytenathera abyssinica	lf		Hypoestes verticillaris	o-lf
B	Phoenix reclinata	v.lf		Sansevieria kirkii	v.lf
	Phyllanthus discoideus	lo		Syzygium guineense subsp. huillense	v.lo
B	Rhus quartiniana	v.lo		Wissadula rostrata	lo
	Steganotaenia araliacea	lo		<u>Climbers:</u>	
	Tarenna neurophylla	lo		Adenia gummifera	lo
B	Ximenia americana	lo		Asparagus racemosus	lo
	<u>Shrubs:</u>		B	Cissampelos owariensis	lo
B	Acalypha chirindica	o-lf	B	Clematis brachiata	lo
B	Allophylus africanus	lo		Hippocratea africana	lo
	Allophylus congolanus	r	B	Commicarpus plantagineus	lo
	Bridelia duvigneaudi	lo		Ipomoea verbascoidea	lo
	Bridelia ferruginea	r		Landolphia parvifolia	lo
	Canthium lactescens	lo		Opilia celtifolia	lo
B	Canthium zanzibaricum	v.lo	B	Rhoicissus tridentata	lo
B	Capparis tomentosa	lo		Strychnos lucens	lo
	Carissa edulis	lo	B	Tacazzea apiculata	v.lo
	Cassia singueana	lo	B	Vernonia aurantiaca	lf
	Cissus schmitzii	r			

WATERSHED PLAIN

	<u>Shrubs:</u>			Combretum mechowianum	lo
	Burkea africana	lo		Combretum psidioides	lo
	Combretum apiculatum	lo		Diplorhynchus condylocarpon	o-lf

Erythrophleum africanum	lo	Eugenia angolensis	lo
Hymenocardia acida	f	Fadogia monticola	lo
Maprounea africana	lo	Fadogia triphylla	lo
Olex obtusifolia	lo	Garcinia buchneri	v.lf
Oldfieldia dactylophylla	f	Gardenia brachythamnus	v.lf
Protea madiensis	lo	Gnidia chrysantha	lo
Protes welwitschii	o-lf	Hibiscus hiernianus	v.lf
Syzygium guineense subsp. macrocarpum	lo	Hibiscus rhodanthus	lo
Terminalia brachystemma	lo	Humularia bequaerti	lf
Uapaca robynsii	lf	Humularia rosea	lo
Vangueriopsis lanciflora	r	Kotschya strobilantha	lo
Vitex madiensis	lo	Lannea edulis	o-lf
Xylopi odoratissima	r	Landolphia gossweileri	lo
		Magnistipula eglandulosa	lo
<u>Suffrutices:</u>		Morinda angolensis	r
Acalypha stuhlmannii	lf	Napoleona gossweileri	r
Acrocephalus sericeus	lc	Otiophora coerulea	v.lo
Aeschynomene baumii	lo	Ozoroa (3244)	r-lo
Aeschynomene nyassana	lo	Parinari capensis	f-c
Ancylanthus bainesii	r	Protea angolensis	lo
Annona stenophylla subsp. nana	o-lf	Psorospermum mechowi	r
Becium obovatum	lo	Psychotria heterosticta	lo
Brackenridgea arenaria	o-lf	Psychotria pumila	lo
Caloncoba suffruticosa	r	Pygmaeothamnus zeyheri	lo
Cassia mimosoides	lo	Sapium acetosella	r
Coleus esculentus	lo	Scoparia dulcis	lo
Coleus (3409)	r	Smilax kraussiana	lo
Combretum platypetalum	lf	Sopubia welwitschii	lo
Crotalaria recta	lo	Strychnos caespitosa	lo
Crotalaria variegata	o-lf	Syzygium guineense subsp. huillense	o-lf
Dichapetalum rhodesicum	r	Tephrosia dasyphylla	lo
Dissotis angusii	r	Tephrosia n.s	lo
Doliches densiflorus	lo	Tricalysia angolensis	lo
Ectadiopsis producta	lo	Triumfetta digitata	lo
Entada nana	r	Vernonia turbinella	lo
Eriosema buchananii	lo	Xylopi tomentosa	r

DAMBO VEGETATION

D – dry W – wet

Trees:

D	Acacia polyacantha	v.lf	W	Ludwigia abyssinica	lo
			D	Philippia benguelensis	o-lf
			DW	Protea welwitschii	lf

Shrubs:

D	Adenodolichos baumii	lo	W	Rhus anchietae	lo
W	Aeschynomene fulgida	lo	W	Sesbania microphylla	v.lf
W	Aeschynomene indica	lo	W	Sesbania sesban	lf
W	Ascocarydion mirabile	v.lf	W	Triumfetta cordifolia	lf
D	Pteridium aquilinum	lc	W	Vernonia leucocalyx	lf

W	Desmodium salicifolium	lo
W	Dissotis princeps	lf
W	Eriosema psoraleoides	lf
W	Kosteletzkya begoniifolia	r
W	Kotschya africana	lf
W	Kotschya speciosa	r
D	Leonotis leonurus	lo

Suffrutices:

W	Aeolanthus engleri	lo
D	Aeschynomene pygmaea	lo
D	Aloe crassipes	r
D	Annona stenophylla subsp. nana	v.lf
D	Becium homblei	lo
D	Blepharis buchneri	lo

D	<i>Caloncoba suffruticosa</i>	r	W	<i>Neohyptis paniculata</i>	r
D	<i>Combretum platypetalum</i>	o-lf	D	<i>Nidorella spartioides</i>	r
D	<i>Desmodium caffrum</i>	r	W	<i>Nidorella welwitschii</i>	lf
W	<i>Dissotis canescens</i>	lf	D	<i>Otiophora caerulea</i>	r
W	<i>Dissotis rotundifolia</i>	r	D	<i>Polygala gomesiana</i>	r
W	<i>Dissotis</i> (3245)	r	W	<i>Protea secundiflora</i>	r
W	<i>Dissotis</i> (3442)	r	D	<i>Protea trichophylla</i>	r
D	<i>Dolichos densiflorus</i>	lo	W	<i>Pycnostachys stuhlmannii</i>	lo
D	<i>Endostemon obtusifolius</i>	lo	D	<i>Rhynchosia insignis</i>	lo
D	<i>Eriosema englerianum</i>	lo	D	<i>Rhynchosia verdicki</i>	lo
D	<i>Fadogia cienkowski</i>	lo	D	<i>Rytigynia lewisii</i>	v.lf
W	<i>Gnidia chrysantha</i>	lo	D	<i>Sesamum angustifolium</i>	lo
W	<i>Gnidia dekindtiana</i>	r	W	<i>Sopubia densiflora</i>	lo
W	<i>Gnidia kraussiana</i>	o-lf	W	<i>Sopubia parviflora</i>	r
D	<i>Helichrysum odoratissimum</i>	lo	W	<i>Sopubia ramosa</i>	lf
D	<i>Heliotropium ovalifolium</i>	lo	W	<i>Sopubia simplex</i>	lf
D	<i>Hibiscus rhodanthus</i>	lo	D	<i>Strophanthus angusii</i>	r
W	<i>Hypericum lalandii</i>	lo	W	<i>Syzygium guineense</i> subsp. <i>huillense</i>	lf
D	<i>Indigofera microphylla</i>	lo	D	<i>Tephrosia paniculata</i>	lo
D	<i>Ipomoea obscura</i>	lo	D	<i>Tetracera masuiana</i>	v.lf
D	<i>Ipomoea vernalis</i>	lo	D	<i>Thesium cinereum</i>	lo
D	<i>Lanea edulis</i>	o-lf	D	<i>Triumfetta heliocarpa</i>	v.lf
D	<i>Lippia wilmsii</i>	lo	D	<i>Triumfetta welwitschii</i>	v.lf
W	<i>Melastromastrum segregatum</i>	r	D	<i>Xyzmalopium undulatum</i>	r
D	<i>Microglossa angolensis</i>	v.lf			

ENDEMICS

Mwinilunga has a greater number of species endemic to the district than any other district. Most of them are riparian species from either Angola or Congo. The following 53 species are endemic, as far as is known at the moment:

	Vegetation type	Locality
<i>Adenodolichos bussei</i>	P	Kalene Hill
<i>Afzelia bipindensis</i>	R	Kalene Hill
<i>Alangium chinense</i>	R	Luakera River
<i>Aloe crassipes</i>	D	Kalenda
<i>Aloe milne-redheadi</i>	A	Matonchi
<i>Anthocleista vogelii</i>	R.S	Zambezi River
<i>Aphanostylis manni</i>	R	Zambezi River
<i>Aulacocalyx jasminiflora</i>	R.K1	Isombo River
<i>Beilschmiedia gilbertii</i>	R	Kalene hill
<i>Bridelia ferruginea</i>	A	Matonchi
<i>Byrsocarpus coccineus</i>	K	Matonchi
<i>Chaetocarpus africanus</i>	R	Kalene
<i>Chrysobalanus atacorensis</i>	R	Luakera River
<i>Chrysophyllum welwitschii</i>	R	Muzera River
<i>Dichapetalum crassifolium</i>	R	Lunga River
<i>Dichapetalum whitei</i>	R	Zambezi River
<i>Dioscorea baya</i>	R	Matonchi
<i>Diospyros hoyleana</i>	R	Zambezi River
<i>Euphorbia sereti</i>	H	Kabompo gorge
<i>Fadogia erythrophloea</i>	K.P	Lake Chibesha
<i>Ficus ardisioides</i>	R	Muzera River
<i>Ficus persicifolia</i>	A	Kakoma
<i>Gaertnera paniculata</i>	R.K1	Kalene
<i>Garcinia punctata</i>	R.K1	Kalene
<i>Heinsia crinita</i>	K.K1	Kalene
<i>Hibiscus altissimus</i>	R	Kalene
<i>Hippocratea pallens</i>	R	Lunga river
<i>Hippocratea ritschardii</i>	T	Zambezi River
<i>Klainedoxa gabonensis</i>	R	Zambezi River
<i>Kosteletzkya begoniifolia</i>	S.D	Matonchi
<i>Leptoderris goetzei</i>	R	Kalene
<i>Macaranga schweinfurthii</i>	S	Zambezi River
<i>Maesobotrya n.s.</i>	R	Zambezi River
<i>Morinda angolensis</i>	SK	Solwezi Road
<i>Mussaenda angolensis</i>	S	Kabompo gorge
<i>Newtonia aubrevillei</i>	R	Kalene
<i>Pavetta redheadii</i>	R	Mwinilunga town
<i>Pleiotaxis fulva</i>	P.H	Mwinilunga town
<i>Protea haemantha</i>	K	Kabompo Road
<i>Psorospermum mechowi</i>	SK	Kalene Hill
<i>Pseudagrostistachys ugandensis</i>	R	Lunga River

	Vegetation type	Locality
Rinorea welwitschii	R	Zambezi River
Rutidea smithii	R	Matonchi
Sabicea angolensis	K1.R	Isombo River
Salacia pynaertii	R	Zambezi River
Samanea leptophylla	R	Zambezi River
Sherbournia bignoniiflora	R	Zambezi River
Staudtia gabonensis	R	Lunga River
Toxocarpus brevipes	K1.R	Zambezi River
Uvaria edulis	R.S	Zambezi River
Uvariopsis congensis	S	Kalene
Xylopia acutiflora	R	Lunga River

FOREST RESEARCH PAMPHLET NO. 26, 1969**THE VEGETATION OF SENANGA DISTRICT**

Senanga District covers some 11,655 square miles [30,186 km²] in Central Barotse Province. It lies between latitudes 15°15' and 17°30' S, and between longitudes 22°00' and 24°30' E. It is bounded on the south east by Sesheke District, on the south west by Angola, on the north by Kalabo and on the north east by Mongu and Mankoya districts.

It is divided in two by the Zambezi River running north to south east through the district. West of the Zambezi the terrain is a vast flat sand plain relieved by high sand scarps along each side of the main water courses. East of the Zambezi, the land rises gently through some 250 ft [76 m] towards the central plateau and is divided by the wide fertile valleys of several perennial tributaries of the Zambezi. The wide Barotse Plain lies each side of the Zambezi from Senanga Boma up river into Mongu District.

West of the Zambezi the only perennial stream is the Lueti River which rises in Kalabo. East of the Zambezi, the two main tributaries are the Lui and Lumbe rivers.

Some 40% of the land surface of the district is liable to seasonal waterlogging or flooding. The Barotse Plain floods when the river rises to midway between the minimum and maximum levels of 4 and 18 ft respectively [1.2 and 5.5 m], usually from mid-February to mid-June.

The mean annual rainfall over the period 1931–1962 has been 33 inches per annum [84 cm] falling between mid-November and mid-March. The rainfall increases slightly from south to north. Heavy dew is precipitated during the winter months. Mean maximum temperatures vary from 70–80°F [21–27°C] between February–September, but absolute monthly maxima are over 100°F [38°C] between September–January. Frosts occur in low-lying depressions during the winter months. The prevailing wind is from the south-east except during July–August when it blows from the south-west.

The geology of the district is masked by a blanket of Kalahari sand. It can be inferred that this is underlain by Karoo beds including sandstones, chalcedony, gravels and clays. The Kalahari sands are the weathered product of the weak upper Karoo sandstone.

The sands can be divided into the undifferentiated, whitish to golden coarse-grained sands of very low fertility and the transitional grey or brown, finer sands with a fertility just permitting maize cultivation. The latter carry the *Baikiaea* forests. Peaty soils are found as fringes to the large circular pans in the central loose sand area and grey brown, fertile, silty clay loams cover most of the Barotse Plain.

"Mutuya" (*Brachystegia spiciformis*) woodland covers the central loose sands along the Lueti scarps and the west bank of the Zambezi and between the Lui River and the east bank of the Zambezi. Between the Lui and Lumbe rivers on the east bank lies a stretch of mutondo (*Julbernardia paniculata*) woodland. The Siluana plains west of the Zambezi and south of the Mulonga/Matabele plains, is a belt of small plains or pans contained within a matrix of munga woodland.

The Siluana plains are boxed in by a broad belt of mukusi (*Baikiaea*) forest along the Mashi River, along the southern fringe of the Mulonga/Matabele plain and along the west bank of the Zambezi River. North of the Mulonga/Matabele plain is an area of plains and bush groups. The Barotse Plain is non-wooded.

The following vegetation types occur in the district:

1. Closed Forest**A. Climatic**

1. Dry evergreen forest
 - (a) *Cryptosepalum* forest (relic) - K1
2. Dry deciduous forest
 - (a) *Baikiaea* forest - K6
 - (b) Secondary *Baikiaea* forest - K6/12

B. Edaphic

1. Riparian woodland

2. Open Forest with Grass

1. Miombo/Kalahari woodland - K3, K5
2. Kalahari woodland - K7.8, SK5, SK6
3. Mopane woodland - S1
4. Munga woodland - K12

3. Termitaria

1. Mopane termitaria
2. Munga termitaria - K12/T, K7/12
3. Riparian termitaria
4. Dambo termitaria

4. Grasslands

1. Sand plains
2. Dambos
3. Flood plains

1. CLOSED FOREST**1.A.1.a Dry Evergreen *Cryptosepalum* Forest**

Relics of this dry evergreen forest type, locally known as "mavunda" (Trapnell's K1) occur around the headquarters of the Lumbe River as pole crops dominated by *Cryptosepalum exfoliatum* subsp. *pseudotaxus* over a tangle of *Landolphia*, evergreen shrubs and scramblers. The occurrences are in small, oval patches almost at the southern limit of the range of both the type and the species. It is a stunted forest with a more-or-less closed canopy 30–35 ft high [9–10.5 m], no distinct understorey but a marked, sometimes almost impenetrable shrub layer at the height of the dominant *Copaifera* 3–4 ft high [1–1.2 m].

Cryptosepalum is strongly dominant, but *Brachystegia longifolia*, *B. spiciformis* and *Julbernardia paniculata* from the surrounding woodland are usually present.

Common small trees and shrubs include the strongly dominant *Copaifera baumiana* with *Diplorhynchus condylocarpon*, *Paropsia brazzeana*, *Tricalysia angolensis* and *Vangueriopsis lanciflora*. Sub-shrubs are chiefly *Chamaeclitandra henriquesiana*, *Diospyros virgata*, *Tricalysia cacondensis* and *Triumfetta dekindtiana* over a moss carpet.

The scrambler element which imparts the characteristic appearance to "mavunda" consists largely of *Landolphia camptoloba* with *Canthium venosum*, *Cassytha filiformis* and *Strophanthus welwitschi*.

1.A.2.a Dry Deciduous *Baikiaea* Forest

Relic patches of mukusi forest (Trapnell's K6) occur along the Zambezi and Mashi rivers, particularly in Watembo, Lilonga, Liu, Nampiu and Sinjambele forests on the west bank and Naluya forest on the east bank. The best preserved patches are in Matembo and Nampiu forests where *Baikiaea* forests exactly like the best Masese forests still stand.

The better-preserved forests have an almost pure canopy of *Baikiaea* 40–60 ft high [12–18 m] with scattered, sometimes emergent *Entandrophragma caudatum*, localised groups of *Commiphora angolensis* and invasive *Ricinodendron rautanenii* on the river fringe. Sub-dominants are *Croton gratissimus* and *Lonchocarpus nelsii*. *Pterocarpus antunesi*, co-dominant in the Sesheke forests, is very local along the Zambezi but more widely distributed along the Mashi River.

The mutemwa undergrowth is a *Baphia* – *Bauhinia* – *Combretum* complex 10–15 ft high [3–4.5 m]. The typical east bank component of the mutemwa, *Dalbergia martini*, is rather local probably because it is fire-sensitive. Common mutemwa shrubs and small trees include *Acacia ataxacantha*, *Baphia massaiensis* subsp. *obovata*, *Bauhinia macrantha*, *Combretum celastroides*, *C. elaeagnoides* (in the southern half of the district only, at the limit of its range in the west), *Dichrostachys cinerea*, *Grewia avellana*, *G. flavescens*, *Markhamia acuminata* and *Popowia obovata*.

Achyranthes aspera, *Hypoestes verticillaris*, *Pupalia lappacea* and *Triumfetta annua* are common in the mutemwa understory. *Baissea wulffhorsti* and *Hippocratea parviflora* are the only common climbers, the former more or less restricted to the mutemwa, the latter in the canopy.

The less well preserved forests vary from the above to Kalahari woodland (Trapnell's K7). The commonest form is an overwood of *Baikiaea* associated with varying amounts of *Acacia giraffae* and *Combretum mechowianum* over a low (4–6 ft high) [1.2–1.8 m] dense mutemwa, largely composed of *Baphia* and *Bauhinia*.

In old fire holes, *Acacia flecki*, *Croton pseudopulchellus* and *Markhamia obtusifolia* are commonly found.

Along the Zambezi in particular, to a lesser extent along the Mashi, invasive species from the munga woodland of the alluvial flats are frequently found in the forest. Typical of such invaders are *Acacia nigrescens*, *Albizia versicolor*, *Combretum imberbe*, *Diospyros mespiliformis*, *Kigelia africana* and *Lannea stuhlmanni*.

A noticeable feature of the *Baikiaea* forests is the absence of *Baikiaea* regeneration. With the exception of patches of regeneration in Nampiu, the forests appear to be more or less moribund and even in Nampiu, although the regeneration is vigorous it is coppice regeneration. Natural regeneration is rare.

1.A.2.b Secondary *Baikiaea* Forest

This is fire-degraded *Baikiaea* forest invaded by Kalahari woodland elements, e.g. *Guibourtia coleosperma* or *Combretum mechowianum* on the one hand, and munga elements, e.g. *Acacia giraffae* or *Terminalia sericea* on the other hand. It acts as a buffer between *Baikiaea* and Kalahari woodland or *Baikiaea* and munga woodland. These ecotones are in a continual state of flux advancing into *Baikiaea* forest on the inside and being absorbed into Kalahari or munga woodland on the outside. The type varies from open heavily degraded forest over low dense mutemwa to high tangled mutemwa with little overwood to dense stands of invasive species over a light mutemwa.

Common overwood species include *Acacia giraffae*, *Combretum mechowianum*, *Croton gratissimus*, *Lonchocarpus nelsii* and *Terminalia sericea*. *Baikiaea* may or may not be present. The chief shrubs and small trees are *Acacia ataxacantha*, *A. flecki*, *Baphia massaiensis*, *Bauhinia macrantha*, *Combretum celastroides*, *C. elaeagnoides* (but only as far north as Nampiu Forest), *Croton pseudopulchellus*, *Dichrostachys cinerea*, *Grewia avellana*, *Markhamia acuminata* and *M. obtusifolia*.

Common sub-shrubs include *Clerodendrum uncinatum* (following cultivation), *Disperma crenatum*, *Hemizygia bracteosa*, *Hibiscus mastersianus*, *Ocimum americanum*, *Sida cordifolia*, *Tephrosia paniculata*, *Triumfetta annua* and *Waltheria indica*. The succulent *Sansevieria kirki* is locally frequent. *Dioscorea hirtiflora* and *Hippocratea parviflora* are the only climbers at all frequent.

1.B.1 Riparian Woodland

Riparian or gallery woodland occurs as a double fringe to the Zambezi River. It is almost non-existent along the Mashu River. The outer fringe with its feet in the water is almost pure *Syzygium guineense* subsp. *barotsense* with *Rhus quartiniana* and *Sesbania* species in places and the gaps filled by *Phragmites mauritianus* reeds. The climber *Tacazzea apiculata* is common and even *Mimosa pigra* tries to climb into the *Syzygium*.

The inner (landward) fringe which may be separated from the outer by 50 ft [15 m] of alluvial flat carries a varied assortment of riparian trees, shrubs and climbers. Common dominants are *Acacia albida* (especially on high sandbanks), *A. polyacantha* (locally) and *Ficus capensis*. The chief small trees and shrubs are *Phoenix reclinata* palms (locally), *Allophylus africanus*, *Antidesma venosum*, *Byrsocarpus orientalis*, *Diospyros lycioides*, *Ficus pygmaea* and *Mimosa pigra*. *Cocculus hirsutus* and *Jasminum fluminense* are the commonest climbers.

Gallery woodland along the smaller rivers like the Lui has been reduced to the odd relic clump of *Salix* and long stretches of *Phragmites* reeds with *Tacazzea* climbers.

2. OPEN FOREST

2.1 Miombo/Kalahari Woodland

These woodlands represent two aspects of arrested regression from *Baikiaea* forest to suffrutex grassland. The primary *Guibourtia* stage of Kalahari woodland has been invaded firstly by *Brachystegia spiciformis*, secondly by *Julbernardia paniculata* (Trapnell's K5 and K3, respectively). On the east bank *B. spiciformis* woodland is true to type and contains nearly all the species listed below for first stage Kalahari woodland. On the west bank, however, *B. spiciformis* occurs in almost pure stands which suggests that it may there have invaded a later stage in the regression when fewer Kalahari woodland species were present as competitors.

The K3 *Julbernardia paniculata* woodlands are virtually confined to the east bank of the Zambezi between the Lui and Lumbe rivers. There is one small area on the west bank near Sioma Falls. The K3 woodland on the east bank is specifically rich as the *Julbernardia* is in the process of replacing a rich K5 woodland.

Brachystegia bakerana is locally frequent in the Lui–Lumbe area as dense belts of thicket marginal to dambos and streams, in some cases, e.g. Lumbe head, completely filling the dambos. *Brachystegia longifolia* is present in dense stands around the Lumbe headwaters. For composition, see Kalahari woodland below.

2.2 Kalahari Woodland

Woodland on Kalahari sand (Trapnell's K7, K8, SK5, SK6) is one long regression from *Baikiaea* forest to watershed grassland. Mutemwa as such is absent but the shrub cover is often dense and very similar to the *Baphia–Bauhinia* low mutemwa of the K6 intermediate stages in appearance. It is widespread on the west bank of the Zambezi. The regression can be divided into the following stages:

- a) *Baikiaea–Guibourtia* woodland, the primary stage but in Senanga comparatively rare and only noted in the eastern end of Shelangu and in some of the Mulele group of forests as a fringe to the *Baikiaea* forest.
- b) *Baikiaea–Guibourtia–Erythrophleum* woodland following on (a) above with *Baikiaea* absent or rare but *Guibourtia* still persisting. Most of the Kalahari woodland on the west bank, except around the large Siluana and Matabele plains, represents some form of this stage.
- c) *Burkea–Erythrophleum* woodland following on (b) above. *Burkea*, except locally, is the more dominant of the two species because of its greater resistance to fire.
- d) *Burkea–Diplorhynchus* scrub following on (c) above, so much degraded that there is little else but the two named species.

- e) Watershed grassland or sand plain covered with suffrutices sparse grass and sedges. Most if not all the suffrutices can be found in the Kalahari woodland fringes in the *Burkea* subtypes.

Generally in K7 ((b) above), top canopy height averages 30 ft [9 m] but rarely reaches 40 ft [12 m], with the exception of a few ancient *Guibourtia* which reach 50 ft [15 m]. The canopy varies from fairly close to very open.

Common overwood dominants, apart from those already mentioned, are *Brachystegia longifolia* (very local), *Cryptosepalum exfoliatum* subsp. *pseudotaxus* (usually occurring as poles in pseudo-mavunda over small localised areas), *Pterocarpus angolensis* and *Ricinodendron rautanenii* (erratic distribution but mostly fringing the Mashi and Zambezi rivers).

Common small trees include *Brachystegia bakerana*, *Combretum psidioides*, *C. zeyheri*, *Diospyros batocana*, *Diplorhynchus condylocarpon*, *Hymenocardia acida*, *Ochna pulchra* and *Terminalia brachystemma*.

The most important shrubs are *Baphia massaiensis* (a relic from K6), *Bauhinia urbaniana* (replacing *B. macrantha*), *Copaifera baumiana*, *Grewia* spp., *Kotschya strobilantha* (on dambo margins only), *Lepidagathis macrochila*, *Paropsia brazzeana*, *Vitex madiensis* and, locally, *Xeromphis obovata*.

Sub-shrubs are a feature of the more degraded *Burkea*–*Erythrophleum* and *Burkea*–*Diplorhynchus* subtypes and, of course, of the watershed grassland itself. Especially *Annona stenophylla* subsp. *nana*, *Brackenridgea arenaria*, *Chamaecitandra henriquesiana*, *Diospyros chamaethamnus*, *D. virgata*, *Gardenia brachythamnus*, *Napoleona gossweileri* (locally), *Ochna* spp., *Parinari capensis*, *Sapium oblongifolium*, *Strobilanthesis linifolia*, *Strychnos caespitosa* (locally), *Tricalysia cacondensis* and *Triumfetta dekindtiana* (in gaps). In addition, on watershed grassland occur *Magnistipula eglandulosa* and *Pygmaeothamnus zeyheri*.

Climbers are comparatively rare as most are fire sensitive. *Baissea wulfhorsti* (a K6 relic), *Landolphia camptoloba* (a K6 relic) and *Rhynchosia holosericea* (a ground creeper) are the most abundant of the few species.

2.3 Mopane Woodland

Mopane woodland (Trapnell's S1) occurs pure or almost so at the southern extremity of the Siluana Plain, and spreads over the boundary into Sesheke District. It occurs on alluvial flats around shallow, seasonal water holes and on the anthills which dot the fringes of such areas (see under mopane termitaria).

2.4 Munga Woodland

Munga woodland of *Acacia*–*Combretum*–*Terminalia* occurs as a fringe to the Siluana and Matabele plains and on the alluvial flats by the Mashi and Zambezi rivers. Usually it is a very open type of woodland but groups of denser stocking occur here and there, e.g. *Terminalia sericea* on low dunes surrounding the smaller plains or *Acacia giraffae* towards the fringes of the Siluana. A vague thicket is sometimes associated with these groups or even with individual trees. Dominant trees are up to 60 ft high [18 m], small trees 10–15 ft high [3–4.5 m].

Canopy dominants include the *Acacias*, *A. luederitzii*, *A. giraffae*, *A. nigrescens* and *A. sieberana*, *Albizia amara* and *A. harveyi*, *Combretum imberbe*, *Hyphaene ventricosa* palms (locally and usually as juveniles), *Lonchocarpus capassa*, *Strychnos potatorum* and *Terminalia sericea*.

The commoner shrubs and small trees are *Acacia hebeclada* (usually around water holes), *A. mellifera*, *Combretum hereroense*, *Dalbergia melanoxylon*, *Dichrostachys cinerea*, *Euclea divinorum* and *Maytenus senegalensis*.

Common sub-shrubs include the ubiquitous *Achyranthes aspera*, *Aerva lanata*, *Hermannia glanduligera*, *Leonotis nepetifolia*, *Sesamum capense* and *Sutera elegantissima*; the last two usually

restricted to low sandbanks on the flood plain. Climbers are rare, only *Cardiospermum halicacabum* and *Cocculus hirsutus* are at all common.

3. TERMITARIA

3.1 Mopane Termitaria

These occur on alluvial flats around shallow seasonal water holes at the southern end of the Siluana Plain. Common dominants besides *Colophospermum mopane* include *Acacia nigrescens*, *Albizia amara* and *A. harveyi*, *Euphorbia candelabrum* and *Strychnos potatorum*. Small trees and shrubs are represented chiefly by *Albizia anthelmintica*, *Boscia mossambicensis*, *Combretum elaeagnoides*, *Diospyros lycioides* and *Ximenia americana*.

Sub-shrubs are few, chiefly the *Aloes*, *A. chabaudi* and *A. zebrina*, *Dyschoriste verticillaris* and *Sansevieria deserti* (mother-in-law's tongue). Climbers are more common, especially *Asparagus africanus*, *Cissus quadrangularis*, *Fockea multiflora* (the python vine) and *Turbina shirensis*.

3.2 Munga Termitaria

Two distinct forms with one variant occur in the district, all usually called bush groups. The first, designated K12/T, is a rare form occurring round shallow seasonal pans on alluvial flats just as mopane termitaria do.

Dominant trees include *Acacia nigrescens*, *Albizia harveyi*, *Combretum hereroense*, *C. imberbe* and *Cassine transvaalensis*. Common shrubs and small trees are chiefly *Acalypha ornata*, *Byrsocarpus cinerea*, *Diospyros lycioides*, *Euclea divinorum*, *Markhamia obtusifolia*, *Popowia obovata* and *Wissadula rostrata*.

Sub-shrubs are a feature, especially *Barleria mackenii* (local), *Disperma crenatum*, *Hypoestes verticillaris*, *Justicia betonicoides* and the succulent *Sansevieria deserti*. Common climbers include *Cissampelos mucronata*, *Cocculus hirsutus* and *Hippocratea africana*.

The second form, designated K7/12, consists of isolated groups of Kalahari woodland, even including *Baikiaea*, invaded by riparian and munga woodland species as a result of a high water table in the surrounding area. The bush groups were formed by erosion of the interfluvial margins combined with a fluctuating water table and thus forming secondary and tertiary drainage channels. These bush groups cover a wide area in the north west, north of the Matabele Plain and link up with similar vegetation in the south west of Kalabo District. The mounds are elliptical in shape 200–300 ft long [61–92 m] and 10–12 ft high [3–3.7 m] separated by wide areas of grassland.

Canopy dominants are chiefly *Baikiaea plurijuga*, *Brachystegia spiciformis*, *Burkea africana*, *Combretum imberbe*, *C. mechowianum*, *Erythrophleum africanum*, *Pterocarpus angolensis* and, locally, *Ricinodendron rautanenii* and *Terminalia sericea*.

Small trees are common, especially *Combretum zeyheri*, *Diospyros batocana*, *Diplorhynchus condylocarpon*, *Hymenocardia acida*, *Maprounea africana*, *Markhamia obtusifolia*, *Maytenus senegalensis*, *Monotes glaber*, *Ochna pulchra*, *Oldfieldia dactylophylla* and *Pseudolachnostylis maprouneifolia*.

Shrubs are few compared to the small trees, but *Baphia massaiensis*, *Bauhinia macrantha*, *Diospyros lycioides*, *Paropsia brazzeana* and *Popowia obovata* are common. Climbers are infrequent, the commonest being the dodder *Cassytha filiformis*, *Cocculus hirsutus* and *Landolphia camptoloba*.

A variation on the above on the southern Siluana Plains has resulted in bush groups on low mounds with virtually only two species, *Pterocarpus angolensis* and *Ricinodendron rautanenii*. *Hypphaene* palms, usually juvenile, are occasionally associated.

3.3 Riparian Termitaria

Along the Mashi River and the smaller streams termite mounds occur with a thicket vegetation, rather like mutemwa beneath a munga overwood.

Canopy dominants are chiefly *Combretum mechowianum*, *Lannea stuhlmanni* and *Terminalia sericea*. Small trees are rare. Common shrubs include *Capparis tomentosa*, *Diospyros lycioides*, *Phyllanthus reticulatus*, *Popowia obovata* and *Rytigynia umbellulata*.

Sub-shrubs are a feature, especially *Abutilon* spp., *Achyranthes aspera*, *Dyschoriste verticillaris*, *Hermannia glanduligera*, *Hypoestes verticillaris*, *Justicia glabra*, *Ocimum americanum*, *Pavonia hirsuta*, *Sida cordifolia* and *Wissadula rostrata*. Climbers are few, mostly *Cissampelos mucronata* and *Jasminum fluminense*.

3.4 Dambo Termitaria

These occur on alluvial flats, dambos and plains. Dominant trees include *Acacia nigrescens*, *Boscia albitrunca*, *Combretum imberbe* and *Strychnos potatorum*. The commoner shrubs and small trees are *Acalypha ornata*, *Antidesma venosum*, *Byrsocarpus orientalis*, *Capparis tomentosa*, *Diospyros lycioides*, *Euclea divinorum*, *Grewia schinzi*, *Markhamia obtusifolia*, *Phoenix reclinata* palms, *Securinega virosa* and *Vernonia amygdalina*.

Sub-shrubs include *Abutilon* spp., *Achyranthes aspera*, *Disperma crenatum*, *Hibiscus vitifolius* and *Triumfetta annua*. The commoner climbers are *Cissampelos mucronata*, *Cocculus hirsutus*, *Helinus integrifolius* and *Hippocratea africana*.

4. GRASSLANDS

4.1 Sand Plains

The suffrutex element of the vegetation has already been enumerated under Kalahari woodland/watershed plain. The dominant grass is *Loudetia simplex* in association with *Tristachya hitchcocki*. *Loudetia* and *Tristachya* are normally found on poor sandy or sour soils. Most of these grasslands – the Siluana Plains – are subject to shallow flooding during the rains.

4.2 Dambos

The dambos are essentially grass–sedge areas with suffrutices and occasional trees, in fact, the reverse of the sand plains on which suffrutices are dominant. *Erythrophleum africanum* as a stunted tree is common in places. Common suffrutices include *Asparagus asiaticus*, *Combretum platypetalum*, *Eriosema pauciflorum*, *Gnidia kraussiana*, *Lannea edulis* and *L. gossweileri*, *Napoleona gossweileri*, *Ochna leptoclada*, *Sesamum angustifolium* and *Syzygium guineense* subsp. *huillense*.

4.3 Flood Plains

These include the Barotse and Wanyau plains and, to some extent, the Lueti and Lui plains. Grasses are of the sweet type. *Hyparrhenia rufa* and *Setaria* species form characteristic tussock grassland. *Vetiveria nigriflora* marks alluvial banks of clay loam and *Echinochloa stagnina* is widespread on the lower lying alluvial clays of the Bulozhi.

Fringing the flood plains is a seepage zone with a narrow fringe of *Hyparrhenia bracteata* and *Trachypogon spicatus* marking the limit of the sand grasses, followed by the actual seepage zone dominated by *Scleria* sedges and passing into a peat swamp of tussocky *Miscanthidium violaceum*.

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SPECIES LISTS

a – abundant, c – common, f – frequent, lc – locally common, lf – locally frequent,
o – occasional, lo – locally occasional, r – rare

BAIKIAEA FOREST (K6)Canopy trees:

Acacia giraffae	f-c
Acacia nigrescens	r
Adansonia digitata	r
Azalia quanzensis	lo
Albizia harveyi	r
Albizia versicolor	r
Amblygonocarpus andongensis	r
Baikiaea plurijuga	a
Berchemia discolor	r-o
Boscia albitrunca	o
Brachystegia spiciformis	r
Combretum imberbe	r
Combretum mechowianum	f-c
Commiphora angolensis	lf
Croton gratissimus	f
Dialium englerianum	o
Diospyros mespiliformis	r
Entandrophragma caudatum	r-lo
Erythrophleum africanum	r
Excoecaria bussei	lo
Ficus fischeri	r-o
Guibourtia coleosperma	r
Hyphaene ventricosa	r
Kigelia africana	r
Lannea stuhlmannii	lo
Lonchocarpus nelsii	f
Peltophorum africanum	lo
Pterocarpus angolensis	r
Pterocarpus antunesii	lf
Ricinodendron rautaneni	lo
Sclerocarya caffra	r
Strychnos innocua	lo
Strychnos potatorum	lo
Terminalia sericea	o-lf

Small trees:

Albizia anthelmintica	r
Cassipourea n.s.	lo
Combretum celastroides	f-c
Combretum engleri	o
Markhamia acuminata	o-lf
Ochna pulchra	o
Phyllanthus discoideus	r
Phyllanthus engleri	r
Rhus tenuinervis	o
Schrebera trichoclada	lo
Vangueriopsis lanciflora	r

Shrubs and scramblers:

Acacia ataxacantha	f-lc
Acacia fleckii	lf
Baphia massaiensis subsp. obovata	c
Bauhinia macrantha	f-c
Bridelia duvigneaudi	r
Byrsocarpus orientalis	r-o
Canthium huillense	lo
Citropsis daweani	lo
Combretum elaeagnoides	f-c
Croton pseudopulchellus	lf
Dalbergia martinii	o-lf
Dalbergia melanoxylon	r
Dichrostachys cinerea	lf
Erythrococca menyharthii	o
Euclea divinorum	lo
Fagara trijuga	r-o
Grewia avellana	f
Grewia falcistipula	r-o
Grewia flavescens	f
Grewia retinervis	lo
Maerua juncea	r
Markhamia obtusifolia	lf
Maytenus senegalensis	r-o
Ochna cinnabarina	o
Paropsia brazzeana	r
Phyllanthus reticulatus	lo
Popowia obovata	f
Tarenna luteola	o-f
Tricalysia allenii	o-f
Vangueria infausta	r
Vitex amboniensis	o
Ximenia americana	o

Sub-shrubs:

Achyranthes aspera	lf
Aspilia mossambicensis	r-o
Clerodendrum capitatum	lo
Clerodendrum uncinatum	lo
Coleus esculentus	r
Crotalaria flavicarinata	o
Euphorbia benthamii	lo
Euphorbia transvaalensis	lo
Gardenia brachythamnus	lo
Hemizygia bracteosa	lf
Hibiscus calyphyllus	r-o
Hibiscus lobatus	lo
Hibiscus mastersianus	lf

Hibiscus physaloides	r-o	<u>Climbers:</u>	
Hypoestes verticillaris	lf	Asparagus africanus	r-o
Jasminum streptopus	o	Baissea wulfhorsti	f-lc
Justicia betonicoides	o-f	Bonamia spectabilis	lo
Phyllanthus capillaris	o	Clematis brachiata	r
Phyllanthus pentandrus	f	Cocculus hirsutus	r
Plumbago zeylanica	o	Combretum mossambicense	o-f
Pollichia campestris	r	Hippocratea parviflora	f
Pupalia lappacea	o-f	Ipomoea verbascoidea	o
Peristrophe bicalyculata	r	Rhynchosia caribea	lo
Solanum panduriforme	lo	Strophanthus kombe	r-o
Triumfetta annua	o-f	Vigna vexillata	o

SECONDARY BAIKIAEA FOREST (K6/12)Canopy trees:

Acacia giraffae	f-lc
Acacia nigrescens	lo
Acacia sieberiana	r
Azelia quanzensis	r-o
Albizia harveyi	r
Albizia versicolor	r
Baikiaea plurijuga	lf
Boscia albitrunca	o
Combretum mechowianum	f-lc
Commiphora angolensis	o-lf
Croton gratissimus	f
Erythrophleum africanum	lo
Excoecaria bussei	lo
Guibourtia coleosperma	lo
Lannea stuhlmannii	lo
Lonchocarpus capassa	r
Lonchocarpus nelsii	f
Parinari curatellifolia	r
Peltoporum africanum	lo
Pterocarpus angolensis	r-o
Strychnos innocua	lo
Strychnos potatorum	lo
Terminalia sericea	o-lf
Ziziphus mucronata	o

Small trees:

Albizia anthelmintica	r
Cassipourea n.s.	lo
Combretum celastroides	o-lf
Combretum engleri	o
Markhamia acuminata	lf
Ochna pulchra	o
Phyllanthus discoideus	r
Piliostigma thonningii	r
Pseudolachnostylis maprouneifolia	lo
Rhus tenuinervis	o
Schrebera trichoclada	lo
Strychnos cocculoides	r

Shrubs and scramblers:

Acacia ataxacantha	f-a
Acacia fleckii	f-o
Acacia mellifera	r-lo
Allophylus africanus	lo
Baphia massaiensis subsp. obovata	f
Bauhinia macrantha	f
Byrsocarpus orientalis	r-o
Citropsis daweana	lo
Cleome gynandra	lf
Combretum elaeagnoides	f-c
Combretum psidioides	o-lf
Combretum zeyheri	o-lf
Croton pseudopulchellus	lc
Dalbergia melanoxylon	r-o
Dichrostachys cinerea	f
Diospyros lycioides	lo
Erythroocca menyharthi	o
Fagara trijuga	r-o
Grewia avellana	f
Grewia falcistipula	o-f
Grewia flavescens	o-f
Grewia retinervis	lf
Hoslundia opposita	r
Hymenocardia acida	lo
Markhamia obtusifolia	f-lc
Ochna cinnabarina	lo
Pavetta cataractarum	r
Popowia obovata	o-f
Securinega virosa	r
Tricalysia allenii	o
Vangueria infausta	r
Vitex amboniensis	r-o
Vitex madiensis	lo
Ximenia americana	o
Ximenia caffra	o

Sub-shrubs:

Aerva lanata	lo
Aspilia mossambicensis	lo

Barleria mackenii	lo	Sida cordifolia	lf
Cassia absus	lf	Solanum panduriforme	lo
Clerodendrum uncinatum	lf	Tephrosia paniculata	lf
Crotalaria flavicarinata	o	Triumfetta annua	lf
Disperma crenatum	lf	Triumfetta tomentosa	lf
Euphorbia benthamii	r	Waltheria indica	lf
Euphorbia transvaalensis	lo		
Gardenia brachythamnus	lo	<u>Climbers:</u>	
Hemizygia bracteosa	lf-lc	Adenia senensis	r
Hermannia angolensis	lo	Bonamia spectabilis	r-o
Hibiscus mastersianus	f	Cardiospermum halicacabum	lo
Hibiscus mechowii	lo	Cissampelos mucronata	lo
Hibiscus meeusei	lo	Cocculus hirsutus	r
Hypoestes verticillaris	o-lf	Dioscorea hirtiflora	lf
Jasminum streptopus	lo	Dioscorea quartiniana	r
Justicia betonicoides	o-f	Dolichos africanus	lo
Melhanian acuminata	lf	Helinus integrifolius	lo
Ocimum americanum	c-la	Hippocratea parviflora	f
Parinari capensis	lf	Merremia tridentata	lo
Plumbago zeylanica	o	Momordica clematidea	r
Pupalia lappacea	o	Rhynchosia caribea	r-o
Sansevieria kirkii	lf		

RIPARIAN WOODLAND

Canopy trees:

Acacia albida	lf	Acalypha ornata	lf
Acacia polyacantha	lf	Aeschynomene cristata	r
Azelia quanzensis	r	Allophylus africanus	o-lf
Diospyros mespiliformis	o	Antidesma venosum	o-f
Ficus capensis	o-f	Bridelia cathartica	lo
Ficus natalensis	r	Byrsocarpus orientalis	o-f
Ficus sycomorus	r	Canthium zanzibaricum	o
Garcinia livingstonei	o	Diospyros lycioides	f-c
Kigelia africana	r-o	Ficus capreifolia	lo
Mimusops zeyheri	o	Ficus pygmaea	o-f
Salix subserrata	lc	Maytenus senegalensis	o
Syzygium guineense subsp. barotsense	a	Mimosa pigra	o-lf
Terminalia sericea	lo	Myrica conifera	lf
Trichilia emetica	r	Phragmites mauritanus	c-a

Small trees:

Acacia hebeclada	r	Sesbania sesban	f
Anthocleista liebrechtsiana	r		
Cordia pilosissima	lo	<u>Climbers:</u>	
Croton leuconeurus	o	Ampelocissus africana	lo
Croton megalobotrys	o	Artabotrys brachypetalus	o
Phoenix reclinata	lf	Asparagus plumosus	o
Rhus quartiniana	c	Cocculus hirsutus	o-f
Sesbania pubescens	o-f	Ipomoea rubens	lo
Turraea zambesica	o	Jasminum fluminense	o-f

Shrubs:

Acacia schweinfurthii	lo	Mikania cordata	lo
		Mucuna pruriens	o
		Tacazzea apiculata	f-c

KALAHARI WOODLAND (K3, 5, 8)

<u>Canopy trees:</u>		Rothmannia engleriana	lo
Acacia galpinii	r	Schrebera trichoclada	lo
Acacia giraffae	lo	Securidaca longepedunculata	o
Adansonia digitata	r	Steganotaenia araliacea	lo
Azelia quanzensis	r-o	Strychnos cocculoides	o
Albizia antunesiana	o	Strychnos innocua	r-o
Amblygonocarpus andongensis	r-o	Strychnos pungens	o
Baikiaea plurijuga	lo-lf	Strychnos spinosa	o
Brachystegia longifolia	lc	Swartzia madagascariensis	o
Brachystegia spiciformis	lc	Terminalia brachystemma	o-f
Burkea africana	f	Uapaca kirkiana	o-lf
Combretum mechowianum	o-f	Uapaca nitida	o-lf
Commiphora angolensis	lo	Vangueriopsis lanciflora	o
Cryptosepalum exfoliatum		Vernonia amygdalina	lo
subsp. pseudotaxus	lf	Vernonia colorata	lo
Dialium englerianum	o	Xylopia odoratissima	o
Erythrophleum africanum	o-f	Ziziphus abyssinica	r-o
Guibourtia coleosperma	lf	Ziziphus mucronata	lo
Hyphaene ventricosa	r		
Julbernardia paniculata	lc	<u>Shrubs:</u>	
Kigelia africana	r	Baphia massaiensis subsp. obovata	o-lf
Parinari curatellifolia	o	Bauhinia macrantha	lo
Pericopsis angolensis	r	Bauhinia urbaniana	f
Pterocarpus angolensis	o-lf	Bridelia duvigneaudi	r-o
Ricinodendron rautanenii	lf	Byrsocarpus orientalis	lo
Sclerocarya caffra	r-o	Canthium venosum	r
Strychnos potatorum	lo	Cassia singueana	lo
Terminalia trichopoda	r	Cissus cornifolia	r
Zanha africana	r	Copaifera baumiana	lf
		Dalbergia melanoxylon	lo
<u>Small trees:</u>		Eriosema ellipticum	r
Brachystegia bakeriana	lf	Flacourtia indica	o
Canthium huillense	o	Grewia falcistipula	o-f
Chrysophyllum bangweolense	r-o	Grewia flavescens	o-f
Combretum psidioides	f	Grewia monticola	lo
Combretum zeyheri	f-c	Grewia retinervis	lf
Commiphora mossambicensis	lo	Holostylon baumi	r-lo
Crossopteryx febrifuga	r	Indigofera microcalyx	lo
Croton gratissimus	lo	Indigofera podocarpa	lo
Dalbergia nitidula	r	Indigofera sutherlandioides	lo
Diospyros batocana	f-c	Jasminum stenolobum	r
Diplorhynchus condylocarpon	f	Kotschya strobilantha	lf
Hannea chlorantha	lf	Lepidagathis macrochila	lf
Hexalobus monopetalus	lo	Ochna cinnabarina	r
Hymenocardia acida	o-f	Ozoroa longipes	r
Lannea discolor	lo	Ozoroa nitida	r
Maprounea africana	lo	Paropsia brazzeana	f
Monotes glaber	o	Pavetta assimilis	r
Ochna pulchra	o-lf	Pavetta schumanniana	lo
Olax obtusifolia	lo	Popowia obovata	o
Oldfieldia dactylophylla	lo	Protea angolensis	lo
Protea petiolaris	lo	Protea gagedi	o-lf
Pseudolachnostylis maprouneifolia	o	Psorospermum baumi	lo
Rhus tenuinervis	o	Psorospermum febrifugum	lo

Rytigynia orbicularis	lo	Justicia betonicoides	o-lf
Sida hoefneri	lf	Lanea virgata	lo
Tricalysia allenii	o	Lanea gossweileri	lo
Tricalysia angolensis	lo	Leptactina benguelensis	o
Vangueria infausta	o	Magnistipula eglandulosa	r
Vernonia glaberrima	o	Mechowia grandiflora	r
Vernonia shirensis	lo	Napoleona gossweileri	lf
Vitex madiensis	o-lf	Nidorella microcephala	lo
Xeromphis obovata	lf	Ochna leptoclada	lf
Ximenia caffra	lo	Ochna pygmaea	lf
		Parinari capensis	lc
<u>Sub-shrubs:</u>		Phyllanthus maderaspatensis	o
Abrus pulchellus subsp. suffruticosus	lo	Phyllanthus welwitschianus	lo
Acalypha senensis	o	Pollichia campestris	o
Achyranthes aspera	o-lf	Psychotria kirkii	r
Aloe zebrina	r	Rhus kirkii	o
Alvesia rosmarinifolia	r-lo	Salacia erecta	lo
Ancylanthos rubiginosus	lo	Sansevieria kirkii	lo
Annona stenophylla subsp. nana	lf	Sapium oblongifolium	o-lf
Aspilia mossambicensis	lo	Scoparia dulcis	r
Brackenridgea arenaria	lf	Sphenostylis marginata subsp. erecta	o
Centemopsis gracilentia	lo	Strobilanthesis linifolia	o-f
Chamaeclitandra henriquesiana	lf	Strychnos caespitosa	lf
Clematopsis scabiosifolia	o	Syzygium guineense subsp. huillense	lo
Clerodendrum capitatum	lo	Tapiphyllum discolor	r
Clerodendrum ternatum	lo	Tephrosia cephalantha	o
Clutia abyssinica	r	Thesium fastigiatum	r-o
Coleus esculentus	r	Tinnea vestita	o
Crotalaria variegata	o	Tricalysia cacondensis	o-lf
Desmodium barbatum	lo	Tricalysia suffruticosa	r
Dichapetalum rhodesicum	lo	Triumfetta dekindti	lf
Diospyros chamaethamnus	lf	Waltheria indica	lf
Diospyros virgatus	o-f		
Diplolophium zambesianum	lo	<u>Climbers:</u>	
Ectadiopsis oblongifolium	o	Abrus precatorius	r
Entada nana	r	Ampelocissus africana	lo
Eugenia angolensis	lo	Ampelocissus obtusata	lo
Fadogia fuchsoides	lo	Baissea wulfhorsti	o-lf
Fadogia monticola	o	Cassytha filiformis	o
Felicia barbellata	r	Combretum mossambicense	o
Gardenia brachythamnus	o-lf	Landolphia camptoloba	o-lf
Gardenia subacaulis	r	Merremia tridentata	o
Helichrysum kirkii	o	Rhynchosia holosericea	o-lf
Hemizygia bracteosa	lo	Strophanthus welwitschii	r
Hermannia angolensis	lo	Thunbergia crispa	lo
Hypoestes verticillaris	lo	Tylosema fassoglensis	lo
Indigofera griseoides	r	Vigna frutescens	o
Jasminum streptopus	lo		

MUNGA WOODLAND (K12)

<u>Canopy trees:</u>		Acacia nigrescens	f-c
Acacia galpinii	o	Acacia polyacantha	lo
Acacia giraffae	f-c	Acacia sieberiana	o-f
Acacia luederitzii	f-lc	Adansonia digitata	r

Azelia quanzensis	r	Tarenna luteola	lo
Albizia amara	o-lf	Urena lobata	p-lf
Albizia harveyi	o-lf	Vernonia glabra	o-f
Albizia versicolor	o	Wissadula rostrata	lo
Amblygonocarpus andongensis	lo	Withania somnifera	r
Berchemia discolor	r	Ximenia americana	o
Combretum imberbe	c		
Erythrophleum africanum	lo	<u>Sub-shrubs:</u>	
Ficus capensis	r	Achyranthes aspera	lf
Ficus fischeri	r	Aerva lanata	f
Guibourtia coleosperma	r	Aloe chabaudi	lo
Hyphaene ventricosa	o-lf	Barleria mackeni	lf
Kigelia africana	lo	Blepharis buchneri	o-lf
Lannea stuhlmannii	lo	Blumea gariepina	lf
Lonchocarpus capassa	o-f	Cleome hirta	r
Manilkara mochisia	r	Clerodendrum uncinatum	lo
Parinari curatellifolia	r	Corchorus tridens	lo
Peltophorum africanum	lo	Corchorus trilocularis	r
Sclerocarya caffra	lo	Heliotropium ovalifolium	lf
Strychnos potatorum	o-lf	Hermannia glanduligera	lf
Terminalia sericea	f-lc	Hibiscus cannabinus	lo
Xeroderris stuhlmannii	o-lf	Hibiscus mechowii	lo
		Ipomoea vernalis	lo
<u>Small trees:</u>		Lantana rhodesiensis	r-o
Acacia hebeclada	o-lf	Leonotis nepetifolia	lf
Acacia mellifera	lf	Pavonia hirsuta	o-f
Albizia anthelmintica	o	Peristrophe bicalyculata	lo
Combretum hereroense	f-c	Sesamum capense	lo
Combretum zeyheri	o	Sida alba	o
Piliostigma thonningii	o	Solanum incanum	lo
Rhus tenuinervis	o	Sutera elegantissima	lf
Strychnos cocculoides	r	Triumfetta annua	lo
Strychnos spinosa	o	Walafriida angolensis	lo
Ziziphus abyssinica	o		
Ziziphus mucronata	o	<u>Climbers:</u>	
		Abrus precatorius	o
<u>Shrubs:</u>		Ampelocissus africana	r-o
Bridelia cathartica	r	Asparagus racemosus	o
Byrsocarpus orientalis	o	Cardiospermum halicacabum	o-lf
Carissa edulis	lo	Cissampelos mucronata	o
Commiphora pyracanthoides	lo	Cissus integrifolius	r-o
Dalbergia melanoxylon	lf	Cocculus hirsutus	o-f
Dichrostachys cinerea	f-c	Combretum mossambicense	o
Diospyros lycioides	f	Dioscorea quartiniana	lo
Euclea divinorum	o-f	Dioscorea sylvatica	r
Grewia flavescens	lo	Dolichos africanus	o
Hoslundia opposita	lo	Merremia tridentata	o-f
Maytenus senegalensis	o-f	Momordica clematidea	r
Phyllanthus reticulatus	lo	Pergularia extensa	r-o
Securinega virosa	o		

MOPANE TERMITARIA

<u>Canopy trees:</u>		Acacia sieberiana	o
Acacia nigrescens	o-lf	Adansonia digitata	r-o

Azalia quanzensis	r	Erythroxylum zambesiicum	r-o
Albizia amara	f	Euclea divinorum	o
Albizia harveyi	o-f	Euphorbia espinosa	r
Colophospermum mopane	a	Gardenia resiniflua	o
Combretum imberbe	lo	Gardenia spatulifolia	r
Diospyros mespiliformis	o	Grewia flavescens	o
Euphorbia candelabrum	o-f	Grewia monticola	o
Lanea stuhlmannii	lo	Hyphaene ventricosa	lo
Lonchocarpus capassa	o	Markhamia acuminata	o
Manilkara mochisia	o	Popowia obovata	o
Sclerocarya caffra	r-o	Steganotaenia araliacea	o
Terminalia sericea	o	Ximenia americana	o-f
Ziziphus abyssinica	o	Ximenia caffra	o
<u>Small trees & shrubs:</u>		<u>Suffrutices:</u>	
Acacia erubescens	o	Aloe chabaudi	lc
Albizia anthelmintica	f	Aloe zebrina	lf
Boscia mossambicensis	f-c	Blumea gariepina	lf
Canthium frangula	r	Dyschoriste verticillaris	lc
Capparis tomentosa	o	Sansevieria desertii	lc
Combretum elaeagnoides	o-lf		
Combretum ghasalense	o	<u>Climbers:</u>	
Commiphora madagascariensis	o	Asparagus africanus	o-lf
Commiphora mossambicensis	o	Cissus quadrangularis	o-lf
Cordia pilosissima	o	Dregea macrantha	o
Crossopteryx febrifuga	o	Fockea multiflora	f-c
Croton gratissimus	o	Hippocratea buchananii	o
Dalbergia melanoxylon	o	Pergularia extensa	o
Dichrostachys cinerea	lo	Strophanthus nicholsoni	o
Diospyros lycioides	o-f	Turbina shirensis	o-f

MUNGA TERMITARIA (K12/T)

<u>Dominant trees:</u>		<u>Small trees:</u>	
Acacia luederitzii	lo	Acacia mellifera	lo
Acacia giraffae	o	Acacia nilotica	lo
Acacia nigrescens	f	Albizia anthelmintica	o
Azalia quanzensis	r	Canthium burtii	r
Albizia harveyi	o-f	Croton gratissimus	o
Berchemia discolor	r	Excoecaria bussei	r
Boscia albitrunca	o	Markhamia acuminata	o
Cassine transvaalensis	o-lf	Markhamia obtusifolia	o-f
Combretum hereroense	o-f	Rhus tenuinervis	o
Combretum imberbe	f		
Commiphora angolensis	o	<u>Shrubs:</u>	
Euphorbia candelabrum	r-o	Acalypha ornata	o-lf
Ficus fischeri	r	Allophylus africanus	o
Garcinia livingstonei	o	Baphia massaiensis subsp. obovata	o
Lanea stuhlmannii	o	Bauhinia macrantha	o
Lonchocarpus capassa	o	Byrsocarpus orientalis	o-lf
Manilkara mochisia	r	Carissa edulis	lo
Peltoporum africanum	r-o	Citropsis daweania	r
Strychnos potatorum	o	Commiphora pyracanthoides	r-o
Terminalia sericea	o	Dichrostachys cinerea	f
Ziziphus mucronata	o	Diospyros lycioides	f

Erythrococca menyharthi	lo	Hibiscus calyphyllus	r
Euclea divinorum	f	Hypoestes verticillaris	o-f
Feretia aeruginescens	lo	Justicia betonicoides	f
Grewia flavescens	lo	Lantana rhodesiensis	r
Grewia schinzii	o	Pavonia hirsuta	lo
Indigofera ormocarpoides	r	Pupalia lappacea	o
Maytenus senegalensis	lo	Peristrophe bicalyculata	lo
Phyllanthus reticulatus	o	Ruspolia decurrens	lo
Popowia obovata	o-lf	Sansevieria desertii	f-lc
Securinega virosa	o		
Sida hoepfneri	lo	<u>Climbers:</u>	
Tarenna luteola	lo	Abrus precatorius	o
Tricalysia allenii	lo	Asparagus racemosus	o
Vangueria infausta	r	Cardiospermum halicacabum	o
Wissadula rostrata	f	Cissampelos mucronata	o-f
Withania somnifera	lo	Cocculus hirsutus	o-f
Ximenia americana	o	Combretum mossambicense	o
Ximenia caffra	o	Cyclantheropsis parviflora	r-o
		Gongronema angolense	lo
<u>Sub-shrubs:</u>		Gymnema sylvestre	r-o
Abutilon angulatum	o-lf	Helinus integrifolius	lo
Asparagus asiaticus	lo	Hippocratea africana	lf
Aspilia mossambicensis	r	Hippocratea parviflora	lo
Barleria mackeni	lf	Pergularia extensa	r
Clerodendrum capitatum	o	Tragia benthamii	r-o
Disperma crenatum	f-lc	Vernonia aurantiaca	r-lo
Hermannia glanduligera	lo		

MUNGA TERMITARIA (K7/12)

<u>Canopy trees:</u>		Ricinodendron rautanenii	lo
Acacia galpinii	r	Sclerocarya caffra	r-o
Acacia giraffae	lo	Strychnos potatorum	lo
Acacia nigrescens	o	Terminalia sericea	o-lf
Azelia quanzensis	r-o	Ziziphus mucronata	o
Albizia amara	lo		
Albizia antunesiana	o	<u>Small trees:</u>	
Albizia harveyi	lo	Acacia nilotica	lo
Albizia versicolor	o	Combretum hereroense	lo
Amblygonocarpus andongensis	o	Combretum psidioides	lo
Baikiaea plurijuga	o-lf	Combretum zeyheri	o-lf
Brachystegia spiciformis	o-f	Diospyros batocana	o-lf
Burkea africana	f	Diplorhynchus condylocarpon	f
Combretum imberbe	o-lf	Hymenocardia acida	f-c
Combretum mechowianum	o-f	Lanea discolor	lo
Dialium englerianum	lo	Maprounea africana	o-f
Diospyros mespiliformis	r-o	Markhamia obtusifolia	lf
Erythrophleum africanum	o-lf	Maytenus senegalensis	o-f
Guibourtia coleosperma	o	Monotes glaber	o-f
Hyphaene ventricosa	lo	Ochna pulchra	o-f
Lanea stuhlmannii	lo	Oldfieldia dactylophylla	lf
Lonchocarpus capassa	o	Piliostigma thonningii	lo
Parinari curatellifolia	o	Pseudolachnostylis maprouneifolia	o-f
Peltophorum africanum	lo	Rhus tenuinervis	o
Pterocarpus angolensis	o-lf	Strychnos pungens	o

<i>Strychnos spinosa</i>	o	<u>Sub-shrubs:</u>	
<i>Swartzia madagascariensis</i>	o	<i>Acalypha senensis</i>	lo
<i>Terminalia brachystemma</i>	c	<i>Achyranthes aspera</i>	o-f
<i>Vangueriopsis lanciflora</i>	lo	<i>Annona stenophylla</i> subsp. <i>nana</i>	lf
<i>Vernonia amygdalina</i>	lo	<i>Aspilia mossambicensis</i>	lo
<i>Vitex madiensis</i>	o	<i>Chamaeclitandra henriquesiana</i>	lo
<i>Xylopia odoratissima</i>	o	<i>Clerodendrum capitatum</i>	o
		<i>Crotalaria variegata</i>	o
<u>Shrubs:</u>		<i>Diospyros virgata</i>	o
<i>Allophylus africanus</i>	lo	<i>Eugenia angolensis</i>	lo
<i>Baphia massaiensis</i> subsp. <i>obovata</i>	f-c	<i>Gardenia brachythamnus</i>	lo
<i>Bauhinia urbaniana</i>	f	<i>Hermannia angolensis</i>	lo
<i>Bridelia duvigneaudi</i>	lo	<i>Jasminum streptopus</i>	o
<i>Byrsocarpus orientalis</i>	lo	<i>Leptactina benguelensis</i>	o
<i>Canthium huillense</i>	lo	<i>Magnistipula eglandulosa</i>	lo
<i>Copaifera baumiana</i>	lo	<i>Napoleona gossweileri</i>	lo
<i>Dalbergia melanoxylon</i>	lo	<i>Rhus kirkii</i>	o
<i>Diospyros lycioides</i>	o-lf	<i>Sansevieria kirkii</i>	lf
<i>Grewia falcistipula</i>	o	<i>Strobilanthesis linifolia</i>	o-f
<i>Grewia flavescens</i>	o	<i>Syzygium guineense</i> subsp. <i>huillense</i>	lf
<i>Grewia retinervis</i>	lo	<i>Triumfetta dekindtiana</i>	o
<i>Kotschya strobilantha</i>	lo		
<i>Paropsia brazzeana</i>	o-f	<u>Climbers:</u>	
<i>Pavetta schumanniana</i>	lo	<i>Abrus precatorius</i>	lo
<i>Popowia obovata</i>	o-lf	<i>Ampelocissus africana</i>	o
<i>Psorospermum febrifugum</i>	o	<i>Asparagus racemosus</i>	o
<i>Tricalysia allenii</i>	o	<i>Cassytha filiformis</i>	o-f
<i>Tricalysia angolensis</i>	lo	<i>Cocculus hirsutus</i>	o-lf
<i>Ximenia americana</i>	o	<i>Combretum mossambicense</i>	o
<i>Ximenia caffra</i>	o	<i>Landolphia camptoloba</i>	o-lf

RIPARIAN TERMITARIA

<u>Canopy trees:</u>		<i>Maerua angolensis</i>	r
<i>Acacia sieberiana</i>	o	<i>Phoenix reclinata</i>	lo
<i>Berchemia discolor</i>	r	<i>Piliostigma thonningii</i>	o
<i>Boscia albitrunca</i>	o	<i>Rhus tenuinervis</i>	o
<i>Combretum mechowianum</i>	o-f		
<i>Ficus capensis</i>	o	<u>Shrubs:</u>	
<i>Ficus natalensis</i>	r-o	<i>Allophylus africanus</i>	o
<i>Ficus sycomorus</i>	r	<i>Antidesma venosum</i>	o
<i>Garcinia livingstonei</i>	o	<i>Byrsocarpus orientalis</i>	o
<i>Guibourtia coleosperma</i>	r	<i>Capparis tomentosa</i>	o-f
<i>Kigelia africana</i>	o	<i>Diospyros lycioides</i>	f-c
<i>Lannea stuhlmannii</i>	o-f	<i>Erythrococca menyharthii</i>	o
<i>Lonchocarpus capassa</i>	o	<i>Feretia aeruginescens</i>	r-o
<i>Manilkara mochisia</i>	o	<i>Indigofera ormocarpoides</i>	r
<i>Parinari curatellifolia</i>	r	<i>Lippia javanica</i>	o
<i>Terminalia sericea</i>	f-lc	<i>Maytenus senegalensis</i>	o
<i>Trichilia emetica</i>	r	<i>Pavetta lasiopeplus</i>	r-o
<i>Ziziphus abyssinica</i>	o	<i>Phyllanthus reticulatus</i>	lf
<i>Ziziphus mucronata</i>	o	<i>Popowia obovata</i>	f
		<i>Premna senensis</i>	o
<u>Small trees:</u>		<i>Rytigynia umbellulata</i>	o-f
<i>Acacia nilotica</i>	lo	<i>Securinega virosa</i>	o

Ximения americana	o	Pseudarthria hookeri	r
<u>Sub-shrubs:</u>		Peristrophe bicalyculata	lo
Abutilon angulatum	o-lf	Sida cordifolia	o-lf
Abutilon ramosum	f-lc	Urena lobata	lo
Achyranthes aspera	f-c	Waltheria indica	o
Acalypha senensis	r-o	Wissadula rostrata	f
Cassia obtusifolia	lf	<u>Climbers:</u>	
Clerodendrum capitatum	o	Abrus precatorius	o
Cyathula prostrata	lo	Asparagus racemosus	o
Dyschoriste verticillaris	lf	Cissampelos mucronata	o-f
Heliotropium indicum	r	Clematis brachiata	lo
Hermannia glanduligera	f	Dioscorea hirtiflora	lo
Hibiscus physaloides	lo	Glycine javanica	lo
Hibiscus vitifolius	o	Gymnema sylvestre	lo
Hypoestes verticillaris	f	Helinus integrifolius	o
Indigofera arrecta	r	Jasminum fluminense	f
Justicia betonicoides	f	Lablab niger	r
Justicia glabra	lf	Neorautanenia pseudopachyrhiza	r
Ocimum americanum	lf	Rhynchosia holosericea	lo
Ocimum suave	lo	Senecio bojeri	r
Pavonia hirsuta	f		

DAMBO TERMITARIA

<u>Dominant trees:</u>		Maerua angolensis	r
Acacia giraffae	lo	Markhamia obtusifolia	f
Acacia nigrescens	f	Phoenix reclinata	lf
Albizia amara	o	Piliostigma thonningii	o
Albizia harveyi	o	Rhus tenuinervis	r-o
Albizia versicolor	o	Vernonia amygdalina	lf
Berchemia discolor	o	<u>Shrubs:</u>	
Boscia albitrunca	o-f	Acacia schweinfurthii	lo
Combretum imberbe	c	Acalypha ornata	f
Commiphora edulis	r	Antidesma venosum	o-f
Diospyros mespiliformis	o	Baphia massaiensis subsp. obovata	lo
Euphorbia candelabrum	o	Bridelia cathartica	lo
Ficus sycomorus	r-o	Byrsocarpus orientalis	o-f
Garcinia livingstonei	r-o	Capparis tomentosa	f-lc
Hyphaene ventricosa	lo	Carissa edulis	r
Kigelia africana	o	Cassia singueana	o
Lannea stuhlmannii	o	Diospyros lycioides	f-o
Lonchocarpus capassa	o	Euclea divinorum	f
Manilkara mochisia	r-o	Feretia aeruginescens	r-o
Parinari curatellifolia	r	Grewia monticola	lo
Sclerocarya caffra	r-o	Grewia schinzii	o-f
Strychnos potatorum	o-f	Hoslundia opposita	o
Terminalia sericea	lo	Maerua juncea	o
Ziziphus mucronata	o	Maytenus senegalensis	o
<u>Small trees:</u>		Securinega virosa	o-f
Acacia nilotica	lo	<u>Sub-shrubs:</u>	
Cordia pilosissima	r-o	Abutilon angulatum	lf
Croton megalobotrys	lo	Abutilon ramosum	f-c
Grewia bicolor	lo		

<i>Achyranthes aspera</i>	f-c	<i>Cissampelos mucronata</i>	o-f
<i>Disperma crenatum</i>	c	<i>Cissus integrifolia</i>	lo
<i>Euphorbia transvaalensis</i>	lo	<i>Cocculus hirsutus</i>	o-f
<i>Hibiscus caesius</i>	lo	<i>Combretum mossambicense</i>	o
<i>Hibiscus vitifolius</i>	o-lf	<i>Commicarpus plantagineus</i>	o
<i>Lantana rhodesiensis</i>	lo	<i>Dioscorea hirtiflora</i>	lo
<i>Leonotis nepetifolia</i>	lo	<i>Dolichos africanus</i>	lo
<i>Triumfetta annua</i>	lf	<i>Gongronema angolense</i>	r-o
		<i>Helinus integrifolius</i>	o-f
<u>Climbers:</u>		<i>Hippocratea africana</i>	o-f
<i>Abrus precatorius</i>	o	<i>Hippocratea parviflora</i>	lo
<i>Asparagus racemosus</i>	o	<i>Vernonia aurantiaca</i>	r
<i>Cardiospermum halicacabum</i>	o		

WATERSHED GRASSLAND (SK)

<u>Suffrutices:</u>		<i>Napoleona gossweileri</i>	lf
<i>Brackenridgea arenaria</i>	f-lc	<i>Ochna leptoclada</i>	lf
<i>Diospyros chamaethamnus</i>	lc	<i>Ochna manikensis</i>	lf
<i>Dolichos densiflorus</i>	o	<i>Ochna pygmaea</i>	lf
<i>Ectadiopsis producta</i>	r-o	<i>Parinari capensis</i>	a
<i>Entada nana</i>	lo	<i>Pygmaeothamnus zeyheri</i>	c
<i>Lannea edulis</i>	o	<i>Strychnos caespitosa</i>	lf
<i>Magnistipula eglandulosa</i>	lf		

GRASSY PLAINS AND DAMBOS (D)

<u>Suffrutices:</u>		<i>Hibiscus rhodanthus</i>	lo
<i>Acrocephalus sericeus</i>	lo	<i>Hypericum lalandi</i>	r
<i>Alvesia rosmarinifolia</i>	lo	<i>Ipomoea vernalis</i>	lo
<i>Ancylanthos rubiginosus</i>	lo	<i>Lannea edulis</i>	f
<i>Asparagus asiaticus</i>	lo-lf	<i>Lannea gossweileri</i>	f-c
<i>Combretum platypetalum</i>	o-lf	<i>Napoleona gossweileri</i>	lf
<i>Ectadiopsis producta</i>	r	<i>Neorautanenia pseudopachyrhiza</i>	r
<i>Entada nana</i>	r	<i>Ochna leptoclada</i>	lf
<i>Eriosema pauciflorum</i>	lo	<i>Pygmaeothamnus zeyheri</i>	f
<i>Eriosema psoraleoides</i>	lf	<i>Sesamum angustifolium</i>	f
<i>Gnidia buchananii</i>	lo	<i>Sopubia ramosa</i>	lf
<i>Gnidia chrysantha</i>	lo	<i>Syzygium guineense</i> subsp. <i>huillense</i>	lc
<i>Gnidia kraussiana</i>	f	<i>Thesium fastigiatum</i>	r
<i>Hermannia quartiniana</i>	r	<i>Tylosema fassoglensis</i>	lo

FOREST RESEARCH PAMPHLET NO. 16, 1968**THE VEGETATION OF SESHEKE DISTRICT**

Sesheke District covers 11,000 square miles [28,500 km²] of the Barotse Province in the south west corner of Zambia between latitudes 15°30' and 17°50' S and longitudes 23°00' and 25°30' E. It is bounded on the west by the Mashi River (the international boundary with Angola) and Senanga District, on the north by Mankoya District, on the east by Kalomo District, and on the south by the Zambezi River as far west as Katima Mulilo and the international boundary with the Caprivi Strip of South West Africa from Katima to the Mashi River.

The district lies between 915–1220 m [3000–4000 ft] and is divided into two parts by the Zambezi River which flows roughly NW–SE as far as Katima, where it bends to the east forming the southern boundary of the district. West of the Zambezi the country is flat and featureless and there is little difference, if any, between the altitudes of the Zambezi and Mashi rivers. The north-west corner is included in the Siluana Plains and thus liable to annual flooding. East of the Zambezi the terrain is again flat but dissected by a series of rivers and their tributaries flowing into the Zambezi River. The river valleys are seldom wide and their sides are steep. The north-east corner of the district just touches the watershed of the Luampa River system to the north, the Nioko system to the west, the Lwanganda/Lusanda system to the east, and the Machili to the south. All the rivers and most of the smaller streams are perennial, but east of Sesheke boma the tributary rivers go underground some way before meeting the Zambezi River.

Rainfall is generally low but variable and scattered with a mean of 670 mm [27 inches] per annum. The rainy season is from mid-November to the end of March. Heavy dew occurs in the winter months. Temperatures are very extreme. From September to February the absolute maximum is over 100°F [38°C] and during the remainder of the year is over 88°F [31°C]. During the winter months night radiation from the sand gives rise to very low night temperatures so that low lying areas and depressions suffer from frost. The prevailing winds are from the east and south-east. Whirlwinds are frequent between September and March.

The district is almost entirely covered by sand of Kalahari type, probably underlain by Karoo beds with patches of fine silty gray alluvium locally on plains. The sands are a Pleistocene deposit, probably the erosion product of the weak upper Karoo sandstones. Much of the sand was deposited in lakes formed by the pounding of upper Zambezi, and subsequently reworked by wind action. The sands vary from pallid to orange in colour, are moderately acid with 3–12% silt + clay. The content of fine sand varies from 15–60%. The sands are not very fertile but where are well drained will support excellent growth of suitable tree species. These sands have the merit of conserving the entire season's rainfall to such an extent that damp soil has been found locally to within three feet of the surface as late as September/October.

The district possesses the best preserved and largest blocks of mukusi (*Baikiaea*) forest, especially the Machili and Masese C.F.P.As. Most of the remainder of the district east of the Zambezi is covered by Kalahari woodland dominated by *Julbernardia* and characterised by *Cryptosepalum*. Between the Zambezi and the Mashi rivers lies Kalahari woodland with *Ricinodendron* and *Commiphora*, and along the immediate riparian strips chains of small mukusi forests.

The district also contains all the known dwarf mukusi and shell mukusi forests, the latter being grown-up dwarf mukusi forest. Their raison d'etre has long been a mystery but it is now thought to be due to lack of aeration in soil caused by a local abundance of telluric moisture. But frost certainly helps to keep the *Baikiaea* and other forest-sensitive species dwarf.

Other unusual vegetation types include "mavunda" on the Mankoya border, the invasion ecotone around the mukusi forest dominated by *Acacia*, *Combretum* and *Terminalia*, the riparian termitaria around shallow seasonal pans, variable mopane woodlands and streamside thicket. Grassy plains and suffrutex savannas are not such a feature as in Senanga District, but are fairly widespread west of the Zambezi River.

As a result of fairly intensive studies and plenty of variety in vegetation some 550 woody species, a high total by Barotse standards, have been found in the district.

The following vegetation types occur in the district:

1. Closed Forest

A. Climatic

1. Dry Evergreen forest
 - a) *Cryptosepalum* forest
2. Dry Deciduous forest
 - a) *Baikiaea* forest
 - i) Dwarf *Baikiaea*
 - ii) Secondary *Baikiaea*

B. Edaphic

1. Riparian Woodland

2. Open Forest with grass

1. Kalahari Woodland
 - a) Miombo/Kalahari woodland
 - b) Suffrutex savanna
2. Mopane Woodland
 - a) Scrub mopane
3. Munga Woodland

3. Vegetation of Termitaria

1. Kalahari
2. Mopane
3. Munga

4. Grasslands

1. Dambo
2. Flood plain

1. CLOSED FOREST

1.A.1.a *Cryptosepalum* Forest

Outliers of this dry evergreen forest type, locally known as "mavunda" (Trapnell's K1) from NW Zambia occur on the borders of Mankoya District as pole crops dominated by *Cryptosepalum exfoliatum* subsp. *pseudotaxus* over a tangle of *Landolphia*, evergreen shrubs and scramblers. The occurrences are in small, oval patches at the southern limit of the range of the type and species. The woodland has a more or less closed canopy at 9.1–11.6 m [30–35 ft] high, no distinct understorey but a marked, sometimes almost impenetrable shrub layer at the height of the dominant *Copaifera* 1.2–2.4 m [4–8 ft].

Cryptosepalum is strongly dominant but *Brachystegia longifolia*, *Brachystegia spiciformis* and *Julbernardia paniculata* from the surrounding Kalahari woodland are present.

Common small trees and shrubs include the strongly dominant *Copaifera baumiana* with *Diplorhynchus condylocarpon*, *Paropsia brazzeana*, *Tricalysia angolensis* and *Vangueriopsis lanciflora*. Sub-shrubs are chiefly *Chamaeclitandra henriquesiana*, *Diospyros virgata*, *Tricalysia cacadensis* and *Triumfetta dekindtiana* over a moss carpet.

It is the scrambler element which imparts the characteristic appearance to mavunda, largely *Landolphia camptoloba* with *Canthium venosum*, *Cassytha filiformis* and *Strophanthus welwitschi*.

1.A.2.a *Baikiaea* Forest

Mukusi forest (Trapnell's K6) is a two-storeyed forest with an open or close canopy between 9–19 m [30–60 ft] high (maximum height 24–27 m [80–90 ft], Kataba Forest) composed of *Baikiaea* and *Pterocarpus antunesii* in varying proportions. The latter is virtually absent on the west bank of the Zambezi River, but reappears on the Mashi River. The invasive *Acacia giraffae* and *Combretum mechowianum* are widespread, and *Entandrophragma caudatum* occurs locally. On the west bank of the Zambezi River the better preserved forests have an almost pure canopy of *Baikiaea* with scattered *Entandrophragma*, localised groups of *Commiphora angolensis* and invasive *Ricinodendron rautanenii* mainly on the river fringe. The pattern is repeated on the east bank of the Mashi River. *Commiphora*, like *Ricinodendron*, is restricted, in large sizes at least, to the immediate neighbourhood of the Zambezi (both banks) and Mashi rivers.

Sub-dominants include *Boscia albitrunca*, *Commiphora angolensis*, *Croton gratissimus*, *Lonchocarpus nelsi*, *Strychnos innocua* and *S. potatorum*. *Ficus fischeri*, a strangling fig, is conspicuous at Kataba in the exploited forest areas. In the best-developed forests *Pterocarpus* is subdominant to *Baikiaea*.

The understorey, locally called mutemwa, is a *Baphia–Bauhinia–Combretum–Dalbergia* complex 3–4.5 m [10–15 ft] high. *Dalbergia* (*D. martinii*) is rare on the west bank of the Zambezi but reappears on the Mashi River. Common shrubs include *Acacia ataxacantha* (becoming dominant in fire holes), *Baphia massaiensis* subsp. *obovata*, *Bauhinia macrantha*, *Combretum celastroides*, *C. elaeagnoides* (an invader but now widespread), *Dichrostachys cinerea* (invasive), *Grewia avellana*, *G. flavescens*, *Markhamia acuminata*, *M. obtusifolia* (invasive) and *Popowia obovata*. There is a vaguely defined understorey to the mutemwa, characterised by *Croton scheffleri* (virtually missing from the west bank), *Grewia avellana* and *Erythrococca welwitschi*. The sub-shrubs *Achyranthes aspera*, *Hypoestes verticillaris*, *Pupalia lappacea* and *Triumfetta annua* are common on the ground along with a large number of herbs, a few grasses and the odd sedge in the rainy season.

Climbers, both woody and herbaceous (in the rains only), are occasional to frequent, especially *Baisseia wulffhorsti* although it only occasionally leaves the ground, *Combretum mossambicense* and *Hippocratea parviflora*. Herbaceous climbers, particularly Cucurbitaceae and Vitaceae, are frequent on the forest margins in the rainy season. A number of shrubs, especially *Acacia ataxacantha*, *Bauhinia macrantha*, *Combretum celastroides* and *Dalbergia martinii*, are in fact scramblers and occasionally climb into the canopy.

The *Baikiaea* forests of the west bank Zambezi and the Mashi vary from the above to what is virtually woodland, the commonest form being an overwood of *Baikiaea* with varying amounts of *Acacia giraffae* and *Combretum mechowianum* over a low 1.2–1.8 m [4–6 ft] high, dense fire-degraded mutemwa, largely *Baphia* and *Bauhinia*. In old fire holes *Acacia flecki*, *Croton pseudopulchellus* and *Markhamia obtusifolia* are commonly found.

Along the southern boundary of the Masese forests, the Zambezi fringe and to a lesser extent the Mashi fringe, invasive species from the munga woodland are frequently found in *Baikiaea* forest. Typical of such invaders are *Acacia nigrescens*, *Albizia versicolor*, *Combretum imberbe*, *Diospyros mespiliformis*, *Kigelia africana* and *Lannea stuhlmanni*.

The total woody flora of the type including invasive species is approximately 250 species.

1.A.2.a.i Dwarf *Baikiaea*

Dwarf *Baikiaea* "forest", and its grown-up counterpart ring or shell forest, are widespread on the Mashi River where whole forests are occasionally shell forests. Dwarf forest also occurs in the Lumino, Sisisi, Sikubwinda, Malavwe and Kasiki forests of the Masese group.

Dwarf forest is literally *Baikiaea* forest compressed to about 1.2 m [4 ft] high with occasional emergent to about 3 m [10 ft], especially *Terminalia sericea* and *Combretum* species. All dwarf and ring forest are connected visibly or invisibly with the visible drainage, i.e. the dambos, and can be considered as the external manifestation of an underground drainage pattern.

The stunted habit is analogous to the habit of dambo suffrutices and is thought to be due to poor aeration on sites with inherently free drainage which receive quantities of telluric water. As *Baikiaea* is a species which demands good aeration, the reduced aeration due to telluric water filling a considerable portion of the available air space is sufficient to stunt its growth.

The ring or shell forests of the Mashi – there are some poor examples at Sisisi – are grown up dwarf forests. Whereas dwarf forest lies at the head of a subsidiary underground drainage channel, the shell forests always lie nearer the visible drainage, i.e. downstream as it were from the dwarf forest. The fact that they are now grown up appears to be due to the telluric water moving at greater depths thus leaving the upper soil levels better aerated, although not as well aerated as under normal *Baikiaea* forest.

1.A.2.a.ii Secondary *Baikiaea*

This widespread, exceedingly variable type represents the invasion ecotone between *Baikiaea* forest and the alluvial strip. The chief invaders are *Acacia*, *Combretum* and *Terminalia*. *Combretum* and *Terminalia* have winged fruit easily distributed by wind, and *Acacia giraffae* is distributed by elephant who are partial to the pods. The type varies from two-storeyed forest to two-storeyed scrub, from 15–18 m [50–60 ft] high to 3 m [10 ft] high. The overwood varies from very dense and comparatively young regrowth to very open and heavily degraded forest. The mutemwa is equally variable but on the whole dense, as much of it is regrowth and most of it receives more light than under the closed or nearly closed canopy of *Baikiaea* forest. The height varies from 1.2–3.6 m [4–12 ft].

Overwood dominants include *Acacia giraffae*, locally *Acacia nigrescens* and *Combretum imberbe*, *Combretum mechowianum*, *Peltophorum africanum* and *Terminalia sericea*. *Croton gratissimus* occasionally reaches canopy level. The mutemwa dominants include the basic persistent *Baphia massaiensis* subsp. *obovata*, *Bauhinia macrantha* and *Popowia obovata* with *Acacia ataxacantha* plus a wide range of invasive species, particularly *Acacia flecki*, *Combretum zeyheri*, *Croton pseudopulchellus*, *Dichrostachys cinerea*, *Diospyros lycioides*, *Markhamia acuminata* and *M. obtusifolia*. Climbers are scarce on the whole – *Baissea wulfhorsti*, *Combretum mossambicense* and *Hippocratea parviflora* are the commonest.

Invasive woody herbs and sub-shrubs are a feature of the type. The commonest species are *Aerva lanata*, *Bidens* species, *Disperma crenatum*, *Hemizygia bracteosa*, *Hibiscus* species and *Waltheria indica*. These invasive species tend to replace the herbs to some extent. Grasses, chiefly woodland invasives, are much more common than in *Baikiaea* forest. The succulent, *Sansevieria kirki*, is locally frequent.

The original dominants – *Baikiaea* and *Pterocarpus antunesii* – may or may not persist according to circumstances and the stage which invasion has reached. *Pterocarpus* is more fire-sensitive than *Baikiaea* so that *Baikiaea* tends to persist longer. Yet there are large areas of the type between the east boundary of Simungoma forest and the Loanja River which contain *Pterocarpus* but not *Baikiaea*. These are probably secondary K10 thickets from which the *Baikiaea* has disappeared as the drainage became impeded.

1.B.1 Riparian Woodland

A narrow continuous or discontinuous double strip of woodland borders the Zambezi River. It is almost non-existent on the Mashi River. The outer fringe with its feet in the water consists almost entirely of *Syzygium guineense* subsp. *barotsense* 9–12 m [30–40 ft] high with an understory of *Rhus quartiniana*, scrambling *Mimosa pigra* and the climber *Tacazzea apiculata*, with *Phragmites* reeds in any gaps. The inner strip usually separated from the outer fringe by a sandbank and trough is a dense woodland, largely evergreen, occasionally studded with anthills and often carrying evergreen thicket. The dominant trees are up to 18 m [60 ft] high.

The dominants of this inner fringe are *Diospyros mespiliformis*, *Kigelia africana* and *Strychnos potatorum*. Common shrubs include *Diospyros lycioides*, *Euclea divinorum*, *Phyllanthus reticulatus*, *Turraea zambesiaca* and the wild date palm *Phoenix reclinata*. Climbers and scramblers are common, especially *Acacia schweinfurthi*, *Cocculus hirsutus* and *Jasminum fluminense*. The succulent *Sansevieria deserti* frequently forms colonies in this inner strip. Occasionally, on sandy bluffs by the river the evergreen inner strip is absent but is replaced by open stands of *Acacia albida* and *Acacia schweinfurthi*, separately or in combination. This latter degraded type of riparian woodland is found in places along the Loanja River without the outer *Syzygium* fringe.

Gallery woodland along the smaller rivers like the Machili is reduced to the odd relic clump of *Salix* in long stretches of *Phragmites* reed with *Tacazzea* climbers.

2. OPEN FOREST

2.1 Kalahari Woodland

Kalahari woodland is derived from *Baikiaea* forest as a result of fire and subsequent invasion by fire-hardy species. The primary stage of *Burkea–Guibourtia–Erythrophleum* woodland with or without *Baikiaea*, Trapnell's K7, is widespread on the west bank of the Zambezi but is also associated with the Machili and Masese blocks of *Baikiaea* forest. *Pterocarpus angolensis*, *Dialium engleranum* and *Ricinodendron rautaneni* are locally common at this stage.

K7 degrades to Trapnell's K8 dominated by *Burkea africana* and *Erythrophleum africanum*. *Baikiaea* and *Guibourtia* have been lost in the transition. K8 Kalahari woodland occurs as a narrow fringe along some dambo edges and on the fringe of blocks of K7. In the north *Pterocarpus* replaces the *Erythrophleum*, and with *Burkea* forms a very open woodland about 6 m [20 ft] high occurring as scattered area in miombo/Kalahari woodland.

K8 degrades to *Burkea–Diplorhynchus* scrub, Trapnell's SK5, which contains little else than the two name species 1.5–3 m [5–10 ft] high at widely scattered intervals.

The final regression stage, suffrutex savanna, is dealt with below.

In general the common overwood dominants are *Burkea africana*, *Dialium engleranum* (locally on the west bank), *Erythrophleum africanum*, *Guibourtia coleosperma*, *Pterocarpus angolensis* and *Ricinodendron rautaneni* (mostly fringing the Mashi and Zambezi rivers).

Common small trees include *Brachystegia bakerana* (particularly at dambo heads and then in pure stands), *Combretum psidioides*, *C. zeyheri*, *Diospyros batocana*, *Diplorhynchus condylocarpon*, *Ochna pulchra* and *Terminalia brachystemma*.

The most important shrubs are *Baphia massaiensis* (relic from K6), *Bauhinia urbaniana* (replacing *B. macrantha*), *Copaifera baumiana*, *Grewia* species, *Kotschyia strobilantha* (on dambo margins only), *Lepidagathis macrochila*, *Paropsia brazzeana*, *Vitex madiensis* and locally *Xeromphis obovata*.

Sub-shrubs are a feature of the more degraded *Burkea–Erythrophleum* and *Burkea–Diplorhynchus* subtypes, especially *Annona stenophylla* subsp. *nana*, *Brackenridgea arenaria*, *Chamaeclitandra*

henriquesiana, *Diospyros chamaethamnus*, *D. virgata*, *Gardenia brachythamnus*, *Napoleona gossweileri* (locally), *Ochna* species, *Parinari capensis*, *Sapium oblongifolium*, *Strobilanthopsis linifolia*, *Strychnos caespitosa* (local), *Tricalysia cacondensis* and *Triumfetta dekindtiana* (in gaps).

Climbers are comparatively rare as most are fire-sensitive. *Baijsea wulfhorsti* (as a K6 relic), *Landolphia camptoloba* and *Rhynchosia holosericea* (a ground creeper) are the most abundant of the few species.

2.1.a Miombo/Kalahari Sand

The miombo elements – *Brachystegia* species and *Julbernardia paniculata* – have spread westwards off the plateau onto the Kalahari sands, invading and dominating the primary stage of Kalahari woodland. The greater part of the country east of the Zambezi River is covered by miombo/Kalahari woodland dominated by *Julbernardia* and *Brachystegia spiciformis*. This is a mixture of Trapnell's K3 (*Julbernardia*) and K5 (*B. spiciformis*) types. *Brachystegia longifolia* occurs in the Kataba area. *B. spiciformis* is widespread on the west bank of the Zambezi as far west as the Mashu River, but *Julbernardia* is only known from one small area on the west bank about 50 miles [80 km] north of Katima Mulilo. Woodlands dominated by *B. spiciformis* alone, Trapnell's K5, occur on the east bank within 10 miles [16 km] of the Zambezi River on fine sand. Small trees, shrubs and sub-shrubs and climbers more-or-less as for Kalahari woodland.

In some areas owing to differential erosion and changes in the drainage pattern, patches of the Kalahari or miombo/Kalahari woodland, often based on termite mounds, have been cut off from the main block of woodland and left as bush groups on the fringes. Their vegetation is similar to that of the block from which they were separated, with or without the addition of the Kalahari mound species. The main areas of such bush groups lie (a) in the far north as outliers of miombo/Kalahari woodland, (b) between the Njoko and Loanja rivers, (c) between the Zambezi and the Mashu as outliers from Kalahari woodland.

2.1.b Suffrutex Savanna

This is the final regression stage of the Kalahari woodland, Trapnell's SK, in which the woody plants are reduced to a carpet of suffrutices 8–45 cm [3–18 ins] high. The suffrutices are interspersed with perennial tussock grasses and bulbous herbs. The type occurs in very narrow belts between Trapnell's SK5 (*Burkea–Diplorhynchus* scrub) and the dambos or grassy plains. A similar suffruticose carpet occurs beneath the *Burkea–Diplorhynchus* scrub and on the margins of K8 (*Burkea–Erythrophleum* woodland). The dominant suffrutices are *Diospyros chamaethamnus*, *Lannea edulis*, *Napoleona gossweileri*, *Ochna* species, *Parinari capensis* (the type species and by far the commonest), *Pygmaeothamnus zeyheri* and *Strychnos caespitosa*.

2.2 Mopane Woodland

This varies from an open woodland 6–21 m [20–70 ft] high with almost pure mopane, to a semi-closed mopane/munga ecotone 6–12 m [20–40 ft] high. Stands occur near the Mashu River, on both banks of the Zambezi River and on the west bank of the Machili River. In the pure stands *Acacia nigrescens* is the only other canopy tree, with *Lonchocarpus capassa* and *Strychnos potatorum* fairly frequent in the 6–9 m [20–30 ft] understorey. In the mopane/munga ecotone mopane is associated with such common munga species as *Acacia nigrescens* and *A. sieberana*, *Albizia amara* and *A. harveyi*, *Combretum imberbe*, *Hyphaene ventricosa* palms, *Lonchocarpus capassa*, *Strychnos potatorum* and *Terminalia sericea*.

2.2.a Scrub Mopane

Scrub mopane, Trapnell's S3, occurs in a few places on basalt outcrops on the west bank of Zambezi River. This is a low, open pole woodland with the canopy between 6–9 m [20–30 ft] high. Besides mopane, common canopy trees include *Acacia nigrescens*, *Combretum elaeagnoides* and *Strychnos potatorum*.

Small trees and shrubs are chiefly *Acalypha ornata*, *Markhamia acuminata* and *Popowia obovata*. *Dyschoriste verticillaris* and *Disperma crenatum* are abundant as shrubs. *Hippocratea africana* and *H. buchmanii* are the only common climbers. The succulent *Sansevieria deserti* is locally common.

2.3 Munga Woodland

Munga woodland, Trapnell's K12, of *Acacia–Combretum–Terminalia* occurs on the alluvial flats by the Mashi, Zambezi and Machili rivers. Normally it is a very open type of woodland, but groups of denser stocking occur here and there. A vague thicket is sometimes associated with these groups or even with individual trees. *Terminalia sericea* is common where the type fringes on sand plain, e.g. the Siluana, but uncommon to absent where the type fringes on flood plain, e.g. the Matabele Plain. Where the drainage is very poor munga woodland forms bush groups. Dominant trees rise to 18 m [60 ft] high, small trees to 3–4.5 m [10–15 ft].

Canopy dominants include the *Acacia luederitzi*, *A. giraffae*, *A. nigrescens* and *A. sieberana*, *Albizia amara* and *A. harveyi*, *Combretum imberbe*, *Hyphaene ventricosa* palms (locally and usually as juveniles), *Lonchocarpus capassa*, *Strychnos potatorum* and *Terminalia sericea*.

The commoner shrubs and small trees are *Acacia hebeclada* (usually around water holes), *A. mellifera*, *Combretum hereroense*, *Dalbergia melanoxylon*, *Dichrostachys cinerea*, *Euclea divinorum* and *Maytenus senegalensis*.

Common sub-shrubs include the ubiquitous *Achyranthes aspera*, *Aerva lanata*, *Hermannia glanduligera*, *Leonotis nepetifolia*, *Sesamum capense* and *Sutera elegantissima*, the last two usually restricted to low sandbanks on the flood plain. Climbers are rare, only *Cardiospermum halicacabum* and *Cocculus hirsutus* at all common.

An ecotone occurs on sand caps in certain places, e.g. on the Loanja River by Masese where munga and riparian woodland meet. It is a two-storeyed woodland with a light, more or less closed canopy 12 m [40 ft] high over a dense, deciduous thicket 3–6 m [10–12 ft] high composed of small trees, shrubs and climbers. Sub-shrubs are a feature of the lower levels from 0.6–1.5 m [2–5 ft] high. The thicket is dominated by munga species plus the riparian *Trichilia emetica*. The small trees and shrubs are derived from both sources while the sub-shrubs are almost wholly thicket species.

The common canopy dominants are *Acacia nigrescens*, *Combretum imberbe*, *Lonchocarpus capassa*, *Strychnos potatorum*, *Terminalia sericea* and *Trichilia emetica*. Small trees are largely *Combretum hereroense* and *Markhamia obtusifolia*. Common shrubs include *Diospyros lycioides*, *Maytenus senegalensis*, *Popowia obovata*, *Rytigynia umbellulata* and *Securinega virosa*. Sub-shrubs are abundant especially *Abutilon ramosum*, *Achyranthes aspera*, *Aerva lanata*, *Hibiscus* species, *Sida cordifolia*, *Triumfeta annua* and *Wissadula rostrata*. Climbers are a feature with *Abrus precatorius*, *Cardiospermum halicacabum*, *Clematis brachiata*, *Cocculus hirsutus*, *Cyclantheropsis parviflora*, *Helinus integrifolius* and *Jasminum fluminense*.

3. TERMITARIA

3.1 Kalahari Termitaria

Termite mounds occur on Kalahari sands of the Karoo type where the silt +clay content is reasonably high, or on the fringes of the Kalahari sand proper where heavier soils underlie the sands. Thus termitaria occur in *Baikiaea* forest (very low ones covered with *Boscia mossambicensis* or taller ones with *Capparis tomentosa*), in secondary *Baikiaea* forest, in Kalahari woodland, or in miombo/Kalahari woodland.

The dominant is usually a solitary specimen of *Acacia galpini*, *A. nigrescens*, *Albizia amara*, *Diospyros mespiliformis* or *Strychnos potatorum* to 15 m [50 ft] high. Of the small trees *Boscia albitrunca* and *Markhamia obtusifolia* are the most frequent. Common shrubs include *Capparis tomentosa* or *Diospyros lycioides*, *Euclea divinorum*, *Grewia schinzii*, *G. bicolor*, *G. monticola*,

Maerua juncea, *Popowia obovata*, *Securinea virosa* and *Ximenia americana*. Climbers are plentiful especially *Asparagus africanus*, *Cardiospermum halicacabum*, *Hippocratea parviflora*, *Combretum mossambicense*, *Commicarpus plantagineus* and *Helinus integrifolius*. Sub-shrubs are few but *Disperma crenatum* is frequent.

3.2 Mopane Termitaria

Termite mounds occur in pure mopane woodland but there the vegetation is restricted largely to *Combretum elaeagnoides*. Mopane termitaria occur also at the headwaters of the Machili River and near Machili Forest Station in the mopane/munga ecotone with a great variety of species.

Besides mopane (*Colophospermum*) the dominants are *Albizia harveyi* and *Peltophorum africanum*. *Combretum hereroense* and *Terminalia brachystemma* are common small trees. Shrubs are abundant especially *Commiphora africana* and *C. pyracanthoides*, *Croton menyharthi*, *Dalbergia melanoxylon*, *Erythroxylum zambesiaceum*, *Euclea divinorum*, *Euphorbia espinosa*, *E. transvaalensis* and *Flacourtia indica*.

Common shrubs include *Aloe zebrina*, *Coleus decumbens*, *Plectranthus cylindraceus* and *Sansevieria deserti*. Climbers are chiefly *Asparagus racemosus*, *Cissampleos mucronata*, *Cissus quadrangularis*, *Cocculus hirsutus* and *Tinospora tenera*.

3.3 Munga Termitaria

These are densely wooded termite mounds on the margins of shallow pans on alluvium. The overwood and small trees are derived from munga woodland and the shrubs and sub-shrubs represent the thicket element. In some places the mounds merge together to form woodland, elsewhere they stand apart and give the impression of bush groups. Dominant trees rise to 15 m [15 ft] high.

The canopy dominants are largely *Acacia nigrescens* and *Combretum imberbe*, with a fair amount of *Strychnos potatorum*. But there are at least four other *Acacia* species present.

The commoner small trees are *Albizia anthelmintica* and *A. harveyi*, *Combretum hereroense*, *Dalbergia melanoxylon*, *Dichrostachys cinerea*, *Euclea divinorum* and locally *Crocoxylon transvaalense*. Shrubs and scramblers are represented chiefly by *Capparis tomentosa*, *Diospyros lycioides*, *Erythrococca menyharthii*, *Maytenus senegalensis*, *Pavetta cataractarum*, *Popowia obovata* and *Securinea virosa*. *Acalypha ornata*, *Achyranthes aspera* and *Disperma crenatum* are the commonest sub-shrubs. Climbers include *Asparagus africanus*, *Cocculus hirsutus*, *Combretum mossambicense* and *Hippocratea africana*. The succulent bowstring hemp, *Sansevieria deserti*, is locally abundant.

4. GRASSLANDS

4.1 Dambos and Dry Plains

The dry grassy plains and dambos are basically grass-sedge areas with a few suffrutices. The plains occasionally flood in seasons heavy rainfall.

The commoner grasses include *Andropogon shirensis*, *Aristida stipitata*, *Brachiaria brizantha*, *Digitaria diagonalis*, *Hyperthelia dissoluta*, *Monocymbium ceresiforme*, *Trachypogon spicatus* and *Tristachya hitchcocki*. The commoner sedges belong to the genera *Fimbristylis*, *Kyllinga* and *Scleria*.

Suffrutices are chiefly *Acacia giraffae* (acting as a suffrutex), *Annona stenophylla* subsp. *nana*, *Clematopsis scabiosifolia*, *Combretum platypetalum* and *Hermannia angolensis*.

4.2 Floodplains

The sandy flood plains carry a dense vegetation of coarse grasses and sedges with a few perennial bulbous herbs like *Crinum pedicellatum* and numerous annual herbs like *Ammania* and *Rotala* species. The grass-sedge cover is variable depending on duration of flooding and depth of water.

The outer fringes flooded for only for only 1–2 months are dominated by the grass *Cynodon dactylon* associated particularly with *Sacciolepis huillensis* and the sedges *Cyperus longus* and *Juncus arabicus*.

The flats nearer the river flooded for 4–5 months of the year are dominated by grasses, chiefly *Panicum dregeanum*, *P. repens* and *Brachyachne patentiflora* with local colonies of *Imperata cylindrica* and *Leersia hexandra*.

Permanent pools in the floodplain carry dense stands 1.8–3 m [6–10 ft] high of mashinge (*Eleocharis fistulosa*), wild rice (*Oryza barthi*), bulrush (*Typha angustifolia*) or matete reed (*Phragmites mauritianus*).

The whole district apart from the fire protected areas of the R.T.F. is subject to annual fires. The *Baikiaea* forests are particularly susceptible. Heavy crown fires result in dense thorn (*Acacia ataxacantha*) thickets, repeated ground fires in secondary *Baikiaea* forest with *Acacia*, *Combretum* and *Terminalia* or Kalahari woodland depending on the whether the mutemwa regenerates or not after the fire. The area between the Zambezi and the Mashi rivers where there has been no fire protection of any kind has suffered most. The most deleterious effect of fire is on the fertility of the soil. Impatient cultivators cut short the bush fallow which should be 25–35 years or more on these infertile sands. As a result the land has not regained its former fertility and more land is needed to produce the same amount of crops.

The aerial photographs show that the size of the areas cultivated recently is out of all proportion to the population of the region.

Fire however is no recent hazard. There must always have been fire in the district. It is probably that the *Baikiaea* forests were regenerated by light fires and destroyed by heavy fires or degraded to secondary *Baikiaea* forest or Kalahari woodland. This in its turn has been, or is being, degraded to suffrutex savanna and grassy plains under the influence of fire. It is likely that *Baikiaea* forest once covered the area of well drained sands. Now the forests are more or less reduced to the immediate vicinity of the Zambezi, Mashi, Machili and Njoko rivers.

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SPECIES LISTS

a – abundant, c – common, f – frequent, lf – locally frequent, lo – locally occasional, o – occasional, r – rare

K1, CRYPTOSEPALUM FOREST

<u>Canopy trees:</u>			
Albizia antunesiana	r-o	Pavetta schummaniana	o
Brachystegia longifolia	o	Paropsia brazzeana	f
Brachystegia spiciformis	o	Pseudolachnostylis maprouneifolia	o
Burkea africana	o	Psorospermum baumii	o
Cryptosepalum exfoliatum		Securidaca lonepedunculata	o
subsp. pseudotaxus	a	Swartzia madagascariensis	o
Diospyros batocana	o	Strychnos cocculoides	o
Erythrophleum africanum	o	Strychnos pungens	o
Guibourtia coleosperma	o	Tricalysia angolensis	f
Julbernardia paniculata	o-1f	Triumfetta dekindtiana	o-f
Parinari curatellifolia	o	Vangueriopsis lanciflora	1f
Terminalia brachystemma	o	Vernonia glaberrima	r
Terminalia sericea	r		
		<u>Suffrutices:</u>	
		Chamaeclitandra henriquesiana	1f
		Coleus kapatensis	o
<u>Small trees:</u>		Diodia scandens	o
Bauhinia urbaniana	r-o	Diospyros virgata	f
Bridelia duvigneaudi	r-o	Fadogia erythrophlea	r-o
Canthium huillense	o	Leptactina benguelensis	o
Combretum mechowianum	o	Strobilanthopsis linifolia	o
Combretum psidioides	o	Tephrosia cephalantha	o
Combretum zeyheri	o	Tricalysia cacondensis	f
Copaifera baumiana	a		
Diplorhynchus condylocarpon	o-f	<u>Scramblers & climbers:</u>	
Hannoa chlorantha	r	Canthium venosum	lo
Maprounea africana	r-o	Cassytha filiformis	1f
Ochna pulchra	o	Landolphia camptoloba	a
Olax obtusifolia	o	Strophanthus welwitschii	o-f
Oldfieldia dactylophylla	r		

K6, BAIKIAEA FOREST

	Lozi name	Derivation	Frequency
<u>Overstorey trees:</u>			
Acacia polyacantha	miKotokoto	D	r
Acacia galpinii	miKotokoto	D	lo
Acacia giraffae	muHoto		f-lo
Acacia luederitzii	muMbovwa	D	lo
Acacia nigrescens	muKwena	D.S	r
Acacia sieberiana	muTuvatuva	D	r
Adansonia digitata	muBuyu	D.S	r
Azalia quanzensis	mWande	D.K	r
Albizia versicolor	muBuba	D.R	r
Amblygonocarpus andogensis		D	r
Baikiaea plurijuga	muKusi		a

	Lozi name	Derivation	Frequency
<i>Berchemia discolor</i>	muZinzila		lo
<i>Boscia albitrunca</i>	kaBombwa-mu-temwa		o
<i>Boscia angustifolia</i>	kaBombwa-mu-temwa		r
<i>Brachystegia spiciformis</i>	muTuya	K	r
<i>Burkea africana</i>	muSheshe	K	r
<i>Cassia abbreviata</i>	muLulwe		lo
<i>Colophospermum mopane</i>	muPane		r
<i>Combretum imberbe</i>	muZwile	D.S	r
<i>Combretum mechowianum</i>			o-lo
<i>Commiphora angolensis</i>	muBwabwa	S	o-lf
<i>Croton gratissimus</i>	muKena		lf
<i>Diospyros mespiliformis</i>	muChenja	R.A	r
<i>Entandrophragma caudatum</i>	muPamena		lo
<i>Erythrophleum africanum</i>	muBako	K	r
<i>Ficus fischeri</i>	muTata		lo
<i>Ficus natalensis</i>	muTaba		r
<i>Ficus stuhlmannii</i>			r
<i>Guibourtia coleosperma</i>	muZauli	K	r
<i>Kigelia africana</i>	muZungula	D.R	r
<i>Lannea discolor</i>	kaBumbu	K	r
<i>Lannea stuhlmannii</i>	muSamba	D.R	r
<i>Lonchocarpus capassa</i>	muPanda	D	r
<i>Lonchocarpus nelsii</i>	muKololo		o-lf
<i>Ostryoderris stuhlmannii</i>	muZwamalos	D	r
<i>Peltoporum africanum</i>	muNyele	D.K	lo
<i>Pteleopsis myrtifolia</i>	mwAnzabalu		lo
<i>Pterocarpus angolensis</i>	muKwa	K	r
<i>Pterocarpus antunesii</i>	muAngula		o-a
<i>Ricinodendron rautanenii</i>	muNgongo	K	r
<i>Schreberia trichoclada</i>	kaOki	K	r-lo
<i>Sclerocarya caffra</i>	muLula	D	r
<i>Strychnos innocua</i>	muTeme		lo
<i>Strychnos potatorum</i>	muLombelombe		lo
<i>Terminalia mollis</i>	Inumbawa	D	r
<i>Terminalia sericea</i>	muHonono	D	lo
<i>Trichilia emetica</i>	muSikili	R	r
<u>Mutemwa shrubs & scramblers:</u>			
<i>Abutilon angulatum</i>	luKulu	D.A	r-lo
<i>Abutilon ramosum</i>	luKulu	A	r
<i>Acacia ataxacantha</i>	muNangatao		f-lo
<i>Acacia fleckii</i>	muKoka		f-lo
<i>Acacia mellifera</i>	kaKumbwe	D	f-lo

	Lozi name	Derivation	Frequency
<i>Acacia nilotica</i>	muKotokoto	D.A	r
<i>Acalypha chirindica</i>	muZoboto		r-lo
<i>Achyranthes aspera</i>			f-o
<i>Alchornea occidentalis</i>			lo
<i>Allophylus africanus</i>		R	r-o
<i>Asparagus africanus</i>	iLutwa	D	r-o
<i>Asparagus asiaticus</i>	iLutwa	D	lo
<i>Aspilia mossambicensis</i>		K	r
<i>Baphia massaiensis</i> subsp. <i>obovata</i>	Isunde		c-a
<i>Barleria mackenii</i>		D	lo
<i>Barleria matopensis</i>			v.lf
<i>Bauhinia macrantha</i>	muPondopondo		c
<i>Blepharis buchneri</i>	chiAsabawime	D	r
<i>Boscia mossambicensis</i>	muBwabwa	D.A	r-lo
<i>Bridelia duvigneaudi</i>	muNwamena		r
<i>Byrsocarpus orientalis</i>	muKolwe	D.R	r
<i>Canthium burttii</i>	muBilo		lo
<i>Canthium frangula</i>	kaFua		o-lf
<i>Canthium huillense</i>	muNianyu	K	lo
<i>Cassia absus</i>		W	lf
<i>Cassia mimosoides</i>		K	r
<i>Cassia obtusifolia</i>	chaNgu	W	lf
<i>Cassia occidentalis</i>	chaNgu	W	lf
<i>Cassia quarrei</i>		W	r-o
<i>Cassipourea n.s.</i>			r-o
<i>Cissus cornifolia</i>	muMinanzoka	K	r
<i>Citropsis daweara</i>	nZani		lo
<i>Clematopsis scabiosifolia</i>		K	lo
<i>Cleome gynandra</i>	naManga	W	lf
<i>Clerodendrum capitatum</i>			o
<i>Clerodendrum myricoides</i>	muTume		o
<i>Clerodendrum ternatum</i>		K	r
<i>Clerodendrum uncinatum</i>	muBwanyo		o-lf
<i>Coleus esculentus</i>		K	r
<i>Combretum apiculatum</i>	muKalanga	S	r
<i>Combretum celastroides</i>	kaNgolo		c
<i>Combretum elaeagnoides</i>	muLala-bainga	S	c
<i>Combretum engleri</i>	Minda		f
<i>Combretum hereroense</i>	muBubu	D	r
<i>Combretum psidioides</i>	muFula	K	lo
<i>Combretum zeyheri</i>	muKenge	K	lo
<i>Commiphora mossambicensis</i>	muBwabwa	S	r
<i>Commiphora pyracanthoides</i>	muBwabwa	D	o

	Lozi name	Derivation	Frequency
<i>Corchorus tridens</i>		W	r
<i>Crotalaria damaraensis</i>		W	lo
<i>Crotalaria flavicarinata</i>	muLalatani		o
<i>Croton polytrichus</i>			o-lf
<i>Croton pseudopulchellus</i>	muKena		f-lo
<i>Croton scheffleri</i>	muPasila		f
<i>Cyathula prostrata</i>		R	lf
<i>Dalbergia martinii</i>	muLianzovu		c
<i>Dichrostachys cinerea</i>	muSelesele	D.K	o-lf
<i>Dicliptera verticillata</i>		D	la
<i>Diospyros abyssinica</i>	muLokwambula	D	r
<i>Diospyros lycioides</i>	muPichu	D	o-lf
<i>Disperma crenatum</i>		D.A	lo
<i>Dyschoriste verticillaris</i>			lo
<i>Erythrococca menyharthi</i>	Poko		o
<i>Erythroxyllum emarginatum</i>			r
<i>Erythroxyllum zambesiaccum</i>		S	lo
<i>Euclea divinorum</i>	muSokola	D	lo
<i>Eugenia angolensis</i>	muVuti	D	r
<i>Euphorbia benthamii</i>	kaBomba		o
<i>Euphorbia espinosa</i>		S	r
<i>Euphorbia transvaalensis</i>		A	lo
<i>Fagara trijuga</i>	Nwanyi		o
<i>Gardenia brachythamnus</i>		K	o-lf
<i>Gardenia spatulifolia</i>	muSulu	D.K	r
<i>Grewia avellana</i>	muChabachaba		f-c
<i>Grewia bicolor</i>	muWana	D.A	r
<i>Grewia falcistipula</i>	muLomolomo	K	r
<i>Grewia flavescens</i>	muZuzinyani		o
<i>Grewia monticola</i>	muWana	D.S	lo
<i>Grewia retinervis</i>	muZuzinyani		lo
<i>Grewia schinzi</i>	muTutu	D	r
<i>Haplocoelum foliolosum</i>	chiZilo		r
<i>Hemizygia bracteosa</i>	siMuke		lo
<i>Hermannia angolensis</i>		D.	lf
<i>Hibiscus calyphyllus</i>	maKuka		lf
<i>Hibiscus lobatus</i>	maKuka		o-lf
<i>Hibiscus cannabinus</i>	maKuka	D	r-o
<i>Hibiscus mastersianus</i>	maKuka	D	r-o
<i>Hibiscus mechowii</i>	maKuka	W	lo
<i>Hibiscus meeusei</i>	maKuka	W	lo
<i>Hibiscus physaloides</i>	maKuka		lo
<i>Hoslundia opposita</i>		D.A	r

	Lozi name	Derivation	Frequency
<i>Hymenodictyon parvifolium</i>		S	r
<i>Hyphaene ventricosa</i>	muNganda	D	r
<i>Hypoestes verticillaris</i>			lf
<i>Indigofera ormocarpoides</i>	luKungandofu		o-f
<i>Ipomoea vernalis</i>		D	r
<i>Jasminum streptopus</i>			o
<i>Justicia betonica</i>			f
<i>Lantana rhodesiensis</i>		D.A	o
<i>Leonotis nepetifolia</i>		W	lf
<i>Lippia javanica</i>	liKobeza-balisana	D	r
<i>Maerua friesii</i>		A	r
<i>Markhamia acuminata</i>	mwAlachi		o-lf
<i>Maerua juncea</i>			r
<i>Maytenus senegalensis</i>	muOliba	D	lo
<i>Melhania acuminata</i>		K	lf
<i>Mundulea sericea</i>	luKangandofu	S	r
<i>Nidorella microcephala</i>		W	lo
<i>Ochna afzelioides</i>	muNyelinyeli		r
<i>Ochna cinnabarina</i>	siLungumukaka		o
<i>Ochna pulchra</i>	muNyelinyeli		o
<i>Ocimum americanum</i>	muKubamwe	W	lf
<i>Ocimum suave</i>	muKubamwe	D	r
<i>Pavonia hirsuta</i>	Gonde	W	lf
<i>Phyllanthus discoideus</i>			o
<i>Phyllanthus maderaspatensis</i>			lo
<i>Phyllanthus reticulatus</i>		D.R	r
<i>Plumbago zeylanica</i>	siKalutenta		o-lf
<i>Pollichia campestris</i>		K	lo
<i>Polygala schinziana</i>		K	r
<i>Polygala sphenoptera</i>		K	r
<i>Popowia obovata</i>	muChinga		f
<i>Premna senensis</i>	luFetu	A.R	lo
<i>Psychotria spithamea</i>		K	r
<i>Pupalia lappacea</i>	liLamatwa		o-lf
<i>Rhus tenuinervis</i>	muKamati		o
<i>Ruspolia decurrens</i>		A	o-lf
<i>Rytigynia umbellulata</i>	luFeto		lo
<i>Excoecaria bussei</i>	naMaya		r
<i>Securidaca longependunculata</i>	muInda	K	lo
<i>Sida cordifolia</i>		D	o-lf
<i>Sida hoepfneri</i>		D	lo
<i>Solanum panduriforme</i>	nTulwantulwa	W	lo
<i>Strychnos cocculoides</i>	muHuluhulu	K	r

	Lozi name	Derivation	Frequency
<i>Strychnos pungens</i>	muWawa	K	r
<i>Strychnos spinosa</i>		K	r
<i>Tarenna luteola</i>			o-f
<i>Tephrosia cephalantha</i>		K	o-f
<i>Tephrosia longipes</i>		K	o-f
<i>Thunbergia crispata</i>			l-f
<i>Tricalysia allenii</i>	muNtiontio		o-f
<i>Tricalysia cacondensis</i>		K	lo
<i>Tricalysia congesta</i>		T	r
<i>Triumfetta annua</i>			f-c
<i>Triumfetta tomentosa</i>			f
<i>Triumfetta trichocarpa</i>			o-lf
<i>Vangueria randii</i>	muBilo	K	r-o
<i>Vangueria tomentosa</i>	muBilo	Ko	K
<i>Vepris termitaria</i>		T	lo
<i>Vernonia glabra</i>		D	lo
<i>Vitex amboniensis</i>	muKekete		o
<i>Waltheria indica</i>		W	lf
<i>Wissadula rostrata</i>		R/T	lf
<i>Ximenia americana</i>	muTente	K	o
<i>Ximenia caffra</i>	muLutulua	K	o
<i>Ziziphus mucronata</i>	muKalu	A	r
<u>Climbers:</u>			
<i>Abrus precatorius</i>	muPitipiti	D	r
<i>Abrus pulchellus</i>		R/T	r
<i>Adenia senensis</i>		D	r
<i>Ampelocissus africana</i>	muNsansa	D.A	r.
<i>Ampelocissus obtusata</i>	muNsansa	K	lo
<i>Asparagus racemosus</i>	llutwa	K.A	lo
<i>Asparagus plumosus</i>	llutwa	D.S	r
<i>Baissea wulffhorstii</i>	muNdandanyani		f-c
<i>Bonamia spectabilis</i>	luKokamila		o-lf
<i>Capparis tomentosa</i>	chiWezeze	A	r
<i>Cardiospermum halicacabum</i>		D.A	lo
<i>Cissampelos mucronata</i>	ltende	D.A	lo
<i>Cissus integrifolia</i>		A	lo
<i>Clematis brachiata</i>		D.A	lo
<i>Cocculus hirsutus</i>	siKoka	D.R	r
<i>Combretum mossambicense</i>	siLutombolwa		o-f
<i>Corallocarpus sp. (6122)</i>		D	r
<i>Cucumis metuliferus</i>			r-o
<i>Cycnantheropsis parviflora</i>	liBoma	D.A	lo

	Lozi name	Derivation	Frequency
<i>Cyphostemma bororensis</i>			lo
<i>Cyphostemma cirrhosum</i>			lo
<i>Cyphostemma congestum</i>		D	lo
<i>Cyphostemma crotalarioides</i>			lo
<i>Cyphostemma lynesii</i>			lo
<i>Cyphostemma</i> sp. (6372)			lo
<i>Dioscorea cochleari-apiculata</i>		D	r
<i>Dioscorea asteriscus</i>			lf
<i>Dioscorea hirtiflora</i>	maNtembe	D.A	lf
<i>Dioscorea quartiniana</i>	siKubabe	D	lo
<i>Dolichos africanus</i>	chiLekeleke	D.A	lo
<i>Fockea multiflora</i>	naNiam		r
<i>Glycine javanica</i>		D	r
<i>Gymnema sylvestre</i>		D.A	r
<i>Helinus integrifolius</i>	muLalawa	D.A	lo-lf
<i>Hippocratea africana</i>	naMinda	D.A	r
<i>Hippocratea parviflora</i>	muKutinge		f
<i>Hymenosicyos</i> sp.			r
<i>Ipomoea involucreta</i>			f
<i>Ipomoea obscura</i>			o
<i>Ipomoea pes-tigridis</i>			f
<i>Ipomoea pileata</i>			f
<i>Ipomoea arachnosperma</i>			f
<i>Ipomoea sinensis</i>			lo
<i>Ipomoea tuberculata</i>			r
<i>Ipomoea verbascoidea</i>	liTalala		o-f
<i>Jacquemontia tamnifolia</i>		W	lf
<i>Kedrostis foetidissima</i>			r
<i>Lablab niger</i>		D.A	r
<i>Landolphia parvifolia</i>	muMbonogolume		r
<i>Melothria punctata</i>		W	o-lf
<i>Momordica balsamina</i>	lombwalombwa	W	lo
<i>Momordica clematidea</i>		D.A	r
<i>Momordica foetida</i>			r
<i>Momordica kirkii</i>			lo
<i>Mucuna pruriens</i>	muYuyu		r
<i>Paederia foetens</i>			lo
<i>Pentarrhinum insipidum</i>			r
<i>Pergularia n.s.</i>			
<i>Rhynchosia caribaea</i>	muNkoyamomo		o
<i>Rhynchosia totta</i>			r
<i>Secamone parvifolia</i>			r

	Lozi name	Derivation	Frequency
<i>Lagenaria sphaerica</i>	Buzuagwe		o-lf
<i>Strophanthus kombe</i>	muNunga		o
<i>Thunbergia alata</i>			o-f
<i>Tinospora tenera</i>		D.A	o
<i>Tragia benthamii</i>	kaYuwe		lo
<i>Tragia brevipes</i>	kaYuwe		r
<i>Triaspis macropteron</i>			r
<i>Tryphostemma hanningtonianum</i>			o
<i>Vernonia aurantiaca</i>		A	lo
<i>Vigna maranguensis</i>			r
<i>Vigna vexillata</i>			o
<u>Herbs:</u>			
<i>Acalypha ciliata</i>			f-c
<i>Acalypha segetalis</i>		W	r
<i>Acanthosicyos naudinianus</i>		W	lf
<i>Acanthospermum australe</i>		W	lo
<i>Acrocephalus galeopsifolius</i>			lo
<i>Aerva lanata</i>		W	lf
<i>Albuca angolensis</i>		D	r
<i>Alectra vogeli</i>			r
<i>Aloe zebrina</i>		D	r
<i>Aspilia pluriseta</i>		D	lf
<i>Alternanthera pungens</i>		W	lo
<i>Amorphophallus abyssinicus</i>	?liVava		o
<i>Aneilema johnstonii</i>			f
<i>Aneilema pedunculatum</i>			f
<i>Anisopappus canescens</i>			lo
<i>Anisopappus dentatus</i>			lo
<i>Anthericum subpetiolatum</i>			lo
<i>Aspilia kotschyi</i>			o-f
<i>Asystasia gangetica</i>			lf
<i>Bidens cylindracea</i>			o
<i>Bidens schimperi</i>			o-f
<i>Biophytum sensitivum</i>	siMasika		o-f
<i>Blainvillea latifolia</i>			lf
<i>Blepharis caloneura</i>		D	lo
<i>Blepharis maderaspatensis</i>			f
<i>Borreria scabra</i>			lf
<i>Buchnera hispida</i>		D	lf
<i>Celosia trigyna</i>			lf
<i>Celosia welwitschii</i>			lo

	Lozi name	Derivation	Frequency
<i>Chlorophytum brachystachyum</i>		K	lo
<i>Chlorophytum glabriflorum</i>			lo
<i>Coleus drymophilus</i>			lo
<i>Coleus kapatensis</i>			r
<i>Commelina aspera</i>	naMuyinde	D	lo
<i>Commelina buchananii</i>	naMuyinde		f
<i>Commelina pycnospata</i>	naMuyinde		lo
<i>Commelina zambesiaca</i>	naMuyinde		f
<i>Corrigiola paniculata</i>			o-f
<i>Crinum harmsii</i>		D	r
<i>Crotalaria platysepala</i>		K	lo
<i>Crotalaria senegalensis</i>		W	lo
<i>Dicerocaryum zanguebarium</i>		K	lo
<i>Dipcadi magnum</i>			lc
<i>Englerastrum hjalmari</i>		K	lc
<i>Erlangea laxa</i>			lo
<i>Erlangea sessilifolia</i>			o-f
<i>Eulophia quartiniana</i>			r
<i>Euphorbia crotonoides</i>			lo
<i>Euphorbia hirta</i>		W	lo
<i>Evolvulus alsinoides</i>		K	lo
<i>Gisekia africana</i>			f
<i>Gloriosa superba</i>	?muKoakoa		l
<i>Gomphrena celosioides</i>		W	r
<i>Haemanthus multiflorus</i>			lo
<i>Harpagophyton procumbens</i>		W	lo
<i>Celosia scabra</i>		W	lf
<i>Indigofera charlieriana</i>		K	lo
<i>Indigofera echinata</i>		W	lo
<i>Indigofera livingstoniana</i>		K	lo
<i>Indigofera vicioides</i>		D	lo
<i>Ipomoea chloroneura</i>		K	lo
<i>Jatropha baumii</i>		D	r
<i>Justicia heterocarpa</i>	kaBomba		f-c
<i>Justicia flava</i>			f
<i>Justicia matammensis</i>		D.S	lo
<i>Kaempferia carsonii</i>			lo
<i>Kalanchoe lanceolata</i>	siZenze		o-f
<i>Leucas descampsi</i>		W	lo
<i>Limeum fenestratum</i>		W	r
<i>Limeum viscosum</i>		W	r
<i>Merremia pinnata</i>			lo

	Lozi name	Derivation	Frequency
Merremia tridentata		W	lo
Lupiniphyllum lupinifolium		D	lo
Micrococca mercurialis			o
Monechma debile			f
Monechma fimbriatum		D	lo
Murdannia simplex		K	o
Oldenlandia affinis		D	r
Oldenlandia corymbosa			lo
Oxygonum sinuatum			o-f
Pandiaka schweinfurthii		K	lo
Phaulopsis longifolia			r
Phyllanthus capillaris			o-f
Phyllanthus hutchinsonianus			r
Phyllanthus leucanthus			r
Phyllanthus pentandrus			o-f
Plectranthus biflorus			f-c
Polygala pygamea		K	r
Rothia hirsuta		W	r
Sansevieria kirkii	luKushe		o-lf
Scilla hyacinthina			lo
Scilla indica		D	lo
Sclerocarpus africanus			lo
Stylochiton puberulus			r-o
Talinum crispatum		D	o
Tephrosia caerulea		D	r
Tephrosia purpurea		D	lo
Thesium sp. (5780)			r
Tribulus terrestris			r
Vernonia poskeana	? muBalusika	D	o-lf
Vernonia stenolepis			c
Vernonia sp. (6410)			lo
Zornia milneana			r
<u>Grasses:</u>			
Andropogon textilis		K	lo
Brachiaria nigropedata		K	lo
Craspedorachis uniflora			lo
Cynodon dactylon			lo
Dactyloctenium giganteum	siSongo	W	lc
Digitaria perrotteti		W	lo
Digitaria setivalva		D	lf
Digitaria sp. (5457)	muSambo		a

	Lozi name	Derivation	Frequency
Eragrostis arenicola		W	lo
Eragrostis aspera		W	lo
Eragrostis ciliaris		W	lo
Eragrostis patens		W	lo
Eragrostis viscosa		D	lo
Eragrostis sp. (5652)		W	lo
Eragrostis sp. (6145)			r-o
Hyparrhenia sp.		K	lo
Leptocarydion vulpiastrum		W	lo
Oplismenus hirtellus			f-c
Panicum heterostachyum			c
Panicum maximum	naNdundu		la
Perotis patens		D	lo
Perotis vaginata		W	lo
Rhynchelytrum subglabrum		K	lo
Setaria homonyma			f-lc
Setaria lindenbergiana		R/T	r
Sporobolus fimbriatus		K	lf
Sporobolus pyramidalis		W	lc
Trichoneura grandiglumis		K	lo
Urochloa trichopus		W	lo
<u>Sedges:</u>			
Cyperus amabilis		W	lf
Cyperus esculentus		W	lf
Cyperus margaritaceus		D	lo
Cyperus sphacelatus			o
Cyperus sylvestris			o
Fimbristylis exilis		W	lf
Mariscus dubius			o

SECONDARY BAIKIAEA FOREST

Canopy trees:

Acacia galpinii	lo	Combretum hereroense	o
Acacia giraffae	f-lc	Combretum imberbe	f-c
Acacia nigrescens	lf	Combretum mechowianum	f-c
Acacia polyacantha	lo	Erythrophleum africanum	o
Adansonia digitata	r	Ficus fischeri	lo
Azelia quanzensis	r	Guibourtia coleosperma	lf
Baikiaea plurijuga	o	Lonchocarpus capassa	r-o
Boscia albitrunca	o	Lonchocarpus nelsii	o
Burkea africana	o	Ostryoderris stuhlmannii	lo
Colophospermum mopane	lo	Peltophorum africanum	o-f
		Pterocarpus antunesii	o

Ricinodendron rautanenii	r	Acacia ataxacantha	o-f
Terminalia mollis	r	Adenia senensis	r
Terminalia sericea	a	Asparagus africanus	o
Ziziphus mucronata	o	Baissea wulfhorsti	o
		Bonamia spectabilis	lo
<u>Shrubs & small trees:</u>		Capparis tomentosa	r
Abutilon angulatum	lo	Cardiospermum halicacabum	o
Acacia fleckii	o-lf	Cissampelos mucronata	o
Acacia hebeclada	lo	Cissus cornifolia	o
Acacia luederitzii	r-lo	Cissus integrifolia	r
Acacia mellifera	lf	Clematis brachiata	o
Acacia nilotica	r	Cocculus hirsutus	o
Baphia massaiensis subsp. obovata	f	Combretum celastroides	f
Bauhinia macrantha	f	Combretum mossambicense	lf
Canthium frangula	o	Cyclantheropsis parviflora	lf
Canthium huillense	r	Dalbergia martinii	o-f
Citropsis daweana	lo	Dioscorea hirtiflora	lf
Combretum apiculatum	r	Dioscorea quartiniana	o-f
Combretum elaeagnoides	o	Dolichos africanus	lf
Combretum engleri	o	Dregea macrantha	r
Combretum psidioides	o	Grewia flavescens	o
Combretum zeyheri	f	Helinus integrifolius	o
Commiphora angolensis	o	Hippocratea africana	r
Commiphora pyracanthoides	r	Hippocratea parviflora	o-f
Croton gratissimus	lf	Jacquemontia tamnifolia	lf
Croton pseudopulchellus	lc	Maerua juncea	r-o
Dalbergia melanoxylon	lo	Melothria punctata	r
Diospyros lycioides	f-c	Momordica clematidea	r
Diplorhynchus condylocarpon	lo	Momordica kirkii	o
Euclea divinorum	r-o	Pergularia <i>n.s.</i>	o
Grewia avellana	lo	Rhynchosia caribaea	r
Grewia monticola	o	Tinospora tenera	r
Grewia retinervis	lf	Vigna vexillata	o-f
Hoslundia opposita	o		
Hymenodictyon parvifolium	r	<u>Sub-shrubs:</u>	
Lannea discolor	r	Acalypha senensis	lo
Lippia javanica	r	Achyranthes aspera	f-c
Markhamia obtusifolia	lf	Aerva lanata	o-lf
Maytenus senegalensis	r-o	Aspilia mossambicensis	lo
Ochna cinnabarina	r	Blepharis buchneri	lo
Ochna pulchra	lf	Blumea gariepina	lo
Phyllanthus reticulatus	r	Cassia absus	lo
Popowia obovata	o-f	Cassia mimosoides	lo
Rhus tenuinervis	o	Cassia obtusifolia	lf
Schrebera trichoclada	lo	Cassia occidentalis	lf
Securidaca longepedunculata	o	Cleome gynandra	lf
Strychnos cocculoides	o	Clerodendrum capitatum	lo
Strychnos pungens	o	Clerodendrum ternatum	r
Tarenna luteola	o	Clerodendrum uncinatum	lf
Tricalysia allenii	o	Coleus kapatensis	r
Vangueria tomentosa	r	Corchorus tridens	lo
Vitex amboniensis	r	Crotalaria flavicarinata	o
Ximения americana	lo	Desmodium helenae	r
		Disperma crenatum	f
<u>Scramblers & climbers:</u>		Euphorbia benthamii	lo
Abrus precatorius	lo	Euphorbia transvaalensis	lo

Hemizygia bracteosa	lf	Polygala schinziana	r
Hermannia angolensis	lf	Polygala sphenoptera	r
Hibiscus mastersianus	lc	Pupalia lappacea	lo
Hibiscus mechowii	lf	Ruspolia decurrens	lf
Hibiscus meeusei	lf	Salacia erecta	lo
Hypoestes verticillaris	lf	Sansevieria kirkii	lo
Justicia betonica	lf	Sida cordifolia	f
Leonotis nepetifolia	lo	Sida hoepfneri	lo
Melhania acuminata	lf	Solanum panduriforme	lo
Nidorella microcephala	lf	Tephrosia longipes	lo
Ocimum americanum	lc	Triumfetta annua	lf
Pavonia hirsuta	f	Triumfetta tomentosa	lf
Phyllanthus maderaspatensis	lo	Triumfetta trichocarpa	lo
Plumbago zeylanica	o-f	Vernonia glabra	lo
Pollichia campestris	o-lf	Waltheria indica	lc

RIPARIAN WOODLAND

<u>Canopy trees:</u>		Cyathula prostrata	lf
Acacia albida	o-lf	Diospyros lycioides	o-lc
Acacia sieberiana	lf	Euclea divinorum	o-f
Albizia amara	o	Feretia aeruginescens	lo
Albizia brevifolia	r	Flacourtia indica	lo
Albizia versicolor	o	Grewia avellana	r
Berchemia discolor	o	Grewia flavescens	o
Commiphora edulis	r	Grewia schinzii	o
Diospyros mespiliformis	o-f	Homalium abdessammadi	r
Ekebergia capensis	r	Kosteletzkya buettneri	lo
Ficus burkei	r	Maytenus senegalensis	o-f
Ficus capensis	o	Myrica conifera	lo
Ficus ingens	lo	Nidorella welwitschii	lf
Ficus natalensis	r	Peristrophe bicalyculata	lf
Garcinia livingstonei	o	Phoneix reclinata	lc
Hyphaene ventricosa	r	Phragmites mauritianus	f-lc
Khaya nyasica	v.r	Phyllanthus reticulatus	o-f
Kigelia africana	o-lf	Rhus quartiniana	lf
Lannea stuhlmannii	o	Securinea virosa	lo
Mimusops zeyheri	o	Sesbania sesban	f
Salix subserrata	lc	Turraea zambesiaca	o-lf
Strychnos potatorum	lf		
Syzygium cordatum	lf	<u>Sub-shrubs:</u>	
Syzygium guineense subsp. barotsense	lc	Ficus capraefolia	lo
Trichilia emetica	o-lf	Ficus pygmaea	lf
		<u>Climbers:</u>	
<u>Small trees & shrubs:</u>		Abrus precatorius	lo
Acalypha ornata	lf	Acacia schweinfurthii	lc
Achyranthes aspera	lf	Artabotrys brachypetalus	lo
Allophylus africanus	lf	Cissampelos mucronata	o
Antidesma venosum	lo	Cocculus hirsutus	o-lf
Blepharis buchneri	lo	Combretum microphyllum	lo
Bridelia cathartica	lo	Glycine javanica	lo
Byrsocarpus orientalis	lo	Gymnema sylvestre	r
Canthium zanzibaricum	o	Hippocratea africana	o
Croton leuconeurus	r	Ipomoea rubens	lf
Croton megalobotrys	o		

Jasminum fluminense	f	Paullinia pinnata	lo
Merremia pterygocaulos	lo	Rubus rigidus	lf
Mimosa pigra	f	Tacazzea apiculata	lo
Mucuna pruriens	lo	Tiliacora funifera	lo

KALAHARI WOODLANDCanopy trees:

Acacia giraffae	r	Ancylanthos rubiginosus	r
Acacia nigrescens	lo	Baphia massaiensis subsp. obovata	f
Acacia sieberiana	r	Bauhinia urbaniana	f
Adansonia digitata	r	Bridelia cathartica	r
Azelia quanzensis	r	Bridelia duvigneaudi	r
Albizia antunesiana	o	Canthium frangula	r-o
Albizia versicolor	r	Canthium huillense	lo
Amblygonocarpus andongensis	o-lc	Cassia singueana	r-o
Baikiaea plurijuga	lo	Chrysophyllum bangweolense	r-o
Boscia albitrunca	r-o	Cissus cornifolia	r
Brachystegia spiciformis	o-lf	Cleome gynandra	lf
Burkea africana	o-f	Clerodendrum myricoides	r
Combretum imberbe	r	Clutia abyssinica	r
Combretum mechowianum	o-f	Combretum elaeagnoides	lo
Combretum psidioides	o	Combretum hereroense	r
Combretum zeyheri	o	Commiphora angolensis	r
Crytosepalum exfoliatum		Commiphora mossambicensis	r
subsp. pseudotaxus	f-lc	Copaifera baumiana	o-lf
Dialium englerianum	lf	Crossopteryx febrifuga	r
Diospyros batocana	f	Croton gratissimus	o-lf
Diospyros mespiliformis	r	Croton scheffleri	r
Erythrophleum africanum	o-f	Cussonia kirkii	r
Ficus fischeri	r	Dalbergia melanoxylon	r
Guibourtia coleosperma	o-lf	Dalbergia nitidula	r
Hyphaene ventricosa	lo	Dichrostachys cinerea	o
Julbernardia paniculata	a	Diospyros lycioides	lo
Lannea stuhlmannii	r	Diplorhynchus condylocarpon	f-c
Lonchocarpus capassa	o	Eriosema ellipticum	r-o
Monotes glaber	o-f	Erythrocca menyharthi	r
Ostryoderris stuhlmannii	r	Euclea divinorum	r-o
Parinari curatellifolia	o	Euphorbia espinosa	r
Peltophorum africanum	o	Euphorbia matabelensis	r-lf
Pericopsis angolensis	r-o	Euphorbia systyloides	lo
Pterocarpus angolensis	o-f	Flacourtia indica	o
Ricinodendron rautaneni	r-lf	Garcinia huillensis	r
Sclerocarya caffra	r	Gardenia spatulifolia	r-o
Strychnos potatorum	r	Grewia avellana	lf
Terminalia sericea	o-lc	Grewia decemovulata	r
Zanha africana	r	Grewia falcistipula	lf
		Grewia flavescens	o
		Grewia monticola	r-o
		Grewia retinervis	lf
		Hannoa chlorantha	r-o
		Ozoroa longipes	r
		Ozoroa nitida	r-o
		Hexalobus monopetalus	o
		Hibiscus mastersianus	lf
		Hibiscus mechowii	lo

Small trees & shrubs:

Abutilon englerianum	r		
Acacia ataxacantha	r		
Acacia fleckii	lo		
Acalypha chirindica	r-o		
Allophylus africanus	lf		
Alvesia rosmarinifolia	lo		

<i>Hibiscus surattensis</i>	lo	<i>Withania somnifera</i>	r
<i>Holostylon baumii</i>	lo	<i>Xeromphis obovata</i>	lo
<i>Hymenocardia acida</i>	o-f	<i>Ximenia americana</i>	r
<i>Indigofera sutherlandioides</i>	lo	<i>Ximenia caffra</i>	o
<i>Jasminum stenolobum</i>	r	<i>Ziziphus abyssinica</i>	o
<i>Kotschya strobilantha</i>	r	<i>Ziziphus mucronata</i>	r
<i>Lannea discolor</i>	r-o		
<i>Lantana rhodesiensis</i>	r-o	<u>Sub-shrubs:</u>	
<i>Lepidagathis macrochila</i>	lf	<i>Abrus pulchellus</i> subsp. <i>suffruticosus</i>	o
<i>Maprounea africana</i>	o	<i>Acalypha senensis</i>	o
<i>Markhamia acuminata</i>	r	<i>Annona stenophylla</i> subsp. <i>nana</i>	f
<i>Markhamia obtusifolia</i>	lo	<i>Aspilia mossambicensis</i>	lo
<i>Maytenus senegalensis</i>	o	<i>Brackenridgea arenaria</i>	lf
<i>Melhania acuminata</i>	lf	<i>Cassia mimosoides</i>	r
<i>Ochna pulchra</i>	o	<i>Chamaecitandra henriquesiana</i>	f
<i>Olax obtusifolia</i>	o-lf	<i>Clematopsis scabiosifolia</i>	lf
<i>Oldenlandia bojeri</i>	r	<i>Clerodendrum capitatum</i>	r-o
<i>Oldfieldia dactylophylla</i>	o	<i>Clerodendrum ternatum</i>	r
<i>Paropsia brazzeana</i>	o-f	<i>Coleus esculentus</i>	r
<i>Pavetta schumanniana</i>	lo	<i>Combretum platypetalum</i>	lf
<i>Phyllanthus discoideus</i>	r	<i>Corchorus tridens</i>	lo
<i>Phyllanthus reticulatus</i>	r	<i>Desmodium barbatum</i>	lf
<i>Piliostigma thonningii</i>	r-o	<i>Dichapetalum rhodesicum</i>	o-lf
<i>Popowia obovata</i>	r-o	<i>Diospyros chamaethamnus</i>	f-lc
<i>Protea angolensis</i>	lo	<i>Diospyros virgatus</i>	f
<i>Protea gagedi</i>	lo	<i>Diplolophium zambesianum</i>	o-lf
<i>Protea petiolaris</i>	o-f	<i>Dolichos densiflorus</i>	r-o
<i>Pseudolachnostylis maprouneifolia</i>	o-f	<i>Ectadiopsis oblongifolia</i>	o
<i>Psorospermum baumii</i>	r	<i>Ectadiopsis producta</i>	o
<i>Psorospermum febrifugum</i>	r	<i>Entada nana</i>	r
<i>Psychotria spithamea</i>	r-lo	<i>Eugenia angolensis</i>	lo
<i>Rhus quartiniana</i>	r	<i>Euphorbia benthamii</i>	r
<i>Rhus tenuinervis</i>	r-o	<i>Fadogia fuchsioides</i>	o
<i>Rothmannia engleriana</i>	r-o	<i>Fadogia monticola</i>	o
<i>Rytigynia orbicularis</i>	r-lf	<i>Felicia</i> sp.	r
<i>Schrebera trichoclada</i>	r	<i>Gardenia brachythamnus</i>	f
<i>Securidaca longepedunculata</i>	o	<i>Gardenia subacaulis</i>	r
<i>Securinea virosa</i>	r	<i>Gnidia goetzeana</i>	lo
<i>Strychnos cocculoides</i>	o	<i>Helichrysum kirkii</i>	lf
<i>Strychnos innocua</i>	r	<i>Hemizygia bracteosa</i>	lo
<i>Strychnos pungens</i>	o	<i>Hermannia glanduligera</i>	lo
<i>Strychnos spinosa</i>	o	<i>Hermannia angolensis</i>	lf
<i>Swartzia madagascariensis</i>	o-f	<i>Hypoestes verticillaris</i>	lf
<i>Tarenna luteola</i>	lo	<i>Indigofera griseoides</i>	lo
<i>Terminalia brachystemma</i>	r-o	<i>Ipomoea vernalis</i>	lo
<i>Terminalia trichopoda</i>	r	<i>Jasminum streptopus</i>	lo
<i>Tricalysia allenii</i>	lo	<i>Lannea virgata</i>	lo
<i>Tricalysia angolensis</i>	lo	<i>Lannea edulis</i>	o-f
<i>Uapaca kirkiana</i>	lo	<i>Lannea gossweileri</i>	lo
<i>Uapaca nitida</i>	lo	<i>Leptactina benguelensis</i>	o-f
<i>Vangueria tomentosa</i>	lo	<i>Lippia wilmsii</i>	r
<i>Vangueriopsis lanciflora</i>	o	<i>Mechowia grandiflora</i>	r
<i>Vernonia colorata</i>	lo	<i>Neorautanenia pseudopachyrrhiza</i>	lo
<i>Vernonia glaberrima</i>	o-lf	<i>Ochna leptoclada</i>	o
<i>Vernonia shirensis</i>	lo	<i>Ochna manikensis</i>	lo
<i>Vitex madiensis</i>	o-f	<i>Ochna pygmaea</i>	o

Parinari capensis	lf	Asparagus plumosus	r
Pavatta pygmaea	lo	Asparagus racemosus	lo
Pavonia hirsuta	lo	Baissea wulfhorsti	r
Phyllanthus maderaspatensis	lo	Cassytha filiformis	r-o
Phyllanthus welwitschianus	o	Ceropegia abyssinica	r
Pollichia compestris	lo	Ceropegia multiflora	r
Polygala sphenoptera	r	Ceropegia stenantha	r
Pygmaeothamus zeyheri	lf	Cissampelos mucronata	o
Raphionacme sp. (5977)	r	Cissus integrifolia	r
Rhus kirkii	r	Clematis brachiata	r-o
Salacia erecta	lf	Cocculus hirsutus	r
Sapium oblongifolium	lf	Dictyophleba lucida	r-lo
Sphenostylis erecta	lo	Dioscorea quartiniana	r
Strobilanthesis linifolia	o-f	Dolichos africanus	r
Strychnos caespitosa	lf	Hippocratea parviflora	r
Sutera elegantissima	lo	Ipomoea shirambensis	lo
Tapiphyllum discolor	r	Ipomoea verbascoidea	r
Tephrosia cephalantha	lf	Landolphia camptoloba	lf
Thesium fastigiatum	o	Landolphia parvifolia	r
Tinnea vestita	o	Rhynchosia caribaea	r
Tricalysia cacondensis	r-lo	Rhynchosia holosericea	lf
Tricalysia suffruticosa	r-lo	Sphedamnocarpus angolensis	r
Walafrida angolensis	lo	Strophanthus kombe	r
Waltheria indica	o	Strophanthus welwitschii	r
		Thunbergia crispa	o-lf
<u>Climbers:</u>		Tylosema fassoglensis	lo
Ampelocissus africana	lo	Vigna frutescens	r
Ampelocissus obtusata	lo		

SUFFRUTEX SAVANNA

<u>Suffrutices:</u>		Heliotropium ovalifolium	lo
Ancylanthos rubiginosus	lf	Hibiscus rhodanthus	o
Annona stenophylla subsp. nana	c	Lanea gossweileri	f
Brackenridgea arenaria	lo	Napoleona gossweileri	f
Chamaeclitandra henriquesiana	lo	Ochna leptoclada	lo
Cissus guerkeana	r	Ochna manikensis	lf
Diospyros chamaethamnus	f-c	Ochna pulchra	r
Diospyros virgata	lo	Ochna pygmaea	lf
Dolichos densiflorus	lo	Parinari capensis	a
Ectadiopsis oblongifolia	o	Pygmaeothamnus zeyheri	f
Ectadiopsis producta	o	Salacia erecta	lo
Entada nana	o	Strychnos caespitosa	f-c
Eriospermum abyssinicum	o	Tapiphyllum discolor	lo
Eugenia angolensis	lo	Tricalysia cacondensis	r
Fadogia monticola	o	Vernonia manikensis	lo
Gardenia subacaulis	r		

MOPANE WOODLAND

<u>Canopy trees:</u>		Adansonia digitata	r
Acacia nigrescens	o-lf	Azafia quanzensis	r
Acacia polyacantha	r	Albizia amara	f
Acacia sieberiana	o	Albizia harveyi	o-f

Colophospermum mopane	a	Hibiscus caesius	lo
Combretum elaeagnoides	lf	Hibiscus cannabinus	lo
Combretum imberbe	lo	Hibiscus vitifolius	lo
Diospyros mespiliformis	o	Hyphaene ventricosa (juveniles)	lf
Euphorbia candelabrum	o-lf	Indigofera ormocarpoides	o-lf
Lannea stuhlmannii	lo	Jasminum stenolobium	f
Lonchocarpus capassa	o-lf	Kirkia acuminata	r
Manilkara mochisia	lo	Lannea discolor	r
Peltophorum africanum	o-lf	Lantana rhodesiensis	r-lo
Sclerocarya caffra	r	Markhamia acuminata	lo-lf
Strychnos potatorum	o-lf	Maytenus senegalensis	lo
Terminalia prunioides	lo	Olox dissitiflora	lo
Terminalia sericea	lo	Pavetta lasioeplus	r-lo
Ziziphus abyssinica	lo	Pavetta schumanniana	lo
Ziziphus mucronata	lo	Piliostigma thonningii	r
		Popowia obovata	o-lf
<u>Small trees & shrubs:</u>		Rhus tenuinervis	lo
Acacia fleckii	lo	Securidaca longepedunculata	lo
Acacia mellifera	r	Securinea virosa	lo
Albizia anthelmintica	f	Steganotaenia araliacea	lo
Boscia mossambicensis	f-c	Strophanthus nicholsonii	lo
Byrsocarpus orientalis	r	Strychnos spinosa	r
Canthium frangula	r-lo	Strychnos potatorum	r
Canthium huillense	r	Tarenna luteola	lo
Capparis tomentosa	lo	Terminalia brachystemma	lo
Carissa edulis	r	Terminalia randii	r
Cissus cornifolia	lo	Tricalysia allenii	lo
Combretum ghasalense	lo	Ximenia americana	o-lf
Combretum hereroense	lo	Ximenia caffra	lo
Combretum zeyheri	lo		
Commiphora africana	o-lf	<u>Sub-shrubs:</u>	
Commiphora madagascariensis	r-lo	Aloe chabaudi	lo
Commiphora mossambicensis	f-c	Aloe zebrina	lf
Commiphora pyracanthoides	lf-lc	Coleus vagatus	lf
Cordia pilosissima	lo	Disperma crenatum	lf
Crossopteryx febrifuga	lo	Dyschoriste verticillaris	lo
Croton gratissimus	lo	Heliotropium indicum	lf
Croton menyharthi	o-lf	Ipomoea vernalis	lo
Croton pseudopulchellus	r	Oldenlandia bojeri	r
Dalbergia melanoxylon	lo-lf	Peristrophe bicalyculata	lo
Dichrostachys cinerea	r	Plectranthus cylindraceus	lc
Diospyros lycioides	o-lf	Sansevieria desertii	lf
Diplorhynchus condylocarpon	lo		
Ehretia obtusifolia	r-lo	<u>Climbers:</u>	
Erythroxylum zambesiicum	lo-lf	Asparagus africanus	o-lf
Euclea divinorum	o-lf	Asparagus racemosus	lo
Euphorbia espinosa	o-lf	Cardiospermum halicacabum	lo
Euphorbia transvaalensis	f-c	Cissamplelos mucronata	lo
Feretia aeruginescens	r	Cissus crusei	r
Flacourtia indica	o-lf	Cissus quadrangularis	lo
Gardenia resiniflua	lo	Cocculus hirsutus	r-lo
Gardenia spatulifolia	r	Corallocarpus sp.	r
Grewia bicolor	r-lo	Dioscorea quartiniana	lo
Grewia flavescens	r	Dioscorea sylvatica	lo
Grewia monticola	lo	Dregea macrantha	lo
Heteromorpha trifoliata	r	Fockea multiflora	f-lc

<i>Hippocratea africana</i>	lf	<i>Rhynchosia minima</i>	r
<i>Hippocratea buchamanii</i>	lf	<i>Rhynchosia verdicki</i>	lo
<i>Ipomoea coptica</i>	lf	<i>Senecio bojeri</i>	r
<i>Ipomoea tuberculata</i>	lo	<i>Tinospora tenera</i>	r
<i>Kedrostis</i> sp. (5934)	r	<i>Tryplostemma hanningtonianum</i>	lo
<i>Neorautanenia pseudopachyrrhiza</i>	lo	<i>Turbina shirensis</i>	o-lf
<i>Pergularia n.s.</i>	r		

MUNGA WOODLAND

Canopy trees:

<i>Acacia galpinii</i>	r	<i>Barleria mackeni</i>	lf
<i>Acacia giraffae</i>	f	<i>Bauhinia petersiana</i>	o
<i>Acacia luederitzii</i>	lc	<i>Boscia albitrunca</i>	o
<i>Acacia nigrescens</i>	o-f	<i>Boscia mossambicensis</i>	r
<i>Acacia polyacantha</i>	o-lf	<i>Bridelia cathartica</i>	lf
<i>Acacia sieberiana</i>	f-c	<i>Cassia singueana</i>	r-o
<i>Adansonia digitata</i>	r	<i>Combretum elaeagnoides</i>	lf
<i>Azelia quanzensis</i>	r	<i>Combretum ghasalense</i>	o-lf
<i>Albizia amara</i>	lf	<i>Combretum zeyheri</i>	lf
<i>Albizia harveyi</i>	lf	<i>Commiphora pyracanthoides</i>	r
<i>Albizia versicolor</i>	o-lf	<i>Cordia n.s.</i>	r
<i>Amblygonocarpus andongensis</i>	lf	<i>Crotalaria flavicarinata</i>	lo
<i>Colophospermum mopane</i>	r	<i>Dalbergia melanoxylon</i>	r
<i>Combretum hereroense</i>	f	<i>Dichrostachys cinerea</i>	o-la
<i>Combretum imberbe</i>	c	<i>Diospyros lycioides</i>	f-c
<i>Combretum mechowianum</i>	lf	<i>Disperma crenatum</i>	f-lc
<i>Commiphora edulis</i>	r	<i>Euclea divinorum</i>	lo
<i>Croton megalobotrys</i>	o-lf	<i>Flacourtia indica</i>	o
<i>Diospyros mespiliformis</i>	o	<i>Gardenia spatulifolia</i>	lo
<i>Ficus burkei</i>	r-o	<i>Grewia bicolor</i>	o
<i>Ficus capensis</i>	r	<i>Grewia flavescens</i>	o
<i>Ficus fischeri</i>	r	<i>Grewia monticola</i>	o
<i>Ficus sycomorus</i>	o	<i>Grewia pachycalyx</i>	lf
<i>Kigelia africana</i>	o-f	<i>Grewia schinzii</i>	o-f
<i>Lannea discolor</i>	r	<i>Hibiscus caesius</i>	lo
<i>Lannea stuhlmannii</i>	lo	<i>Hibiscus calyphyllus</i>	o-lf
<i>Lonchocarpus capassa</i>	f	<i>Hibiscus cannabinus</i>	o
<i>Ostryoderris stuhlmannii</i>	lf	<i>Hibiscus lobatus</i>	r-o
<i>Peltophorum africanum</i>	o-f	<i>Hibiscus mastersianus</i>	f
<i>Sclerocarya caffra</i>	r-lo	<i>Hibiscus meeusei</i>	o
<i>Strychnos potatorum</i>	lf	<i>Hoslundia opposita</i>	lf
<i>Ziziphus abyssinica</i>	lo	<i>Lantana rhodesiensis</i>	o
<i>Ziziphus mucronata</i>	o	<i>Leonotis nepetifolia</i>	lf
		<i>Lippia javanica</i>	lo
		<i>Markhamia acuminata</i>	lo
		<i>Markhamia obtusifolia</i>	lf
		<i>Maytenus senegalensis</i>	f
		<i>Oncoba spinosa</i>	o
		<i>Pavetta cataractarum</i>	o-lf
		<i>Phyllanthus reticulatus</i>	lf
		<i>Piliostigma thonningii</i>	o
		<i>Pseudarthria hookeri</i>	lo
		<i>Securidaca longepedunculata</i>	o
		<i>Securinega virosa</i>	o-f
		<i>Sida hoepfneri</i>	lo

Shrubs:

<i>Solanum panduriforme</i>	lo	<u>Climbers:</u>	
<i>Strychnos spinosa</i>	o	<i>Ampelocissus africana</i>	lo
<i>Tarenna luteola</i>	lo	<i>Asparagus africanus</i>	o-f
<i>Terminalia mollis</i>	lo	<i>Asparagus asiaticus</i>	o-lf
<i>Tricalysia allenii</i>	lo	<i>Capparis tomentosa</i>	o
<i>Triumfetta annua</i>	f	<i>Cissampelos mucronata</i>	o
<i>Triumfetta tomentosa</i>	lf	<i>Cissus integrifolia</i>	o
<i>Vernonia amygdalina</i>	lf	<i>Clematis brachiata</i>	lo
<i>Vernonia glabra</i>	o	<i>Cocculus hirsutus</i>	o
<i>Vernonia shirensis</i>	lf	<i>Combretum mossambicense</i>	f-c
<i>Ximenia americana</i>	o-f	<i>Commicarpus plantagineus</i>	r-o
<i>Ximenia caffra</i>	lo	<i>Cucumis metuliferus</i>	o
		<i>Cyclantheropsis parviflora</i>	r-o
<u>Sub-shrubs:</u>		<i>Cyphostemma congestum</i>	o
<i>Acalypha senensis</i>	lo	<i>Dioscorea dumetorum</i>	r
<i>Annona stenophylla</i> subsp. <i>nana</i>	o	<i>Dioscorea hirtiflora</i>	f
<i>Blepharis buchneri</i>	o	<i>Dioscorea sylvatica</i>	r
<i>Blumea gariepina</i>	lf	<i>Dioscorea quartiniana</i>	o-f
<i>Cassia absus</i>	lf	<i>Dolichos africanus</i>	f
<i>Cassia obtusifolia</i>	lf	<i>Dregea macrantha</i>	r
<i>Cassia occidentalis</i>	lo	<i>Gongronema angolense</i>	r
<i>Cleome hirta</i>	lo	<i>Gymnema sylvestre</i>	lo
<i>Clerodendrum uncinatum</i>	o	<i>Helinum integrifolius</i>	o
<i>Corchorus tridens</i>	o-f	<i>Ipomoea arachnosperma</i>	o
<i>Corchorus trilocularis</i>	r	<i>Ipomoea involucrata</i>	o
<i>Dyschoriste perrotteti</i>	lf	<i>Ipomoea pes-tigridis</i>	o-f
<i>Epaltes alata</i>	lc	<i>Ipomoea pileata</i>	o
<i>Hermannia quartiniana</i>	r	<i>Ipomoea plebeia</i>	o
<i>Hypoestes verticillaris</i>	lo	<i>Ipomoea tuberculata</i>	r-o
<i>Ipomoea vernalis</i>	lo	<i>Ipomoea verbascoidea</i>	o
<i>Lannea edulis</i>	lo	<i>Kedrostis</i> sp. (5934)	o
<i>Lannea gossweileri</i>	lf	<i>Lablab niger</i>	o
<i>Nidorella microcephala</i>	lf	<i>Melothria punctata</i>	o
<i>Ocimum americanum</i>	lf	<i>Momordica balsamina</i>	o
<i>Ocimum suave</i>	lo	<i>Momordica clematidea</i>	lo
<i>Pavonia hirsuta</i>	lf	<i>Momordica foetida</i>	o
<i>Peristrophe bicalyculata</i>	lo	<i>Pergularia</i> sp.	r
<i>Phyllanthus maderaspatensis</i>	o-lf	<i>Rhynchosia minima</i>	o
<i>Pollichia campestris</i>	o	<i>Senecio bojeri</i>	lo
<i>Pupalia lappacea</i>	o-f	<i>Thunbergia crispa</i>	o
<i>Sida alba</i>	lo	<i>Tinospora enera</i>	o
		<i>Tragia benthamii</i>	r
		<i>Tryphostemma hanningtonianum</i>	r-o
		<i>Vigna lancifolia</i>	o

KALAHARI TERMITARIA

<u>Tall trees:</u>		<i>Ficus fischeri</i>	r
<i>Acacia galpinii</i>	o	<i>Garcinia livingstonei</i>	o
<i>Acacia nigrescens</i>	f-c	<i>Lonchocarpus capassa</i>	o-f
<i>Acacia polyacantha</i>	lo	<i>Manilkara mochisia</i>	r
<i>Albizia amara</i>	o	<i>Mimusops zeyheri</i>	r
<i>Baikiaea plurijuga</i>	r	<i>Peltophorum africanum</i>	o
<i>Berchemia discolor</i>	o	<i>Sclerocarya caffra</i>	lo
<i>Combretum hereroense</i>	o-f	<i>Strychnos potatorum</i>	o
<i>Combretum imberbe</i>	f-c	<i>Ziziphus mucronata</i>	o-f
<i>Diospyros mespiliformis</i>	o		

Small trees:

Acacia fleckii	lo
Acacia nilotica	o
Albizia anthelmintica	o-lf
Boscia albitrunca	o
Colophospermum mopane	r
Combretum elaeagnoides	f
Combretum mechowianum	r
Dichrostachys cinerea	f
Diospyros lycioides	f-c
Euphorbia candelabrum	r
Grewia schinzii	o
Maerua angolensis	r
Markhamia obtusifolia	f-c
Rhus tenuinervis	r
Strychnos innocua	r

Shrubs:

Abutilon ramosum	f
Acalypha ornata	o
Acalypha senensis	o
Achyranthes aspera	f
Aspilia mossambicensis	o
Baphia massaiensis subsp. obovata	o-f
Boscia mossambicensis	o
Bridelia cathartica	r
Byrsocarpus orientalis	r
Canthium frangula	o
Capparis tomentosa	o-f
Carissa edulis	o
Cassia singueana	o
Clerodendrum capitatum	lf
Clerodendrum wildii	r
Cordia pilosissima	lo
Cordia n.s.	o
Croton megalobotrys	o
Croton menyharthii	r
Croton pseudopulchellus	r
Croton scheffleri	lo
Cyathula prostrata	lo
Dalbergia melanoxylon	o-f
Disperma crenatum	f-c
Erythrococca menyharthii	r
Euclea divinorum	lf
Euphorbia transvaalensis	lf
Feretia aeruginescens	o
Flacourtia indica	o
Grewia bicolor	o
Grewia flavescens	o
Grewia monticola	o
Hibiscus allenii	lf
Hibiscus caesius	lo
Hibiscus calyphyllus	lf
Hibiscus vitifolius	r
Hoslundia opposita	o
Hypoestes verticillaris	lf

Justicia glabra	lf
Lantana rhodesiensis	o
Lippia javanica	o-f
Maerua juncea	o
Maytenus heterophylla	r
Maytenus senegalensis	o
Mystroxyton aethiopicum	r
Oncoba spinosa	r
Pavetta cataractarum	lo
Pavetta schumanniana	o
Peristrophe bicalyculata	o
Phyllanthus reticulatus	o-f
Plumbago zeylanica	o
Popowia obovata	f
Premna senensis	o
Pupalia lappacea	o
Ruellia patula	lo
Ruspolia decurrens	o
Rytigynia umbellulata	lo
Securinega virosa	o
Tarenna luteola	o
Tricalysia allenii	o
Vernonia amygdalina	r
Wissadula rostrata	f
Ximenia americana	o
Ximenia caffra	r

Climbers:

Acacia schweinfurthii	r
Ampelocissus africana	r
Asparagus africanus	o-f
Asparagus plumosus	o
Cardiospermum halicacabum	f
Cissus integrifolia	o
Clematis brachiata	o
Cocculus hirsutus	o-f
Combretum mossambicense	o
Commicarpus plantagineus	r
Cyphostemma lynesii	r
Dioscorea hirtiflora	o-f
Glycine javanica	o
Gongrenema angolense	o
Gymnema sylvestre	r
Helinus integrifolius	f
Hippocratea africana	o-f
Ipomoea arachnosperma	f
Ipomoea tuberculata	r
Jasminum fluminense	f
Lablab niger	r
Melothria punctata	o
Momordica clematidea	r
Momordica kirkii	r
Thunbergia alata	o
Tinospora tenera	r
Tragia benthamii	o
Vernonia aurantiaca	lo

MUNGA TERMITARIACanopy trees:

Acacia galpinii	o
Acacia luederitzii	o
Acacia nigrescens	a
Acacia sieberiana	o
Albizia amara	o
Albizia versicolor	o
Berchemia discolor	r
Colophospermum mopane	v.r
Combretum imberbe	a
Crocoxylon transvaalense	
Diospyros mespiliformis	o
Garcinia livingstonei	lo
Kigelia africana	lo
Lannea stuhlmannii	o
Lonchocarpus capassa	o-f
Peltophorum africanum	r-o
Strychnos potatorum	o-f

Small trees:

Acacia hebeclada	lo
Acacia nilotica	o
Albizia anthelmintica	f-c
Albizia harveyi	f
Boscia albitrunca	o
Combretum hereroense	o-f
Croton gratissimus	lo
Croton megalobotrys	o
Dalbergia melanoxylon	o-lf
Dichrostachys cinerea	lf
Diospyros lycioides	o-f
Euclea divinorum	o-lf
Grewia bicolor	o
Grewia schinzii	o
Markhamia acuminata	lo
Markhamia obtusifolia	r-o
Maytenus senegalensis	f
Phoenix reclinata	v.r
Pterocarpus antunesii	r-o
Rhus tenuinervis	o
Securinega virosa	f-c
Ximения americana	o
Ximения caffra	r-o
Ziziphus mucronata	o

Shrubs & scramblers:

Abutilon angulatum	r-o
Abutilon ramosum	r
Acalypha ornata	o-f
Achyranthes aspera	f
Aerva lanata	o

Asparagus asiaticus	lf
Barleria mackenii	r
Bridelia cathartica	o
Byroscarpus orientalis	o
Capparis tomentosa	o-f
Cassia singueana	o
Combretum elaeagnoides	lo
Commicarpus plantagineus	o
Commiphora pyracanthoides	lo
Cordia pilosissima	lo
Croton scheffleri	r
Disperma crenatum	a
Dyschoriste verticillaris	lf
Erythrococca menyharthi	f
Euphorbia espinosa	lo
Flacourtia indica	o
Grewia flavescens	o
Hibiscus cannabinus	o
Indigofera ormocarpoides	lo
Leonotis nepetifolia	lo
Lippa javanica	r
Maerua juncea	r-o
Ocimum americanum	f
Pavetta cataractarum	lf
Pavetta lasiopeplus	r
Peristrophe bicalyculata	lo
Phyllanthus reticulatus	lf
Popowia obovata	f
Pupalia lappacea	lo
Ruspolia decurrens	o
Rytigynia umbellulata	o
Sansevieria desertii	lc
Tarenna luteola	r-o
Tricalysia allenii	r
Wissadula rostrata	o-f

Climbers:

Ampelocissus africana	o
Asparagus africanus	f
Asparagus willdemannii	r
Cissampelos mucronata	r-o
Cissus integrifolia	o
Cocculus hirsutus	o-f
Combretum mossambicense	f
Cyclantheropsis parviflora	r
Gongromena angolense	r
Gymnema sylvestre	r-o
Hippocratea africana	f
Jasminum fluminense	o-f
Pergularia <i>n.s.</i>	o

GRASSY PLAINS AND DAMBOS

<i>Acacia giraffae</i>	lc	<i>Hibiscus cannabinus</i>	lo
<i>Acalypha senensis</i>	o-f	<i>Hibiscus rhodanthus</i>	o-f
<i>Acanthaceae</i> sp. (6187)	r-o	<i>Indigofera hirsuta</i>	o
<i>Acrocephalus sericeus</i>	lo	<i>Indigofera livingstoniana</i>	r
<i>Ancylanthos rubiginosus</i>	lo	<i>Ipomoea blepharophylla</i>	o
<i>Annona stenophylla</i> subsp. <i>nana</i>	c	<i>Ipomoea bolusiana</i>	lf
<i>Barleria subglobosa</i>	lf	<i>Ipomoea vernalis</i>	lf
<i>Tylosema fassoglensis</i>	lo	<i>Ipomoea welwitschii</i>	lf
<i>Brackenridgea arenaria</i>	lo	<i>Lannea edulis</i>	lo
<i>Cassia falcinella</i>	r	<i>Lannea gossweileri</i>	f
<i>Clematopsis scabiosifolia</i>	f-c	<i>Merremia tridentata</i>	o-f
<i>Clerodendrum ternatum</i>	o-f	<i>Neorautanenia pseudopachyrrhiza</i>	r-o
<i>Clerodendrum uncinatum</i>	o	<i>Ochna leptoclada</i>	lf
<i>Combretum platypetalum</i>	c	<i>Ochna pygmaea</i>	lf
<i>Ectadiopsis oblongifolia</i>	o	<i>Pandiaka carsoni</i> (wet)	o
<i>Ectadiopsis producta</i>	o-lf	<i>Parinari capensis</i>	lf
<i>Epaltes alta</i> (wet)	lf	<i>Protea angolensis</i>	r
<i>Eriosema pauciflorum</i>	o-lf	<i>Pygmaeothamnus zeyheri</i>	lf
<i>Eriosema psoraleoides</i>	lo	<i>Sesamum angustifolium</i>	o
<i>Fadogia cienkowski</i>	r	<i>Sida alba</i>	lf
<i>Ficus pygmaea</i> (wet)	lf	<i>Sopubia ramosa</i> (wet)	lf
<i>Gardenia brachythamnus</i>	r	<i>Sutera elegantissima</i>	lo
<i>Glossostelma spathulatum</i>	r	<i>Syzygium guineense</i> subsp. <i>huillense</i> (wet)	lc
<i>Gnidia buchananii</i>	o	<i>Tephrosia cephalantha</i>	o
<i>Gnidia chrysantha</i>	o	<i>Thesium fastigiatum</i>	o-f
<i>Gnidia kraussiana</i>	f	<i>Tinnea vestita</i>	o
<i>Heliotropium ovalifolium</i>	lo	<i>Vernonia glabra</i>	o-lf
<i>Hermannia angolensis</i>	lc		

FOREST RESEARCH PAMPHLET NO. 45, 1972**THE VEGETATION OF THE VICTORIA FALLS AND ITS ENVIRONS**

The Zambezi River plunges over the 400 ft [120 m] high Victoria Falls at latitude 17°56' S, longitude 2°51' E, at an altitude of 2980 ft [910 m] above sea level. At this point the river is 1850 yards [1690 m] in width. The falls lie almost halfway along the river's length 800 miles [1290 km] from the source near Kalene Hill and 900 miles [1450 km] from its mouth at Quelimane. The surrounding terrain includes the steep or vertical gorge walls below the falls, the last foothills of the central plateau and the riverine flats.

The climate is hot and sticky in the dry season, wet and humid in the rainy season which lasts from early November to late March. The mean annual rainfall is 750 mm [30 inches]. The mean temperature in the wet summer months is 78.8°F [26°C] and in the dry winter months 67.5°F [19.7°C]. Frosts are unknown.

The Zambezi River cuts through basaltic lavas from Kazungula to about 80 miles [130 km] below the Victoria Falls. Basalt detritus is scattered over the river banks and mixed with alluvium or Kalahari sand. The low foothills which approach the river below the falls are of basalt origin. Livingstone itself lies on Kalahari sand, as do the river levees all the way up to Mambovu. The southern side is very similar.

Riparian woodland or forest forms a narrow strip along the Zambezi and clothes the gullies of the small tributary streams. Kalahari woodland in one form or another cover the Kalahari sand areas. A scrub woodland dominated by *Kirkia* and mopane covers the foothills, with mopane woodland proper in the Livingstone Game Park. The steep gorge sides carry an open deciduous woodland characterised by paper bark trees.

The woody flora is in the region of 500+ species; the total flora including herbs, grasses, sedges and ferns is about 1000 species.

The following vegetation types are represented in the area:

1. Closed Forest

1. Riparian forest
2. Riparian woodland

2. Open Forest

1. Kalahari woodland
2. Mopane woodland
 - (a) mopane–munga scrub
3. Deciduous woodland

1. CLOSED FOREST**1.1 Riparian Forest**

The Victoria Falls Guidebook has always boasted that there is a small patch of "rain forest" at the falls and used it as a tourist attraction. This is purely an advertising gimmick. What is there is a small relic patch of riparian forest kept alive by the spray from the falls. Similar relic patches occur in the depths of the gorges where small tributary streams enter the Zambezi. The best preserved is in a gorge just below the falls on the Zambian side. It is a three-storeyed forest, closely allied to true rain forest.

The dominant tall trees are *Syzygium guineense* subsp. *afromontanum* associated with *Mimusops zeyheri* and *Syzygium cordatum*. Small trees are chiefly *Croton gratissimus*, the wild olive (*Olea africana*) and groups of *Phoenix* palms.

Characteristic common shrubs are the scrambling *Acacia ataxacantha* (probably an invader), *Acalypha ornata*, *Diospyros lycioides*, *Feretia aeruginescens* and *Friesodielsia obovata*. Sub-shrubs are chiefly weed species like *Nidorella resedifolia* and *Triumfetta* spp. or *Pupalia lappacea* and *Cyathula prostrata*.

Climbers are typically abundant, chiefly *Cissampelos mucronata*, *Cissus quadrangularis*, *Clematis brachiata* (invasive), *Combretum paniculatum* (the fire bush) and *C. mossambicense*. *Helinus integrifolius*, *Hippocratea africana* (very much in evidence), *Jasminum fluminense* and the introduced and naturalized, rather showy *Solanum seafortianum*.

1.2 Riparian Woodland

Once away from the spray zone and the ravine depths, the riparian woodland reverts to a narrow gallery strip with no particular dominants. Once it was a *Khaya-Trichilia* gallery forest but degradation has removed most of the *Khaya nyasica*. Common tall trees include *Diospyros mespiliformis*, the figs *Ficus capensis* and *F. sycomorus*, *Garcinia livingstonei*, *Homalium abdessammadii*, *Trichilia emetica* and, with its feet in the water forming a river fringe in places, *Syzygium guineense* subsp. *barotsense*.

Small trees are chiefly *Combretum hereroense* (unusual), *Rhus quartiniana*, *Salix subserrata* (the local willow in the open spaces) and *Turraea zambesica*.

Shrubs are many, chiefly *Disperma quadrangulare* (a local novelty), *Dodonaea viscosa*, *Hibiscus calyphyllus*, *Oncoba spinosa*, *Phyllanthus reticulatus* and *Sesbania cinerascens* with *Acalypha chirindica* as a landward fringe. Sub-shrubs apart from weed species on the sandbank are chiefly *Jasminum streptopus*, *Phaulopsis imbricata* and *Solenostemon zambesiacus*. Climbers are not so much in evidence as in the rain forest, chiefly *Cocculus hirsutus*, *Ipomoea rubens* and *Tacazzea apiculata*.

2. OPEN FOREST

2.1 Kalahari Woodland

Kalahari woodland with *Baikiaea* occurs on the old river sandbanks from just east of Livingstone to 12 miles [19 km] north of the town and as far west as Mambovu. The woodland is very similar to the west bank woodlands north of Katima but with less *Commiphora angolensis*. Originally *Baikiaea* forest, it has degraded to a state which is neither woodland nor forest but something in between. The area was cut over a hundred years ago and creamed again by Zambezi Sawmills in the 1930s.

It is dominated in turn by *Brachystegia* spp. (*B. longifolia*, *B. boehmii* and *B. spiciformis*), *Julbernardia globiflora*, *Burkea africana*, *Baikiaea plurijuga* itself and *Ricinodendron rautanenii*. *Brachystegia* and *Julbernardia* are invasive from the nearby miombo woodland. Associated dominants include *Amblygonocarpus andongensis*, *Combretum collinum*, *Erythrophleum africanum*, *Guibourtia coleosperma* and *Terminalia sericea*.

Small trees are chiefly *Albizia antunesiana*, *Combretum celastroides* and *C. elaeagnoides*, *Diospyros batocana*, *Diplorhynchus condylocarpon*, *Pseudolachnostylis maprouneifolia* and *Terminalia brachy-stemma*.

Shrubs are mostly relics of the original mutemwa thicket – *Acacia ataxacantha*, *Baphia massaiensis* subsp. *obovata*, *Bauhinia macrantha*, *Copaifera baumiana*, *Dalbergia martinii* and *Paropsia brazzeana*. *Copaifera* and *Paropsia* are not mutemwa species. Sub-shrubs are almost entirely weeds of open spaces and gaps but *Blepharis maderaspatensis* is a mutemwa relic and *Gardenia brachythamnus* certainly is not a weed.

2.2 Mopane Woodland

This open woodland occurs in two forms on the basalts alongside the Zambezi River. Parts of the flat area have a cover of almost pure mopane (*Colophospermum mopane*) with little else except the odd shrub, while the foothills further back from the river carry a mixed mopane/munga low scrub woodland with a great variety of species, although mopane is still generally dominant. This woodland on basalt, like that on sand, is also invaded by *Brachystegia* spp. and *Julbernardia globiflora*. There is little difference between it and the deciduous woodland of the gorges, except for the absence of mopane in the latter.

Common tall trees associated with the mopane are *Acacia nigrescens*, *Albizia harveyi*, *Burkea africana*, *Combretum imberbe*, *Erythrophleum africanum*, *Kirkia acuminata*, *Peltophorum africanum*, *Pterocarpus rotundifolius*, *Sterculia quinqueloba* and *Terminalia sericea*.

Small trees are chiefly species of *Combretum* and *Terminalia* (influence of the munga woodland) associated with *Commiphora* spp., *Dalbergia melanoxylon*, *Diplorhynchus condylocarpon*, *Erythrina abyssinica*, *Piliostigma thonningii* and *Pseudolachnostylis maprouneifolia*.

Shrubs are a mixed bunch chiefly *Barleria prionitis*, *Bauhinia petersiana*, *Dichrostachys cinerea*, *Diricletia pubescens*, *Elephantorrhiza goetzei*, *Friesodielsia obovata*, *Turbina holubii*, *Vellozia equisetoides* and *Xeromphis obovata*.

Apart from weed species which are ubiquitous in the area, sub-shrubs are limited to two aloes (*Aloe christianii* and *A. zebrina*), *Blepharis pungens* and *Disperma crenatum*.

Climbers are more plentiful than one would expect in such open woodland. *Combretum mossambicense*, *Decorsea schlechteri* (small and wiry), *Ipomoea kituensis* and *T. shirambensis* and *Turbina shirensis*.

2.3 Deciduous Woodland

This is quite the most interesting woodland in the area, partly because of its novelty and partly the difficulty of getting down among it to find out what is growing there. Owing to the difficulties of the terrain, this area has not been as well explored as the others. The characteristic feature is the presence of paper bark trees of at least three species.

Tall trees are chiefly *Brachystegia glaucescens* and *B. spiciformis*, *Commiphora marlothii* and *Manilkara mochisia*. The odd mahogany (*Entandrophragma caudatum*) stands out above the canopy. Small trees are commonly only *Commiphora ugogensis* and *Ficus soldanella*. Other paperbark trees are *Albizia tanganyikensis* and *Sterculia quinqueloba*.

Barleria matopensis is everywhere in the shrub layer associated with *Elephantorrhiza goetzei*, *Gardenia resiniflua*, *Myrothamnus flabellifolius* (the Resurrection Plant) and *Vepris fanshawei*. Two species of *Aloe* crowd the gorge walls, *A. chabaudii* and *A. cryptopoda*. Climbers are few and far between.

REFERENCES

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- Fanshawe, D.B. (1970). The Vegetation of Kalomo District. Forest Research Bulletin No. 31. Forest Department, Ndola.

SPECIES LIST

a – abundant, c – common, f – frequent, lf – locally frequent, o – occasional,
lo – locally occasional, r – rare

RIPARIAN WOODLAND

	Freq.	Vernacular names S ??	Tonga
<u>Tall trees:</u>			
<i>Acacia albida</i>	lo	munga	musangu
<i>Acacia nigrescens</i>	o-lf	mukwena	mwabaa
<i>Acacia polyacantha</i> - invasive	lf	mukotokoto	mumbu
<i>Azelia quanzensis</i>	lo	mwande	mupapa
<i>Albizia amara</i>	lo	mukangola	kankumbwila
<i>Albizia brevifolia</i>	r-lo	-	-
<i>Albizia glaberrima</i>	r	-	-
<i>Albizia versicolor</i>	r-lo	mububa	-
<i>Berchemia discolor</i>	r	muzinzila	mwinji
<i>Combretum collinum</i>	lo	mulamana	mukunza
<i>Combretum imberbe</i>	lo	muzwili	mubimba
<i>Diospyros mespiliformis</i>	o-lf	muchenja	muchenja
<i>Ficus capensis</i>	o-lf	mukuyu	mukuyu
<i>Ficus ingens</i>	lo	mutata	-
<i>Ficus sycomorus</i>	o-lf	mukuyu	mukuyu
<i>Ficus zambesiaca</i>	r-lo	-	-
<i>Garcinia livingstonei</i>	o-lf	mukwananga	mukwanaga
<i>Homalium abdessammadii</i>	lf	-	-
<i>Hyphaene ventricosa</i>	r	munganda	mapokwe
<i>Khaya nyasica</i>	lo	mululu	mululu
<i>Kigelia africana</i>	lo	muzungula	muzungula
<i>Kirkia acuminata</i>	r	muzumina	musanta
<i>Lannea stuhlmannii</i>	r-lo	musamba	mungongwa
<i>Lonchocarpus capassa</i>	o-lf	mupanda	mukololo
<i>Manilkara obovata</i>	lo	-	-
<i>Mimusops zeyheri</i>	o-lf	mucheningi	mukalanjoni
<i>Parinari curatellifolia</i>	lo	mubula	mula
<i>Peltoporum africanum</i>	lo	munyele	muzenzenze
<i>Pterocarpus antunesii</i>	lo	mwangula	mukambo
<i>Strychnos potatorum</i>	lo	mulombe	musisilombe
<i>Syzygium cordatum</i>	o-lf	mutoya	katope
<i>Syzygium guineense</i> subsp. <i>barotsense</i>	f-c	mutoya	katope
<i>Tamarindus indica</i>	r	-	musika
<i>Trichilia emetica</i>	o-lf	musikili	musikili
<u>Small trees:</u>			
<i>Acacia goetzei</i>	r	-	mwaba
<i>Acacia kirkii</i>	v.lo	-	-
<i>Acacia nilotica</i>	r	-	mukoka
<i>Antidesma venosum</i>	lo	simezi	-

	Freq.	Vernacular names S ??	Tonga
<i>Azanza garckeana</i>	r-lo	muneko	muneko
<i>Boscia salicifolia</i>	r-lo	mubita	mulaba
<i>Cassia abbreviata</i>	lo	mululwe	mululwe
<i>Cassine aethiopica</i>	r-lo	-	-
<i>Cassine transvaalensis</i>	r	-	-
<i>Combretum apiculatum</i>	lo	mumpumpa	mukalanga
<i>Combretum elaeagnoides</i>	lo	mulalabainga	mukalanga
<i>Combretum hereroense</i>	lf	mubimba	namazubo
<i>Commiphora mollis</i>	lo	mubwabwa	muntyokela
<i>Cordia goetzei</i>	r-lo	-	-
<i>Croton gratissimus</i>	o-lf	mukena	mungai
<i>Croton leuconeurus</i>	lo	-	-
<i>Croton megalobotrys</i>	r-lo	mutuatua	mutua
<i>Dalbergia melanoxylon</i>	lo	mukelete	musonkomo
<i>Diospyros quiloensis</i>	lo	-	musyabwele
<i>Erythroxylum zambesiicum</i>	lo	-	mubalubalu
<i>Euclea divinorum</i>	lo	musokolo	munyansyabweli
<i>Ficus burkei</i>	r-lo	muminamboma	-
<i>Lannea discolor</i>	lo	mubumbu	mungongwa
<i>Nuxia oppositifolia</i>	lo	-	-
<i>Olax dissitiflora</i>	r-lo	-	muchombansimba
<i>Olea africana</i>	o-lf	-	-
<i>Pappea capensis</i>	lo	-	-
<i>Phoenix reclinata</i>	lc	nzala	-
<i>Piliostigma thonningii</i>	o-lf	mubaba	musekese
<i>Pseudolachnostylis maprouneifolia</i>	o-lf	mukunyu	mukunyu
<i>Rhus longipes</i>	lo	-	-
<i>Rhus quartiniana</i>	o-lf	-	-
<i>Salix subserrata</i>	lf	iyamdumaka	-
<i>Steganotaenia araliacea</i>	lo	mukutu	mupelewa
<i>Strychnos innocua</i>	lo	muteme	mwabo
<i>Teclea nobilis</i>	r	-	-
<i>Terminalia prunioides</i>	lo	mulumbu	mukonono
<i>Terminalia stuhlmannii</i>	lo	mulumbu	mukonono
<i>Turraea zambesica</i>	o-lf	-	tuvwanipati
<i>Vitex payos</i>	lo	mukekete	muyankonga
<i>Ximenia americana</i>	lo	mungomba	muchonfwa
<i>Ziziphus mauritiana</i>	lo	-	musawu
<i>Ziziphus mucronata</i>	lo	mukalu	mwichechete
Shrubs:			
<i>Acacia ataxacantha</i> - scandent	o-lf	munyanya	lubamfwa
<i>Acacia schweinfurthii</i> - scandent	lo	mokoka	lubua
<i>Acalypha chirindica</i>	lf	lombwelombwe	-
<i>Acalypha ornata</i>	o-lc	mozoboto	-
<i>Aeschynomene cristata</i>	r	-	-

	Freq.	Vernacular names	Tonga
		S ??	
<i>Aeschynomene indica</i>	lo	-	-
<i>Aeschynomene uniflora</i>	r	-	-
<i>Allophylus africanus</i>	lo	-	-
<i>Bolusanthus speciosus</i>	o-lf	musungu	-
<i>Bridelia cathartica</i>	lo	muniminga	munyanyamenda
<i>Byrsocarpus orientalis</i>	lo	mukolwe	kazingini
<i>Canthium zanzibaricum</i>	lo	-	-
<i>Capparis tomentosa</i> - scandent	lo	chiwezeze	chonswe
<i>Carissa edulis</i> - scandent	lo	-	-
<i>Cestrum laevigatum</i> - naturalised Jessamine			
<i>Clerodendrum glabrum</i>	r-lo	-	-
<i>Clerodendrum myricoides</i>	lo	mutume	-
<i>Conyza persicifolia</i>	lo	-	-
<i>Croton scheffleri</i>	r	mupasila	-
<i>Desmodium salicifolium</i>	lo	-	-
<i>Dichrostacys cinerea</i>	o-lf	muselesele	katenge
<i>Diospyros lycioides</i>	o-lf	mupichu	-
<i>Disperma quadrangulare</i>	lc	-	tubwani
<i>Dodonaea viscosa</i>	o-lf	-	-
<i>Eriosema psoraleoides</i>	v.lf	-	-
<i>Erythroxylum emarginatum</i>	r	-	-
<i>Euclea schimperi</i>	lo	-	-
<i>Feretia aeruginescens</i>	o-lf	-	munyansankula
<i>Ficus capreifolia</i>	lo	sikului	-
<i>Ficus pygmaea</i>	r-lo	samangonda	-
<i>Ficus verruculosa</i>	lo	-	-
<i>Flacourtia indica</i>	lo	mubulukushu	mutumbulwa
<i>Friesodielsia obovata</i>	o-lf	muchinga	muchinga
<i>Gomphocarpus fruticosus</i>	r	-	-
<i>Grewia flavescens</i> - scandent	lo	muzuzinyani	mukunykunyu
<i>Grewia pachycalyx</i>	r-lo	muchabachaba	-
<i>Hibiscus calyphyllus</i>	lf	-	-
<i>Hibiscus cannabinus</i>	o-lf	makuka	-
<i>Hibiscus diversifolius</i>	r	-	-
<i>Hibiscus surattensis</i> - scandent	r	-	-
<i>Hoslundia opposita</i>	r-lo	likobezalalisana	musombwani
<i>Lantana camera</i> - naturalised		likobezabalisana	-
<i>Maesa lanceolata</i>	lo	-	-
<i>Margaritaria discoidea</i>	r-lo	-	mulyankanga
<i>Maytenus senegalensis</i>	lo	muliba	mukuba
<i>Melastomastrum segregatum</i>	r	-	-
<i>Microglossa pyrifolia</i> - scandent	lo	-	-
<i>Mimosa pigra</i>	lo	muchabachaba	sichatubabi
<i>Myrica serrata</i>	v.lo	-	-
<i>Oncoba spinosa</i>	o-lf	kakoma	mukumbuzu
<i>Ormocarpum kirkii</i>	r	-	musankanakucha

	Freq.	Vernacular names S ??	Tonga
<i>Pavetta assimilis</i>	lo	-	-
<i>Pavetta cataractarum</i>	r-lo	-	-
<i>Pavetta schumanniana</i>	lo	-	-
<i>Phyllanthus reticulatus</i>	o-lf	-	mwichechele
<i>Pleurostyliya africana</i>	r	-	-
<i>Pluchea dioscoridis</i>	lo	-	-
<i>Plumbago zeylanica</i>	lo	sikalutenta	sikalutenta
<i>Premna senensis</i>	lo	lufetu	mumpika
<i>Psorospermum baumii</i>	r-lo	-	mwilatuba
<i>Securinega virosa</i>	lo	-	mwilatuba
<i>Sesbania rogersii</i>	r	muzekezeke	-
<i>Sesbania sesban</i>	lf	lilongo	mbelembele
<i>Sida alba</i>	lo	-	mulyangombe
<i>Tarenna luteola</i>	lo	-	-
<i>Tarenna rhodesica</i>	lo	-	-
<i>Urena lobata</i>	v.lf	-	-
<i>Vepris zambesiaca</i>	o-lf	-	-
<i>Vernonia adoensis</i>	lo	-	-
<i>Vernonia ampla</i>	r	-	-
<i>Vernonia amygdalina</i>	lo	-	musoboyo
<i>Vernonia aurantiaca - scandent</i>	r-lo	-	-
<i>Vernonia colorata</i>	lo	-	musoboya
<i>Vitex petersiana</i>	r-lo	-	mukoma
<u>Sub-shrubs:</u>			
<i>Acalypha senensis</i>	o-lf	-	-
<i>Achyranthes aspera</i>	lf	-	tantajulo
<i>Asparagus setaceus - creeping</i>	r-lo	ilutwa	mutandamyoba
<i>Aspilia mossambicensis</i>	lo	-	-
<i>Barleria kirkii</i>	lf	-	chavani
<i>Blepharis caloneura</i>	lo	chasabawime	-
<i>Blepharis maderaspatensis</i>	lo	chasabawime	-
<i>Cassia obtusifolia</i>	o-lf	changu	-
<i>Clerodendrum capitatum</i>	lo	-	shamanya
<i>Clerodendrum ternatum</i>	lo	-	-
<i>Cleome hirta</i>	lo	namanga	mulangazuba
<i>Corchorus tridens</i>	o-lf	-	tyelele
<i>Corchorus trilocularis</i>	lo	-	tyelele
<i>Cyathula prostrata</i>	r-lo	-	-
<i>Desmodium repandum</i>	v.lf	-	-
<i>Dyschoriste perrottetii</i>	v.lf	-	-
<i>Ethulia conyzoides</i>	lo	-	-
<i>Gomphostigma virgatum</i>	r	-	-
<i>Heliotropium ovalifolium</i>	o-lf	-	baba
<i>Hermannia glanduligera</i>	lo	-	sambabajeje
<i>Hibiscus lobatus</i>	lo	-	-

	Freq.	Vernacular names S ??	Tonga
<i>Hibiscus vitifolius</i>	lo	-	mubaluba
<i>Indigofera colutea</i>	lo	-	kapalupalu
<i>Jasminum streptopus</i> - scandent	o-lf	-	-
<i>Justicia glabra</i>	lo	-	-
<i>Ludwigia octovalvis</i>	lo	-	-
<i>Melochia corchorifolia</i>	r	-	-
<i>Monechma debile</i>	o-lf	-	-
<i>Nidorella resedifolia</i>	lf	-	-
<i>Phaulopsis imbricata</i>	o-lf	-	-
<i>Phyllanthus maderaspatensis</i>	o-lf	-	-
<i>Polygala sphenoptera</i>	lo	-	-
<i>Pseudarthria hookeri</i>	lo	-	-
<i>Psychotria kirkii</i>	lo	-	-
<i>Pupalia lappacea</i>	o-lf	lilamatwa	-
<i>Rhynchosia minima</i>	lo	-	-
<i>Ruspolia decurrens</i>			
<i>Ruspolia seticalyx</i>	r	-	-
<i>Sansevieria desertii</i> - succulent	v.lf	mukusa	musombo
<i>Sesamum angolense</i>	lo	lunembwe	bwengo
<i>Solenostemon zambesiacus</i>	o-lf	-	-
<i>Sopubia simplex</i> - dambo	v.lf		
<i>Sutera elegantissima</i>	r	-	-
<i>Tragia kirkiana</i> - twiner	r	kayuwe	-
<i>Tragia okanyua</i> - twiner	lo	mubafu	-
<i>Triumfetta annua</i>	v.lf	-	-
<i>Triumfetta rhomboidea</i>	lo	-	-
<i>Triumfetta tomentosa</i>	o-lf	-	-
<i>Vernonia glaberrima</i>	lo	-	-
<i>Vernonia glabra</i>	o-lf	-	-
<i>Walafrida angolensis</i>	r	-	-
<i>Wissadula rostrata</i>	v.lo	-	-
<u>Climbers:</u>			
<i>Abrus precatorius</i>	lo	mupiti	musolosolo
<i>Adenia gummifera</i>	r-lo	-	-
<i>Ampelocissus africana</i>	lo	munsansa	-
<i>Artabotrys brachypetalus</i>	lo	-	mulandabala
<i>Artabotrys monteiroae</i>	r-lo	-	-
<i>Asparagus racemosus</i>	lo	ilutwa	mutandamyoba
<i>Canavalia virosa</i>	o	-	-
<i>Cassytha filiformis</i>	v.lf	luze	-
<i>Cayratia gracilis</i>	r		
<i>Cissampelos mucronata</i>	o-lf	itende	itende
<i>Cissus integrifolia</i>	lo	-	-
<i>Cissus quadrangularis</i>	o-lf	-	mulungalunga

	Freq.	Vernacular names S ??	Tonga
<i>Clematis brachiata</i>	o-lf	koti	kalatongo
<i>Cocculus hirsutus</i>	o-lf	sikoka	itende
<i>Combretum mossambicense</i>	o-lf	silutombolwa	numinambebele
<i>Combretum paniculatum</i> subsp. <i>microphyllum</i>	o-lf	kachingamwezi	mutombolo
<i>Cyphostemma congestum</i>	r	-	-
<i>Dioscorea cochleari-apiculata</i>	lo	siboyani	mpama
<i>Dioscorea quartiniana</i>	lo	sikubabe	-
<i>Fockea multiflora</i>	r	nanyama	mutindika
<i>Glycine wightii</i>	lo	-	-
<i>Gymnema sylvestre</i>	lo	-	-
<i>Helinus integrifolius</i>	o-lf	mulalawa	-
<i>Hippocratea africana</i>	o-lf	mukutinga	mulele
<i>Hippocratea buchananii</i>	lo	mukutinga	mulele
<i>Ipomoea cairica</i>	lo	-	-
<i>Ipomoea rubens</i>	o-lf	-	-
<i>Jasminum fluminense</i>	lf	-	-
<i>Merremia pterygocaulos</i>	lo	-	-
<i>Mikania cordata</i>	lo	-	-
<i>Mondia whitei</i>	r	-	-
<i>Mucuna pruriens</i>	lo	muyuyu	muyuyu
<i>Paederia foetens</i>	lo	-	-
<i>Paullinia pinnata</i>	lo	-	-
<i>Senecio bojeri</i>	r-lo	-	-
<i>Smilax kraussiana</i>	r-lo	-	-
<i>Solanum seforthianum</i> - naturalised	f-lc	-	-
<i>Tacazzea apiculata</i>	lf	-	-
<i>Tiliacora funifera</i>	lo	mwiya	-

Epiphytes:

<i>Loranthus bulawayensis</i>	r	chilubia	jenyengwa
<i>Loranthus oleifolius</i>	r	chilubia	jenyengwa
<i>Loranthus quinquangulus</i>	r	chilubia	jenyengwa
<i>Loranthus rubroviridis</i>	lo	chilubia	jenyengwa

Herbs:

<i>Acalypha ciliata</i>	lf	<i>Aspilia kotschii</i>	o-lf
<i>Acalypha segetalis</i>	lo	<i>Asystasia gangetica</i>	o-lf
<i>Adenostemma perrottetii</i>	lo	<i>Bidens pilosa</i>	lf
<i>Ageratum conyzoides</i>	f-lc	<i>Bidens schimperi</i>	o-lf
<i>Alectra sessiliflora</i>	r	<i>Biophytum sensitivum</i>	lo
<i>Alternanthera sessilis</i>	lo	<i>Bistella dichotoma</i>	lo
<i>Amaranthus spinosus</i>	o-lf	<i>Blumea alata</i>	lo
<i>Amaranthus viridis</i>	lc	<i>Blumea aurita</i>	lo
<i>Ammannia baccifera</i>	r	<i>Blumea mollis</i>	o-lf
<i>Ammannia auriculata</i>	v.lf	<i>Boerhavia diffusa</i>	lo
<i>Amorphophallus abyssinicus</i>	r	<i>Calanthe corymbosa</i>	r
<i>Anagallis pumila</i>	v.lo	<i>Calostephane divaricata</i>	lo
<i>Ansellia gigantea</i>	r	<i>Canscora diffusa</i>	v.lo
		<i>Canscora kirkii</i>	v.lo

<i>Celosia trigyna</i>	f	<i>Justicia flava</i>	lo
<i>Centella asiatica</i>	r-lo	<i>Justicia heterocarpa</i>	lo
<i>Chironia palustris</i>	lo	<i>Justicia striata</i>	lo
<i>Commelina zambesica</i>	lo	<i>Kaempferia rosea</i>	lo
<i>Corchorus olitorius</i>	lo	<i>Kalanchoe lanceolata</i> - succulent	o-lf
<i>Crassocephalum crepidioides</i>	lo	<i>Lobelia kirkii</i>	lo
<i>Crassocephalum picridifolium</i>	lo	<i>Lobelia livingstoniana</i>	lo
<i>Crassocephalum rubens</i>	f	<i>Lobelia nuda</i>	lc
<i>Crinum pedicellatum</i>	lo	<i>Ludwigia palustris</i>	lo
<i>Crotalaria piscicarpa</i>	lo	<i>Ludwigia pulvinaris</i>	lo
<i>Cynanchum schistoglossum</i> - twiner	r	<i>Margaretta rosea</i>	lo
<i>Denekia capensis</i>	lo	<i>Melanthera albinervia</i>	lo
<i>Diclis petiolaris</i>	lo	<i>Micrococca mercurialis</i>	lo
<i>Drosera burkeana</i>	lo	<i>Mimulus gracilis</i>	r.r.
<i>Emilia protracta</i>	v.lo	<i>Momordica balsamina</i>	lo
<i>Englerastrum schweinfurthii</i>	lo	<i>Myriophyllum spicatum</i> - aquatic	v.lf
<i>Eriocaulon gilgianum</i>	lo	<i>Najas pectinata</i> - aquatic	v.lf
<i>Erlangea sessilifolia</i>	lo	<i>Nelsonia canescens</i>	lo
<i>Eulophia angolensis</i>	r	<i>Nesaea crassicaulis</i>	lo
<i>Eulophia livingstoniana</i>	r	<i>Nesaea radicans</i>	lo
<i>Eulophia wakefieldii</i>	r	<i>Nesaea rigidula</i>	lo
<i>Euphorbia zambesiana</i>	lo	<i>Nesaea schinzii</i>	lo
<i>Evolvulus alsinoides</i>	lo	<i>Nymphoides indica</i> - aquatic	lo
<i>Exacum quinquenervium</i>	r	<i>Oldenlandia capensis</i>	lo
<i>Felicia barbellata</i>	r-lo	<i>Oldenlandia corymbosa</i>	lo
<i>Floscopa flavida</i>	lo	<i>Oldenlandia herbacea</i>	lo
<i>Floscopa glomerata</i>	lo	<i>Oldenlandia lancifolia</i>	lo
<i>Floscopa rivularis</i>	o-lf	<i>Ottelia ulvifolia</i> - aquatic	v.lf
<i>Genlisea africana</i>	r-lo	<i>Pentodon pentandrus</i>	r
<i>Gisekia africana</i>	lo	<i>Phyllanthus eylesii</i>	lo
<i>Gladiolus psittacinus</i>	lo	<i>Phyllanthus leucanthus</i>	lo
<i>Gladiolus unguiculatus</i>	o-lf	<i>Phyllanthus niruri</i>	lo
<i>Glinus lotoides</i>	v.lf	<i>Pistia stratiotes</i> - aquatic	v.lc
<i>Gloriosa superba</i> - scandent	lo	<i>Polycarpaea corymbosa</i>	v.lo
<i>Grangea maderaspatana</i>	lo	<i>Polygala persicariifolia</i>	lo
<i>Gutenbergia polycephala</i>	lo	<i>Polygonum lapathifolium</i>	lo
<i>Habenaria mallacophylla</i>	r	<i>Polygonum pulchrum</i>	lo
<i>Haemanthus filiflorus</i>	r	<i>Polygonum salicifolium</i>	lf
<i>Haemanthus multiflorus</i>	lo	<i>Potamogeton octandrus</i> - aquatic	lo
<i>Heliotropium baclei</i>	lo	<i>Potamogeton richardii</i> - aquatic	lo
<i>Hydrilla verticillata</i>	v.lf	<i>Potamogeton schweinfurthii</i> - aquatic	lo
<i>Hydrocotyle verticillata</i>	lo	<i>Ranunculus multifidus</i>	lo
<i>Hygrophila abyssinica</i>	lo	<i>Rhamphicarpa fistulosa</i>	lo
<i>Hygrophila cataractae</i>	lo	<i>Rhamphicarpa tubulosa</i>	lf
<i>Hygrophila pilosa</i>	o-lf	<i>Rorippa cryptantha</i>	r
<i>Ilysanthes parviflora</i>	lo	<i>Rotala filiformis</i>	r
<i>Ilysanthes purpurascens</i>	lo	<i>Rotala heteropetala</i>	r
<i>Indigofera astragalina</i>	lo	<i>Scilla hyacinthina</i>	lo
<i>Indigofera charlieriana</i>	o-lf	<i>Sclerocarpus africanus</i>	r-lo
<i>Indigofera hirsuta</i>	lf	<i>Sebaea pentandra</i>	lo
<i>Indigofera spicata</i>	lf	<i>Selaginella imbricata</i>	lo
<i>Inversodicraea tenax</i> - aquatic	v.lf	<i>Solenostemon decumbens</i>	r
<i>Ipomoea pes-tigridis</i>	lo	<i>Solenostemon latifolius</i>	lo
<i>Ipomoea tuberculata</i>	r	<i>Sonchus oleraceus</i>	lo
<i>Isoetes alstonii</i> - aquatic	r	<i>Sphaeranthus angolensis</i>	lo
<i>Justicia elegantula</i>	o-lf	<i>Sphaeranthus flexuosus</i>	lo

Sphaeranthus suaveolens	lo	Setaria mombassana
Tagetes minuta	lc	Setaria porphyrantha
Tristicha trifaria)	v.lf	Setaria sphacelata
Utricularia arenaria)	lo	Sorghum caffrorum
Utricularia firmula)	lo	Trachypogon spicatus
Utricularia gibba) - aquatics	lo	Tristachya hitchcockii
Utricularia inflexa)	lo	Tristachya superba
Utricularia scandens)	lo	Urochloa pullulans
Utricularia subulata)	lo	Vetiveria nigritana
Vernonia cinerea	r-lo	Vossia cuspidata
Vernonia petersii	lc	
Vernonia stenolepis	lf	<u>Sedges:</u>
Vigna luteola	lo	Ascolepis protea
Xanthium strumarium	r	Cyperus alternifolius
		Cyperus denudatus
		Cyperus digitatus
		Cyperus distans
		Cyperus haspan
		Cyperus imbricatus
		Cyperus papyrus
		Eleocharis capitata - aquatic
		Eleocharis kirkii - aquatic
		Fimbristylis bisumbellata
		Fimbristylis dichotoma
		Fimbristylis squarrosa
		Fuirena pubescens
		Fuirena umbellata
		Lipocarpha monocephala
		Mariscus dubius
		Rhynchospora cyperoides
		Scirpus paludicola
		<u>Ferns:</u>
		Adiantum capillus-veneris
		Adiantum incisum
		Adiantum patens
		Ampelopteris prolifera
		Asplenium erectum
		Asplenium protensum
		Azolla pinnata - aquatic
		Cheilanthes farinosa
		Ctenitis cirrhosa
		Microlepia speluncae
		Nephrolepis undulata
		Pteris catoptera
		Pteris dentata
		Pteridium aquilium
		Salvinia sp. - aquatic
		Thelypteris bergiana
		Thelypteris dentata
		Thelypteris totta

MOPANE WOODLAND

	Freq.	Vernacular names	Tonga
		S ??	
<u>Tall trees:</u>			
<i>Acacia gerrardii</i>	r	mumbovwa	munyenyengwe
<i>Acacia nigrescens</i>	o-lf	mukwema	mwaba
<i>Acacia polyacantha</i>	lo	mukotokoto	mumbu
<i>Acacia sieberiana</i>	lo	mutubatuba	mumpongala
<i>Adansonia digitata</i>	lo	mubuyu	mubuyu
<i>Azelia digitata</i>	lo	mwande	mupapa
<i>Albizia amara</i>	lo	mukangala	kankumbwila
<i>Albizia harveyi</i>	o-lf	mukangala	mukangala
<i>Albizia tanganyikensis</i>		-	mtelele
<i>Amblygonocarpus andongensis</i>	lo	munyene	-
<i>Berchemia discolor</i>	r	muzinzila	mwinji
<i>Brachystegia boehmii</i>	o-lf	mubombo	muombo
<i>Burkea africana</i>	o-lf	museshe	museshe
<i>Colophospermum mopane</i>	a	mupane	mupane
<i>Combretum imberbe</i>	o-lf	muzwili	mubimba
<i>Diospyros mespiliformis</i>	lo	muchenja	muchenja
<i>Erythrophleum africanum</i>	o-lf	mubako	mungansa
<i>Ficus zambesiaca</i>	r	-	-
<i>Guibourtia coleosperma</i>	lo	muzauli	-
<i>Hyphaene ventricosa</i>	lo	munganda	mapokwe
<i>Julbernardia globiflora</i>	lf	mwanza	-
<i>Kirkia acuminata</i>	lf	muzumina	musanta
<i>Lonchocarpus capassa</i>	lo	mupanda	mukololo
<i>Ozoroa reticulata</i>	lo	mulilela	-
<i>Peltophorum africanum</i>	lf	munyele	muzenzenze
<i>Pteleopsis myrtifolia</i>	lo	mwanabalu	mulyabalombe
<i>Pterocarpus angolensis</i>	lo	mukwa	mukala
<i>Pterocarpus antunesii</i>	lf	mwangula	mukambo
<i>Pterocarpus rotundifolius</i>	o-lf	-	muhumbyanteme
<i>Ricinodendron rautanenii</i>	lo	mungongo	-
<i>Sclerocarya caffra</i>	lo	mulula	muongo
<i>Sterculia africana</i>	lo	mukosa	mukosa
<i>Sterculia quinqueloba</i>	o-lf	mukosa	mukosa
<i>Strychnos potatorum</i>	lo	mulombelombe	musisi
<i>Terminalia sericea</i>	o-lf	muhonono	mutwamaila
<i>Xeroderris stuhlmannii</i>	lo	muzwamaloa	mutundula
<i>Zanha africana</i>	lo	musangaluembe	mutalala
<u>Small trees:</u>			
<i>Acacia erubescens</i>	r	mukoka	-
<i>Acacia kirkii</i>	v.lo	-	-

	Freq.	Vernacular names	Tonga
		S ??	
<i>Acacia nilotica</i>	lo	-	mukoka
<i>Acacia senegal</i>	r	-	-
<i>Albizia anthelmintica</i>	lo	mwikalankanga	chondwe
<i>Balanites aegyptiaca</i>	lo	-	mulyanzovu
<i>Boscia albitrunca</i>	r	mubita	mulaba
<i>Boscia angustifolia</i>	lo	mubita	mulaba
<i>Boscia salicifolia</i>	lo	mubita	mulaba
<i>Bridelia cathartica</i>	lo	muniminga	munyanyamenda
<i>Cassia abbreviata</i>	lo	mululwe	mululwe
<i>Cassine aethiopica</i>	lo	-	-
<i>Combretum apiculatum</i>	o-lf	mumpumpa	mukalanga
<i>Combretum elaeagnoides</i>	lo	mulalabainga	mukalanga
<i>Combretum fragrans</i>	lf	mulamana	mukutabulonga
<i>Combretum hereroense</i>	o-lf	mubimba	namazubo
<i>Combretum molle</i>	lo	mufula	-
<i>Combretum zeyheri</i>	lo	mukenge	mukutabulonga
<i>Commiphora africana</i>	lo	mubwabwa	muntyokela
<i>Commiphora karibensis</i>	lo	mubwabwa	muntyokela
<i>Commiphora madagascariensis</i>	r	mubwabwa	muntyokela
<i>Commiphora mollis</i>	o-lf	mubwabwa	muntyokela
<i>Commiphora mossambicensis</i>	lo	mubwabwa	muntyokela
<i>Commiphora pyracanthoides</i>	lo	mubwabwa	muntyokela
<i>Crossopteryx febrifuga</i>	r	mulyambesu	mulyambyo
<i>Croton gratissimus</i>	o-lf	mukena	mungai
<i>Dalbergia melanoxylon</i>	o-lf	mukelete	musonkomo
<i>Dalbergia nitidula</i>	lo	mukonkoto	ndelege
<i>Diospyros quiloensis</i>	lo	-	-
<i>Diospyros squarrosa</i>	r	-	-
<i>Diplorhynchus condylocarpon</i>	f-lc	mulya	mutowa
<i>Dombeya rotundifolia</i>	r	-	-
<i>Erythrina abyssinica</i>	o-lf	mulunguti	mulunguti
<i>Erythroxylum zambesiacum</i>	lo	-	mubalubalu
<i>Euclea divinorum</i>	lo	musokolo	munyansyabweli
<i>Euphorbia matabelensis</i>	r	-	-
<i>Fagara chalybea</i>	r	-	-
<i>Fagara trijuga</i>	r	nwanyi	-
<i>Gardenia spatulifolia</i>	lo	sulu	-
<i>Grewia bicolor</i>	lo	muwana	musongongo
<i>Hymenodictyon parvifolium</i>	r	-	-
<i>Lanea discolor</i>	lo	mubumbu	mungongwa
<i>Markhamia acuminata</i>	lf	mupetankwale	mundale
<i>Ochna pulchra</i>	lo	munyelenyele	muswa
<i>Piliostigma thonningii</i>	o-lf	mubaba	musekese
<i>Pseudolachnostylis maprouneifolia</i>	o-lf	mukunyu	mukunyu

	Freq.	Vernacular names S ??	Tonga
<i>Pterocarpus brenanii</i>	r	-	sisimbya
<i>Rhus lucens</i>	r	-	-
<i>Rhus natalensis</i>	lo	-	-
<i>Rhus tenuinervis</i>	lo	mukumati	mukazyotabike
<i>Schrebera trichoclada</i>	lo	mulyambesu	mulyambesu
<i>Steganotaenia araliacea</i>	r-lo	muketu	mupelewa
<i>Strychnos cocculoides</i>	lo	muhuluhulu	muono
<i>Strychnos spinosa</i>	lo	mwimbili	muntamba
<i>Tarenna neurophylla</i>	lo	-	mulambati
<i>Terminalia mollis</i>	o-lf	inumbwa	-
<i>Terminalia prunioides</i>	lo	mulumbu	mukonono
<i>Terminalia randii</i>	o-lf	mulumbu	kasansa
<i>Terminalia stenostachya</i>	lo	-	kalunguti
<i>Terminalia stuhlmannii</i>	lo	mulumbu	mukonono
<i>Ximenia americana</i>	lo	mungomba	muchonfwa
<i>Ziziphus mucronata</i>	lo	mukalu	mwichechete

Shrubs:

<i>Abutilon angulatum</i>	lo	lukuku	bukuku
<i>Allophylus africanus</i>	lo	-	-
<i>Barleria crassa</i>	lo	-	chavani
<i>Barleria prionitis</i>	o-lf	-	chavani
<i>Barleria spinulosa</i>	lo	-	chavani
<i>Bauhinia petersiana</i>	lf	mupondopondo	mupondo
<i>Bidens oligoflora</i>	lo	chilembalembe	mupondo
<i>Blumea gariepina</i>	o-lf	nyanda	-
<i>Blumea brevipes</i>	v.lf	-	-
<i>Bolusanthus speciosus</i>	lo	musungu	-
<i>Boscia matabelensis</i>	lo	-	chonzo
<i>Byrsocarpus orientalis</i>	lo	mukolwe	kazingini
<i>Canthium crassum</i>	lo	-	-
<i>Canthium frangula</i>	lo	kafua	musasati
<i>Capparis tomentosa - scandent</i>	lo	chiwezeze	chonswe
<i>Cissus cornifolia</i>	lo	muminanzoka	-
<i>Cleome gynandra</i>	lf	namanga	siungwa
<i>Clerodendrum myricoides</i>	lo	mutuma	-
<i>Clerodendrum wildii</i>	r	-	-
<i>Commicarpus plantagineus</i>	lf	-	yamugani
<i>Crotalaria laburnifolia</i>	lo	-	-
<i>Crotalaria pallidicaulis</i>	lo	-	-
<i>Croton menyhartii</i>	v.lo	-	-
<i>Dichrostachys cinerea</i>	lf	muselesele	katenge
<i>Diricletia pubescens</i>	lf	-	mupalakwe
<i>Ehretia obtusifolia</i>	lo	-	musunsuchulu

	Freq.	Vernacular names	Tonga
		S ??	
<i>Elephantorrhiza goetzei</i>	lf	-	-
<i>Erythrococca menyharthi</i>	r	poko	poko
<i>Friesodielsia obovata</i>	lf	muchinga	muchinga
<i>Gardenia resiniflua</i>	lo	sulu	mujolo
<i>Grewia flavescens</i>	lo	muzuzinyani	mukunyukunyu
<i>Grewia monticola</i>	r-lo	mwana	mwingili
<i>Grewia pachycalyx</i>	lo	muchabachaba	-
<i>Grewia praecox</i>	lo	mulama	-
<i>Grewia schinzii</i>	r	mutulu	-
<i>Hibiscus cannabinus</i>	lf	makuka	-
<i>Hibiscus shirensis</i>			
<i>Indigofera ormocarpoides</i>	lo	lukangandofu	-
<i>Jasminum stenolobum</i>	lo	-	munimbwa
<i>Leonotis nepetifolia</i>	lo	-	-
<i>Maerua parvifolia</i>	r	-	chonzo
<i>Margaritaria discoidea</i>	lo	-	mulyankanga
<i>Maytenus heterophylla</i>	r	-	-
<i>Maytenus senegalensis</i>	lo	muoliba	mukoba
<i>Melhania acuminata</i>	lo	-	-
<i>Melhania forbesii</i>	lo	-	-
<i>Microglossa pyrifolia</i>	lo	-	-
<i>Mundulea sericea</i>	r-lo	lukangandofu	-
<i>Myrothamus flabellifolius</i>	v.lo	-	-
<i>Ormocarpum kirkii</i>	r	-	musankanakucha
<i>Pavetta lasiopeplus</i>	r	-	-
<i>Pleurostyliia africana</i>	v.r	-	mulyamandebele
<i>Pouzolzia hypoleuca</i>	lo	-	-
<i>Premna senensis</i>	lo	lufetu	mumpika
<i>Psorospermum febrifugum</i>	lo	mubemu	-
<i>Securidaca longepedunculata</i>	o-lf	mwinda	bwazi
<i>Securinea virosa</i>	lo	-	mwilatuba
<i>Tarenna luteola</i>	lo	-	-
<i>Tinnea zambesiaca</i>	lo	-	-
<i>Tragia okanyua</i>	lo	mubafu	-
<i>Triaspis macropteron</i>	r	-	-
<i>Turbina holubii</i>	lc	-	-
<i>Vangueria randii</i>	lo	mubilo	mububu
<i>Vellozia equisetoides</i>	lc	-	mupwesya
<i>Vepris zambesiaca</i>	r	-	-
<i>Vernonia amygdalina</i>	lo	-	musoboyo
<i>Vernonia aurantiaca - scandent</i>	r	-	-
<i>Vernonia colorata</i>	lo	-	musoboyo
<i>Vitex petersiana</i>	lo	-	mukoma
<i>Xeromphis obovata</i>	o-lf	mutungambabala	mutungambabala

	Freq.	Vernacular names S ??	Tonga
<u>Sub-shrubs:</u>			
<i>Achyranthes aspera</i>	f	-	tantajulo
<i>Aerva leucura</i>	lf	-	-
<i>Aloe christianii</i> - succulent	lf	lichenke	kanembe
<i>Aloe zebrina</i> - succulent	lf	lichenke	kanembe
<i>Aptosimum decumbens</i>	r	-	-
<i>Asparagus longicladus</i>	r	ilutwa	mutandamyoba
<i>Asparagus setaceus</i>	lo	ilutwa	mutandamyoba
<i>Barleria capitata</i>	r	-	chavani
<i>Blepharis caloneura</i>	lf	chasabawine	-
<i>Blepharis pungens</i>	lo	chasabawine	-
<i>Cassia falcinella</i>	r	-	-
<i>Cassia kirkii</i>	lo	-	-
<i>Cassia mimosoides</i>	lf	-	-
<i>Cassia obtusifolia</i>	lc	-	-
<i>Cissus crusei</i>	r	-	-
<i>Cleome monophylla</i>	lf	namanga	mulangazuba
<i>Cleome hirta</i>	lf	namanga	mulangazuba
<i>Clerodendrum ternatum</i>	lo	-	-
<i>Conyza aegyptiaca</i>	lo	-	-
<i>Crotalaria platysepala</i>	r	-	-
<i>Desmodium tortuosum</i>	lo	-	-
<i>Dicliptera verticillata</i>	lf	-	-
<i>Dicoma anomala</i>	r	-	-
<i>Diplolophium zambesianum</i>	lf	muhonde	-
<i>Disperma crenatum</i>	lf	-	bonje
<i>Erythrocephalum zambesianum</i>	lo	-	-
<i>Euphorbia transvaalensis</i>	lo	kabomba	-
<i>Heliotropium ovalifolium</i>	lf	-	baba
<i>Hibiscus allenii</i>	r	-	-
<i>Hibiscus articulatus</i>	r	-	-
<i>Hibiscus caesius</i>	lo	-	chiyasabalim
<i>Hibiscus micranthus</i>	r	-	-
<i>Hibiscus sidiformis</i>	lo	-	-
<i>Indigofera colutea</i>	lo	-	kapalupalu
<i>Monechma debile</i>	lo	kapesi	-
<i>Peristrophe bicalyculata</i>	lo	kalelo	-
<i>Pupalia lappacea</i>	lo	lilamatwa	-
<i>Rhinacanthus gracilis</i>	lo	-	-
<i>Ruellia praetermissa</i>	r	-	-
<i>Sansevieria desertii</i>	lc	mukusa	-
<i>Seddera suffruticosa</i>	r	-	-
<i>Sesamum angolense</i>	lf	lunembwe	bwengo
<i>Sesamum calycinum</i>	lf	lunembwe	bwengo

	Freq.	Vernacular names S ??	Tonga
<i>Sida acuta</i>	r	-	-
<i>Sida urens</i>	r	-	-
<i>Solanum nigrum</i> - naturalised	lf	mutuntulwa	mutuntulwa
<i>Talinum portulacifolium</i>	lo	-	-
<i>Tephrosia kasikiensis</i>	lo	-	-
<i>Trichodesma physaloides</i>	lf	-	-
<i>Trichodesma zeylanicum</i>	lf	-	-
<i>Vernonia glaberrima</i>	lo	-	-

Climbers:

<i>Abrus precatorius</i>	v.lo	mupiti	musolosolo
<i>Adenia gummifera</i>	r	-	-
<i>Ampelocissus africana</i>	lo	munsansa	-
<i>Asparagus racemosus</i>	lo	ilutwa	mutandamyobo
<i>Cassytha filiformis</i>	lo	-	sibonenwisiku
<i>Cissus petiolata</i>	lo	-	tebelebe
<i>Combretum mossambicense</i>	o-lf	silutombolwa	numinambebele
<i>Cynanchum tetrapterum</i>	r	-	-
<i>Decorsea schlechteri</i>	f-lc	-	-
<i>Dioscorea cochleari-apiculata</i>	lo	siboyani	mpama
<i>Dioscorea quartiniana</i>	lo	sikubabe	mpama
<i>Dioscorea sylvatica</i>	r	siboyani	mpama
<i>Dregea macrantha</i>	lo	-	kachinko
<i>Gymnema sylvestre</i>	lo	-	-
<i>Ipomoea kituiensis</i>	lf	-	-
<i>Ipomoea shirambensis</i>	lf	lukuli	mukuli
<i>Ipomoea verbascoidea</i>	lo	litalala	-
<i>Luffa cylindrica</i>	lo	mupelo	-
<i>Momordica cardiospermoides</i>	r-lo	-	-
<i>Rhynchosia minima</i>	lf	-	-
<i>Rhynchosia totta</i>	lo	-	-
<i>Stomatostemma monteiroae</i>	r	-	-
<i>Strophanthus nicholsonii</i>	r	bulembe	bukmbe
<i>Tinospora tenera</i>	lo	-	-
<i>Turbina shirensis</i>	o-lf	-	chivavani

Herbs:

<i>Acalypha segetalis</i>	lo	<i>Borreria subvulgata</i>	lo
<i>Acanthospermum hispidum</i>	lf	<i>Buchnera henriquesii</i>	lo
<i>Albuca melleri</i>	lo	<i>Buchnera hispida</i>	lo
<i>Alysicarpus rugosus</i>	lo	<i>Calostephane divaricata</i>	o-lf
<i>Ageratum conyzoides</i>	lf	<i>Ceratotheca sesamoides</i>	lo
<i>Ansellia gigantea</i>	r	<i>Chlorophytum brachystachum</i>	r
<i>Bidens pilosa</i>	lf	<i>Chrysanthellum americanum</i>	r-lo
<i>Blepharis leendertziae</i>	r	<i>Commelina forskalei</i>	lo
<i>Boerhavia diffusa</i>	a	<i>Commelina subulata</i>	

Corchorus asplenifolius	Portulaca oleracea
Corchorus olitorius	Rothia hirsuta
Crabbea velutina	Sphaeranthus angolensis
Crassocephalum rubens	Striga asiatica
Crassula browniana	Striga forbesii
Crinum macowanii	Striga gesnerioides
Crotalaria piscarpa	Synedrella nodiflora
Crotalaria podocarpa	Tacca leontopetaloides
Cynachum schistoglossum	Tephrosia reptans
Datura stramonium	Tridax procumbens
Denekia capensis	Urginea altissima
Dicoma schinzii	Wormskioldia longipedunculata
Dicoma tomentosa	Zornia glochidiata
Euphorbia hirta	
Euphorbia heterophylla	<u>Grasses:</u>
Euphorbia leshumensis	Andropogon arthropogon
Euphorbia mozambicensis	Andropogon gayanus
Evolvulus alsinoides	Aristida hordeacea
Geigeria africana	Aristida meridionalis
Gisekia africana	Aristida pilgeri
Gomphrena celosioides	Aristida rhiniochloa
Gutenbergia polycephala	Bothriochloa glabra
Indigofera astragalina	Brachiaria brizantha
Indigofera hirsuta	Chloris gayana
Indigofera schimperi	Chrysopogon montanus
Indigofera spicata	Cymbopogon validus
Indigofera strobilifera	Diectomis fastigiata
Ipomoea bolusiana	Digitaria milanjiana
Ipomoea coptica	Digitaria setivalva
Ipomoea eriocarpa	Digitaria ternata
Ipomoea lapathifolia	Enteropogon macrostachyus
Ipomoea pes-tigridis	Eragrostis buchananii
Justicia flava	Eragrostis rotifer
Justicia matammensis	Eragrostis superba
Kalanchoe laciniata	Heteropogon contortus
Kalanchoe lanceolata	Heteropogon melanocarpus
Kohautia lasiocarpa	Hyparrhenia dichroa
Lapeirousia rhodesiana	Hyparrhenia filipendula
Lactuca capensis	Hyperthelia dissoluta
Leucas stricta	Panicum aphanoneurum
Limeum fenestratum	Panicum maximum
Ludwigia perennis	Pogonarthria brainii
Margaretta rosea	Rhynchelytrum repens
Melanthera albinervia	Rhynchelytrum villosum
Mollugo nudicaulis	Schmidtia pappophoroides
Monsonia ovata	Setaria anceps
Monsonia senegalensis	Sorghum caffrorum
Nicandra physaloides	Sporoborus albomarginatus
Nicolasia pedunculata	Sporobolus festivus
Oldenlandia herbacea	Trachypogon spicatus
Oxygonum sinuatum	Tragus berteronianus
Pancratium trianthum	Tripogon abyssinicus
Pegolettia senegalensis	Tristachya superba
Polycarpaea corymbosa	Urochloa brachyura
Polygala erioptera	Urochloa mosambicensis

Sedges:

Fimbristylis dichotoma
 Kyllinga alba
 Scleria foliosa

Ferns:

Ophioglossum reticulatum

KALAHARI WOODLAND

	Freq.	Vernacular names	Tonga
	S ??		
<u>Tall trees:</u>			
Afzelia quanzensis	r	mwande	mupapa
Amblygonocarpus andongensis	o-lf	munyenye	-
Baikiaea plurijuga	a	mukusi	-
Brachystegia boehmii	f	mubombo	muombo
Brachystegia longifolia	c	-	-
Brachystegia spiciformis	f	mutuya	musewe
Burkea africana	f	museshe	museshe
Combretum collinum	o-lf	mulamana	mukunza
Dialium englerianum	r	muhamani	-
Erythrophleum africanum	f-lc	mubako	mungansa
Guibourtia coleosperma	o-lf	muzauli	-
Julbernardia globiflora	f	mwanza	-
Kirkia acuminata	lo	muzumina	musanta
Peltoporum africanum	lo	munyele	muzenzenze
Pericopsis angolensis	lo	mubanga	mubanga
Pteleopsis myrtifolia	lo	mwanabalu	mulyabalombe
Pterocarpus angolensis	lo	mukwa	mukula
Pterocarpus antunesii	lo	mwangula	mukambo
Ricinodendron rautanenii	o-lf	mungongo	-
Sterculia quinqueloba	lo	mukosa	mukosa
Terminalia sericea	o-lf	muhonono	mutwamaila
Vitex payos	r	-	muyankonga
Xeroderris stuhlmannii	r	muzwamaloa	-
<u>Small trees:</u>			
Albizia antunesiana	o-lf	munganyama	kawizi
Cassine transvaalensis	r	-	-
Combretum celastroides	f	kangolo	mukulusaka
Combretum elaeagnoides	o-lf	mulalabainga	mukalanga
Combretum psidioides	lo	mufula	-
Combretum zeyheri	lo	mukenge	mukutabulonga
Commiphora angolensis	lo	mubwabwa	muntyokela
Commiphora mossambicensis	lo	mubwabwa	muntyokela
Commiphora pyracanthoides	lo	mubwabwa	mubwabwa
Dalbergia nitidula	lo	mukonkoto	ndelete

	Freq.	Vernacular names S ??	Tonga
<i>Diospyros batocana</i>	o-lf	mungongola	-
<i>Diplorhynchus condylocarpon</i>	f	mulya	mutowa
<i>Erythroxylum zambesiacum</i>	r	-	mubalubalu
<i>Lanea discolor</i>	lo	mubumbu	mungongwa
<i>Monotes glaber</i>	lo	mutembo	mutembo
<i>Ochna pulchra</i>	lo	munyeleneyele	muswa
<i>Ochna schweinfurthiana</i>	r	munyeleneyele	-
<i>Pseudolachnostylis maprouneifolia</i>	o-lf	mukunyu	mukunyu
<i>Rhus tenuinervis</i>	o-lf	mukumati	mukazyotabike
<i>Strychnos cocculoides</i>	lo	muhuluhulu	muono
<i>Strychnos pungens</i>	lo	muwawa	-
<i>Swartzia madagascariensis</i>	lo	mushakashela	mulundu
<i>Terminalia brachystemma</i>	o-lf	inumbwa	-
<i>Terminalia trichopoda</i>	lo	inumbwa	-
<i>Vangueriopsis lanciflora</i>	lo	mumbole	mufumo
<i>Vitex madiensis</i>	lo	mukekete	-
<i>Vitex mombassae</i>	lo	mukekete	-
<i>Ximenia caffra</i>	lo	mulutulwa	muchonfwa
<i>Xylopia odoratissima</i>	lo	situndubwanga	-

Shrubs:

<i>Acacia ataxacantha</i> - scandent	v.lf	munyanya	lubamfwe
<i>Allophylus africanus</i>	lo	-	-
<i>Ancylanthos bainesii</i>	lo	yamba	-
<i>Asparagus africanus</i>	lo	ilutwa	mutandanyoba
<i>Baphia massaiensis</i>	f	isunde	-
<i>Bauhinia macrantha</i>	f-c	mupondopondo	mupondo
<i>Bauhinia urbaniana</i>	lo	mupondopondo	mupondo
<i>Canthium huillense</i>	lo	munteme	-
<i>Cassia singueana</i>	lo	-	mululwe
<i>Cissus cornifolia</i>	lo	muminanzoka	-
<i>Cleome gynandra</i>	f	namanga	siungwa
<i>Clerodendrum myricoides</i>	r	mutume	-
<i>Copaifera baumiana</i>	lf	mukuwa	-
<i>Crotalaria flavicarinata</i>	lo	mulalalani	-
<i>Croton scheffleri</i>	v.lf	mupasila	-
<i>Dalbergia martinii</i>	f-lc	mulyanzovu	muyasa
<i>Dichrostachys cinerea</i>	lo	muselesele	katenge
<i>Friesodielsia obovata</i>	lo	muchinga	muchinga
<i>Grewia flavescens</i>	lo	muzuzinyani	mukunyukunyu
<i>Grewia monticola</i>	lo	muwana	-
<i>Holostylon baumii</i>	lo	-	-
<i>Hymenocardia acida</i>	lo	muyunda	-
<i>Leonotis nepetifolia</i>	lo	-	-

	Freq.	Vernacular names	Tonga
	S ??		
<i>Margaritaria discoidea</i>	lo		mulyankanga
<i>Melhania acuminata</i>	lo	-	-
<i>Ozoroa nitida</i>	lo	silubale	-
<i>Paropsia brazzeana</i>	o-lf	mwangalala	-
<i>Pavetta schumanniana</i>	lo	-	-
<i>Securidaca longepedunculata</i>	lo	mwinda	bwazi
<i>Sphenostylis marginata</i>	lo	-	-
<i>Tarenna luteola</i>	lo	muntyontyo	-
<i>Urena lobata</i>	o-lf	-	-
<i>Vangueria infausta</i>	lo	mubilo	mubobu
<i>Vangueria randii</i>	lo	mubilo	mubobu
<i>Vitex amboniensis</i>	r	mukekete	-
<i>Waltheria indica</i>	o-lf	-	-
<i>Xeromphis obovata</i>	lo	mutungambabala	mutungambabala
<u>Sub-shrubs:</u>			
<i>Acalypha senensis</i>	lo	-	-
<i>Achyranthes aspera</i>	f	-	tantajulo
<i>Aerva leucura</i>	lf	-	-
<i>Blepharis buchneri</i>	lo	chasabawine	-
<i>Blepharis maderaspatensis</i>	lf	chasabawine	-
<i>Blepharis pungens</i>	o-lf	chiasa	-
<i>Brackenridgea arenaria</i>	lo	-	-
<i>Cassia absus</i>	r	-	-
<i>Cassia mimosoides</i>	lf	-	-
<i>Cassia occidentalis</i>	lf	katima	-
<i>Centemopsis gracilentia</i>	lo	-	-
<i>Cleome hirta</i>	lf	namanga	mulangazuba
<i>Clerodendrum ternatum</i>	lo	-	-
<i>Clerodendrum uncinatum</i>	lo	mubwanyo	-
<i>Crotalaria platysepala</i>	r	-	-
<i>Dicliptera verticillata</i>	lf	-	-
<i>Gardenia brachythamnus</i>	lf	-	-
<i>Hebenstreitia dentata</i>	lo	-	-
<i>Hemizygia bracteosa</i>	lf	sinuke	-
<i>Hermannia glanduligera</i>	lo	-	sambabajeje
<i>Hibiscus caesius</i>	lo	-	chiyasabalimi
<i>Hibiscus mastersianus</i>	lf	-	-
<i>Hibiscus mechowii</i>	lo		
<i>Hibiscus meeusei</i>	lo	lukukwa	lukukwa
<i>Hibiscus physaloides</i>	lo	-	-
<i>Hibiscus schinzii</i>	lo	-	-
<i>Justicia betonicoides</i>	lo	-	-
<i>Lannea edulis</i>	lo	mulolo	-

	Freq.	Vernacular names S ??	Tonga
<i>Lantana rhodesiensis</i>	lo	-	-
<i>Lippia wilmsii</i>	lo	-	-
<i>Monechma debile</i>	lo	-	-
<i>Pavonia senegalensis</i>	lo	gonde	-
<i>Phyllanthus maderaspatensis</i>	lo	-	-
<i>Pollichia campestris</i>	lo	-	kafuakanswi
<i>Requienia pseudosphaerosperma</i>	r	-	-
<i>Ruspolia decurrens</i>	lo	-	-
<i>Sesamum calycinum</i>	lf	lunembwe	-
<i>Sida cordifolia</i>	lf	-	-
<i>Sida hoepfneri</i>	lo	-	-
<i>Sutera elegantissima</i>	r	-	-
<i>Tephrosia cephalantha</i>	lf	-	-
<i>Tricalysia cacondensis</i>	lo	-	-
<i>Trichodesma physaloides</i>	lf	-	-
<i>Triumfetta tomentosa</i>	lf	-	-
<i>Vernonia poskeana</i>	lf	mubalusika	kampuvuvu

Herbs:

Acanthosicyos naudinianus
Acrotome inflata
Albuca melleri
Alternanthera sessilis
Amaranthus graecizans
Amaranthus viridis
Amorphophallus abyssinicus
Asystasia gangetica
Bidens schimperi
Biophytum sensitivum
Bistella dichotoma
Boerhavia diffusa
Boerhavia erecta
Borreria scabra
Borreria subvulgata
Buchnera hispida
Celosia trigyna
Ceratotheca sesamoides
Ceratotheca triloba
Commelina africana
Crassocephalum rubens
Crinum macowanii
Crotalaria sphaerocarpa
Cucumis hirsutus
Cyanotis speciosa
Cyphocarpa angustifolia
Denekia capensis
Dicerocaryum zanguebarium
Dicoma schinzii
Dicoma tomentosa
Erlangea sessilifolia

Eulophia cucullata
Eulophia livingstoniana
Euphorbia leshumensis
Euphorbia mozambicensis
Euphorbia rubriflora
Evolvulus alsinoides
Gisekia pharnaceoides
Gladiolus atropurpureus
Harpagophytum procumbens
Heliotropium baclei
Hirpicium gracile
Huernia levyi - succulent
Indigofera arenophila
Indigofera charlieriana
Indigofera flavicans
Indigofera hirsuta
Indigofera livingstoniana
Indigofera spicata
Ipomoea blepharophylla
Ipomoea pes-tigridis
Ipomoea pileata
Jacquemontia tamnifolia
Jatropha seineri
Justicia elegantula
Justicia flava
Justicia heterocarpa
Justicia matammensis
Kalanchoe lanceolata
Kohautia lasiocarpa
Lapeirousia odoratissima
Lapeirousia porphyrosiphon
Leucas stricta

Limeum fenestratum	Diheteropogon amplexans
Margaretta rosea	Eleusine africana
Melanthera albinervia	Elionurus argenteus
Merremia pinnata - twiner	Enteropogon macrostachyus
Merremia tridentata - twiner	Eragrostis aspera
Mollugo cerviana	Eragrostis capensis
Momordica balsamina	Eragrostis cilianensis
Nicolasia felicoides	Eragrostis pallens
Oldenlandia affinis	Eragrostis rogersii
Oldenlandia corymbosa	Eragrostis tremula
Oldenlandia herbacea	Heteropogon melanocarpus
Orthanthera jasminiflora	Hyparrhenia rufa
Oxygonum sinuatum	Panicum heterostachyum
Pachycarpus lineolatus	Panicum maximum
Pandiaka schweinfurthii	Perotis patens
Phyllanthus pentandrus	Pogonarthria brainii
Polycarpaea corymbosa	Pogonarthria fleckii
Polygala albida	Pogonarthria squarrosa
Striga gesnerioides	Rhynchelytrum repens
Tephrosia lupinifolia	Rhynchelytrum subglabrum
Tephrosia purpurea	Sacciolepis typhura
Tribulus terrestris	Schizachyrium jeffreysii
Urginea altissima	Setaria homonyma
Urginea sanguinea	Sporobolus fimbriatus
Vernonia cinerea	Sporobolus psammophilus
Vernonia perrottetii	Sporobolus pyramidalis
Vernonia petersii	Trachypogon spicatus
Vernonia stenolepis	Tragus berteronianus
Wormskioldia longipedunculata	Triraphis schinzii
Zornia pratensis	Tristachya superba
<u>Grasses:</u>	<u>Sedges:</u>
Andropogon shirensis	Cyperus amabilis
Aristida stipitata	Cyperus aristatus
Brachiaria brizantha	Cyperus compactus
Brachiaria nigropedata	Cyperus esculentus
Brachiaria serrata	Cyperus zollingeri
Cymbopogon excavatus	Fimbristylis hispidula
Dactyloctenium giganteum	Kyllinga alba
Digitaria angolensis	Kyllinga squamulata
Digitaria lunularis	Mariscus aristatus
Digitaria milanjana	Mariscus pseudovestitus
Digitaria pentzii	
Digitaria perrottetii	<u>Ferns:</u>
Digitaria setivalva	Nephrolepis undulata

DECIDUOUS WOODLAND

	Freq.	Vernacular names S ??	Tonga
<u>Tall trees:</u>			
Albizia brevifolia	r	-	-
Albizia tanganyikensis	lo	-	mtelele
Brachystegia glaucescens	v.lf	-	musowe

	Freq.	Vernacular names S ??	Tonga
<i>Brachystegia longifolia</i>	v.lf	-	-
<i>Commiphora marlothii</i>	o-lf	mubwabwa	muntyokela
<i>Entandrophragma caudatum</i>	r	mupumena	mupingili
<i>Gyrocarpus americanus</i>	v.lo	-	mutubetube
<i>Manilkara mochisia</i>	o-lf	muchisa	mupusyo
<i>Screrocarya caffra</i>	lo	mulula	muongo
<i>Sterculia quinqueloba</i>	lo	mukosa	mukosa
<i>Triplochiton zambesiacus</i>	lo	-	mundyoli
<u>Small trees:</u>			
<i>Boscia albitrunca</i>	lo	mubita	mulaba
<i>Boscia angustifolia</i>	lo	mubita	mulaba
<i>Commiphora ugogensis</i>	o-lf	mubwabwa	muntyokela
<i>Cordia pilosissima</i>	lo	-	muluba
<i>Dalbergia melanoxylon</i>	lo	mukelete	musonkomo
<i>Erythroxylum zambesiacum</i>	lo	-	mubalubalu
<i>Ficus soldanella</i>	r-lf	-	mubungubungu
<i>Olax dissitiflora</i>	r-lo	-	muyuwansya
<i>Pleurostyliya africana</i>	r	-	mulyamandebele
<i>Strychnos innocua</i>	lo	muteme	mwabo
<i>Turraea nilotica</i>	r	-	-
<u>Shrubs:</u>			
<i>Aeschynomene mimosifolia</i>	r	-	-
<i>Barleria matopensis</i>	f-lc	-	chavani
<i>Bauhinia galpinii</i>	v.r	-	-
<i>Canthium frangula</i>	lo	kafua	musasati
<i>Elephantorrhiza goetzei</i>	lf	-	-
<i>Euphorbia fortissima</i>	v.r	-	-
<i>Gardenia resiniflua</i>	o-lf	sulu	mujolo
<i>Grewia monticola</i>	r-lo	muwana	-
<i>Heteromorpha trifoliata</i>	r	-	-
<i>Hibiscus praeteritus</i>	r	-	-
<i>Iboza riparia</i>	lo	-	-
<i>Myrothamnus flabellifolius</i>	v.lf	-	-
<i>Pouzolzia hypoleuca</i>	r	-	-
<i>Rytigynia umbellulata</i>	lo	lufetu	mulyambembela
<i>Vepris fanshawei</i>	o-lf	-	-
<u>Sub-shrubs:</u>			
<i>Aloe chabaudii</i>	v.lf	lichenka	kanembe
<i>Aloe cryptopoda</i>	v.lc	lichenka	kanembe
<i>Barleria capitata</i>	lo	-	chavani
<i>Barleria subglobosa</i>	r	-	chavani

	Freq.	Vernacular names	
		S ??	Tonga
Hibiscus sidiformis	lo	-	-
Hyptis pectinata	lo	-	-
Climbers:			
Stomatostemma monteiroae	lo	-	-
Strophanthus kombe	lo	mununga	musamwezilonda
Herbs:			
Argemone mexicana	v.lf	Heteropogon contortus	
Crassula browniana	r	Oplismenus hirtellus	
Kalanchoe paniculata	r-lo	Panicum maximum	
Peperomia arabica	lc	Rhynchelytrum subglabrum	
Selaginella imbricata		Setaria homonyma	
		Sporobolous panicoides	
Grasses			
Aristida scabrivalvis		Ferns	
Arthraxon lancifolius		Actinopteris radiata	
Chloris gayana		Arthropteris orientalis	
Danthoniopsis petiolata		Asplenium inaequilaterale	
Hackelochloa granularis		Pellaea viridis	

UPDATED SPECIES LIST FROM DISTRICT VEGETATION SURVEYS

<u>Old name</u>	<u>New or correct name</u>
Abrus precatorius	Abrus precatorius <i>L.</i> subsp. africanus <i>Verdc.</i>
Abrus pulchellus subsp. suffruticosus	Abrus melanospermus <i>Hassk.</i> subsp. suffruticosus (<i>Boutique</i>) <i>D.K.Harder</i>
Abutilon angulatum	Abutilon angulatum (<i>Guill. & Perr.</i>) <i>Mast.</i> var. angulatum
Abutilon englerianum	Abutilon englerianum <i>Ulbr.</i>
Abutilon ramosum	Abutilon ramosum (<i>Cav.</i>) <i>Guill. & Perr.</i>
Acacia albida	Faidherbia albida (<i>Delile</i>) <i>A.Chev.</i>
Acacia ataxacantha	Acacia ataxacantha <i>DC.</i>
Acacia chirindica	? <i>Acalypha</i> chirindica
Acacia erubescens	Acacia erubescens <i>Oliv.</i>
Acacia fleckii	Acacia fleckii <i>Schinz</i>
Acacia galpinii	Acacia galpinii <i>Burt Davy</i>
Acacia gerrardii	Acacia gerrardii <i>Benth.</i> subsp. gerrardii
Acacia giraffae	Acacia erioloba <i>E.Mey.</i>
Acacia goetzei subsp. goetzei	Acacia goetzei <i>Harms</i> subsp. goetzei
Acacia goetzei subsp. microphylla	Acacia goetzei <i>Harms</i> subsp. microphylla <i>Brenan</i>
Acacia hebeclada	Acacia hebeclada <i>DC.</i> subsp. chobiensis (<i>O.B.Mill.</i>) <i>A.Schreib.</i>
Acacia hockii	Acacia hockii <i>De Wild.</i>
Acacia kirkii	Acacia kirkii <i>Oliv.</i> subsp. kirkii
Acacia luederitzii	Acacia luederitzii <i>Engl.</i> var. luederitzii
Acacia macrothyrsa	Acacia amythethophylla <i>A.Rich.</i>
Acacia mellifera	Acacia mellifera (<i>Vahl</i>) <i>Benth.</i> subsp. detinens (<i>Burch.</i>) <i>Brenan</i>
Acacia nigrescens	Acacia nigrescens <i>Oliv.</i>
Acacia nilotica	Acacia nilotica (<i>L.</i>) <i>Delile</i> subsp. kraussiana (<i>Vatke</i>) <i>Brenan</i>
Acacia pilispina	Acacia pilispina <i>Pic.-Serm.</i>
Acacia polyacantha	Acacia polyacantha <i>Willd.</i> subsp. campylacantha (<i>A.Rich.</i>) <i>Brenan</i>
Acacia robusta	Acacia robusta <i>Burch.</i> subsp. clavigera (<i>E.Mey.</i>) <i>Brenan</i>
Acacia schweinfurthii	Acacia schweinfurthii <i>Brenan & Exell</i> var. schweinfurthii
Acacia senegal	Acacia senegal (<i>L.</i>) <i>Willd.</i> var. leiorthachis <i>Brenan</i>
Acacia seyal	Acacia seyal <i>Delile</i> var. multijuga <i>Baker f.</i>
Acacia sieberana	Acacia sieberiana <i>DC.</i> var. woodii (<i>Burt Davy</i>) <i>Keay & Brenan</i>
Acacia versicolor	? <i>Albizia</i> versicolor
Acalypha alleni	Acalypha allenii <i>Hutch.</i>
Acalypha ambigua	Acalypha ambigua <i>Pax</i>
Acalypha chirindica	Acalypha chirindica <i>S.Moore</i>
Acalypha ciliata	Acalypha ciliata <i>Forssk.</i>
Acalypha ornata	Acalypha ornata <i>A.Rich.</i>
Acalypha segetalis	Acalypha segetalis <i>Müll.Arg.</i>
Acalypha senensis	Acalypha villicaulis <i>Hochst.</i>
Acalypha stuhlmannii	Acalypha polymorpha <i>Müll.Arg.</i>
Acanthaceae sp. (3365)	??
Acanthaceae sp. (6187)	??
Acanthosicyos naudinianus	Acanthosicyos naudinianus (<i>Sond.</i>) <i>C.Jeffrey</i>
Acanthospermum australe	Acanthospermum australe (<i>Loefl.</i>) <i>Kuntze</i>
Acanthospermum hispidum	Acanthospermum hispidum <i>DC.</i>
Acanthus montanus	Acanthus montanus (<i>Nees</i>) <i>T.Anderson</i>
Achyranthes aspera	Achyranthes aspera <i>L.</i>
Achyrospermum serratum	Achyrospermum serratum <i>E.A.Bruce</i>
Acokanthera oppositifolia	Acokanthera oppositifolia (<i>Lam.</i>) <i>Codd</i>
Acridocarpus katangensis	Acridocarpus katangensis <i>De Wild.</i>
Acrocephalus sp. (3223)	??
Acrocephalus callianthus	Haumaniastrum villosum (<i>Benth.</i>) <i>A.J.Paton</i>
Acrocephalus gairdneri	??
Acrocephalus galeopsifolius	Haumaniastrum villosum (<i>Benth.</i>) <i>A.J.Paton</i>
Acrocephalus rupestris	Haumaniastrum rupestre (<i>R.E.Fr.</i>) <i>A.J.Paton</i>
Acrocephalus sericeus	Haumaniastrum sericeum (<i>Briq.</i>) <i>A.J.Paton</i>
Acrotome inflata	Acrotome inflata <i>Benth.</i>
Actinopteris radiata	??

Adansonia digitata	Adansonia digitata <i>L.</i>
Adenia gummifera	Adenia gummifera (<i>Harv.</i>) <i>Harms</i>
Adenia lobata	Adenia lobata (<i>Jacq.</i>) <i>Engl.</i>
Adenia senensis	Adenia digitata (<i>Harv.</i>) <i>Engl.</i>
Adenodolichos baumi	Adenodolichos baumii <i>Harms</i>
Adenodolichos bussei	Adenodolichos bussei <i>Harms</i>
Adenodolichos punctatus	Adenodolichos punctatus (<i>Micheli</i>) <i>Harms</i>
Adenodolichos rhomboideus	Adenodolichos rhomboideus (<i>O.Hoffm.</i>) <i>Harms</i>
Adenodolichos sp. (M 3340)	Adenodolichos ? exillii <i>Torre</i>
Adenostemma perrottetii	Adenostemma perrottetii <i>DC.</i>
Adiantum capillus-veneris	Adiantum capillus-veneris <i>L.</i>
Adiantum incisum	Adiantum incisum <i>Forssk.</i>
Adiantum patens	Adiantum patens <i>Wild</i>
Aeolanthus engleri	Aeollanthus engleri <i>Briq.</i>
Aeolanthus myrianthus	Aeollanthus myrianthus <i>Baker</i>
Aeolanthus ukamensis	Aeollanthus ukamensis <i>Gürke</i>
Aerva lanata	Aerva lanata (<i>L.</i>) <i>Schult.</i>
Aerva leucura	Aerva leucura <i>Moq.</i>
Aeschynomene abyssinica	Aeschynomene abyssinica (<i>A.Rich.</i>) <i>Vatke</i>
Aeschynomene baumii	Aeschynomene baumii <i>Harms</i> var. baumii
Aeschynomene bracteosa	Aeschynomene bracteosa <i>Baker</i> var. bracteosa
Aeschynomene cristata	Aeschynomene cristata <i>Vatke</i> var. cristata
Aeschynomene fulgida	Aeschynomene fulgida <i>Baker</i>
Aeschynomene heurckeana	Aeschynomene heurckeana <i>Baker</i>
Aeschynomene hyassana	Aeschynomene nyassana <i>Taub.</i>
Aeschynomene indica	Aeschynomene indica <i>L.</i>
Aeschynomene mimosifolia	Aeschynomene mimosifolia <i>Vatke</i>
Aeschynomene mimosoides	Aeschynomene ?mimosifolia
Aeschynomene nyassana	Aeschynomene nyassana <i>Taub.</i>
Aeschynomene pararubrofarinacea	Aeschynomene pararubrofarinacea <i>J.Léonard</i>
Aeschynomene pygmaea	Aeschynomene pygmaea <i>Baker</i> subsp. hebecarpa <i>J.Léonard</i>
Aeschynomene rubrofarinacea	Aeschynomene rubrofarinacea (<i>Taub.</i>) <i>F.White</i>
Aeschynomene schimperi	Aeschynomene schimperi <i>A.Rich.</i>
Aeschynomene tenuirama	Aeschynomene tenuirama <i>Baker</i> var. tenuirama
Aeschynomene trigonocarpa	Aeschynomene trigonocarpa <i>Baker</i> f.
Aeschynomene uniflora	Aeschynomene uniflora <i>E.Mey.</i> var. uniflora
Aframomum zambesiaceum	Aframomum zambesiaceum (<i>Baker</i>) <i>K.Schum.</i>
Aframomum angustifolium	Aframomum angustifolium (<i>Sonn.</i>) <i>K.Schum.</i>
Aframomum biauriculatum	Aframomum alboviolaceum (<i>Ridl.</i>) <i>K.Schum.</i>
Afzelia bipindensis	Afzelia peturei <i>De Wild.</i>
Afzelia digitata	? Adansonia digitata
Afzelia quanzensis	Afzelia quanzensis <i>Welw.</i>
Agathathisanthemum bojeri	Agathisanthemum bojeri <i>Klotzsch</i> subsp. angolense (<i>Bremek.</i>) <i>Verdc.</i>
Agauria salicifolia	Agauria salicifolia (<i>Lam.</i>) <i>Oliv.</i>
Agelaea heterophylla	Agelaea pentagyna (<i>Lam.</i>) <i>Baill.</i>
Ageratum conyzoides	Ageratum conyzoides <i>L.</i>
Aidia micrantha	Aidia micrantha (<i>K.Schum.</i>) <i>F.White</i>
Alangium chinense	Alangium chinense (<i>Lour.</i>) <i>Harms</i>
Albizia adianthifolia	Albizia adianthifolia (<i>Schumach.</i>) <i>W.F.Wright</i>
Albizia amara	Albizia amara (<i>Roxb.</i>) <i>Boivin</i> subsp. sericocephala (<i>Benth.</i>) <i>Brenan</i>
Albizia anthelmintica	Albizia anthelmintica (<i>A.Rich.</i>) <i>Brongn.</i>
Albizia antunesiana	Albizia antunesiana <i>Harms</i>
Albizia brevifolia	Albizia brevifolia <i>Schinz</i>
Albizia glaberrima	Albizia glaberrima (<i>Schumach. & Thonn.</i>) <i>Benth.</i> var. glabrescens (<i>Oliv.</i>) <i>Brenan</i>
Albizia harveyi	Albizia harveyi <i>G. Fourn.</i>
Albizia tanganyikensis	Albizia tanganyicensis <i>Baker</i> f.
Albizia versicolor	Albizia versicolor <i>Oliv.</i>
Albuca angolensis	Albuca angolensis <i>Baker</i>
Albuca melleri	Albuca melleri (<i>Baker</i>) <i>Baker</i>
Alchornea hirtella	Alchornea hirtella <i>Benth.</i>
Alchornea occidentalis	Alchornea occidentalis (<i>Müll.Arg.</i>) <i>Pax & K.Hoffm.</i>

Alectra sessiliflora	Alectra sessiliflora (<i>Vahl</i>) <i>Kuntze</i>
Alectra vogeli	Alectra vogelii <i>Benth.</i>
Allophylus africanus	Allophylus africanus <i>P.Beauv.</i>
Allophylus b Buchananii	Allophylus chaunostachys <i>Gilg</i>
Allophylus cataractarum	Allophylus africanus <i>Beauv.</i>
Allophylus chaunostachys	Allophylus chaunostachys <i>Gilg</i>
Allophylus congolanus	Allophylus congolanus <i>Gilg</i>
Allophylus didymadenius	Allophylus didymadenius <i>Radlk.</i>
Allophylus whitei	Allophylus whitei <i>Exell</i>
Aloe buettneri	Aloe bulbicaulis <i>Christian</i>
Aloe chabaudii	Aloe chabaudii <i>Schönland</i> var. mlanjeana <i>Christian</i>
Aloe christianii	Aloe christianii <i>Reynolds</i>
Aloe crassipes	Aloe crassipes <i>Baker</i>
Aloe cryptopoda	Aloe cryptopoda <i>Baker</i>
Aloe greatheadii	Aloe greatheadii <i>Schönland</i>
Aloe milne-redheadii	Aloe milne-redheadii <i>Christian</i>
Aloe mzimbana	Aloe mzimbana <i>Christian</i>
Aloe nutti	Aloe nuttii <i>Baker</i>
Aloe zebrina	Aloe zebrina <i>Baker</i>
Alternanthera sessilis	Alternanthera sessilis (<i>L.</i>) <i>DC.</i>
Alvesia rosmarinifolia	Alvesia rosmarinifolia <i>Welw.</i>
Alysicarpus rugosus	Alysicarpus rugosus (<i>Willd.</i>) <i>DC.</i> subsp. rugosus
Amaranthus graecizans	Amaranthus graecizans <i>L.</i> subsp. graecizans
Amaranthus spinosus	Amaranthus spinosus <i>L.</i>
Amaranthus viridis	Amaranthus viridis <i>L.</i>
Amblygonocarpus andongensis	Amblygonocarpus andongensis (<i>Oliv.</i>) <i>Exell & Torre</i>
Ammannia auriculata	Ammannia auriculata <i>Willd.</i> var. auriculata
Ammannia baccifera	Ammannia baccifera <i>L.</i> subsp. baccifera
Amorphophallus abyssinicus	Amorphophallus abyssinicus (<i>A.Rich.</i>) <i>N.E.Br.</i>
Ampelocissus africana	Ampelocissus africana (<i>Lour.</i>) <i>Merr.</i> var. africana
Ampelocissus obtusata	Ampelocissus obtusata (<i>Baker</i>) <i>Planch.</i>
Ampelopteris prolifera	Ampelopteris prolifera (<i>Retz.</i>) <i>Copel.</i>
Anagallis pumila	Anagallis pumila <i>Sw.</i>
Ancylanthos bainesii	Ancylanthos rubiginosus <i>Desf.</i>
Ancylanthos fulgidus	Ancylanthos rubiginosus <i>Desf.</i>
Ancylanthos rubiginosus	Ancylanthos rubiginosus <i>Desf.</i>
Ancylobotrys amoena	Ancylobotrys amoena <i>Hua</i>
Andropogon arthropogon	Schizachyrium jeffreysii (<i>Hack.</i>) <i>Stapf</i>
Andropogon gayanus	Andropogon gayanus <i>Kunth</i>
Andropogon shirensis	Andropogon schirensis <i>A.Rich.</i>
Andropogon textilis	Andropogon textilis <i>Rendle</i>
Aneilema johnstoni	Aneilema johnstonii <i>K.Schum.</i>
Aneilema pedunculatum	Aneilema pedunculatum <i>C.B.Clarke</i>
Anisopappus canescens	Anisopappus chinensis <i>Hook. & Arn.</i> subsp. chinensis
Anisopappus dentatus	Anisopappus dentatus (<i>DC.</i>) <i>Wild</i> subsp. dentatus
Anisophyllea boehmii	Anisophyllea boehmii <i>Engl.</i>
Anisophyllea quangensis	Anisophyllea quangensis <i>Henriques</i>
Annona senegalensis	Annona senegalensis <i>Pers.</i>
Annona stenophylla subsp. longipetiolata	Annona stenophylla <i>Engl. & Diels</i> subsp. longipetiolata (<i>R.E.Fr.</i>) <i>N.Robson</i>
Annona stenophylla subsp. nana	Annona stenophylla <i>Engl. & Diels</i> subsp. nana (<i>Exell</i>) <i>N.Robson</i>
Ansellia gigantea	Ansellia africana <i>Lindl.</i>
Anthericum subpetiolatum	Chlorophytum subpetiolatum (<i>Baker</i>) <i>Kativu</i>
Anthocleista liebrechtsiana	Anthocleista liebrechtsiana <i>De Wild. & T.Dur.</i>
Anthocleista schweinfurthii	Anthocleista schweinfurthii <i>Gilg</i>
Anthocleista vogeli	Anthocleista vogelii <i>Planch.</i>
Anthospermum (M 3119)	Anthospermum ? welwitschii <i>Hiern</i>
Antidesma venosum	Antidesma venosum <i>Tul.</i>
Antidesma vogelianum	Antidesma vogelianum <i>Müll.Arg.</i>
Anysophyllea boehmii	Anisophylla boehmii <i>Engl.</i>
Aphanostylis manni	Aphanostylis manni (<i>Stapf</i>) <i>Pierre</i>
Apodytes dimidiata	Apodytes dimidiata <i>E.Mey.</i> var. dimidiata

Aporrhiza nitida	Aporrhiza nitida <i>Milne-Redh.</i>
Aptosimum decumbens	Aptosimum decumbens <i>Schinz</i>
Argemone mexicana	Argemone mexicana <i>L.</i>
Argyrolobium tomentosum	Argyrolobium tomentosum (<i>Andrews</i>) <i>Druce</i>
Aristida hordeacea	Aristida hordeacea <i>Kunth</i>
Aristida meridionalis	Aristida meridionalis (<i>Stapf</i>) <i>Henrard</i>
Aristida pilgeri	Aristida pilgeri <i>Henrard</i>
Aristida rhiniochloa	Aristida rhiniochloa <i>Hochst.</i>
Aristida scabrivalvis	Aristida ??
Aristida stipitata	Aristida stipitata <i>Hack.</i>
Aristolochia petersiana	Aristolochia albida <i>Duch.</i>
Artabotrys brachypetalus	Artabotrys brachypetalus <i>Benth.</i>
Artabotrys monteiroae	Artabotrys monteiroae <i>Oliv.</i>
Arthraxon lancifolius	??
Arthropteris orientalis	??
Arundinella nepalensis	Arundinella nepalensis <i>Trin.</i>
Ascocarydion mirabile	Plecatranthus mirabilis (<i>Briq.</i>) <i>Launert</i>
Ascolepis protea	Ascolepis protea <i>Welw.</i>
Asparagus africanus	Asparagus africanus <i>Lam.</i>
Asparagus asiaticus	Asparagus africanus <i>Lam.</i>
Asparagus aspergillus	Asparagus aspergillus <i>Jessop</i>
Asparagus longicladus	Asparagus longicladus <i>N.E.Br.</i>
Asparagus mosa	??
Asparagus plumosus	Asparagus plumosus <i>Baker</i>
Asparagus racemosus	Asparagus racemosus <i>Willd.</i>
Asparagus setaceus	Asparagus setaceus (<i>Kunth</i>) <i>Jessop</i>
Asparagus willdemanni	Asparagus schroederi <i>Engl.</i>
Aspilia kotschii	Aspilia kotschyi (<i>Hochst.</i>) <i>Oliv.</i> var. ??
Aspilia mossambicensis	Aspilia mossambicensis (<i>Oliv.</i>) <i>Wild</i>
Aspilia pluriseta	Aspilia pluriseta <i>Schweinf.</i> subsp. pluriseta
Asplenium erectum	Asplenium ?erectum <i>Willd.</i>
Asplenium inaequilaterale	??
Asplenium protensum	Asplenium protensum <i>Schrad.</i>
Astripomoea malvacea	Astripomoea malvacea (<i>Klotzsch</i>) <i>A.Meeuse</i>
Asystasia gangetica	Asystasia gangetica (<i>L.</i>) <i>T.Anderson</i> subsp. micrantha (<i>Nees</i>) <i>Ensermu</i>
Aulacocalyx jasminiflora	Aulacocalyx jasminiflora <i>Hook.f.</i>
Azanza garckeana	Azanza garckeana (<i>F.Hoffm.</i>) <i>Exell & Hillc.</i>
Azolla pinnata	Azolla pinnata <i>R.Br.</i> subsp. africana (<i>Desv.</i>) <i>R.M.K.Saunders & K.Fowler</i>
Baikiaea pluriyuga	Baikiaea pluriyuga <i>Harms</i>
Baissea wulfhorsti	Baissea wulfhorstii <i>Schinz</i>
Balanites aegyptiaca	Balanites aegyptiaca (<i>L.</i>) <i>Delile</i> var. aegyptiaca
Baphia bequaerti	Baphia bequaertii <i>De Wild.</i>
Baphia capparidifolia	Baphia capparidifolia <i>Baker</i> subsp. bangweolensis (<i>R.E.Fr.</i>) <i>Brummitt</i>
Baphia massaiensis subsp. obovata	Baphia massaiensis <i>Taub.</i> subsp. obovata (<i>Schinz</i>) <i>Brummitt</i>
Baphia whitei	Baphia whitei <i>Brummitt</i>
Barleria (3222)	??
Barleria (3298)	??
Barleria capitata	Barleria capitata <i>Klotzsch</i>
Barleria crassa	Barleria crassa <i>C.B. Clarke</i>
Barleria descampai	Barleria descampsii <i>Lindau</i>
Barleria kirkii	Barleria kirkii <i>T.Anderson</i>
Barleria mackenio	Barleria mackenii <i>Hook.f.</i>
Barleria matopensis	Barleria matopensis <i>S.Moore</i>
Barleria nyassana	Barleria nyasensis <i>C.B. Clarke</i> ??
Barleria prionitis	Barleria ameliae <i>A.Meeuse</i>
Barleria spinulosa	Barleria spinulosa <i>Klotzsch</i>
Barleria subglobosa	Barleria purpureotincta <i>I.Darbysh.</i>
Bauhinia galpinii	Bauhinia galpinii <i>N.E.Br.</i>
Bauhinia macrantha	Bauhinia petersiana <i>Bolle</i> subsp. macrantha (<i>Oliv.</i>) <i>Brummitt & J.H.Ross</i>
Bauhinia mendoncae	Bauhinia mendoncae <i>Torre & Hillc.</i>
Bauhinia petersiana	Bauhinia petersiana <i>Bolle</i> subsp. petersiana

Bauhinia tomentosa	Bauhinia tomentosa <i>L.</i>
Bauhinia urbaniana	Bauhinia urbaniana <i>Schinz</i>
Becium angustifolium	Ocimum angustifolium <i>Benth.</i>
Becium homblei	Ocimum centrali-africanum <i>R.E.Fr.</i>
Becium obovatum	Ocimum obovatum <i>Benth.</i> subsp. obovatum
Beilschmiedia gilberti	Beilschmiedia gilbertii <i>Robyns & R.Wilczek</i> var. glabra <i>Robyns & R.Wilczek</i>
Beilschmiedia ugandensis	Beilschmiedia ugandensis <i>Rendle</i> var. katangensis <i>Robyns & R.Wilczek</i>
Berchemia discolor	Berchemia discolor (<i>Klotzsch</i>) <i>Hemsl.</i>
Berkheya sp. (3151)	??
Bersama abyssinica	Bersama abyssinica <i>Fresen.</i> subsp. abyssinica
Bertiera angusiana	Bertiera angusiana <i>N.Hallé</i>
Bidens cylindracea	Bidens cylindrica <i>Sherff</i>
Bidens oligoflora	Bidens oligoflora (<i>Klatt</i>) <i>Wild</i>
Bidens pilosa	Bidens pilosa <i>L.</i>
Bidens schimperi	Bidens schimperi <i>Sch.Bip.</i>
Biophytum sensitivum	Biophytum sensitivum (<i>L.</i>) <i>DC.</i>
Bistella dichotoma	Vahlia dichotoma (<i>Murray</i>) <i>Kuntze</i>
Blainvillea latifolia	??
Blechnum tabulare	Blechnum tabulare (<i>Thunb.</i>) <i>Kuhn</i>
Blepharis buchneri	Blepharis buchneri <i>S.Moore</i>
Blepharis caloneura	Blepharis tenuiramea <i>S.Moore</i>
Blepharis leendertziae	Blepharis leendertziae <i>Oberm.</i>
Blepharis maderaspatensis	Blepharis maderaspatensis (<i>L.</i>) <i>Roth</i>
Blepharis pungens	Blepharis pungens <i>Klotzsch</i>
Blumea alata	Laggera crispata (<i>Vahl</i>) <i>Hepper & J.R.I.Wood</i>
Blumea aurita	Pseudoconyza viscosa (<i>Mill.</i>) <i>D'Arcy</i>
Blumea brevipes	Laggera brevipes <i>Oliv. & Hiern</i>
Blumea gariepina	Blumea decurrens (<i>Vahl</i>) <i>Merxm.</i>
Blumea mollis	Blumea axillaris (<i>Lam.</i>) <i>DC.</i>
Boerhavia diffusa	Boerhavia diffusa <i>L.</i>
Boerhavia erecta	Boerhavia erecta <i>L.</i>
Bolusanthus speciosus	Bolusanthus speciosus (<i>Bolus</i>) <i>Harms</i>
Bonamia spectabilis	Bonamia spectabilis (<i>Choisy</i>) <i>Hallier f.</i>
Borassus aethiopum	Borassus aethiopum <i>Mart.</i>
Borreria scabra	Spermacoce senensis (<i>Klotzsch</i>) <i>Hiern</i>
Borreria subvulgata	Spermacoce subvulgata (<i>K.Schum.</i>) <i>Garcia</i> var. subvulgata
Boscia albitrunca	Boscia albitrunca (<i>Burch.</i>) <i>Gilg-Ben.</i>
Boscia angustifolia	Boscia angustifolia <i>A.Rich.</i> var. corymbosa (<i>Gilg</i>) <i>DeWolf</i>
Boscia cauliflora	Boscia cauliflora <i>Wild</i>
Boscia matabelensis	Boscia matabelensis <i>Pestal</i>
Boscia mossambicensis	Boscia mossambicensis <i>Klotzsch</i>
Boscia salicifolia	Boscia salicifolia <i>Oliv.</i>
Bothriochloa glabra	Bothriochloa bladhii (<i>Retz.</i>) <i>S.T.Blake</i>
Brachiaria brizantha	Brachiaria brizantha (<i>A.Rich.</i>) <i>Stapf</i>
Brachiaria nigropedata	Brachiaria nigropedata (<i>Ficalho & Hiern</i>) <i>Stapf</i>
Brachiaria serrata	Brachiaria serrata (<i>Thunb.</i>) <i>Stapf</i>
Brachystegia bakeriana	Brachystegia bakeriana <i>Hutch. & Burt Davy</i>
Brachystegia boehmii	Brachystegia boehmii <i>Taub.</i>
Brachystegia floribunda	Brachystegia floribunda <i>Benth.</i>
Brachystegia glaberrima	Brachystegia longifolia <i>Benth.</i>
Brachystegia glaucescens	Brachystegia tamarindoides <i>Benth.</i> subsp. microphylla (<i>Harms</i>) <i>Chikuni</i>
Brachystegia longifolia	Brachystegia longifolia <i>Benth.</i>
Brachystegia manga	Brachystegia manga <i>De Wild.</i>
Brachystegia microphylla	Brachystegia tamarindoides <i>Benth.</i> subsp. microphylla (<i>Harms</i>) <i>Chikuni</i>
Brachystegia puberula	Brachystegia puberula <i>Hutch. & Burt Davy</i>
Brachystegia spiciformis	Brachystegia spiciformis <i>Benth.</i>
Brachystegia utilis	Brachystegia utilis <i>Hutch. & Burt Davy</i>
Brachystegia wangermeeana	Brachystegia wangermeeana <i>De Wild.</i>
Brackenridgea arenaria	Brackenridgea arenaria (<i>De Wild. & Dur.</i>) <i>N.Robson</i>
Bridelia cathartica	Bridelia cathartica <i>G.Bertol.</i> subsp. melanthesoides (<i>Baill.</i>) <i>J.Léonard</i>
Bridelia duvigneaudi	Bridelia duvigneaudii <i>J.Léonard</i>

Bridelia ferruginea	Bridelia ferruginea <i>Benth.</i>
Bridelia micrantha	Bridelia micrantha (<i>Hochst.</i>) <i>Baill.</i>
Brillantasia madagascariensis	Brillantasia madagascariensis <i>Lindau</i>
Bromuniola gossweileri	Bromuniola gossweileri <i>Stapf & Hubb.</i>
Buchnera henriquesii	Buchnera henriquesii <i>Engl.</i>
Buchnera hispida	Buchnera hispida <i>D. Don</i>
Burkea africana	Burkea africana <i>Hook.</i>
Byrsocarpus orientalis	Rourea orientalis <i>Baill.</i>
Caesalpinia welwitschiana	Mezoneuron welwitschianum <i>Oliv.</i>
Calamus dertus	Calamus deeratus <i>G. Mann. & H. Wendl.</i>
Calanthe corymbosa	Calanthe sylvatica (<i>Thouars.</i>) <i>Lindl.</i>
Caloncoba suffruticosa	Oncoba suffruticosa (<i>Milne-Redh.</i>) <i>Hul & Breteler</i>
Calostephane divaricata	Calostephane divaricata <i>Benth.</i>
Canavalia virosa	Canavalia africana (<i>Sw.</i>) <i>DC.</i>
Canscora diffusa	Canscora diffusa (<i>Vahl</i>) <i>Roem. & Schult.</i>
Canscora kirkii	Canscora kirkii <i>N.E.Br.</i>
Canthium anomocarpum	Psydrax kraussioides (<i>Hiern</i>) <i>Bridson</i>
Canthium burtii	Canthium burtii <i>Bullock</i> subsp. <i>glabrum</i> <i>Bridson</i>
Canthium captum	? <i>Psydrax mutimushii</i> <i>Bridson</i>
Canthium crassum	<i>Mutidentia crassa</i> <i>Bridson & Verdc.</i>
Canthium frangula	Canthium glaucum <i>Hiern</i> subsp. <i>frangula</i> (<i>S. Moore</i>) <i>Bridson</i>
Canthium glabriflorum	<i>Psydrax subcordata</i> (<i>DC.</i>) <i>Bridson</i> var. <i>subcordata</i>
Canthium gueinzei	<i>Keetia gueinzii</i> (<i>Sond.</i>) <i>Bridson</i>
Canthium henriquesianum	<i>Psydrax kraussioides</i> (<i>Hiern</i>) <i>Bridson</i>
Canthium huillense	<i>Psydrax livida</i> (<i>Hiern</i>) <i>Bridson</i>
Canthium lactescens	<i>Canthium lactescens</i> <i>Hiern</i>
Canthium martini	<i>Psydrax martinii</i> (<i>Dunkley</i>) <i>Bridson</i>
Canthium schimperanum	<i>Psydrax schimperiana</i> (<i>A. Rich.</i>) <i>Bridson</i>
Canthium venosum	<i>Keetia venosa</i> (<i>Oliv.</i>) <i>Bridson</i>
Canthium vulgare	<i>Psydrax parviflora</i> (<i>Afzel.</i>) <i>Bridson</i> subsp. <i>parviflora</i>
Canthium zanzibaricum	<i>Keetia zanzibarica</i> (<i>Klotzsch</i>) <i>Bridson</i> subsp. <i>cornelioides</i> (<i>De Wild.</i>) <i>Bridson</i>
Capparis fascicularis	<i>Capparis fascicularis</i> <i>DC.</i>
Capparis tomentosa	<i>Capparis tomentosa</i> <i>Lam.</i>
Cardiospermum halicacabum	<i>Cardiospermum halicacabum</i> <i>L.</i>
Carissa edulis	<i>Carissa edulis</i> (<i>Forssk.</i>) <i>Vahl.</i>
Cassia abbreviata	<i>Cassia abbreviata</i> <i>Oliv.</i> subsp. <i>abbreviata</i>
Cassia absus	<i>Chamaecrista absus</i> (<i>L.</i>) <i>Irwin & Barneby</i>
Cassia didymobotrya	<i>Senna didymobotrya</i> (<i>Fresen.</i>) <i>Irwin & Barneby</i>
Cassia falcinella	<i>Chamaecrista falcinella</i> (<i>Oliv.</i>) <i>Lock</i>
Cassia kirkii	<i>Chamaecrista absus</i> (<i>Oliv.</i>) <i>Standley</i>
Cassia meeli	<i>Cassia meelii</i> <i>Steyaert</i>
Cassia mimosoides	<i>Chamaecrista mimosoides</i> (<i>L.</i>) <i>Green</i>
Cassia obtusifolia	<i>Senna obtusifolia</i> (<i>L.</i>) <i>Irwin & Barneby</i>
Cassia occidentalis	<i>Senna occidentalis</i> (<i>L.</i>) <i>Link</i>
Cassia quarrei	<i>Chamaecrista stricta</i> <i>E. Mey.</i>
Cassia singueana	<i>Senna singueana</i> (<i>Delile</i>) <i>Lock</i>
Cassine aethiopica	<i>Mystroxyton aethiopicum</i> (<i>Thunb.</i>) <i>Loes.</i>
Cassine buchanani	<i>Elaeodendron buchananii</i> (<i>Loes.</i>) <i>Loes.</i>
Cassine transvaalensis	<i>Elaeodendron transvaalense</i> (<i>Burt Davy</i>) <i>R.H. Archer</i>
Cassipourea congoensis	<i>Cassipourea malosana</i> (<i>Baker</i>) <i>Alston</i>
Cassipourea gummiflua	<i>Cassipourea gummiflua</i> <i>Tul.</i> var. <i>ugandensis</i> (<i>Stapf</i>) <i>J. Lewis</i>
Cassipourea sp.	??
Cassytha filiformis	<i>Cassytha filiformis</i> <i>L.</i>
Cayratia gracilis	<i>Cayratia gracilis</i> (<i>Guill. & Perr.</i>) <i>Suess.</i>
Celosia scabra	<i>Hermbstaedtia scabra</i> <i>Schinz</i>
Celosia trigyna	<i>Celosia trigyna</i> <i>L.</i>
Celosia welwitschi	<i>Hermbstaedtia angolensis</i> <i>C.B. Clarke</i>
Centella asiatica	<i>Centella asiatica</i> (<i>L.</i>) <i>Urb.</i>
Centemopsis gracilentia	<i>Centemopsis gracilentia</i> (<i>Hiern</i>) <i>Schinz</i>
Cephaelis peduncularis	<i>Psychotria peduncularis</i> (<i>Salisb.</i>) <i>Steyerm.</i>

Ceratotheca sesamoides	Ceratotheca sesamoides <i>Endl.</i>
Ceratotheca triloba	Ceratotheca triloba (<i>Bernh.</i>) <i>Hook.f.</i>
Ceropegia abyssinica	Ceropegia abyssinica <i>Decne.</i>
Ceropegia multiflora	Ceropegia multiflora <i>Baker</i> subsp. multiflora
Ceropegia stenantha	Ceropegia stenantha <i>K.Schum.</i>
Cestrum laevigatum	Cestrum laevigatum <i>Schltld.</i>
Chaetacme aristata	Chaetacme aristata <i>Planch.</i>
Chaetocarpus africanus	Chaetocarpus africanus <i>Pax</i>
Chamaeclitandra henriquesiana	Chamaeclitandra henriquesiana (<i>Hallier f.</i>) <i>Pichon</i>
Chassalia cristata	Chassalia cristata (<i>Hiern</i>) <i>Bremek.</i>
Cheilanthes farinosa	Aleuritopteris farinosa (<i>Forssk.</i>) <i>Fée</i>
Chironia palustris	Chironia palustris <i>Burch.</i> subsp. transvaalensis (<i>Gilg</i>) <i>I.Verd.</i>
Chloris gayana	Chloris gayana <i>Kunth</i>
Chloris pycnothrix	Chloris pycnothrix <i>Trin.</i>
Chloris virgata	Chloris virgata <i>Sw.</i>
Chlorophytum brachystachyum	Chlorophytum brachystachyum <i>Baker</i>
Chlorophytum glabriflorum	Chlorophytum nyasae (<i>Rendle</i>) <i>Kativu</i>
Chrysanthellum americanum	Chrysanthellum americanum <i>Rich.</i>
Chrysobalanus atacerensis	Chrysobalanus icaco <i>L.</i> subsp. atacorensis (<i>A.Chev.</i>) <i>F.White</i>
Chrysophyllum bangweolense	Chrysophyllum bangweolense <i>R.E.Fr.</i>
Chrysophyllum magalismontanum	Englerophytum magalismontanum (<i>Sond.</i>) <i>T.D.Penn.</i>
Chrysophyllum welwitschii	Chrysophyllum ? welwitschii <i>Engl.</i>
Chrysopogon montanus	Chrysopogon serrulatus <i>Trin.</i>
Cissampelos mucronata	Cissampelos mucronata <i>A.Rich.</i>
Cissampelos owariensis	Cissampelos owariensis <i>DC.</i>
Cissus cornifolia	Cissus cornifolia (<i>Baker</i>) <i>Planch.</i>
Cissus crusei	Cissus crusei <i>Wild & R.B.Drumm.</i>
Cissus guerkeana	Cissus guerkeana (<i>Büttn.</i>) <i>Dur. & Schinz</i>
Cissus integrifolia	Cissus integrifolia (<i>Baker</i>) <i>Planch.</i>
Cissus petiolata	Cissus petiolata <i>Hook.f.</i>
Cissus quadrangularis	Cissus quadrangularis <i>L.</i>
Cissus schmitzi	Cissus schmitzii <i>Dewit</i>
Citropsis daweanana	Citropsis daweanana <i>Swingle</i>
Clausena anisata	Clausena anisata (<i>Willd.</i>) <i>Benth.</i>
Cleistanthus milleri	Cleistanthus polystachyus <i>Planch.</i> subsp. milleri (<i>Dunkley</i>) <i>Radcl.-Sm.</i>
Clematis brachiata	Clematis brachiata <i>Thunb.</i>
Clematis welwitschii	Clematis welwitschii <i>Kuntze</i>
Clematopsis homblei	Clematopsis homblei (<i>De Wild</i>) <i>Staner & J.Léonard</i>
Clematopsis scabiesifolia	Clematis villosa <i>DC.</i> subsp. villosa
Cleome gynandra	Cleome gynandra <i>L.</i>
Cleome hirta	Cleome hirta (<i>Klotzsch</i>) <i>Oliv.</i>
Cleome monophylla	Cleome monophylla <i>L.</i>
Clerodendrum buchneri	Clerodendrum buchneri <i>Gürke</i>
Clerodendrum capitatum	Clerodendrum capitatum (<i>Willd.</i>) <i>Schum. & Thonn.</i>
Clerodendrum formicarum	Clerodendrum formicarum <i>Gürke</i>
Clerodendrum glabrum	Clerodendrum eriophyllum <i>Gürke</i>
Clerodendrum milne-redheadii	Clerodendrum milne-redheadii <i>Moldenke</i>
Clerodendrum myricoides	Rothea myricoides (<i>Hochst.</i>) <i>D.A.Steane & Mabb.</i> subsp. myricoides
Clerodendrum pusillum	Clerodendrum pusillum <i>Gürke</i>
Clerodendrum quadrangulatum	Clerodendrum quadrangulatum <i>Thomas</i>
Clerodendrum tanganyikense	Clerodendrum tanganyikense <i>Baker</i>
Clerodendrum ternatum	Clerodendrum ternatum <i>Schinz</i>
Clerodendrum thyrsoideum	Clerodendrum mannii <i>Baker</i>
Clerodendrum triplinerve	Clerodendrum formicarum <i>Gürke</i>
Clerodendrum uncinatum	Kalaharia uncinata (<i>Schinz</i>) <i>Moldenke</i>
Clerodendrum violaceum	Rothea violacea (<i>Gürke</i>) <i>Verdc.</i>
Clerodendrum wildii	Rothea wildii (<i>Moldenke</i>) <i>R.Fern.</i>
Cliffortia nitidula	Cliffortia nitidula (<i>Engl.</i>) <i>R.E. & T.C.E.Fr.</i>
Clitoria kaessneri	Clitoria kaessneri <i>Harms</i>
Clutia abyssinica	Clutia abyssinica <i>Jaub. & Spach</i> var. abyssinica
Cocculus hirsutus	Cocculus hirsutus (<i>L.</i>) <i>Diels</i>
Coffea eketensis	Argocoffeopsis eketensis (<i>Wermham</i>) <i>Robbr.</i>

Coleus sp. (3409)	??
Coleus sp. (3485)	??
Coleus drymophilus	<i>Coleus drymophilus G.Taylor</i>
Coleus esculentus	<i>Plectranthus esculentus (N.E.Br.) G.Taylor</i>
Coleus kapatensis	<i>Plectranthus kapatensis (R.E.Fr.) J.K.Morton</i>
Coleus scaposus	<i>Plectranthus buchananii Baker</i>
Coleus shirensis	<i>Solenostemon autrani (Briq.) J.K.Morton</i>
Coleus vagatus	<i>Plectranthus tetensis (Baker) Agnew</i>
Colophospermum mopane	<i>Colophospermum mopane (Benth.) J.Léonard</i>
Combretum acutifolium	<i>Combretum acutifolium Exell</i>
Combretum apiculatum	<i>Combretum apiculatum Sond. subsp. apiculatum</i>
Combretum celastroides	<i>Combretum celastroides M.A.Lawson subsp. celastroides</i>
Combretum collinum	<i>Combretum collinum Fresen.</i>
Combretum egleri	<i>Combretum schumannii Engl.</i>
Combretum elaeagnoides	<i>Combretum elaeagnoides Klotzsch</i>
Combretum engleri	<i>Combretum schumannii Engl.</i>
Combretum fragrans	<i>Combretum adenogonium A.Rich.</i>
Combretum ghasalense	<i>Combretum adenogonium A.Rich.</i>
Combretum gossweileri	<i>Combretum gossweileri Exell</i>
Combretum hereroense	<i>Combretum hereroense Schinz</i>
Combretum imberbe	<i>Combretum imberbe Wawra</i>
Combretum mechowianum	<i>Combretum collinum Fresen.</i>
Combretum microphyllum	<i>Combretum microphyllum Klotzsch</i>
Combretum molle	<i>Combretum molle G.Don</i>
Combretum mossambicense	<i>Combretum mossambicense (Klotzsch) Engl.</i>
Combretum paniculatum	<i>Combretum paniculatum Vent.</i>
Combretum platypetalum	<i>Combretum sericeum M.A.Lawson</i>
Combretum psidioides	<i>Combretum psidioides Welw. subsp. psidioides</i>
Combretum zeyheri	<i>Combretum zeyheri Sond.</i>
Commelina africana	<i>Commelina africana L.</i>
Commelina aspera	<i>Commelina aspera Benth.</i>
Commelina buchananii	<i>Commelina buchananii C.B.Clarke</i>
Commelina forskalei	<i>Commelina forskalei Vahl</i>
Commelina pycnospatha	<i>Commelina pycnospatha Brenan</i>
Commelina subulata	<i>Commelina subulata Roth</i>
Commelina zambesica	<i>Commelina zambesica C.B.Clarke</i>
Commicarpus plantagineus	<i>Commicarpus plantagineus (Cav.) Standl.</i>
Commiphora africana	<i>Commiphora africana (A.Rich.) Engl.</i>
Commiphora angolensis	<i>Commiphora angolensis Engl.</i>
Commiphora edulis	<i>Commiphora edulis (Klotzsch) Engl.</i>
Commiphora karibensis	<i>Commiphora karibensis Wild.</i>
Commiphora madagascariensis	<i>Commiphora madagascariensis Jacq.</i>
Commiphora marlothii	<i>Commiphora marlothii Engl.</i>
Commiphora mollis	<i>Commiphora mollis (Oliv.) Engl.</i>
Commiphora mossambicensis	<i>Commiphora mossambicensis (Oliv.) Engl.</i>
Commiphora pteleifolia	<i>Commiphora pteleifolia Engl.</i>
Commiphora pyracanthoides	<i>Commiphora glandulosa Schinz</i>
Commiphora ugogensis	<i>Commiphora ugogensis Engl.</i>
Conyza aegyptiaca	<i>Conyza aegyptiaca (L.) Aiton</i>
Conyza persicifolia	<i>Conyza persicifolia (Benth.) Oliv. & Hiern</i>
Conyza welwitschii	<i>Conyza welwitschii (S.Moore) Wild</i>
Copaifera baumiana	<i>Copaifera baumiana Harms</i>
Corallocarpus sp. (DF 6122)	<i>Corallocarpus wildii C.Jeffrey</i>
Corchorus asplenifolius	<i>Corchorus asplenifolius Burch.</i>
Corchorus olitorius	<i>Corchorus olitorius L.</i>
Corchorus tridens	<i>Corchorus tridens L.</i>
Corchorus trilocularis	<i>Corchorus trilocularis L.</i>
Cordia goetzei	<i>Cordia goetzei Gürke</i>
Cordia sp.	<i>Cordia ? mukuensis Taton</i>
Cordia ovalis	<i>Cordia monoica Roxb.</i>
Cordia pilosissima	<i>Cordia pilosissima Baker</i>
Corrigiola paniculata	<i>Corrigiola paniculata Peter</i>

Crabbea velutina	Crabbea velutina <i>S.Moore</i>
Craibia affinis	Craibia affinis (<i>De Wild.</i>) <i>De Wild.</i>
Craspedorachis uniflora	Leptochloa uniflora <i>A.Rich.</i>
Crassocephalum crepidioides	Crassocephalum crepidioides (<i>Benth.</i>) <i>S.Moore</i>
Crassocephalum picridifolium	Crassocephalum × picridifolium (<i>DC.</i>) <i>S.Moore</i>
Crassocephalum rubens	Crassocephalum rubens (<i>Jacq.</i>) <i>S.Moore</i>
Crassula browniana	Crassula expansa <i>Dryand.</i> subsp. fragilis (<i>Baker</i>) <i>Toelken</i>
Craterispermum laurinum	Craterispermum schweinfurthii <i>Hiern</i>
Craterosiphon quarrei	Craterosiphon quarrei <i>Staner</i>
Craterosiphon scandens	Craterosiphon scandens <i>Engl. & Gilg</i>
Cremaspora triflora	Cremaspora triflora (<i>Thonn.</i>) <i>K.Schum.</i> subsp. triflora
Crinum harmsii	Crinum harmsii <i>Baker</i>
Crinum macowanii	Crinum macowanii <i>Baker</i>
Crinum pedicellatum	Crinum macowanii <i>Baker</i>
Crocoxydon transvaalense	Elaeodendron transvaalense (<i>Burt Davy</i>) <i>R.H.Archer</i>
Crossandra spinescens	Crossandra spinescens <i>Dunkley</i>
Crossopteryx febrifuga	Crossopteryx febrifuga (<i>G.Don</i>) <i>Benth.</i>
Crotalaria amoena	Crotalaria amoena <i>Baker</i>
Crotalaria caudata	Crotalaria caudata <i>Baker</i>
Crotalaria cleomifolia	Crotalaria cleomifolia <i>Baker</i>
Crotalaria cylindrocarpa	Crotalaria cylindrocarpa <i>DC.</i>
Crotalaria damaraensis	Crotalaria damaraensis <i>Engl.</i>
Crotalaria densicephala	Crotalaria densicephala <i>Baker</i>
Crotalaria flavicarinata	Crotalaria flavicarinata <i>Baker f.</i>
Crotalaria florida	Crotalaria florida <i>Baker</i>
Crotalaria gorensis	Crotalaria gorensis <i>Guill. & Perr.</i>
Crotalaria kapiensis	Crotalaria kapiensis <i>De Wild.</i>
Crotalaria laburnifolia	Crotalaria laburnifolia <i>L.</i> subsp. laburnifolia
Crotalaria lachnophora	Crotalaria lachnophora <i>A.Rich.</i>
Crotalaria ochroleuca	Crotalaria ochroleuca <i>G.Don</i>
Crotalaria orthoclada	Crotalaria orthoclada <i>Baker</i>
Crotalaria pallidicaulis	Crotalaria pallidicaulis <i>Harms</i>
Crotalaria pisicarpa	Crotalaria pisicarpa <i>Baker</i>
Crotalaria platysepala	Crotalaria platysepala <i>Harv.</i>
Crotalaria podocarpa	Crotalaria podocarpa <i>DC.</i>
Crotalaria recta	Crotalaria recta <i>A.Rich.</i>
Crotalaria senegalensis	Crotalaria senegalensis (<i>Pers.</i>) <i>DC.</i>
Crotalaria sphaerocarpa	Crotalaria sphaerocarpa <i>DC.</i> subsp. sphaerocarpa
Crotalaria subcapitata	Crotalaria subcapitata <i>De Wild.</i> var. subcapitata
Crotalaria variegata	Crotalaria variegata <i>Baker</i>
Crotalaria virgulata	Crotalaria virgulata <i>Klotzsch</i> subsp. virgulata
Croton gratissimus	Croton gratissimus <i>Burch.</i> var. gratissimus
Croton leuconeurus	Croton leuconeurus <i>Pax</i> subsp. leuconeurus
Croton megalobotrys	Croton megalobotrys <i>Müll.Arg.</i>
Croton menyhartii	Croton menyhartii <i>Pax</i>
Croton polytrichus	Croton polytrichus <i>Pax</i> subsp. brachystachyus <i>Radcl.-Sm.</i>
Croton pseudopulchellus	Croton pseudopulchellus <i>Pax</i>
Croton scheffleri	Croton scheffleri <i>Pax</i>
Cryptosepalum exfoliatum	Cryptosepalum exfoliatum <i>De Wild.</i>
subsp. pseudotaxus	subsp. pseudotaxus (<i>Baker f.</i>) <i>P.A.Duvign. & Brenan</i>
Cryptosepalum maraviense	Cryptosepalum maraviense <i>Oliv.</i>
Ctenitis cirrhosa	Ctenitis cirrhosa (<i>Schumach.</i>) <i>Ching</i>
Cucumis hirsutus	Cucumis hirsutus <i>Sond.</i>
Cucumis metuliferus	Cucumis metuliferus <i>Naudin</i>
Culcasia scandens	Culcasia scandens (<i>Willd.</i>) <i>P.Beauv.</i>
Cussonia corbusieri	Cussonia corbusieri <i>De Wild.</i>
Cussonia kirkii	Cussonia arborea <i>A.Rich.</i>
Cyanotis speciosa	Cyanotis speciosa (<i>L.f.</i>) <i>Hassk.</i>
Cyathea dregei	Cyathea dregei <i>Kunze</i>
Cyathula prostrata	Cyathula prostrata (<i>L.</i>) <i>Blume</i> var. prostrata
Cyclantheropsis parviflora	Cyclantheropsis parviflora (<i>Cogn.</i>) <i>Harms</i>
Cymbopogon excavatus	Cymbopogon caesius (<i>Hook. & Arn.</i>) <i>Stapf</i> subsp. caesius

<i>Cymbopogon validus</i>	<i>Cymbopogon nardus</i> (L.) Rendle
<i>Cynanchum schistoglossum</i>	<i>Cynanchum schistoglossum</i> Schltr.
<i>Cynanchum tetrapterum</i>	<i>Cynanchum gerrardii</i> (Harv.) Liede
<i>Cynodon dactylon</i>	<i>Cynodon dactylon</i> (L.) Pers.
<i>Cyperus alternifolius</i>	<i>Cyperus alternifolius</i> L. subsp. <i>flabelliformis</i> Kük.
<i>Cyperus amabilis</i>	<i>Cyperus amabilis</i> Vahl
<i>Cyperus aristatus</i>	<i>Cyperus hamulosus</i> M.Bieb.
<i>Cyperus compactus</i>	<i>Cyperus obtusiflorus</i> Vahl
<i>Cyperus denudatus</i>	<i>Cyperus denudatus</i> L.f.
<i>Cyperus digitatus</i>	<i>Cyperus digitatus</i> Roxb. subsp. <i>auricomus</i> (Spreng.) Kük.
<i>Cyperus distans</i>	<i>Cyperus distans</i> L.f.
<i>Cyperus esculentus</i>	<i>Cyperus esculentus</i> L.
<i>Cyperus haspan</i>	<i>Cyperus haspan</i> L.
<i>Cyperus imbricatus</i>	<i>Cyperus imbricatus</i> Retz.
<i>Cyperus margaritaceus</i>	<i>Cyperus margaritaceus</i> Vahl
<i>Cyperus papyrus</i>	<i>Cyperus papyrus</i> L.
<i>Cyperus sphacelatus</i>	<i>Cyperus sphacelatus</i> Rottb.
<i>Cyperus sylvestris</i>	<i>Cyperus laxus</i> Lam. subsp. <i>buchholzii</i> (Boeck.) Lye
<i>Cyperus zollingeri</i>	<i>Cyperus zollingeri</i> Steud.
<i>Cyphocarpa angustifolia</i>	<i>Kyphocarpa angustifolia</i> (Moq.) Lopr.
<i>Cyphostemma bororensis</i>	<i>Cyphostemma bororensis</i> (Klotzsch) Wild & R.B.Drumm.
<i>Cyphostemma cirrhosum</i>	<i>Cyphostemma cirrhosum</i> (Thunb.) Wild & R.B.Drumm.
<i>Cyphostemma congestum</i>	<i>Cyphostemma congestum</i> (Baker) Wild & R.B.Drumm.
<i>Cyphostemma crotalarioides</i>	<i>Cyphostemma crotalarioides</i> (Planch.) Wild & R.B.Drumm.
<i>Cyphostemma lynesii</i>	<i>Cyphostemma lynesii</i> (Dewit) Wild & R.B.Drumm.
<i>Cyphostemma</i> sp. (6372)	??
<i>Dacryodes edulis</i>	<i>Dacryodes edulis</i> (G.Don) H.J.Lam.
<i>Dactyloctenium giganteum</i>	<i>Dactyloctenium giganteum</i> Fisher & Schweick.
<i>Dalbergia arbutifolia</i>	<i>Dalbergia arbutifolia</i> Baker subsp. <i>arbutifolia</i>
<i>Dalbergia boehmii</i>	<i>Dalbergia boehmii</i> Taub. subsp. <i>boehmii</i>
<i>Dalbergia fischeri</i>	<i>Dalbergia fischeri</i> Taub.
<i>Dalbergia malagensis</i>	<i>Dalbergia malagensis</i> Sousa
<i>Dalbergia martinii</i>	<i>Dalbergia martinii</i> F. White
<i>Dalbergia melanoxydon</i>	<i>Dalbergia melanoxydon</i> Guill. & Perr.
<i>Dalbergia nitidula</i>	<i>Dalbergia nitidula</i> Baker
<i>Dalbergiella nyassae</i>	<i>Dalbergiella nyassae</i> Baker f.
<i>Danthoniopsis petiolata</i>	??
<i>Datura stramonium</i>	<i>Datura stramonium</i> L.
<i>Decorsea schlechteri</i>	<i>Decorsea schlechteri</i> (Harms) Verdc.
<i>Deinbollia fanshawei</i>	<i>Deinbollia fanshawei</i> Exell
<i>Denekia capensis</i>	<i>Denekia capensis</i> Thunb.
<i>Desmodium adscendens</i>	<i>Desmodium adscendens</i> (Sw.) DC. var. <i>robustum</i> B.G.Schub.
<i>Desmodium barbatum</i>	<i>Desmodium barbatum</i> (L.) Benth.
<i>Desmodium caffrum</i>	<i>Desmodium dregeanum</i> Benth.
<i>Desmodium gangeticum</i>	<i>Desmodium gangeticum</i> (L.) DC.
<i>Desmodium helenae</i>	<i>Desmodium helenae</i> Buscal. & Muschl.
<i>Desmodium repandum</i>	<i>Desmodium repandum</i> (Vahl) DC.
<i>Desmodium salicifolium</i>	<i>Desmodium salicifolium</i> (Poir.) DC. var. <i>salicifolium</i>
<i>Desmodium tanganyikense</i>	<i>Desmodium tanganyikense</i> Baker
<i>Desmodium tortuosum</i>	<i>Desmodium tortuosum</i> (Sw.) DC.
<i>Desmodium velutinum</i>	<i>Desmodium velutinum</i> (Willd.) DC.
<i>Dialium angolense</i>	<i>Dialium angolense</i> Oliv.
<i>Dialium englerianum</i>	<i>Dialium englerianum</i> Henriq.
<i>Dicerocaryum zanguebarium</i>	<i>Dicerocaryum zanguebarium</i> (Lour.) Merr.
<i>Dichaetanthera rhodesiensis</i>	<i>Dichaetanthera rhodesiensis</i> A. & R.Fern.
<i>Dichapetalum crassifolium</i>	<i>Dichapetalum crassifolium</i> Chod.
<i>Dichapetalum rhodesicum</i>	<i>Dichapetalum rhodesicum</i> Sprague & Hutch.
<i>Dichapetalum thonneri</i>	<i>Dichapetalum bangii</i> (F.Didr.) Engl.
<i>Dichapetalum whitei</i>	<i>Dichapetalum heudelotii</i> (Oliv.) Baill. var. <i>heudelotii</i>
<i>Dichrostachys cinerea</i>	<i>Dichrostachys cinerea</i> (DC.) Wight & Arn.
<i>Dicliptera nemorum</i>	<i>Dicliptera carvalhoi</i> Lindau subsp. <i>nemorum</i> (Milne-Redh.) I.Darbysh.

Dicliptera verticillata	Dicliptera verticillata (<i>Forssk.</i>) <i>C. Chr.</i>
Diclis petiolaris	Diclis petiolaris <i>Benth.</i>
Dicoma anomala	Dicoma anomala <i>Sond.</i>
Dicoma schinzii	Dicoma schinzii <i>O. Hoffm.</i>
Dicoma tomentosa	Dicoma tomentosa <i>Cass.</i>
Dicranopteris sp.	Dicranopteris linearis (<i>Burm.f.</i>) <i>Underw.</i>
Dictyophleba lucida	Dictyophleba lucida (<i>K. Schum.</i>) <i>Pierre</i>
Diectomis fastigiata	Andropogon fastigiatus <i>Sw.</i>
Digitaria angolensis	Digitaria angolensis <i>Rendle</i>
Digitaria lunularis	Digitaria comiphora <i>Pilg.</i>
Digitaria milanjana	Digitaria milanjana (<i>Rendle</i>) <i>Stapf</i>
Digitaria pentzii	Digitaria eriantha <i>Steud.</i>
Digitaria perrottetii	Digitaria perrottetii (<i>Kunth</i>) <i>Stapf</i>
Digitaria setivalva	Digitaria setivalva <i>Stapf</i>
Digitaria sp. (5457)	??
Digitaria ternata	Digitaria ternata (<i>A. Rich.</i>) <i>Stapf</i>
Diheteropogon amplexens	Diheteropogon amplexens (<i>Nees</i>) <i>Clayton</i> var. <i>catangensis</i> (<i>Chiov.</i>) <i>Clayton</i>
Diodia scandens	Diodia sarmentosa <i>Sw.</i>
Dioscorea asteriscus	Dioscorea asteriscus <i>Burkill</i>
Dioscorea baya	Dioscorea baya <i>De Wild.</i> var. <i>baya</i>
Dioscorea bulbifera	Dioscorea bulbifera (<i>L.</i>) <i>L.</i>
Dioscorea cochleari-apiculata	Dioscorea cochleari-apiculata <i>De Wild.</i>
Dioscorea dumetorum	Dioscorea dumetorum (<i>Kunth</i>) <i>Pax</i>
Dioscorea hirtiflora	Dioscorea hirtiflora <i>Benth.</i> subsp. <i>pedicellata</i> <i>Milne-Redh.</i>
Dioscorea nixtiflora	??
Dioscorea praehensilis	Dioscorea praehensilis <i>Benth.</i>
Dioscorea quartiniana	Dioscorea quartiniana <i>A. Rich.</i>
Dioscorea quartinianum	Dioscorea quartiniana <i>A. Rich.</i>
Dioscorea schimperana	Dioscorea schimperiana <i>Kunth</i>
Dioscorea sylvatica	Dioscorea sylvatica (<i>Kunth.</i>) <i>Eckl.</i>
Dioscorea sylvaticum	Dioscorea sylvatica (<i>Kunth.</i>) <i>Eckl.</i>
Diospyros abyssinica	Diospyros abyssinica (<i>Hiern</i>) <i>F. White</i> subsp. <i>abyssinica</i>
Diospyros batocana	Diospyros batocana <i>Hiern</i>
Diospyros chamaethamnus	Diospyros chamaethamnus <i>Mildbr.</i>
Diospyros hoyleana	Diospyros hoyleana <i>F. White</i>
Diospyros kirkii	Diospyros kirkii <i>Hiern</i>
Diospyros lycioides	Diospyros lycioides <i>Desf.</i> subsp. <i>sericea</i> (<i>Bernh.</i>) <i>De Winter</i>
Diospyros mespiliformis	Diospyros mespiliformis <i>A. DC.</i>
Diospyros quiloensis	Diospyros quiloensis (<i>Hiern</i>) <i>F. White</i>
Diospyros senensis	Diospyros senensis <i>Klotzsch</i>
Diospyros squarrosa	Diospyros squarrosa <i>Klotzsch</i>
Diospyros undabunda	Diospyros pseudomespilis <i>Mildbr.</i> subsp. <i>brachycalyx</i> <i>F. White</i>
Diospyros virgata	Diospyros virgata (<i>Gürke</i>) <i>Brenan</i>
Dipcadi magnum	Dipcadi glaucum (<i>Ker Gawl</i>) <i>Baker</i>
Diplophium zambesianum	Diplophium zambesianum <i>Hiern</i>
Diplorhynchus condylocarpon	Diplorhynchus condylocarpon (<i>Müll. Arg.</i>) <i>Pichon</i>
Diricletia pubescens	Carphalea pubescens (<i>Klotzsch</i>) <i>Verdc.</i>
Disperma crenatum	Duosperma crenatum (<i>Lindau</i>) <i>P. G. Mey.</i>
Disperma quadrangulare	Duosperma quadrangulare (<i>Klotzsch</i>) <i>Brummitt</i>
Dissotis sp. (3238)	??
Dissotis sp. (3245)	??
Dissotis sp. (3330)	??
Dissotis sp. (3370)	??
Dissotis sp. (3383)	??
Dissotis sp. (3442)	??
Dissotis sp. (3452)	??
Dissotis sp. (3474)	??
Dissotis angusi	Dissotis falcipila <i>Gilg</i>
Dissotis brazzae	Dissotis brazzae <i>Cogn.</i>
Dissotis canescens	Dissotis canescens (<i>Graham</i>) <i>Hook. f.</i>
Dissotis princeps	Dissotis princeps (<i>Kunth</i>) <i>Triana</i> var. <i>princeps</i>

Dissotis romiana	Dissotis romiana <i>De Wild.</i>
Dissotis rotundifolia	Dissotis rotundifolia (<i>Sim</i>) <i>Triana</i> var. <i>prostrata</i> (<i>Thonn.</i>) <i>Jacq.-Fél.</i>
Dodonaea viscosa	<i>Dodonaea viscosa</i> <i>Jacq.</i>
Dolichos sp. (H 1325)	<i>Dolichos</i> ? <i>magnificus</i> <i>Verdc.</i>
Dolichos sp. (8332)	??
Dolichos africanus	<i>Macrotyloma africanum</i> (<i>R.Wilczek</i>) <i>Verdc.</i>
Dolichos axillaris	<i>Macrotyloma axillare</i> (<i>E.Mey.</i>) <i>Verdc.</i>
Dolichos densiflorus	<i>Macrotyloma densiflorum</i> (<i>Baker</i>) <i>Verdc.</i> var. <i>densiflorum</i>
Dolichos ellipticus	<i>Macrotyloma ellipticum</i> (<i>R.E.Fr.</i>) <i>Verdc.</i>
Dolichos eriocaulos	<i>Macrotyloma ellipticum</i> (<i>R.E.Fr.</i>) <i>Verdc.</i>
Dolichos kilimanascharicus	<i>Dolichos kilimandscharicus</i> <i>Taub.</i> subsp. <i>kilimandscharicus</i>
Dolichos linearifolius	<i>Dolichos linearifolius</i> <i>I.M.Johnst.</i>
Dolichos magnificus	<i>Dolichos magnificus</i> <i>Verdc.</i>
Dolichos pseudocajanus	<i>Dolichos pseudocajanus</i> <i>Baker</i>
Dolichos rupestris	<i>Macrotyloma rupestre</i> (<i>Baker</i>) <i>Verdc.</i>
Dolichos seudocajanus	<i>Dolichos pseudocajanus</i> <i>Baker</i>
Dolichos trinervatus	<i>Dolichos trinervatus</i> <i>Baker</i>
Dombeya burgessiae	<i>Dombeya burgessiae</i> <i>Harv.</i>
Dombeya claessensii	<i>Dombeya buettneri</i> <i>K.Schum.</i>
Dombeya kirki	<i>Dombeya kirkii</i> <i>Mast.</i>
Dombeya rotundifolia	<i>Dombeya rotundifolia</i> (<i>Hochst.</i>) <i>Planch.</i> var. <i>rotundifolia</i>
Dombeya wittei	<i>Dombeya wittei</i> <i>De Wild. & Staner</i>
Dovyalis macrocalyx	<i>Dovyalis macrocalyx</i> (<i>Oliv.</i>) <i>Warb.</i>
Dracaena camerooniana	<i>Dracaena camerooniana</i> <i>Baker</i>
Dracaena reflexa	<i>Dracaena mannii</i> <i>Baker</i>
Dregea macrantha	<i>Dregea rubicunda</i> <i>K.Schum.</i>
Droogmansia pteropus	<i>Droogmansia pteropus</i> (<i>Baker</i>) <i>De Wild.</i> var. <i>platypus</i> (<i>Baker</i>) <i>Verdc.</i>
Droogmansia pteropus	<i>Droogmansia pteropus</i> (<i>Baker</i>) <i>De Wild.</i> var. <i>pteropus</i>
Drosera burkeana	<i>Drosera burkeana</i> <i>Planch.</i>
Drypetes gerrardii	<i>Drypetes gerrardii</i> <i>Hutch.</i> var. <i>gerrardii</i>
Duranta repens	<i>Duranta erecta</i> <i>L.</i>
Dyschoriste verticillaris	<i>Dyschoriste verticillaris</i> (<i>Oliv.</i>) <i>C.B.Clarke</i>
Dyschoriste perrottetii	<i>Dyschoriste perrottetii</i> (<i>Nees</i>) <i>Kuntze</i>
Dyschoriste trichocalyx	<i>Dyschoriste trichocalyx</i> (<i>Oliv.</i>) <i>Lindau</i> subsp. ??
Dyschoriste verticillaris	<i>Dyschoriste verticillaris</i> (<i>Oliv.</i>) <i>C.B.Clarke</i>
Echinochloa colonum	<i>Echinochloa colona</i> (<i>L.</i>) <i>Link</i>
Echinochloa pyramidalis	<i>Echinochloa pyramidalis</i> (<i>Lam.</i>) <i>Hitchc. & Chase.</i>
Echinochloa stagnina	<i>Echinochloa stagnina</i> (<i>Retz.</i>) <i>P.Beauv.</i>
Ectadiopsis oblongifolia	<i>Cryptolepis oblongifolia</i> (<i>Meisn.</i>) <i>Schltr.</i>
Ectadiopsis producta	<i>Cryptolepis producta</i> <i>N.E.Br.</i>
Ehretia obtusifolia	<i>Ehretia obtusifolia</i> <i>DC.</i>
Ekebergia benguelensis	<i>Ekebergia benguelensis</i> <i>C.DC.</i>
Ekebergia capensis	<i>Ekebergia capensis</i> <i>Sparmm.</i>
Elaeodendron buchanani	<i>Elaeodendron buchananii</i> (<i>Loes.</i>) <i>Loes.</i>
Eleocharis capitata	<i>Eleocharis geniculata</i> (<i>L.</i>) <i>Roem. & Schult.</i>
Eleocharis kirkii	<i>Eleocharis kirkii</i> <i>C.B.Clarke</i>
Elephantorrhiza goetzei	<i>Elephantorrhiza goetzei</i> (<i>Harms</i>) <i>Harms</i>
Eleusine africana	<i>Eleusine africana</i> <i>Kenn.O'Byrne</i>
Elionurus argenteus	<i>Elionurus muticus</i> (<i>Spreng.</i>) <i>Kuntze</i>
Embelia schimperi	<i>Embelia schimperi</i> <i>Vatke</i>
Emilia protracta	<i>Emilia protracta</i> <i>S.Moore</i>
Eminia holubi	<i>Eminia holubii</i> (<i>Hemsl.</i>) <i>Taub.</i>
Endostemon dissitifolius	<i>Endostemon dissitifolius</i> (<i>Baker</i>) <i>Ashby</i>
Endostemon obtusifolius	<i>Endostemon obtusifolius</i> (<i>Benth.</i>) <i>N.E.Br.</i>
Englerastrum hjalmari	<i>Plectranthus hjalmari</i> (<i>T.C.E.Fr.</i>) <i>Hutch. & Dandy</i>
Englerastrum schweinfurthii	<i>Englerastrum schweinfurthii</i> <i>Briq.</i>
Ensete homblei	<i>Ensete homblei</i> (<i>De Wild.</i>) <i>Cheesm.</i>
Entada abyssinica	<i>Entada abyssinica</i> <i>A.Rich.</i>
Entada gigas	<i>Entada gigas</i> (<i>L.</i>) <i>Fawcett & Rendle</i>
Entada nana	<i>Entada arenaria</i> <i>Schinz</i> subsp. <i>arenaria</i>
Entandrophragma caudatum	<i>Entandrophragma caudatum</i> (<i>Sprague</i>) <i>Sprague</i>

Entandrophragma devevayi	Entandrophragma devevayi <i>De Wild.</i>
Enteropogon macrostachyus	Enteropogon macrostachyus (<i>A.Rich.</i>) <i>Benth.</i>
Epaltes alata	Epaltes gariepina (<i>DC.</i>) <i>Steetz</i>
Eragrostis arenicola	Eragrostis arenicola <i>C.E.Hubb.</i>
Eragrostis aspera	Eragrostis aspera (<i>Jacq.</i>) <i>Nees</i>
Eragrostis buchananii	Eragrostis nindensis <i>Ficalho & Hiern</i>
Eragrostis capensis	Eragrostis capensis (<i>Thunb.</i>) <i>Trin.</i>
Eragrostis cilianensis	Eragrostis cilianensis (<i>All.</i>) <i>Janch.</i>
Eragrostis ciliaris	Eragrostis ciliaris (<i>L.</i>) <i>R.Br.</i>
Eragrostis pallens	Eragrostis pallens <i>Hack.</i>
Eragrostis patens	Eragrostis patens <i>Oliv.</i>
Eragrostis rogersii	Eragrostis rogersii <i>C.E.Hubb.</i>
Eragrostis rotifer	Eragrostis rotifer <i>Rendle</i>
Eragrostis sp. (6145)	??
Eragrostis sp. (5652)	??
Eragrostis superba	Eragrostis superba <i>Peyr.</i>
Eragrostis tremula	Eragrostis tremula <i>Steud.</i>
Eragrostis viscosa	Eragrostis viscosa (<i>Retz</i>) <i>Trin.</i>
Ericoelum lawtonii	Eriocoelum lawtonii <i>Exell</i>
Eriocaulon gilgianum	Eriocaulon abyssinicum <i>Hochst.</i>
Eriosema buchananii	Eriosema buchananii <i>Baker f.</i>
Eriosema ellipticum	Eriosema ellipticum <i>Baker</i> subsp. <i>ellipticum</i>
Eriosema englerianum	Eriosema englerianum <i>Harms</i>
Eriosema montanum	Eriosema montanum <i>Baker f.</i>
Eriosema pauciflorum	Eriosema pauciflorum <i>Klotzsch</i>
Eriosema psoraleoides	Eriosema psoraleoides (<i>Lam.</i>) <i>G.Don</i>
Eriosema buchananii	Eriosema buchananii <i>Baker f.</i>
Eriospermum abyssinicum	Eriospermum abyssinicum <i>Baker</i>
Erlangea laxa	Bothriochloa laxa <i>N.E.Br.</i>
Erlangea sessilifolia	Erlangea misera (<i>Oliv. & Hiern</i>) <i>S.Moore</i>
Erythrina excelsa	Erythrina excelsa <i>Baker</i>
Erythroxyllum emarginatum	Erythroxyllum emarginatum <i>Thonn.</i>
Erythrina abyssinica	Erythrina abyssinica <i>DC.</i>
Erythrina baumii	Erythrina baumii <i>Harms</i>
Erythrocephalum zambesianum	Erythrocephalum zambesianum <i>Oliv. & Hiern</i>
Erythrococca menyharthii	Erythrococca menyharthii (<i>Pax</i>) <i>Prain</i>
Erythrococca trichogyne	Erythrococca trichogyne (<i>Müll.Arg.</i>) <i>Prain</i> var. <i>trichogyne</i>
Erythrococca welwitschi	Erythrococca welwitschiana (<i>Müll.Arg.</i>) <i>Prain</i>
Erythrophleum abyssinica	??
Erythrophleum africanum	Erythrophleum africanum (<i>Benth.</i>) <i>Harms</i>
Erythrophleum suaveolens	Erythrophleum suaveolens (<i>Guill. & Perr.</i>) <i>Brenan</i>
Erythroxyllum emarginatum	Erythroxyllum emarginatum <i>Thonn.</i>
Erythroxyllum zambesiicum	Erythroxyllum zambesiicum <i>N.Robson</i>
Ethulia conyzoides	Ethulia conyzoides <i>L.f.</i> subsp. <i>conyzoides</i>
Euclea dekindti	Euclea crispa (<i>Thunb.</i>) <i>Gürke</i> subsp. <i>crispa</i>
Euclea divinatorum	Euclea divinatorum <i>Hiern</i>
Euclea natalensis	Euclea natalensis <i>A.DC.</i> subsp. <i>acutifolia</i> <i>F.White</i>
Euclea schimperi	Euclea racemosa <i>Murray</i> subsp. <i>schimperi</i> (<i>A.DC.</i>) <i>F.White</i>
Eugenia angolensis	Eugenia malangensis (<i>O.Hoffm.</i>) <i>Nied.</i>
Eugenia bukobensis	Eugenia bukobensis <i>Engl.</i>
Eulalia villosa	Eulalia villosa (<i>Thunb.</i>) <i>Nees</i>
Eulophia angolensis	Eulophia angolensis (<i>Rchb.f.</i>) <i>Summerh.</i>
Eulophia cucullata	Eulophia cucullata (<i>Sw.</i>) <i>Steud.</i>
Eulophia livingstoniana	Eulophia livingstoniana (<i>Rchb.f.</i>) <i>Schltr.</i>
Eulophia quartiniana	Eulophia quartiniana <i>A.Rich.</i>
Eulophia wakefieldii	Eulophia wakefieldii (<i>Rchb.f. & S.Moore</i>) <i>Summerh.</i>
Eupatorium africanum	Stomatanthes africanus (<i>Oliv. & Hiern</i>) <i>R.M.King & H.Rob.</i>
Euphorbia benthamii	Euphorbia benthamii <i>Hiern</i>
Euphorbia candelabrum	Euphorbia ingens <i>Boiss.</i>
Euphorbia crotonoides	Euphorbia crotonoides <i>Boiss.</i> subsp. <i>crotonoides</i>
Euphorbia espinosa	Euphorbia espinosa <i>Pax</i>
Euphorbia fortissima	Euphorbia fortissima <i>L.C.Leach</i>

Euphorbia heterophylla	Euphorbia heterophylla <i>L.</i>
Euphorbia hirta	Euphorbia hirta <i>L.</i>
Euphorbia leshumensis	Euphorbia eylesii <i>Rendle</i>
Euphorbia matabelensis	Euphorbia matabelensis <i>Pax</i>
Euphorbia mozambicensis	Euphorbia mossambicensis (<i>Klotzsch & Garcke</i>) <i>Boiss.</i>
Euphorbia rubriflora	Euphorbia rubriflora <i>N.E.Br.</i>
Euphorbia sereti	Euphorbia seretii <i>De Wild.</i> subsp. <i>variantissima L.C.Leach</i>
Euphorbia systyloides	Euphorbia systyloides <i>Pax</i> subsp. <i>porcaticapsa S.Carter</i>
Euphorbia transvaalensis	Euphorbia transvaalensis <i>Schltr.</i>
Euphorbia zambesiana	Euphorbia zambesiana <i>Benth.</i> var. <i>zambesiana</i>
Evolvulus alsinoides	Evolvulus alsinoides (<i>L.</i>) <i>L.</i> var. <i>alsinoides</i>
Exacum quinquenervium	Exacum oldenlandioides (<i>S.Moore</i>) <i>Klack.</i>
Excoecaria bussei	Excoecaria bussei (<i>Pax</i>) <i>Pax</i>
Fadogia fuchsioides	Fadogia fuchsioides <i>Oliv.</i>
Fadogia sp. (DF 5967)	Fadogia gossweileri <i>Robyns</i>
Fadogia cienkowski	Fadogia cienkowski <i>Schweinf.</i> var. <i>cienkowskii</i>
Fadogia erythrophloea	Fadogia cienkowski <i>Schweinf.</i> var. <i>cienkowskii</i>
Fadogia fuchsioides	Fadogia fuchsioides <i>Oliv.</i>
Fadogia giorgi	Fadogia triphylla <i>Baker</i> var. <i>giorgi (De Wild.) Verdc.</i>
Fadogia katangensis	Fadogia cienkowski <i>Schweinf.</i> var. <i>cienkowskii</i>
Fadogia monticola	Fadogia homblei <i>De Wild.</i>
Fadogia odorata	Fadogia stenophylla <i>Hiern</i> var. <i>odorata (K.Krause) Verdc.</i>
Fadogia triphylla	Fadogia triphylla <i>Baker</i> var. <i>triphylla</i>
Fadogiella stigmatoloba	Fadogiella stigmatoloba (<i>K.Schum.</i>) <i>Robyns</i>
Fagara chalybea	Zanthoxylum chalybeum <i>Engl.</i> var. <i>chalybeum</i>
Fagara macrophylla	Zanthoxylum gillettii (<i>De Wild.</i>) <i>P.G.Waterman</i>
Fagara trijuga	Zanthoxylum trijugum (<i>Dunkley</i>) <i>P.G.Waterman</i>
Faurea intermedia	Faurea intermedia <i>Engl. & Gilg</i>
Faurea saligna	Faurea saligna <i>Harv.</i>
Faurea speciosa	Faurea rochetiana (<i>A.Rich.</i>) <i>Pic.-Serm.</i>
Felicia barbellata	Felicia welwitschii (<i>Hiern</i>) <i>Grau</i>
Feretia aeruginescens	Feretia aeruginescens <i>Stapf</i>
Ficalhoa laurifolia	Ficalhoa laurifolia <i>Hiern</i>
Ficus sp. (3288)	??
Ficus sp. (3289)	??
Ficus ardisioides	Ficus ardisioides <i>Warb.</i>
Ficus asperifolia	Ficus asperifolia <i>Miq.</i>
Ficus barteri	Ficus barteri <i>Sprague</i>
Ficus brachylepis	Ficus sansibarica <i>Warb.</i> subsp. <i>macrosperma (Mildbr. & Burret) C.C.Berg</i>
Ficus brachypoda	Ficus ovata <i>Vahl</i>
Ficus burkei	Ficus burkei (<i>Miq.</i>) <i>Miq.</i>
Ficus capensis	Ficus sur <i>Forssk.</i>
Ficus capreifolia	Ficus capreifolia <i>Delile</i>
Ficus craterostema	Ficus craterostoma <i>Mildbr. & Burret</i>
Ficus cyathistipula	Ficus cyathistipula <i>Warb.</i>
Ficus dekdekana	Ficus burkei (<i>Miq.</i>) <i>Miq.</i>
Ficus fischeri	Ficus fischeri <i>Mildbr. & Burret</i>
Ficus ingens	Ficus ingens (<i>Miq.</i>) <i>Miq.</i>
Ficus natalensis	Ficus natalensis <i>Hochst.</i> subsp. <i>leprieurii (Miq.) C.C.Berg</i>
Ficus persicifolia	Ficus persicifolia <i>Warb.</i>
Ficus pygmaea	Ficus pygmaea <i>Hiern</i>
Ficus rhodesiaca	Ficus burkei (<i>Miq.</i>) <i>Miq.</i>
Ficus soldanella	Ficus abutilifolia (<i>Miq.</i>) <i>Miq.</i>
Ficus sonderi	Ficus glumosa <i>Delile</i>
Ficus stuhlmannii	Ficus stuhlmannii <i>Warb.</i>
Ficus sycomorus	Ficus sycomorus <i>L.</i> subsp. <i>sycomorus</i>
Ficus thonningii	Ficus burkei (<i>Miq.</i>) <i>Miq.</i> or <i>Ficus petersii Warb.</i>
Ficus tremula	Ficus tremula <i>Warb.</i>
Ficus verruculosa	Ficus verruculosa <i>Warb.</i>
Ficus wakefieldii	Ficus wakefieldii <i>Hutch.</i>
Ficus zambesiaca	Ficus bussei <i>Mildbr. & Burret</i>

Fimbristylis bisumbellata	Fimbristylis bisumbellata (<i>Forssk.</i>) <i>Bubani</i>
Fimbristylis dichotoma	Fimbristylis dichotoma (<i>L.</i>) <i>Vahl</i>
Fimbristylis exilis	Bulbostylis hispidula (<i>Vahl</i>) <i>R.W.Haines</i> subsp. pyriformis (<i>Lye</i>) <i>R.W.Haines</i>
Fimbristylis hispidula	Bulbostylis hispidula (<i>Vahl</i>) <i>R.W.Haines</i> subsp. pyriformis (<i>Lye</i>) <i>R.W.Haines</i>
Fimbristylis squarrosa	Fimbristylis squarrosa <i>Vahl</i>
Flacourtia indica	Flacourtia indica (<i>Burm.f.</i>) <i>Merr.</i>
Flemingia grahamiana	Flemingia grahamiana <i>Wight & Arn.</i>
Floscopa flavida	Floscopa flavida <i>C.B.Clarke</i>
Floscopa glomerata	Floscopa glomerata (<i>Schult. & Schult.f.</i>) <i>Hassk.</i> subsp. glomerata
Floscopa rivularis	Floscopa glomerata (<i>Schult. & Schult.f.</i>) <i>Hassk.</i> subsp. glomerata
Fockea multiflora	Fockea multiflora <i>K.Schum.</i>
Friesodielsia obovata	Friesodielsia obovata (<i>Benth.</i>) <i>Verdc.</i>
Fuirena pubescens	Fuirena pubescens <i>Kunth</i>
Fuirena umbellata	Fuirena umbellata <i>Rottb.</i>
Gaertnera paniculata	Gaertnera paniculata <i>Benth.</i>
Garcinia buchneri	Garcinia buchneri <i>Engl.</i>
Garcinia huillensis	Garcinia huillensis <i>Oliv.</i>
Garcinia livingstonei	Garcinia livingstonei <i>T.Anderson</i>
Garcinia punctata	Garcinia punctata <i>Oliv.</i>
Garcinia smeathmannii	Garcinia smeathmannii (<i>Planch. & Triana</i>) <i>Oliv.</i>
Garcinia volkensii	? <i>Gardenia volkensii</i> <i>K.Schum.</i> subsp. spathulifolia (<i>Stapf & Hutch.</i>) <i>Verdc.</i>
Gardenia brachythamnus	<i>Gardenia brachythamnus</i> (<i>K.Schum.</i>) <i>Launert</i>
Gardenia goetzeana	<i>Gardenia</i> ? <i>ternifolia</i> <i>Schumach. & Thonn.</i> var. <i>goetzei</i> (<i>Stapf & Hutch.</i>) <i>Verdc.</i>
Gardenia imperialis	<i>Gardenia imperialis</i> <i>K.Schum.</i> subsp. <i>imperialis</i>
Gardenia jovis-tonantis	<i>Gardenia ternifolia</i> <i>Schumach. & Thonn.</i> subsp. <i>jovis-tonantis</i> (<i>Welw.</i>) <i>Verdc.</i>
Gardenia resiniflua	<i>Gardenia resiniflua</i> <i>Hiern</i> subsp. <i>resiniflua</i>
Gardenia spatulifolia	<i>Gardenia volkensii</i> <i>K.Schum.</i> subsp. <i>spatulifolia</i> (<i>Stapf & Hutch.</i>) <i>Verdc.</i>
Gardenia subacaulis	<i>Gardenia subacaulis</i> <i>Stapf & Hutch.</i>
Geigeria africana	<i>Geigeria ornativa</i> <i>O.Hoffm.</i> subsp. <i>ornativa</i>
Genlisea africana	<i>Genlisea hispidula</i> <i>Stapf</i>
Gisekia africana	<i>Gisekia africana</i> (<i>Lour.</i>) <i>Kuntze</i>
Gisekia pharnaceoides	<i>Gisekia pharnaceoides</i> <i>L.</i> var. <i>pharnaceoides</i>
Gladiolus atropurpureus	<i>Gladiolus atropurpureus</i> <i>Baker</i>
Gladiolus psittacinus	<i>Gladiolus dalenii</i> <i>Van Geel</i>
Gladiolus unguiculatus	<i>Gladiolus unguiculatus</i> <i>Baker</i>
Glinus lotoides	<i>Glinus lotoides</i> <i>L.</i> var. <i>lotoides</i>
Gloriosa superba	<i>Gloriosa superba</i> <i>L.</i>
Glossostelma spatulatum	<i>Glossostelma spatulatum</i> (<i>K.Schum.</i>) <i>Bullock</i>
Glycine javanica	<i>Neonotonia wightii</i> (<i>Wight & Arn.</i>) <i>J.A.Lacky</i> subsp. <i>wightii</i>
Glycine wightii	<i>Neonotonia wightii</i> (<i>Wight & Arn.</i>) <i>J.A.Lacky</i> subsp. <i>wightii</i>
Gnidia buchananii	<i>Gnidia buchananii</i> <i>Gilg</i>
Gnidia chrysantha	<i>Gnidia chrysantha</i> (<i>Solms</i>) <i>Gilg</i>
Gnidia dekiadtiana	<i>Gnidia dekindtiana</i> <i>Pearson</i>
Gnidia goetzeana	<i>Gnidia goetzeana</i> <i>Gilg</i>
Gnidia kraussiana	<i>Gnidia kraussiana</i> <i>Meisn.</i> var. <i>kraussiana</i>
Gnidia macrorrhiza	<i>Gnidia macrorrhiza</i> <i>Gilg</i>
Gomphocarpus fruticosus	<i>Gomphocarpus fruticosus</i> (<i>L.</i>) <i>W.T.Aiton</i> subsp. <i>fruticosus</i>
Gomphocarpus glaucophyllus	<i>Gomphocarpus praticola</i> (<i>S.Moore</i>) <i>Goyder & Nicholas</i>
Gomphocarpus rostratus	<i>Gomphocarpus fruticosus</i> (<i>L.</i>) <i>W.T.Aiton</i> subsp. <i>rostratus</i> (<i>N.E.Br.</i>) <i>Goyder</i>
Gomphostigma virgatum	<i>Gomphostigma virgatum</i> (<i>L.f.</i>) <i>Baill.</i>
Gomphrena celosioides	<i>Gomphrena celosioides</i> <i>Mart.</i>
Gonglomena taylori	<i>Marsdenia taylori</i> <i>Schltr. & Rendle</i>
Gongrenema angolense	<i>Marsdenia angolensis</i> <i>N.E.Br.</i>
Grangea maderaspatana	<i>Grangea maderaspatana</i> (<i>L.</i>) <i>Poir.</i>
Grewia avellana	<i>Grewia avellana</i> <i>Hiern</i>

Grewia bicolor	Grewia bicolor <i>Juss.</i>
Grewia decemovulata	Grewia decemovulata <i>Merxm.</i>
Grewia falcistipula	Grewia falcistipula <i>K.Schum.</i>
Grewia flavescens	Grewia flavescens <i>Juss.</i>
Grewia monticola	Grewia monticola <i>Sond.</i>
Grewia pachycalyx	Grewia pachycalyx <i>K.Schum.</i>
Grewia praecox	Grewia praecox <i>K.Schum.</i>
Grewia retinervis	Grewia retinervis <i>Burret</i>
Grewia schinzii	Grewia schinzii <i>K.Schum.</i>
Guibourtia coleosperma	Guibourtia coleosperma (<i>Benth.</i>) <i>J.Léonard</i>
Gutenbergia polycephala	Gutenbergia polycephala <i>Oliv. & Hiern</i>
Gymnema sylvestre	Marsdenia sylvestris (<i>Retz.</i>) <i>P.I.Forst.</i>
Gyrocarpus americanus	Gyrocarpus americanus <i>Jacq.</i> subsp. africanus <i>Kubitzki</i>
Habenaria malacophylla	Habenaria malacophylla <i>Rchb.f.</i>
Hackelochloa granularis	??
Haemanthus filiflorus	Scadoxus multiflorus (<i>Martyn</i>) <i>Raf.</i> subsp. multiflorus
Haemanthus multiflorus	Scadoxus multiflorus (<i>Martyn</i>) <i>Raf.</i> subsp. multiflorus
Halleria lucida	Halleria lucida <i>L.</i>
Hannoa chlorantha	Quassia undulata (<i>Guill. & Perr.</i>) <i>F.Dietr.</i>
Hannoa kitombetombe	Hannoa kitombetombe <i>Gilbert</i>
Haplocoelum foliolosum	Haplocoelum foliolosum (<i>Hiern</i>) <i>Bullock</i> subsp. foliolosum
Harpagophytum procumbens	Harpagophytum procumbens (<i>Burch.</i>) <i>Meissn.</i> subsp. procumbens
Harrisonia abyssinica	Harrisonia abyssinica <i>Oliv.</i>
Harungana madagascarensis	Harungana madagascarensis <i>Poir.</i>
Hebenstreitia dentata	Hebenstreitia ? dentata <i>L.</i>
Heinsia crinita	Heinsia crinita (<i>Afzel.</i>) <i>G.Taylor</i> subsp. crinita
Helichrysum angustifronsomum	Helichrysum angustifronsomum <i>S.Moore</i>
Helichrysum kirkii	Helichrysum kirkii <i>Oliv. & Hiern</i>
Helichrysum milne-redheadi	Helichrysum milne-redheadi <i>Brenan</i>
Helichrysum odoratissimum	Helichrysum odoratissimum (<i>L.</i>) <i>Sweet</i>
Helinus integrifolius	Helinus integrifolius (<i>Lam.</i>) <i>Kuntze</i>
Helinus integrifolius	Helinus integrifolius (<i>Lam.</i>) <i>Kuntze</i>
Helinus mystacinus	Helinus mystacinus (<i>Aiton</i>) <i>Steud.</i>
Heliotropium baclei	Heliotropium baclei <i>DC. & A.DC.</i> var. rostratum <i>I.M.Johnst.</i>
Heliotropium indicum	Heliotropium indicum <i>L.</i>
Heliotropium ovalifolium	Heliotropium ovalifolium <i>Forssk.</i>
Hemizygia bracteosa	Hemizygia bracteosa (<i>Benth.</i>) <i>Briq.</i>
Hermannia angolensis	Hermannia angolensis <i>K.Schum.</i>
Hermannia glanduligera	Hermannia glanduligera <i>K.Schum.</i>
Hermannia glandulosa	Hermannia ? glanduligera <i>K.Schum.</i>
Hermannia quartiniana	Hermannia quartiniana <i>A.Rich.</i>
Heteromorpha trifoliata	Heteromorpha arborescens (<i>Thunb.</i>) <i>Cham. & Schldtl.</i> var. abyssinica (<i>A.Rich.</i>) <i>H.Wolff</i>
Heteropogon contortus	Heteropogon contortus (<i>L.</i>) <i>Roem. & Schult.</i>
Heteropogon melanocarpus	Heteropogon melanocarpus (<i>Elliot</i>) <i>Benth.</i>
Hexalobus monopetalus	Hexalobus monopetalus (<i>A.Rich.</i>) <i>Engl. & Diels</i> var. obovatus <i>Brenan</i>
Hibiscus acetosella	Hibiscus acetosella <i>Hiern</i>
Hibiscus allenii	Hibiscus allenii <i>Sprague & Hutch.</i>
Hibiscus altissimus	Hibiscus altissimus <i>Hornby</i>
Hibiscus articulatus	Hibiscus articulatus <i>A.Rich.</i>
Hibiscus caesius	Hibiscus caesius <i>Garcke</i>
Hibiscus calyphyllus	Hibiscus ovalifolius (<i>Forssk.</i>) <i>Vahl</i>
Hibiscus cannabinus	Hibiscus cannabinus <i>L.</i>
Hibiscus diversifolius	Hibiscus diversifolius <i>Jacq.</i> subsp. rivularis (<i>Bremek. & Oberm.</i>) <i>Exell</i>
Hibiscus dongolensis	Hibiscus dongolensis <i>Delile</i>
Hibiscus hiernianus	Hibiscus hiernianus <i>Exell & Mend.</i>
Hibiscus lobatus	Hibiscus lobatus (<i>Murr.</i>) <i>Kuntze</i>
Hibiscus mastersianus	Hibiscus mastersianus <i>Hiern</i>
Hibiscus mechowii	Hibiscus mechowii <i>Garcke</i>
Hibiscus meeusei	Hibiscus meeusei <i>Exell</i>
Hibiscus micranthus	Hibiscus micranthus <i>L.f.</i>

Hibiscus panduriformis	Hibiscus panduriformis <i>Burm.f.</i>
Hibiscus physaloides	Hibiscus physaloides <i>Guill. & Perr.</i>
Hibiscus praeteritus	Hibiscus praeteritus <i>R.A.Dyer</i>
Hibiscus rhodanthus	Hibiscus rhodanthus <i>Gürke</i>
Hibiscus rostellatus	Hibiscus rostellatus <i>Guill. & Perr.</i>
Hibiscus schinzii	Hibiscus schinzii <i>Gürke</i>
Hibiscus shirensis	Hibiscus shirensis <i>Sprague & Hutch.</i>
Hibiscus sidiformis	Hibiscus sidiformis <i>Baill.</i>
Hibiscus surattensis	Hibiscus surattensis <i>L.</i>
Hibiscus vitifolius	Hibiscus vitifolius <i>L. subsp. vitifolius</i>
Hippocratea africana	Loesneriella africana (<i>Willd.</i>) <i>N.Hallé</i>
Hippocratea buchananii	Reissantia buchananii (<i>Loes.</i>) <i>N.Hallé</i>
Hippocratea indica	Reissantia indica (<i>Willd.</i>) <i>N.Hallé</i>
Hippocratea pallens	Apodostigma pallens (<i>Oliv.</i>) <i>R.Wilczek</i> var. <i>pallens</i>
Hippocratea parviflora	Reissantia parviflora (<i>N.E.Br.</i>) <i>N.Hallé</i>
Hippocratea parvifolia	Reissantia parviflora (<i>N.E.Br.</i>) <i>N.Hallé</i>
Hippocratea ritschardi	Prionostemma delagoensis (<i>Loes.</i>) <i>N.Hallé</i> var. <i>ritschardii</i> (<i>Wilczek</i>) <i>N.Hallé</i>
Hirpicium gracile	Hirpicium gracile (<i>O.Hoffm.</i>) <i>Roessler</i>
Holarrhena pubescens	Holarrhena pubescens (<i>Buch.-Ham.</i>) <i>G.Don</i>
Holostylon baumii	Holostylon baumii (<i>Gürke</i>) <i>G.Taylor</i>
Homalium abdessammadii	Homalium abdessammadii <i>Asch. & Schweinf.</i>
Homalium africanum	Homalium africanum (<i>Hook.f.</i>) <i>Benth.</i>
Hoslundia opposita	Hoslundia opposita <i>Vahl.</i>
Huernia levyi	Huernia levyi <i>Oberm.</i>
Humularia bequaerti	Humularia bequaerti (<i>De Wild.</i>) <i>Duvign.</i>
Humularia megalophylla	Humularia welwitschii (<i>Taub.</i>) <i>P.A.Duvign.</i> var. <i>lundensis</i> (<i>P.A.Duvign.</i>) <i>Verdc.</i>
Humularia rosea	Humularia rosea (<i>De Wild.</i>) <i>Duvign.</i> var. <i>rosea</i>
Hydrilla verticillata	Hydrilla verticillata (<i>L.f.</i>) <i>Royle</i>
Hydrocotyle verticillata	Hydrocotyle verticillata <i>Thunb.</i>
Hygrophila abyssinica	Hygrophila abyssinica (<i>Nees</i>) <i>T.Anderson</i>
Hygrophila cataractae	Hygrophila cataractae <i>S.Moore</i>
Hygrophila pilosa	Hygrophila pilosa <i>Burkill</i>
Hymenocardia acida	Hymenocardia acida <i>Tul.</i>
Hymenodictyon floribundum	Hymenodictyon floribundum (<i>Hochst. & Steud.</i>) <i>B.L.Rob.</i>
Hymenodictyon parvifolium	Hymenodictyon parvifolium <i>Oliv.</i> subsp. <i>scabrum</i> (<i>Stapf</i>) <i>Verdc.</i>
Hymenosicyos sp.	Cucumis bryoniifolius (<i>Merxm.</i>) <i>Ghebretinsae & Thulin</i>
Hyparrhenia dichroa	Hyparrhenia dichroa (<i>Steud.</i>) <i>Stapf</i>
Hyparrhenia filipendula	Hyparrhenia filipendula (<i>Hochst.</i>) <i>Stapf</i>
Hyparrhenia finitima	Hyparrhenia finitima (<i>Hochst.</i>) <i>Stapf</i>
Hyparrhenia rufa	Hyparrhenia rufa (<i>Nees</i>) <i>Stapf</i>
Hypericum lalandi	Hypericum lalandii <i>Choisy</i>
Hypericum roeperanum	Hypericum roeperanum <i>A.Rich.</i>
Hyperthelia dissoluta	Hyperthelia dissoluta (<i>Steud.</i>) <i>Clayton</i>
Hyphaene ventricosa	Hyphaene petersiana <i>Mart.</i>
Hypoestes aristata	Hypoestes aristata (<i>Vahl</i>) <i>Roem. & Schult.</i>
Hypoestes triflora	Hypoestes triflora (<i>Forssk.</i>) <i>Roem. & Schult.</i>
Hypoestes verticillaris	Hypoestes forskaolii (<i>Vahl</i>) <i>Roem. & Schult.</i>
Hyptis pectinata	Hyptis pectinata (<i>L.</i>) <i>Poit.</i>
Hyptis spicigera	Hyptis spicigera <i>Lam.</i>
Iboza riparia	Tetradenia riparia (<i>Hochst.</i>) <i>Codd.</i>
Ilex mitis	Ilex mitis (<i>L.</i>) <i>Radlk.</i> var. <i>mitis</i>
Ilysanthes parviflora	Lindernia parviflora (<i>Roxb.</i>) <i>Haynes</i>
Ilysanthes purpurascens	Lindernia pulchella (<i>Skan</i>) <i>Philcox</i>
Indigofera arenophila	Indigofera arenophila <i>Schinz</i>
Indigofera arrecta	Indigofera arrecta <i>A.Rich.</i>
Indigofera astragalina	Indigofera astragalina <i>DC.</i>
Indigofera atriceps	Indigofera atriceps <i>Hook.f.</i> subsp. <i>atriceps</i>
Indigofera baumiana	Indigofera baumiana <i>Harms</i>
Indigofera capitata	Indigofera capitata <i>Kotschy</i>

Indigofera charlieriana	Indigofera charlieriana Schinz subsp. charlieriana
Indigofera colutea	Indigofera colutea (Burm.f.) Merr.
Indigofera congesta	Indigofera congesta Baker
Indigofera dendroides	Indigofera dendroides Jacq.
Indigofera echinata	Indigofera nummulariifolia (L.) Alston
Indigofera emarginella	Indigofera emarginella A.Rich. var. emarginella
Indigofera emarginelloides	Indigofera emarginelloides J.B.Gillett
Indigofera fanshawei	Indigofera fanshawei J.B.Gillett
Indigofera flavicans	Indigofera flavicans Baker
Indigofera glaucifolia	Indigofera glaucifolia Cronq.
Indigofera griseoides	Indigofera griseoides Harms
Indigofera hirsuta	Indigofera hirsuta L. var. hirsuta
Indigofera livingstoniana	Indigofera livingstoniana J.B.Gillett
Indigofera longibarbata	Indigofera longibarbata Engl.
Indigofera microcalyx	Indigofera microcalyx Baker
Indigofera microphylla	??
Indigofera ormocarpoides	Indigofera ormocarpoides Baker
Indigofera podocarpa	Indigofera podocarpa Baker f. & Martin
Indigofera quarrei	Indigofera quarrei Cronq.
Indigofera rhynchocarpa	Indigofera rhynchocarpa Baker var. rhynchocarpa
Indigofera schimperi	Indigofera schimperi Jaub. & Spach. var. schimperi
Indigofera setiflora	Indigofera setiflora Baker
Indigofera spicata	Indigofera spicata Forssk.
Indigofera strobilifera	Indigofera strobilifera (Hochst.) Baker subsp. strobilifera
Indigofera subcorymbosa	Indigofera subcorymbosa Baker
Indigofera sutherlandioides	Indigofera sutherlandioides Baker
Indigofera trita	Indigofera subulata Poir. var. subulata
Indigofera vicoides	Indigofera vicoides Jaub. & Spach subsp. rogersii (R.E.Fries) Schrire
Inula glomerata	Inula glomerata Oliv. & Hiern
Inversodicraea tenax	Ledermanniella tenax (C.H.Wright) C.Cusset
Ipomoea sp. (3348)	??
Ipomoea arachnosperma	Ipomoea dichroa Choisy
Ipomoea blepharophylla	Ipomoea blepharophylla Hallier f.
Ipomoea bolusiana	Ipomoea bolusiana Schinz
Ipomoea cairica	Ipomoea cairica (L.) Sweet. var. cairica
Ipomoea chloroneura	Ipomoea chloroneura Hallier f.
Ipomoea coptica	Ipomoea coptica (L.) Roem. & Schult. var. coptica
Ipomoea eriocarpa	Ipomoea eriocarpa R.Br.
Ipomoea involucrata	Ipomoea involucrata P.Beauv. var. involucrata
Ipomoea kituiensis	Ipomoea kituiensis Vatke var. kituiensis
Ipomoea lapathifolia	Ipomoea lapathifolia Hallier f. var. lapathifolia
Ipomoea obscura	Ipomoea obscura (L.) Ker Gawl var. obscura
Ipomoea pes-tigridis	Ipomoea pes-tigridis L.
Ipomoea pharbitiformis	Ipomoea pharbitiformis Baker
Ipomoea pileata	Ipomoea pileata Roxb. subsp. pileata
Ipomoea plebeia	Ipomoea plebeia R.Br. var. africana Meeuse
Ipomoea rubens	Ipomoea rubens Choisy
Ipomoea shirambensis	Ipomoea shirambensis Baker
Ipomoea sinensis	Ipomoea sinensis (Desr.) Choisy subsp. blepharosepala (A.Rich.) A.Meeuse
Ipomoea tuberculata	Ipomoea tuberculata Ker Gawl.
Ipomoea verbascoidea	Ipomoea verbascoidea Choisy
Ipomoea vernalis	Ipomoea vernalis R.E.Fr.
Ipomoea welwitschii	Ipomoea welwitschii Hallier f.
Ischaemum arcuatum	Ischaemum fasciculatum Brogn.
Isoberlinia angolensis	Isoberlinia angolensis (Benth.) Hoyle & Brenan ? var. niembaensis (De Wild.) Brenan
Isoberlinia tomentosa	Isoberlinia tomentosa (Harms) Craib & Stapf
Isoetes alstonii	Isoetes schweinfurthii Baker
Ixora rhodesiaca	Ixora brachypoda DC.
Jacquemontia tamnifolia	Jacquemontia tamnifolia (L.) Griseb.

Jasminum abyssinicum	Jasminum abyssinicum DC.
Jasminum bakeri	Jasminum bakeri <i>Scott Elliot</i>
Jasminum dichotomum	Jasminum dichotomum <i>Vahl</i>
Jasminum fluminense	Jasminum fluminense <i>Vell.</i>
Jasminum stenolobum	Jasminum stenolobum <i>Rolfé</i>
Jasminum streptopus	Jasminum streptopus <i>E.Mey.</i>
Jatropha baumi	Jatropha baumii <i>Pax</i>
Jatropha seineri	Jatropha seineri <i>Pax</i> var. <i>seineri</i>
Julbernardia globiflora	Julbernardia globiflora (<i>Benth.</i>) <i>Troupin</i>
Julbernardia paniculata	Julbernardia paniculata (<i>Benth.</i>) <i>Troupin</i>
Justicia betonica	Justicia betonica <i>L.</i>
Justicia betonicoides	Justicia betonicoides <i>C.B. Clarke</i>
Justicia elegantula	Justicia elegantula <i>S. Moore</i>
Justicia flava	Justicia flava (<i>Vahl</i>) <i>Vahl</i>
Justicia glabra	Justicia glabra <i>Roxb.</i>
Justicia heterocarpa	Justicia heterocarpa <i>T. Anderson</i> subsp. <i>dinteri</i> (<i>S. Moore</i>) <i>Hedrén</i>
Justicia matammensis	Justicia matammensis (<i>Schweinf.</i>) <i>Oliv.</i>
Justicia striata	Justicia striata (<i>Klotzsch</i>) <i>Bullock</i> subsp. ??
Kaempferia carsonii	Siphonochilus carsonii (<i>Baker</i>) <i>Lock</i>
Kaempferia rosea	Siphonochilus kirkii (<i>Hook.f.</i>) <i>B.L. Burt</i>
Kalanchoe laciniata	Kalanchoe laciniata (<i>L.</i>) <i>DC.</i>
Kalanchoe lanceolata	Kalanchoe lanceolata (<i>Forssk.</i>) <i>Pers.</i>
Kalanchoe paniculata	Kalanchoe paniculata <i>Harv.</i>
Kanahia laniflora	Kanahia laniflora (<i>Forssk.</i>) <i>R.Br.</i>
Kedrostis foetidissima	Kedrostis foetidissima (<i>Jacq.</i>) <i>Cogn.</i>
Kedrostis sp. (DF 5934)	Kedrostis hirtella (<i>Naud.</i>) <i>Cogn.</i>
Khaya nyasica	Khaya anthotheca (<i>Welw.</i>) <i>C.DC.</i>
Kigelia africana	Kigelia africana (<i>Lam.</i>) <i>Benth.</i>
Kigelia stuhlmannii	??
Kirkia acuminata	Kirkia acuminata <i>Oliv.</i>
Klainedoxa gabonensis	Klainedoxa gabonensis <i>Engl.</i>
Kohautia lasiocarpa	Kohautia caespitosa <i>Schnizl.</i> subsp. <i>brachyloba</i> (<i>Sond.</i>) <i>D. Mantell</i>
Kosteletzkya begoniifolia	Kosteletzkya begoniifolia (<i>Ulbr.</i>) <i>Ulbr.</i>
Kosteletzkya buettneri	Kosteletzkya buettneri <i>Gürke</i>
Kotschya sp. (M 3138)	Kotschya imbricata <i>Verdc.</i>
Kotschya aeschenemenoides	Kotschya aeschynomeneoides (<i>Baker</i>) <i>Dewit & P.A. Duvign.</i>
Kotschya africana	Kotschya africana <i>Endl.</i>
Kotschya carsonii	Kotschya carsonii (<i>Baker</i>) <i>Dewit & P.A. Duvign.</i> subsp. <i>carsonii</i>
Kotschya speciosa	Kotschya speciosa (<i>Hutch.</i>) <i>Hepper</i>
Kotschya strigosa	Kotschya strigosa (<i>Benth.</i>) <i>Dewit & P.A. Duvign.</i> var. <i>grandiflora</i> <i>Dewit & P.A. Duvign.</i>
Kotschya strobilantha	Kotschya strobilantha (<i>Benth.</i>) <i>Dewit & P.A. Duvign.</i> var. <i>strobilantha</i>
Kyllinga alba	Kyllinga alba <i>Nees</i>
Kyllinga squamulata	Kyllinga squamulata <i>Vahl</i>
Lablab niger	Lablab purpureus (<i>L.</i>) <i>Sweet</i> subsp. <i>uncinatus</i> <i>Verdc.</i>
Lactuca capensis	Lactuca inermis <i>Forssk.</i>
Lagenaria sphaerica	Lagenaria sphaerica (<i>Sond.</i>) <i>Naudin</i>
Landolphia buchananii	Landolphia buchananii (<i>Hallier f.</i>) <i>Stapf</i>
Landolphia camptoloba	Landolphia camptoloba (<i>K. Schum.</i>) <i>Pichon</i>
Landolphia gossweileri	Landolphia gossweileri (<i>Stapf</i>) <i>Pichon</i>
Landolphia kirkii	Landolphia kirkii <i>Hook.f.</i>
Landolphia parvifolia	Landolphia parvifolia <i>K. Schum.</i>
Landolphia rufescens	Landolphia rufescens (<i>De Wild.</i>) <i>Pichon</i>
Lannea discolor	Lannea discolor (<i>Sond.</i>) <i>Engl.</i>
Lannea edulis	Lannea edulis (<i>Sond.</i>) <i>Engl.</i>
Lannea gossweileri	Lannea gossweileri <i>Exell & Mendonça</i> var. <i>gossweileri</i>
Lannea stuhlmannii	Lannea schweinfurthii (<i>Engl.</i>) <i>Engl.</i>
Lannea virgata	Lannea virgata <i>R. & A. Fern.</i>
Lantana camara	Lantana camara <i>L.</i>
Lantana rhodesiensis	Lantana moldenkei <i>R. Fern.</i>

Lantana trifolia	Lantana trifolia <i>L.</i>
Lapeirousia odoratissima	Lapeirousia odoratissima <i>Baker</i>
Lapeirousia porphyrosiphon	Lapeirousia schimperi (<i>Asch. & Klatt</i>) <i>Milne-Redh.</i>
Lapeirousia rhodesiana	Lapeirousia erythrantha (<i>Klatt</i>) <i>Baker</i>
Leea guineense	Leea guineense <i>G.Don</i>
Leonotis lecharis	??
Leonotis leonurus	Leonotis leonurus (<i>L.</i>) <i>R.Br.</i>
Leonotis nepetifolia	Leonotis nepetifolia (<i>L.</i>) <i>W.T.Aiton</i>
Lepidagathis macrochila	Lepidagathis macrochila <i>Lindau</i>
Lepistemon owariense	Lepistemon owariense (<i>P.Beauv.</i>) <i>Hallier f.</i>
Leptactina benguelensis	Leptactina benguelensis (<i>Hook.f.</i>) <i>R.D.Good</i>
Leptaulis zenkeri	Leptaulis zenkeri <i>Engl.</i>
Leptocarydion vulpiastrum	Leptocarydion vulpiastrum (<i>De Not.</i>) <i>Stapf</i>
Leptoderris goetzei	Leptoderris goetzei (<i>Harms</i>) <i>Dunn</i>
Leptoderris nobilis	Leptoderris nobilis (<i>Baker</i>) <i>Dunn</i>
Leucas descampsi	Leucas tettensis <i>Vatke</i>
Leucas stricta	Leucas tettensis <i>Vatke</i>
Limeum fenestratum	Limeum fenestratum (<i>Fenzl</i>) <i>Heimerl.</i> var. fenestratum
Limeum viscosum	Limeum viscosum (<i>J.Gay</i>) <i>Fenzl</i> subsp. viscosum
Linociera nilotica	Chionanthus niloticus (<i>Oliv.</i>) <i>Stearn</i>
Lipocarpha monocephala	Lipocarpha hemisphaerica (<i>Roth.</i>) <i>Goetgh.</i>
Lippia javanica	Lippia javanica (<i>Burm.f.</i>) <i>Spreng.</i>
Lippia plicata	Lippia plicata <i>Baker</i>
Lippia wilmsii	Lippia woodii <i>Moldenke</i>
Lobelia kirkii	Lobelia kirkii <i>R.E.Fr.</i>
Lobelia livingstoniana	Lobelia livingstoniana <i>R.E.Fr.</i>
Lobelia nuda	Lobelia erinus <i>L.</i>
Lonchocarpus capassa	Philenoptera violacea (<i>Klotzsch</i>) <i>Schrire</i>
Lonchocarpus katangensis	Philenoptera katangensis (<i>De Wild.</i>) <i>Schrire</i>
Lonchocarpus nelsii	Philenoptera nelsii (<i>Schinz</i>) <i>Schrire</i>
Loranthus bulawayensis	Agelanthus pungu (<i>De Wild.</i>) <i>Polhill & Wiens</i>
Loranthus oleifolius	Tapinanthus oleifolius (<i>J.C.Wendl.</i>) <i>Danser</i>
Loranthus quinquangulus	Tapinanthus oleifolius (<i>J.C.Wendl.</i>) <i>Danser</i>
Loranthus rubroviridis	Oliverella rubroviridis <i>Tiegh.</i>
Ludwigia abyssinica	Ludwigia abyssinica <i>A.Rich.</i>
Ludwigia leptocarpa	Ludwigia leptocarpa (<i>Nutt.</i>) <i>Hara</i>
Ludwigia octovalvis	Ludwigia octovalvis (<i>Jacq.</i>) <i>P.H.Raven</i>
Ludwigia palustris	Ludwigia palustris (<i>L.</i>) <i>Elliot</i>
Ludwigia perennis	Ludwigia perennis <i>L.</i>
Ludwigia pulvinaris	Ludwigia senegalensis (<i>DC.</i>) <i>Troch.</i>
Ludwigia stenorrhapha	Ludwigia stenorrhapha (<i>Brenan</i>) <i>Hara</i>
Luffa cylindrica	Luffa cylindrica (<i>L.</i>) <i>M.Roem.</i>
Lupiniphyllum lupinifolium	Tephrosia lupinifolia <i>DC.</i>
Lycium persicum	Lycium shawii <i>Roem. & Schult.</i>
Lygodium microphyllum	Lygodium microphyllum (<i>Cav.</i>) <i>R.Br.</i>
Macaranga schweinfurthii	Macaranga schweinfurthii <i>Pax</i>
Maerua angolensis	Maerua angolensis <i>DC.</i>
Maerua friesii	Maerua friesii <i>Gilg & Gilg-Ben.</i>
Maerua juncea	Maerua juncea <i>Pax</i> subsp. juncea
Maerua kirkii	Maerua kirkii (<i>Oliv.</i>) <i>F.White</i>
Maerua parvifolia	Maerua parvifolia <i>Pax</i>
Maerua prittwitzii	Maerua prittwitzii <i>Gilg & Gilg-Ben.</i>
Maesa lanceolata	Maesa lanceolata <i>Forssk.</i>
Maesobotrya sp.	Maesobotrya sp.
Magnistipula sp. (FW 3379)	Magnistipula butayei <i>De Wild.</i> subsp. bangweolensis (<i>R.E.Fr.</i>) <i>F.White</i>
Magnistipula bangweolensis	Magnistipula butayei <i>De Wild.</i> subsp. bangweolensis (<i>R.E.Fr.</i>) <i>F.White</i>
Magnistipula eglandulosa	Magnistipula sapinii <i>De Wild.</i>
Mallotus oppositifolius	Mallotus oppositifolius (<i>Geiseler</i>) <i>Müll.Arg.</i> var. oppositifolius
Manilkara mochisia	Manilkara mochisia (<i>Baker</i>) <i>Dubard</i>
Manilkara obovata	Manilkara obovata (<i>Sabine & G.Don</i>) <i>J.H.Hemsley</i>
Maprounea africana	Maprounea africana <i>Müll.Arg.</i>

Margaretta rosea	Margaretta rosea <i>Oliv.</i> subsp. <i>cornetii</i> (<i>Dewèvre</i>) <i>Goyder</i> and/or subsp. <i>orbicularis</i> (<i>N.E.Br.</i>) <i>Goyder</i>
Margaritaria discoidea	Margaritaria discoidea (<i>Baill.</i>) <i>G.L.Webster</i>
Mariscus aristatus	<i>Cyperus squarrosus</i> <i>L.</i>
Mariscus dubius	<i>Cyperus dubius</i> <i>Rottb.</i>
Mariscus pseudovestitus	<i>Cyperus pseudovestitus</i> (<i>C.B.Clarke</i>) <i>Kük.</i>
Markhamia acuminata	Markhamia zanzibarica (<i>DC.</i>) <i>K.Schum.</i>
Markhamia obtusifolia	Markhamia obtusifolia (<i>Baker</i>) <i>Sprague</i>
Marquesia acuminata	Marquesia acuminata (<i>Gilg</i>) <i>R.E.Fr.</i>
Marquesia macroura	Marquesia macroura <i>Gilg</i>
Maytenus acuminata	Maytenus acuminata (<i>L.f.</i>) <i>Loes.</i> var. <i>acuminata</i>
Maytenus buchananii	<i>Gymnosporia buchananii</i> <i>Loes.</i>
Maytenus heterophylla	<i>Gymnosporia heterophylla</i> (<i>Eckl. & Zeyh.</i>) <i>Loes.</i> subsp. <i>heterophylla</i>
Maytenus senegalensis	<i>Gymnosporia senegalensis</i> (<i>Lam.</i>) <i>Loes.</i>
Maytenus undata	Maytenus undata (<i>Thunb.</i>) <i>Blakelock</i>
Mechowia grandiflora	Mechowia grandiflora <i>Schinz</i>
Melanthera albinervia	Melanthera albinervia <i>O.Hoffm.</i> subsp. <i>albinervia</i>
Melastomastrum capitatum	Melastomastrum capitatum (<i>Vahl</i>) <i>A. & R.Fern.</i>
Melastomastrum segregatum	Melastomastrum segregatum (<i>Benth.</i>) <i>A. & R.Fern.</i>
Melastomastrum capitatum	Melastomastrum capitatum (<i>Vahl</i>) <i>A. & R.Fern.</i>
Melastomastrum segregatum	Melastomastrum segregatum (<i>Benth.</i>) <i>A. & R.Fern.</i>
Melhania acuminata	Melhania acuminata <i>Mast.</i> var. <i>acuminata</i>
Melhania forbesii	Melhania forbesii <i>Mast.</i>
Mellera lobulata	Mellera lobulata <i>S.Moore</i>
Mellera submutica	Mellera submutica <i>C.B.Clarke</i>
Melochia corchorifolia	Melochia corchorifolia <i>L.</i>
Melothria punctata	<i>Zehneria scabra</i> (<i>L.f.</i>) <i>Sond.</i> subsp. <i>scabra</i>
Memecylon sp. (3891)	??
Memecylon buchanani	<i>Warneckea sansibarica</i> (<i>Taub.</i>) <i>Jacq.-Fél.</i> var. <i>buchananii</i> (<i>Gilg</i>) <i>A. & R.Fern.</i>
Memecylon flavovirens	Memecylon flavovirens <i>Baker</i>
Memecylon sapinii	<i>Warneckea sapinii</i> (<i>De Wild.</i>) <i>Jacq.-Fél.</i>
Merremia pinnata	Merremia pinnata (<i>Choisy</i>) <i>Hallier f.</i>
Merremia pterygocaulos	Merremia pterygocaulos (<i>Choisy</i>) <i>Hallier f.</i>
Merremia tridentata	Merremia tridentata (<i>L.</i>) <i>Hallier f.</i> subsp. <i>angustifolia</i> (<i>Jacq.</i>) <i>van Ooststr.</i>
Mezoneuron angolense	Mezoneuron angolense <i>Oliv.</i>
Micrococca mercurialis	Micrococca mercurialis (<i>L.</i>) <i>Benth.</i>
Microglossa angolensis	<i>Conyza pyrrophappa</i> <i>A.Rich.</i>
Microglossa pyrifolia	Microglossa pyrifolia (<i>Lam.</i>) <i>Kuntze</i>
Microlepis speluncae	Microlepis speluncae (<i>L.</i>) <i>T.Moore</i>
Mikania cordata	Mikania carteri <i>Baker</i>
Mikania scandens	Mikania sagittifera <i>B.L.Rob.</i>
Mikaniopsis tanganyikensis	Mikaniopsis tanganyikensis (<i>R.E.Fr.</i>) <i>Milne-Redh.</i>
Mimosa pigra	Mimosa pigra <i>L.</i>
Mimulus gracilis	Mimulus gracilis <i>R.Br.</i>
Mimusops zeyheri	Mimusops zeyheri <i>Sond.</i>
Miscanthidium teretifolium	Miscanthus sorghum (<i>Nees</i>) <i>Pilg.</i>
Miscanthidium violaceum	Miscanthus violaceus (<i>K.Schum.</i>) <i>Pilg.</i>
Mitragyna stipulosa	<i>Hallea stipulosa</i> (<i>DC.</i>) <i>Leroy</i>
Mollugo cerviana	Mollugo cerviana (<i>L.</i>) <i>Ser.</i> var. <i>cerviana</i>
Mollugo nudicaulis	Mollugo nudicaulis <i>Lam.</i>
Momordica balsamina	Momordica balsamina <i>L.</i>
Momordica cardiospermoides	Momordica cardiospermoides <i>Klotzsch</i>
Momordica clematidea	Momordica sp.
Momordica foetida	Momordica foetida <i>Schumach.</i>
Momordica kirkii	Momordica kirkii (<i>Hook.f.</i>) <i>C.Jeffrey</i>
Mondia whitei	Mondia whitei (<i>Hook. f.</i>) <i>Skeels</i>
Monechma sp. (3429)	??
Monechma debile	Monechma debile (<i>Forssk.</i>) <i>Nees</i>
Monechma fimbriatum	Monechma sp.
Monotes adenophyllus	Monotes adenophyllus <i>Gilg</i>
Monotes africanus	Monotes africanus (<i>Welw.</i>) <i>A.DC.</i>

Monotes angolensis	Monotes angolensis <i>De Wild.</i>
Monotes autennei	Monotes autennei <i>P.A.Duvign.</i>
Monotes dasyanthus	Monotes dasyanthus <i>Gilg</i>
Monotes discolor	Monotes discolor <i>R.E.Fr.</i>
Monotes elegans	Monotes elegans <i>Gilg</i>
Monotes glaber	Monotes glaber <i>Sprague</i>
Monotes katangensis	Monotes katangensis (<i>De Wild.</i>) <i>De Wild.</i>
Monotes redheadii	Monotes redheadii <i>P.A.Duvign.</i>
Monsonia ovata	Monsonia glauca <i>Knuth</i>
Monsonia senegalensis	Monsonia senegalensis <i>Guill. & Perr.</i>
Morinda angolensis	Morinda angolensis (<i>R.Good</i>) <i>F.White</i>
Mucuna glabrialata	Mucuna glabrialata (<i>Hauman</i>) <i>Verdc.</i>
Mucuna poggei	Mucuna poggei <i>Taub.</i> var. <i>poggei</i>
Mucuna pruriens	Mucuna pruriens (<i>L.</i>) <i>DC.</i> var. <i>pruriens</i>
Mucuna stans	Mucuna stans <i>Baker</i>
Mundulea sericea	Mundulea sericea (<i>Willd.</i>) <i>A.Chev.</i>
Murdannia simplex	Murdannia simplex (<i>Vahl</i>) <i>Brenan</i>
Mussaenda angolensis	Mussaenda rivularis <i>Hiern</i>
Mussaenda arcuata	Mussaenda arcuata <i>Poir.</i>
Myrica conifera	Morella serrata (<i>Lam.</i>) <i>Killick</i>
Myrica serrata	Morella serrata (<i>Lam.</i>) <i>Killick</i>
Myriophyllum spicatum	Myriophyllum spicatum <i>L.</i>
Myrothamnus flabellifolius	Myrothamnus flabellifolius <i>Welw.</i>
Myrsine africana	Myrsine africana <i>L.</i>
Mystroxydon aethiopicum	Mystroxydon aethiopicum (<i>Thunb.</i>) <i>Loes.</i>
Najas pectinata	Najas horrida <i>Magnus</i>
Napoleona gossweileri	Napoleonaea gossweileri <i>Baker f.</i>
Nauclaea pobeguinii	Sarcocephalus pobeguinii <i>Pobeg.</i>
Neohyptis paniculata	Neohyptis paniculata (<i>Baker</i>) <i>J.K.Morton</i>
Nelsonia canescens	Nelsonia canescens (<i>Lam.</i>) <i>Spreng.</i>
Neoboutonia africana	Neoboutonia melleri (<i>Müll.Arg.</i>) <i>Prain</i>
Neorautanenia mitis	Neorautanenia mitis (<i>A.Rich.</i>) <i>Verdc.</i>
Neorautanenia pseudopachyrrhiza	Neorautanenia mitis (<i>A.Rich.</i>) <i>Verdc.</i>
Nephrolepis undulata	Nephrolepis cordifolia (<i>L.</i>) <i>C.Presl</i>
Nesaea crassicaulis	Nesaea crassicaulis (<i>Guill. & Perr.</i>) <i>Koehne</i>
Nesaea radicans	Nesaea radicans <i>Guill. & Perr.</i>
Nesaea rigidula	Nesaea rigidula (<i>Sond.</i>) <i>Koehne</i>
Nesaea schinzii	Nesaea schinzii <i>Koehne</i>
Newtonia aubrevillei	Newtonia aubrevillei (<i>Pellegr.</i>) <i>Keay</i> subsp. <i>lasiantha</i> <i>Brenan & Brummitt</i>
Nicandra physaloides	Nicandra physalodes (<i>L.</i>) <i>Gaertn.</i>
Nicolasia felicioides	Nicolasia felicioides (<i>Hiern</i>) <i>S.Moore</i>
Nicolasia pedunculata	Nicolasia pedunculata <i>S.Moore</i> subsp. <i>pedunculata</i>
Nidorella microcephala	Nidorella microcephala <i>Steetz</i>
Nidorella resedifolia	Nidorella resedifolia <i>DC.</i> subsp. <i>resedifolia</i>
Nidorella spartioides	Nidorella spartioides (<i>O.Hoffm.</i>) <i>Cronq.</i>
Nidorella welwitschii	Conyza welwitschii (<i>S.Moore</i>) <i>Wild</i>
Nuxia congesta	Nuxia congesta <i>Fresen.</i>
Nuxia oppositifolia	Nuxia oppositifolia (<i>Hochst.</i>) <i>Benth.</i>
Nymphoides indica	Nymphoides indica (<i>L.</i>) <i>Kuntze</i> subsp. <i>occidentalis</i> <i>A.Raynal</i>
Ochna afzelioides	Ochna afzelioides <i>N.Robson</i>
Ochna cinnabarina	Ochna cinnabarina <i>Engl. & Gilg</i>
Ochna confusa	Ochna confusa <i>Burt Davy & Greenway</i>
Ochna gambleoides	Ochna gambleoides <i>N.Robson</i>
Ochna katangensis	Ochna katangensis <i>De Wild.</i>
Ochna leptoclada	Ochna leptoclada <i>Oliv.</i>
Ochna manikensis	Ochna manikensis <i>De Wild.</i>
Ochna multiflora	Ochna multiflora <i>DC.</i>
Ochna puberula	Ochna puberula <i>N.Robson</i>
Ochna pulchra	Ochna pulchra <i>Hook.</i>
Ochna pygmaea	Ochna pygmaea <i>Hiern</i>

Ochna richardsiae	Ochna richardsiae <i>N.Robson</i>
Ochna schumanniana	Ochna ? schweinfurthiana
Ochna schweinfurthiana	Ochna schweinfurthiana <i>F.Hoffm.</i>
Ochthocosmus lemaireanus	Phyllocosmus lemaireanus (<i>De Wild. & Dur.</i>) <i>T. & H.Dur.</i>
Ocimum americanum	Ocimum americanum <i>L.</i> var. americanum
Ocimum suave	Ocimum gratissimum <i>L.</i> subsp. gratissimum var. gratissimum
Ocimum urticifolium	Ocimum gratissimum <i>L.</i> subsp. gratissimum var. gratissimum
Olax dissitiflora	Olax dissitiflora <i>Oliv.</i>
Olax gambecola	Olax gambecola <i>Baill.</i>
Olax obtusifolia	Olax obtusifolia <i>De Wild.</i>
Oldenlandia affinis	Oldenlandia affinis (<i>Roem. & Schult.</i>) <i>DC.</i> subsp. fugax (<i>Vatke</i>) <i>Verdc.</i>
Oldenlandia bojeri	Agathisanthemum bojeri <i>Klotzsch</i>
Oldenlandia capensis	Oldenlandia capensis <i>L.f.</i>
Oldenlandia corymbosa	Oldenlandia corymbosa <i>L.</i>
Oldenlandia herbacea	Oldenlandia herbacea (<i>L.</i>) <i>Roxb.</i> var. herbacea
Oldenlandia lancifolia	Oldenlandia lancifolia (<i>Schumach.</i>) <i>DC.</i> var. scabridula <i>Bremek.</i>
Oldfieldia dactylophylla	Oldfieldia dactylophylla (<i>Oliv.</i>) <i>J.Léonard</i>
Olea africana	Olea europaea <i>L.</i> subsp. africana (<i>Mill.</i>) <i>P.S.Green</i>
Olea capensis	Olea capensis <i>L.</i> subsp. macrocarpa (<i>C.H.Wright</i>) <i>I.Verd.</i>
Olinia usambarensis	Olinia rochetiana <i>Juss.</i>
Oncoba spinosa	Oncoba spinosa <i>Forssk.</i>
Ophioglossum reticulatum	Ophioglossum reticulatum <i>L.</i>
Opilia celtidifolia	Opilia amentacea <i>Roxb.</i>
Oplismenus hirtellus	Oplismenus hirtellus (<i>L.</i>) <i>P.Beauv.</i>
Oreocanthus sp.	Brachystephanus montifuga (<i>Milne-Redh.</i>) <i>Champl.</i>
Ormocarpum kirkii	Ormocarpum kirkii <i>S.Moore</i>
Orthanthera jasminiflora	Orthanthera jasminiflora (<i>Decne</i>) <i>Schinz</i>
Orthosiphon sp. (M 3467)	? <i>Alvesia cylindricalyx</i> (<i>Mathew</i>) <i>Mathew</i>
Oryza barthii	Oryza barthii <i>A.Chev.</i>
Osmunda regalis	Osmunda regalis <i>L.</i>
Ostryoderris stuhlmannii	Xeroderris stuhlmannii (<i>Taub.</i>) <i>Mendonça & E.P.Sousa</i>
Otiophora caerulea	Otiophora caerulea (<i>Hiern</i>) <i>Bullock</i>
Otiophora scabra	Otiophora scabra <i>Zucc.</i>
Ottelia ulvifolia	Ottelia ulvifolia (<i>Planch.</i>) <i>Walp.</i>
Ouratea andongensis	Ouratea andongensis (<i>Hiern</i>) <i>Exell</i>
Ouratea densiflora	Ouratea densiflora <i>De Wild. & Dur.</i>
Ouratea hierni	Ouratea hierni (<i>Van Tiegh.</i>) <i>Exell</i>
Ouratea welwitschii	Ouratea welwitschii (<i>Van Tiegh.</i>) <i>Exell</i>
Oxyanthus speciosus	Oxyanthus speciosus <i>DC.</i> subsp. mollis (<i>Hutch.</i>) <i>Bridson</i>
Oxygonum sinuatum	Oxygonum sinuatum (<i>Meisn.</i>) <i>Dammer</i>
Oxytenanthera abyssinica	Oxytenanthera abyssinica (<i>A.Rich.</i>) <i>Munro</i>
Ozorea reticulata	Ozorea reticulata (<i>Baker f.</i>) <i>R. & A.Fern.</i> subsp. reticulata
Ozorea sp. (3244)	??
Ozorea homblei	Ozorea homblei (<i>De Wild.</i>) <i>R. & A.Fern.</i>
Ozorea longipes	Ozorea longipes (<i>Engl. & Gilg</i>) <i>R. & A.Fern.</i>
Ozorea nigricans	Ozorea nigricans (<i>van der Veken</i>) <i>R. & A.Fern.</i> var. nigricans
Ozorea nitida	Ozorea nitida (<i>Engl. & Brehmer</i>) <i>R. & A.Fern.</i>
Ozorea pwetoensis	Ozorea pwetoensis (<i>van der Veken</i>) <i>R. & A.Fern.</i>
Ozorea reticulata	Ozorea reticulata (<i>Baker f.</i>) <i>R. & A.Fern.</i> subsp. reticulata
Ozorea stenophylla	Ozorea stenophylla (<i>Engl. & Gilg</i>) <i>R. & A.Fern.</i>
Pachycarpus lineolatus	Pachycarpus lineolatus (<i>Decne.</i>) <i>Bullock</i> and/or <i>P. bisacculatus</i> (<i>Oliv.</i>) <i>Goyder</i>
Pachystela brevipes	Synsepalum brevipes (<i>Baker f.</i>) <i>T.D.Penn.</i>
Paederia foetens	Paederia bojeriana (<i>A.Rich.</i>) <i>Drake</i> subsp. foetens (<i>Hiern</i>) <i>Verdc.</i>
Pancratium trianthum	Pancratium tenuifolium <i>A.Rich.</i>
Pandiaka carsoni	Pandiaka carsonii (<i>Baker</i>) <i>C.B. Clarke</i>
Pandiaka schweinfurthii	Pandiaka ? schweinfurthii (<i>Schinz</i>) <i>C.B. Clarke</i>
Panicum adenophorum	Panicum adenophorum <i>K.Schum.</i>
Panicum aphanoneurum	Panicum fluviicola <i>Steud.</i>
Panicum coloratum	Panicum coloratum <i>L.</i> var. coloratum
Panicum heterostachyum	Panicum heterostachyum <i>Hack.</i>

Panicum maximum	Panicum maximum <i>Jacq.</i>
Panicum repens	Panicum repens <i>L.</i>
Pappea capensis	Pappea capensis <i>Eckl. & Zeyh.</i>
Pappea ugandensis	Pappea capensis <i>Eckl. & Zeyh.</i>
Parinari capensis	Parinari capensis <i>Harv.</i>
Parinari curatellifolia	Parinari curatellifolia <i>Benth.</i>
Parinari excelsa	Parinari excelsa <i>Sabine</i>
Paropsia brazzeana	Paropsia brazzeana <i>Baill.</i>
Paspalum orbiculare	Paspalum scrobiculatum <i>L.</i>
Paullinia pinnata	Paullinia pinnata <i>L.</i>
Pauridiantha holsti	Pauridiantha paucinervis (<i>Hiern</i>) <i>Bremek.</i> subsp. holstii (<i>K.Schum.</i>) <i>Verdc.</i>
Pavetta sp. (3224)	??
Pavetta assimilis	Pavetta gardeniifolia <i>A.Rich.</i>
Pavetta cataractarum	Pavetta cataractarum <i>S.Moore</i>
Pavetta lasiopeplus	Pavetta lasiopeplus <i>K.Schum.</i>
Pavetta nitidula	Pavetta nitidula <i>Hiern</i>
Pavetta pygmaea	Pavetta pygmaea <i>Bremek.</i>
Pavetta redheadii	Pavetta redheadii <i>Bremek.</i>
Pavetta schumanniana	Pavetta schumanniana <i>K.Schum.</i>
Pavetta senegalensis	??
Pavonia hirsuta	Pavonia hirsuta <i>Guill. & Perr.</i>
Pavonia senegalensis	Pavonia senegalensis (<i>Cav.</i>) <i>Leistner</i>
Peddiea fischeri	Peddiea africana <i>Harv.</i>
Pegolettia senegalensis	Pegolettia senegalensis <i>Cass.</i>
Pellaea viridis	??
Peltophorum africanum	Peltophorum africanum <i>Sond.</i>
Pennisetum polystachyon	Pennisetum polystachyon (<i>L.</i>) <i>Schult.</i> subsp. polystachyon
Pentarrhinum insipidum	Pentarrhinum insipidum <i>E.Mey.</i>
Pentas herbacea	Pentas herbacea (<i>Hiern</i>) <i>K.Schum.</i>
Pentodon pentandrus	Pentodon pentandrus (<i>Schum. & Thonn.</i>) <i>Vatke</i> var. pentandrus
Peperomia arabica	Peperomia blanda (<i>Jacq.</i>) <i>Kunth</i>
Pergularia extensa	Pergularia daemia (<i>Forssk.</i>) <i>Chiov.</i> subsp. barbata (<i>Klotzsch</i>) <i>Goyder</i>
Pericopsis angolensis	Pericopsis angolensis (<i>Baker</i>) <i>Meeuwen</i>
Peristrophe bicalyculata	Peristrophe bicalyculata (<i>Retz</i>) <i>Nees</i>
Perotis patens	Perotis patens <i>Gand.</i>
Perotis vaginata	Perotis vaginata <i>Hack.</i>
Phaulopsis imbricata	Phaulopsis imbricata (<i>Forssk.</i>) <i>Sweet</i> subsp. ??
Phaulopsis longifolia	Phaulopsis sp.
Philippia benguelensis	Erica benguelensis (<i>Engl.</i>) <i>E.G.H.Oliv.</i>
Phoenix reclinata	Phoenix reclinata <i>Jacq.</i>
Phragmites mauritianus	Phragmites mauritianus <i>Kunth</i>
Phyllanthus sp. (3337)	Phyllanthus sp.
Phyllanthus capillaris	Phyllanthus nummulariifolius <i>Poir.</i> var. capillaris (<i>Schumach. & Thonn.</i>) <i>Radcl.Sm.</i>
Phyllanthus discoideus	Margaritaria discoidea (<i>Baill.</i>) <i>G.L.Webster</i> var. nitida (<i>Pax</i>) <i>Radcl.-Sm.</i>
Phyllanthus engleri	Phyllanthus engleri <i>Pax</i>
Phyllanthus eylesii	Phyllanthus leucanthus <i>Pax</i>
Phyllanthus guineensis	Phyllanthus ovalifolius <i>Forssk.</i>
Phyllanthus hutchinsonianus	Phyllanthus hutchinsonianus <i>S.Moore</i>
Phyllanthus leucanthus	Phyllanthus leucanthus <i>Pax</i>
Phyllanthus macranthus	Phyllanthus macranthus <i>Pax</i> var. macranthus
Phyllanthus maderaspatensis	Phyllanthus maderaspatensis <i>L.</i>
Phyllanthus muelleranus	Phyllanthus muellerianus (<i>Kuntze</i>) <i>Exell</i>
Phyllanthus eylesii i	Phyllanthus leucanthus <i>Pax</i>
Phyllanthus nummularifolius	Phyllanthus nummulariifolius <i>Poir.</i>
Phyllanthus pentandrus	Phyllanthus pentandrus <i>Schum. & Thonn.</i>
Phyllanthus polyanthus	Phyllanthus polyanthus <i>Pax</i>
Phyllanthus reticulatus	Phyllanthus reticulatus <i>Poir.</i> var. reticulatus
Phyllanthus retinervis	Phyllanthus retinervis <i>Hutch.</i>
Phyllanthus virgulatus	Phyllanthus virgulatus <i>Müll.Arg.</i>
Phyllanthus welwitschianus	Phyllanthus welwitschianus <i>Müll.Arg.</i>

Phyllocosmus lemaireanus	Phyllocosmus candidus <i>Engl. & Gilg.</i>
Phytolacca dodecandra	Phytolacca dodecandra <i>L.Hér.</i>
Piliostigma thonningii	Piliostigma thonningii (<i>Schumach.</i>) <i>Milne-Redh.</i>
Piper capense	Piper capensis <i>L.f.</i> var. <i>capensis</i>
Piper guineense	Piper guineensis <i>Thonn. & Schumach.</i>
Pistia stratiotes	Pistia stratiotes <i>L.</i>
Pittosporum mannii	Pittosporum viridiflorum <i>Sims</i>
Plectranthus biflorus	Plectranthus tetragonus <i>Gürke</i>
Plectranthus candelabrififormis	Plectranthus candelabrififormis <i>Launert</i>
Plectranthus cylindraceus	Plectranthus montanus <i>Benth.</i>
Plectranthus esculentus	Plectranthus esculentus <i>N.E.Br.</i>
Plectranthus kapatensis	Plectranthus kapatensis <i>R.E.Fr.</i>
Plectranthus mirabilis	Plectranthus mirabilis (<i>Briq.</i>) <i>Launert</i>
Pleiotaxis eximia	Pleiotaxis eximia <i>O.Hoffm.</i> subsp. <i>eximia</i>
Pleiotaxis fulva	Pleiotaxis fulva <i>Hiern</i>
Pleiotaxis pulcherrima	Pleiotaxis pulcherrima <i>Steetz</i>
Pleiotaxis rogersii	Pleiotaxis rogersii <i>S.Moore</i>
Pleurostyliia africana	Pleurostyliia africana <i>Loes.</i>
Pluchea dioscoridis	Pluchea dioscoridis (<i>L.</i>) <i>DC.</i>
Plumbago zeylanica	Plumbago zeylanica <i>L.</i>
Podocarpus milanjanus	Podocarpus milanjanus <i>Rendle</i>
Pogonarthria brainii	Eragrostis brainii (<i>Stent</i>) <i>Launert</i>
Pogonarthria fleckii	Pogonarthria fleckii (<i>Hack.</i>) <i>Hack.</i>
Pogonarthria squarrosa	Pogonarthria squarrosa (<i>Roem. & Schult.</i>) <i>Pilg.</i>
Pollichia campestris	Pollichia campestris <i>Aiton</i>
Polycarpaea corymbosa	Polycarpaea corymbosa (<i>L.</i>) <i>Lam.</i> var. <i>corymbosa</i>
Polygala albida	Polygala albida <i>Schinz</i> var. <i>albida</i>
Polygala arenicola	Polygala arenicola <i>Gürke</i>
Polygala erioptera	Polygala erioptera <i>DC.</i> subsp. <i>erioptera</i>
Polygala exelliana	Polygala exelliana <i>Troupin</i>
Polygala gomesiana	Polygala gomesiana <i>Oliv.</i>
Polygala gossweileri	Polygala gossweileri <i>Exell & Mendonça</i>
Polygala kalaxariensis	Polygala kalaxariensis <i>Schinz</i>
Polygala nematophylla	Polygala nematophylla <i>Exell</i>
Polygala persicariifolia	Polygala persicariifolia <i>DC.</i>
Polygala pygmaea	Polygala welwitschii <i>Chodat</i> subsp. <i>pygmaea</i> (<i>Gürke</i>) <i>Paiva</i>
Polygala schinziana	Polygala schinziana <i>Chodat</i>
Polygala sphenoptera	Polygala sphenoptera <i>Fresen.</i>
Polygonum lapathifolium	Persicaria lapathifolia (<i>L.</i>) <i>Gray</i>
Polygonum pulchrum	Persicaria attenuata (<i>R.Br.</i>) <i>Sojak</i> subsp. <i>africana</i> <i>K.L.Wilson</i>
Polygonum salicifolium	Persicaria serrulata (<i>Lag.</i>) <i>Webb & Moq.</i>
Polyscias fulva	Polyscias fulva (<i>Hiern</i>) <i>Harms</i>
Popowia gracilis	Sphaerocoryne gracilis (<i>Engl. & Diels</i>) <i>Verdc.</i>
Popowia sp.	? <i>Friesoldielsia obovata</i>
Popowia obovata	<i>Friesoldielsia obovata</i> (<i>Benth.</i>) <i>Verdc.</i>
Popowia oliverana	<i>Monanthotaxis parviflora</i> (<i>Oliv.</i>) <i>Verdc.</i> subsp. <i>parvifolia</i>
Portulaca oleracea	Portulaca oleracea <i>L.</i>
Potamogeton octandrus	Potamogeton octandrus <i>Poir.</i>
Potamogeton richardii	Potamogeton richardii <i>Solms</i>
Potamogeton schweinfurthii	Potamogeton schweinfurthii <i>A.W.Benn</i>
Pouzolzia hypoleuca	Pouzolzia mixta <i>Solms</i>
Premna senensis	Premna senensis <i>Klotzsch</i>
Protea angolensis	Protea angolensis <i>Welw.</i>
Protea gagedi	Protea gagedi <i>J.F.Gmel.</i>
Protea haemantha	Protea haemantha <i>Engl. & Gilg</i>
Protea madiensis	Protea madiensis <i>Oliv.</i>
Protea micans	Protea micans <i>Welw.</i>
Protea petiolaris	Protea petiolaris (<i>Hiern</i>) <i>Baker & C.H.Wright</i>
Protea rupestris	Protea rupestris <i>R.E.Fr.</i>
Protea secundiflora	Protea paludosa (<i>Hiern</i>) <i>Engl.</i> subsp. <i>secundifolia</i> (<i>Hauman</i>) <i>Chisumpa & Brummitt</i>
Protea trichophylla	Protea trichophylla <i>Engl. & Gilg</i>

Protea welwitschii	Protea welwitschii <i>Engl.</i>
Pseudagrostachys ugandensis	Pseudagrostachys ugandensis (<i>Hutch.</i>) Pax & K.Hoffm.
Pseudarthria hookeri	Pseudarthria hookeri Wight & Arn. var. hookeri
Pseudobrachiaria deflexa	Brachiaria deflexa (<i>Schumach.</i>) Robyns
Pseudolachnostylis maprouneifolia	Pseudolachnostylis maprouneifolia Pax
Psorospermum baumii	Psorospermum baumii <i>Engl.</i>
Psorospermum febrifugum	Psorospermum febrifugum Spach
Psorospermum mechowii	Psorospermum mechowii <i>Engl.</i>
Psychotria sp. (3423)	??
Psychotria buzica	Psychotria pumila Hiern var. buzica (<i>S.Moore</i>) E.M.A.Petit
Psychotria djumaensis	Psychotria djumaensis De Wild. var. zambesiaca E.M.A.Petit
Psychotria eminiana	Psychotria eminiana (<i>Kuntze</i>) Petit var. eminiana
Psychotria hererostricta	Psychotria hererostricta Petit var. hererostricta
Psychotria humilis	Psychotria humilis Hiern
Psychotria kirkii	Psychotria kirkii Hiern
Psychotria linearistepala	Psychotria linearisepala Petit var. linearisepala
Psychotria megistosticta	Psychotria mahonii C.H.Wright var. puberula (<i>E.M.A.Petit</i>) Verdc.
Psychotria pumila	Psychotria pumila Hiern
Psychotria spithamea	Psychotria spithamea S.Moore
Psychotria succulenta	Psychotria succulenta (<i>Hiern</i>) Petit
Pteleopsis angolensis	? Pterocarpus angolensis
Pteleopsis anisoptera	Pteleopsis anisoptera (<i>M.A.Lawson</i>) Engl. & Diels
Pteleopsis myrtifolia	Pteleopsis myrtifolia (<i>M.A.Lawson</i>) Engl. & Diels
Pteridium aquilinum	Pteridium aquilinum (<i>L.</i>) Kuhn subsp. ? centrali-africanum Hieron
Pteris catoptera	Pteris catoptera Kunze var. catoptera
Pteris dentata	Pteris dentata Forssk.
Pterocarpus angolensis	Pterocarpus angolensis DC.
Pterocarpus antunesii	Pterocarpus lucens Guill. & Perr. subsp. antunesii (<i>Taub.</i>) Rojo
Pterocarpus brenanii	Pterocarpus brenanii Barbosa & Torre
Pterocarpus chrysothrix	Pterocarpus tinctorius Welw.
Pterocarpus rotundifolius	Pterocarpus rotundifolius (<i>Sond.</i>) Druce subsp. polyanthus (<i>Harms</i>) Mendonça & E.P.Sousa
Pterolobium stellatum	Pterolobium stellatum (<i>Forssk.</i>) Brenan
Pupalia lappacea	Pupalia lappacea (<i>L.</i>) A.Juss. var. velutina (<i>Moq.</i>) Hook.f.
Pycnanthus angolensis	Pycnanthus angolensis (<i>Welw.</i>) Exell subsp. schweinfurthii (<i>Warb.</i>) Verdc.
Pycnostachys dewildemanniiana	Pycnostachys de-wildemanniiana Robyns & Lebrun
Pycnostachys schliebeni	Pycnostachys schliebenii Mildbr.
Pycnostachys stuhlmanni	Pycnostachys stuhlmannii Gürke
Pygeum africanum	Prunus africana (<i>Hook.f.</i>) Kalkman
Pygmaeothamnus zeyheri	Pygmaeothamnus zeyheri (<i>Sond.</i>) Robyns
Ranunculus multifidus	Ranunculus multifidus Forssk.
Rapanea melanophloeos	Rapanea melanophloeos (<i>L.</i>) Mez.
Raphia farinifera	Raphia farinifera (<i>Gaertn.</i>) Hyl.
Raphia sp.	? Raphia farinifera
Raphionacme sp. (DF 5977)	Raphionacme velutina Schltr.
Rauvolfia caffra	Rauvolfia caffra Sond.
Rauvolfia nana	Rauvolfia nana E.A.Bruce
Rawsonia lucida	Rawsonia lucida Harv. & Sond.
Requienia pseudosphaerosperma	Requienia pseudosphaerosperma (<i>Schinz</i>) Brummitt
Rhamnus prinoides	Rhamnus prinoides L'Hér.
Rhamphicarpa fistulosa	Rhamphicarpa fistulosa (<i>Hochst.</i>) Benth.
Rhamphicarpa tubulosa	Cycnium tubulosum (<i>L.f.</i>) Engl. subsp. tubulosum
Rhaphiostylis beninensis	Rhaphiostylis beninensis (<i>Planch.</i>) Benth.
Rhinacanthus gracilis	Rhinacanthus gracilis Klotzsch var. gracilis
Rhoicissus tridentata	Rhoicissus tridentata (<i>L.f.</i>) Wild & R.B.Drumm.
Rhopalopilium marquesii	Rhopalopilium marquesii (<i>Engl.</i>) Engl.
Rhus anchietae	Rhus anchietae Ficalho & Hiern
Rhus caribea	??
Rhus kirkii	Rhus kirkii Oliv.
Rhus longipes	Rhus longipes Engl. var. longipes

<i>Rhus lucens</i>	<i>Rhus lucens</i> <i>Hutch.</i>
<i>Rhus natalensis</i>	<i>Rhus natalensis</i> <i>C.Krauss</i>
<i>Rhus quartiniana</i>	<i>Rhus quartiniana</i> <i>A.Rich.</i>
<i>Rhus tenuifolia</i>	? <i>Rhus tenuinervis</i>
<i>Rhus tenuinervis</i>	<i>Rhus tenuinervis</i> <i>Engl.</i>
<i>Rhynchelytrum repens</i>	<i>Melinis repens</i> (<i>Willd.</i>) <i>Zizka</i> subsp. <i>repens</i>
<i>Rhynchelytrum subglabrum</i>	<i>Melinis subglabra</i> <i>Mez.</i>
<i>Rhynchelytrum villosum</i>	<i>Melinis repens</i> (<i>Willd.</i>) <i>Zizka</i> subsp. <i>grandiflora</i> (<i>Hochst.</i>) <i>Zizka</i>
<i>Rhynchosia</i> sp. (3307)	??
<i>Rhynchosia albiflora</i>	<i>Rhynchosia hirta</i> (<i>Andrews</i>) <i>Meikle & Verdc.</i>
<i>Rhynchosia caribaea</i>	<i>Rhynchosia caribaea</i> (<i>Jacq.</i>) <i>DC.</i> var. <i>caribea</i>
<i>Rhynchosia castroi</i>	<i>Rhynchosia castroi</i> <i>Baker f.</i>
<i>Rhynchosia floribunda</i>	<i>Rhynchosia procurrens</i> (<i>Hiern</i>) <i>K.Schum.</i> subsp. <i>floribunda</i> (<i>Baker</i>) <i>Verdc.</i>
<i>Rhynchosia hirta</i>	<i>Rhynchosia hirta</i> (<i>Andrews</i>) <i>Meikle & Verdc.</i>
<i>Rhynchosia holosericea</i>	<i>Rhynchosia holosericea</i> <i>Schinz</i>
<i>Rhynchosia imbricata</i>	<i>Rhynchosia nyasica</i> <i>Baker</i>
<i>Rhynchosia insignis</i>	<i>Rhynchosia insignis</i> (<i>O.Hoffm.</i>) <i>R.E.Fr.</i>
<i>Rhynchosia luteola</i>	<i>Rhynchosia luteola</i> (<i>Hiern</i>) <i>K.Schum.</i> var. <i>luteola</i>
<i>Rhynchosia minima</i>	<i>Rhynchosia minima</i> (<i>L.</i>) <i>DC.</i>
<i>Rhynchosia resinosa</i>	<i>Rhynchosia resinosa</i> (<i>A.Rich.</i>) <i>Baker</i>
<i>Rhynchosia sublobata</i>	<i>Rhynchosia sublobata</i> (<i>Schum. & Thonn.</i>) <i>Meikle</i>
<i>Rhynchosia totta</i>	<i>Rhynchosia totta</i> (<i>Thunb.</i>) <i>DC.</i> var. <i>fenchelii</i> <i>Schinz</i>
<i>Rhynchosia venulosa</i>	<i>Rhynchosia totta</i> (<i>Thunb.</i>) <i>DC.</i> var. <i>fenchelii</i> <i>Schinz</i>
<i>Rhynchosia verdickii</i>	<i>Rhynchosia luteola</i> (<i>Hiern</i>) <i>Schum.</i> var. <i>verdickii</i> (<i>De Wild.</i>) <i>Verdc.</i>
<i>Rhynchospora cyperoides</i>	<i>Rhynchospora holoschoenoides</i> (<i>Rich.</i>) <i>Herter</i>
<i>Riciodendron rautanenii</i>	<i>Schinziophytum rautanenii</i> (<i>Schinz</i>) <i>Radcl.-Sm.</i>
<i>Rinorea welwitschii</i>	<i>Rinorea welwitschii</i> (<i>Oliv.</i>) <i>Kuntze</i> subsp. ??
<i>Ritchiea gossweileri</i>	<i>Ritchiea gossweileri</i> <i>Exell & Mendonça</i>
<i>Rorippa cryptantha</i>	<i>Rorippa cryptantha</i> (<i>A.Rich.</i>) <i>Robyns & Boutique</i>
<i>Rotala filiformis</i>	<i>Rotala filiformis</i> (<i>Bellardi</i>) <i>Hiern</i>
<i>Rotala heteropetala</i>	<i>Rotala heteropetala</i> <i>Koehne</i>
<i>Rothia hirsuta</i>	<i>Rothia hirsuta</i> (<i>Guill. & Perr.</i>) <i>Baker</i>
<i>Rothmannia englerana</i>	<i>Rothmannia engleriana</i> (<i>K.Schum.</i>) <i>Keay</i>
<i>Rothmannia fischeri</i>	<i>Rothmannia fischeri</i> (<i>K.Schum.</i>) <i>Bullock</i> subsp. <i>fischeri</i>
<i>Rothmannia whitfieldii</i>	<i>Rothmannia whitfieldii</i> (<i>Lindl.</i>) <i>Dandy</i>
<i>Rubus apetalus</i>	<i>Rubus apetalus</i> <i>Poir.</i> var. <i>apetalus</i>
<i>Rubus rigidus</i>	<i>Rubus rigidus</i> <i>Sm.</i>
<i>Ruellia patula</i>	<i>Ruellia patula</i> <i>Jacq.</i>
<i>Ruellia praetermissa</i>	<i>Ruellia praetermissa</i> <i>Lindau</i>
<i>Ruellia prostrata</i>	<i>Ruellia otaviensis</i> <i>Mey.</i>
<i>Ruspolia decurrens</i>	<i>Ruspolia decurrens</i> (<i>Nees</i>) <i>Milne-Redh.</i>
<i>Ruspolia decurrens</i>	<i>Ruspolia decurrens</i> (<i>C.B. Clarke</i>) <i>Milne-Redh.</i>
<i>Rutidea olenotricha</i>	<i>Rutidea olenotricha</i> <i>Hiern</i>
<i>Rutidea smithii</i>	<i>Rutidea smithii</i> <i>Hiern</i>
<i>Rytigynia lewisii</i>	<i>Rytigynia lewisii</i> <i>Tennant</i>
<i>Rytigynia orbicularis</i>	<i>Rytigynia orbicularis</i> (<i>K.Schum.</i>) <i>Robyns</i>
<i>Rytigynia umbellulata</i>	<i>Rytigynia umbellulata</i> (<i>Hiern</i>) <i>Robyns</i>
<i>Sabicea africana</i>	<i>Sabicea africana</i> (<i>P.Beauv.</i>) <i>Hepper</i>
<i>Sabicea angolensis</i>	<i>Sabicea angolensis</i> <i>Wernh.</i>
<i>Sabicea laurentii</i>	<i>Sabicea laurentii</i> <i>De Wild.</i>
<i>Sacciolepis typhura</i>	<i>Sacciolepis typhura</i> (<i>Stapf</i>) <i>Stapf</i>
<i>Salacia bussei</i>	<i>Salacia bussei</i> <i>Loes.</i>
<i>Salacia chlorantha</i>	<i>Salacia chlorantha</i> <i>Oliv.</i>
<i>Salacia congolensis</i>	<i>Salacia congolensis</i> <i>De Wild. & Dur.</i>
<i>Salacia elegans</i>	<i>Salacia elegans</i> <i>Oliv.</i>
<i>Salacia erecta</i>	<i>Salacia erecta</i> (<i>G.Don</i>) <i>Walp.</i>
<i>Salacia luebbertii</i>	<i>Salacia luebbertii</i> <i>Loes.</i>
<i>Salacia pynaerti</i>	<i>Salacia pynaertii</i> <i>De Wild.</i>
<i>Salacia rhodesiaca</i>	<i>Salacia rhodesiaca</i> <i>Blakelock</i>
<i>Salix subserrata</i>	<i>Salix mucronata</i> <i>Thunb.</i> subsp. <i>mucronata</i>

Salvinia sp.	Salvinia ? molesta <i>D.S.Mitch.</i>
Samanea leptophylla	Albizia leptophylla <i>Harms</i>
Sansevieria desertii	Sansevieria pearsonii <i>N.E.Br.</i>
Sansevieria kirkii	Sansevieria kirkii <i>Baker</i>
Sansevieria scabrifolia	Sansevieria scabrifolia <i>Dinter</i>
Sapium acetosella	Sebastiania acetosella (<i>Milne-Redh.</i>) <i>Kruijt</i>
Sapium cornutum	Sclerocroton cornutus (<i>Pax</i>) <i>Kruijt & Roebers</i>
Sapium ellipticum	Shirakiopsis elliptica (<i>Hochst.</i>) <i>Esser</i>
Sapium oblongifolium	Sclerocroton oblongifolius (<i>Müll.Arg.</i>) <i>Kruijt & Roebers</i>
Sapium schmitzi	Sclerocroton schmitzii (<i>J.Léonard</i>) <i>Kruijt & Roebers</i>
Schefflera abyssinica	Schefflera abyssinica (<i>A.Rich.</i>) <i>Harms</i>
Schistostephium	Schistostephium sp.
Schistostephium artemisiifolium	Schistostephium artemisifolium <i>Baker</i>
Schizachyrium brevifolium	Schizachyrium brevifolium (<i>Sw.</i>) <i>Büse</i>
Schizachyrium jeffreysii	Schizachyrium jeffreysii (<i>Hack.</i>) <i>Stapf</i>
Schmidtia pappophoroides	Schmidtia pappophoroides <i>Steud.</i>
Schrebera alata	Schrebera alata (<i>Hochst.</i>) <i>Welw.</i>
Schrebera trichoclada	Schrebera trichoclada <i>Welw.</i>
Scilla hyacinthina	Ledebouria revoluta (<i>L.f.</i>) <i>Jessop</i>
Scilla indica	Drimia indica (<i>Roxb.</i>) <i>Jessop</i>
Scirpus paludicola	Schoenoplectus paludicola (<i>Kunth</i>) <i>Palla</i>
Scleria foliosa	Scleria foliosa <i>A.Rich.</i>
Sclerocarpus africanus	Sclerocarpus africanus <i>Murr.</i>
Sclerocarya caffra	Sclerocarya birrea (<i>A.Rich.</i>) <i>Hochst.</i> subsp. <i>caffra</i> (<i>Sond.</i>) <i>Kokwaro</i>
Scolopia stolzi	Scolopia stolzii <i>Gilg</i> var. <i>stolzii</i>
Scolopia zeyheri	Scolopia zeyheri (<i>Nees</i>) <i>Harv.</i>
Scoparia dulcis	Scoparia dulcis <i>L.</i>
Scutia myrtina	Scutia myrtina (<i>Burm.f.</i>) <i>Kurz</i>
Sebae pentandra	Sebaea pentandra <i>E.Mey.</i> var. <i>burchellii</i> (<i>Gilg</i>) <i>Marais</i>
Secamone erythradenia	Secamone erythradenia <i>K.Schum.</i>
Secamone micrandra	Secamone punctulata <i>Decne.</i>
Secamone parvifolia	Secamone parvifolia (<i>Oliv.</i>) <i>Bullock</i>
Secamone stuhlmannii	Secamone stuhlmannii <i>K.Schum.</i>
Securidaca longepedunculata	Securidaca longepedunculata <i>Fresen.</i>
Securinega virosa	Flueggea virosa (<i>Willd.</i>) <i>Voigt</i> subsp. <i>virosa</i>
Seddera suffruticosa	Seddera suffruticosa (<i>Schinz</i>) <i>Hallier f.</i> var. <i>suffruticosa</i>
Selaginella imbricata	Selaginella imbricata (<i>Forssk.</i>) <i>Decne.</i>
Senecio bojeri	Solanecio angulatus (<i>Vahl</i>) <i>C.Jeffrey</i>
Sesamum alatum	Sesamum alatum <i>Thonn.</i>
Sesamum angolense	Sesamum angolense <i>Welw.</i>
Sesamum angustifolium	Sesamum angustifolium (<i>Oliv.</i>) <i>Engl.</i>
Sesamum calycinum	Sesamum calycinum <i>Welw.</i>
Sesamum capense	??
Sesbania microphylla	Sesbania microphylla <i>E.Phillips & Hutch.</i>
Sesbania pubescens	Sesbania sericea (<i>Willd.</i>) <i>Link</i>
Sesbania rogersii	Sesbania tetraptera <i>Baker</i> subsp. <i>rogersii</i> (<i>E.Phillips & Hutch.</i>) <i>G.P.Lewis</i>
Sesbania sesban	Sesbania sesban (<i>L.</i>) <i>Merr.</i> var. <i>nubica</i> <i>Chiov.</i>
Setaria anceps	Setaria sphacelata (<i>Schumach.</i>) <i>Moss</i>
Setaria eylesii	Setaria incrassata (<i>Hochst.</i>) <i>Hack.</i>
Setaria homonyma	Setaria homonyma (<i>Steud.</i>) <i>Chiov.</i>
Setaria lindenbergiana	Setaria lindenbergiana (<i>Nees</i>) <i>Stapf</i>
Setaria mombassana	Setaria incrassata (<i>Hochst.</i>) <i>Hack.</i>
Setaria pophyrantha	Setaria incrassata (<i>Hochst.</i>) <i>Hack.</i>
Setaria sphacelata	Setaria sphacelata (<i>Schumach.</i>) <i>Moss</i>
Sherbournia bignoniiflora	Sherbournia bignoniiflora (<i>Welw.</i>) <i>Hua</i>
Sida acuta	Sida acuta <i>Burm.f.</i>
Sida alba	Sida alba <i>L.</i>
Sida cordifolia	Sida cordifolia <i>L.</i> subsp. <i>maculata</i> (<i>Cav.</i>) <i>Marais</i>
Sida hoepfneri	Sida hoepfneri <i>Gürke</i>
Sida rhombifolia	Sida rhombifolia <i>L.</i>
Sida urens	Sida urens <i>L.</i>
Smilax kraussiana	Smilax anceps <i>Willd.</i>

Solanum incanum	Solanum incanum <i>L.</i>
Solanum nigrum	Solanum nigrum <i>L.</i>
Solanum panduriforme	Solanum panduriforme <i>Dunal</i>
Solanum seaforthianum	Solanum seaforthianum <i>Andrews</i>
Solanum terminale	Solanum terminale <i>Forsk.</i>
Solenostemon decumbens	Plectranthus decumbens <i>Hook.f.</i>
Solenostemon latifolius	Plectranthus bojeri (<i>Benth.</i>) <i>Hedge</i>
Solenostemon zambesiaca	Plectranthus shirensis (<i>Gürke</i>) <i>A.J. Paton</i>
Sonchus oleraceus	Sonchus oleraceus <i>L.</i>
Sopubia angolensis	Sopubia angolensis <i>Engl.</i>
Sopubia densiflora	Sopubia lanata <i>Engl.</i> var. densiflora (<i>Skan</i>) <i>O.J.Hansen</i>
Sopubia manni	Sopubia mannii <i>Skan</i>
Sopubia parviflora	Sopubia parviflora <i>Engl.</i>
Sopubia ramosa	Sopubia ramosa (<i>Hochst.</i>) <i>Hochst.</i>
Sopubia simplex	Sopubia simplex (<i>Hochst.</i>) <i>Hochst.</i>
Sopubia welwitschii	Sopubia karaguensis <i>Oliv.</i>
Sorghum caffrorum	Sorghum caffrorum (<i>Thunb.</i>) <i>P.Beauv.</i>
Sorindeia katangensis	Sorindeia katangensis <i>van der Veken</i>
Sphaeranthus angolensis	Sphaeranthus angolensis <i>O.Hoffm.</i>
Sphaeranthus flexuosus	Sphaeranthus flexuosus <i>O.Hoffm.</i>
Sphaeranthus suaveolens	Sphaeranthus suaveolens (<i>Forsk.</i>) <i>DC.</i>
Sphedamnocarpus angolensis	Sphedamnocarpus angolensis (<i>A.Juss.</i>) <i>Oliv.</i>
Sphenostylis erecta	Sphenostylis erecta (<i>Baker f.</i>) <i>Baker</i> subsp. erecta
Sphenostylis marginata subsp. erecta	Sphenostylis erecta (<i>Baker f.</i>) <i>Baker</i> subsp. erecta
Sporobolus albomarginatus	Sporobolus cordofanus (<i>Steud.</i>) <i>Coss.</i>
Sporobolus festivus	Sporobolus festivus <i>A.Rich.</i>
Sporobolus fimbriatus	Sporobolus fimbriatus (<i>Trin.</i>) <i>Nees</i>
Sporobolus panicoides	??
Sporobolus psammophilus	Sporobolus micranthus (<i>Steud.</i>) <i>T.Durand & Schinz</i>
Sporobolus pyramidalis	Sporobolus pyramidalis <i>P.Beauv.</i>
Staudtia gabonensis	Staudtia kamerunensis <i>Warb.</i> var. gabonensis (<i>Warb.</i>) <i>Fouilloy</i>
Steganotaenia araliacea	Steganotaenia araliacea <i>Hochst.</i>
Stephania abyssinica	Stephania abyssinica (<i>Quart.-Dill. & A.Rich.</i>) <i>Walp.</i> var. abyssinica
Sterculia africana	Sterculia africana (<i>Lour.</i>) <i>Fiori</i>
Sterculia quinqueloba	Sterculia quinqueloba (<i>Garcke</i>) <i>K.Schum.</i>
Sterculia subviolacea	Sterculia subviolacea <i>K.Schum.</i>
Stereospermum kunthianum	Stereospermum kunthianum <i>Cham.</i>
Stomatostemma monteiroae	Stomatostemma monteiroae (<i>Oliv.</i>) <i>N.E.Br.</i>
Striga asiatica	Striga asiatica (<i>L.</i>) <i>Kuntze</i>
Striga forbesii	Striga forbesii <i>Benth.</i>
Striga gesnerioides	Striga gesnerioides (<i>Willd.</i>) <i>Vatke</i>
Strobilanthesis linifolia	Strobilanthesis linifolia (<i>C.B. Clarke</i>) <i>Milne-Redh.</i>
Strophanthus sp. (3139)	??
Strophanthus angusii	Strophanthus angusii <i>F.White</i>
Strophanthus gardeniiflorus	Strophanthus gardeniiflorus <i>Gilg</i>
Strophanthus kombe	Strophanthus kombe <i>Oliv.</i>
Strophanthus nicholsonii	Strophanthus nicholsonii <i>Holmes</i>
Strophanthus welwitschii	Strophanthus welwitschii (<i>Baill.</i>) <i>K.Schum.</i>
Strychnos angolensis	Strychnos angolensis <i>Gilg</i>
Strychnos caespitosa	Strychnos gossweileri <i>Exell</i>
Strychnos cocculoides	Strychnos cocculoides <i>Baker</i>
Strychnos gossweileri	Strychnos gossweileri <i>Exell</i>
Strychnos innocua	Strychnos innocua <i>Delile</i>
Strychnos lucens	Strychnos lucens <i>Baker</i>
Strychnos madagascariensis	Strychnos madagascariensis <i>Poir.</i>
Strychnos potatorum	Strychnos potatorum <i>L.f.</i>
Strychnos pungens	Strychnos pungens <i>Solered.</i>
Strychnos robynsi	??
Strychnos spinosa	Strychnos spinosa <i>Lam.</i>
Strychnos usambarensis	Strychnos usambarensis <i>Gilg</i>
Strychnos xantha	Strychnos xantha <i>Leeuwenberg</i>
Stylochiton puberulus	Stylochaeton puberulus <i>N.E.Br.</i>

Sutera elegantissima	Sutera elegantissima (<i>Schinz</i>) <i>Skan</i>
Swartzia madagascariensis	Bobgunnia madagascariensis (<i>Desv.</i>) <i>J.H.Kirkbr. & Wiersema</i>
Symphonia globulifera	Symphonia globulifera <i>L.f.</i>
Synadenium kirki	Synadenium kirki <i>N.E.Br.</i>
Synedrella nodiflora	Synedrella nodiflora <i>Gaertn.</i>
Syzygium cordatum	Syzygium cordatum <i>C.Krauss</i>
Syzygium guineense ssp. afromontanum	Syzygium guineense (<i>Willd.</i>) <i>DC.</i> subsp. afromontanum <i>F.White</i>
Syzygium guineense ssp. barotsense	Syzygium guineense (<i>Willd.</i>) <i>DC.</i> subsp. barotsense <i>F.White</i>
Syzygium guineense ssp. huillense	Syzygium guineense (<i>Willd.</i>) <i>DC.</i> subsp. huillense (<i>Hiern</i>) <i>F.White</i>
Syzygium guineense ssp. macrocarpum	Syzygium guineense (<i>Willd.</i>) <i>DC.</i> subsp. macrocarpum (<i>Engl.</i>) <i>F.White</i>
Syzygium guineense ssp. riparium	Syzygium guineense (<i>Willd.</i>) <i>DC.</i> subsp. ? barotsense <i>F.White</i>
Syzygium macrocarpum	Syzygium guineense (<i>Willd.</i>) <i>DC.</i> subsp. macrocarpum (<i>Engl.</i>) <i>F.White</i>
Syzygium owariense	Syzygium owariense (<i>P.Beauv.</i>) <i>Benth.</i>
Tabernaemontana angolensis	Tabernaemontana pachysiphon <i>Stapf</i>
Tacazzea apiculata	Tacazzea apiculata <i>Oliv.</i>
Tacca leontopetaloides	Tacca leontopetaloides (<i>L.</i>) <i>Kuntze</i>
Tagetes minuta	Tagetes minuta <i>L.</i>
Talinum crispatum	Talinum tenuissimum <i>Dinter</i>
Talinum portulacifolium	Talinum portulacifolium (<i>Forssk.</i>) <i>Schweinf.</i>
Tamarindus indica	Tamarindus indica <i>L.</i>
Tapiphyllum sp. (DF 8980)	Tapiphyllum molle <i>Robyns</i>
Tapiphyllum discolor	Tapiphyllum discolor (<i>De Wild.</i>) <i>Robyns</i>
Tapiphyllum velutinum	Tapiphyllum velutinum (<i>Hiern</i>) <i>Robyns</i>
Tarenna luteola	Tarenna luteola (<i>Stapf</i>) <i>Bremek.</i>
Tarenna neurophylla	Coptosperma neurophyllum (<i>S.Moore</i>) <i>Degreef</i>
Tarenna pavettoides	Tarenna pavettoides (<i>Harv.</i>) <i>Sim</i> subsp. gillmanii <i>Bridson</i>
Tarenna rhodesica	Tarenna rhodesica <i>Bremek.</i>
Teclea nobilis	Vepris nobilis (<i>Delile</i>) <i>W.Mziray</i>
Tecomaria capensis	Tecomaria capensis (<i>Thunb.</i>) <i>Spach</i>
Temnocalyx obovatus	Fadogia ancylantha <i>Schweinf.</i>
Tephrosia caerulea	Tephrosia caerulea <i>Baker f.</i>
Tephrosia cephalantha	Tephrosia cephalantha <i>Baker</i> var. decumbens <i>Baker</i>
Tephrosia dasyphylla	Tephrosia dasyphylla <i>Baker</i> subsp?
Tephrosia decora	Tephrosia decora <i>Baker</i>
Tephrosia elata	Tephrosia elata <i>Defers</i> var. heckmanniana (<i>Harms</i>) <i>Brummitt</i>
Tephrosia kasikiensis	Tephrosia kasikiensis <i>Baker f.</i>
Tephrosia longipes	Tephrosia longipes <i>Meissn.</i> subsp. longipes
Tephrosia lupinifolia	Tephrosia lupinifolia <i>DC.</i>
Tephrosia paniculata	Tephrosia paniculata <i>Baker</i>
Tephrosia purpurea	Tephrosia purpurea (<i>L.</i>) <i>Pers.</i> subsp. leptostachya (<i>DC.</i>) <i>Brummitt</i>
Tephrosia reptans	Tephrosia reptans <i>Baker</i> var. reptans
Terminalia brachystemma	Terminalia brachystemma <i>Hiern</i> subsp. brachystemma
Terminalia mollis	Terminalia mollis <i>M.A.Lawson</i>
Terminalia prunioides	Terminalia prunioides <i>M.A.Lawson</i>
Terminalia randii	Terminalia randii <i>Baker f.</i>
Terminalia sericea	Terminalia sericea <i>DC.</i>
Terminalia stenostachya	Terminalia stenostachya <i>Engl. & Diels</i>
Terminalia stuhlmannii	Terminalia stuhlmannii <i>Engl.</i>
Terminalia trichopoda	Terminalia trichopoda <i>Diels</i>
Tessmannia burtii	Tessmannia burtii <i>Harms</i>
Tetracera alnifolia	Tetracera alnifolia <i>Willd.</i>
Tetracera masuiana	Tetracera masuiana <i>De Wild. & Dur.</i>
Thecacoris trichogyne	Thecacoris trichogyne <i>Müll.Arg.</i>
Thelypteris bergiana	Amauropelta bergiana (<i>Schltld.</i>) <i>Hottum</i> var. bergiana
Thelypteris dentata	Christella dentata (<i>Forssk.</i>) <i>Brownsey & Jermy</i>
Thelypteris totta	Thelypteris totta <i>Schelpé</i>
Thesium cinereum	Thesium cinereum <i>A.W.Hill</i>
Thesium fastigiatum	Thesium fastigiatum <i>A.W.Hill</i>
Thesium sp. (DF 5780)	Thesium megalocarpum <i>A.W.Hill</i>
Thunbergia alata	Thunbergia alata <i>Sims</i>
Thunbergia crispa	Thunbergia crispa <i>Burkill</i>

Tiliacora funifera	Tiliacora funifera (<i>Miers</i>) <i>Oliv.</i>
Tinnea rhodesiana	Tinnea rhodesiana <i>S.Moore</i>
Tinnea vestita	Tinnea vestita <i>Baker</i>
Tinnea zambesiaca	Tinnea zambesiaca <i>Baker</i>
Tinospora caffra	Tinospora caffra (<i>Miers</i>) <i>Troupin</i>
Tinospora tenera	Tinospora tenera <i>Miers</i>
Toddalia asiatica	Toddalia asiatica (<i>L.</i>) <i>Lam.</i>
Toxocarpus brevipes	Secamone brevipes (<i>Benth.</i>) <i>Klack.</i>
Trachypogon spicatus	Trachypogon spicatus (<i>L.f.</i>) <i>Kuntze</i>
Tragia benthamii	Tragia benthamii <i>Baker</i>
Tragia brevipes	Tragia brevipes <i>Pax</i>
Tragia kirkiana	Tragia kirkiana <i>Müll.Arg.</i>
Tragia okanyua	Tragia okanyua <i>Pax</i>
Tragus berteronianus	Tragus berteronianus <i>Schult.</i>
Trema orientalis	Trema orientalis (<i>L.</i>) <i>Blume</i>
Triaspis macropteron	Triaspis macropteron <i>Oliv.</i> subsp. macropteron
Tribulus terrestris	Tribulus terrestris <i>L.</i>
Tricalysia sp. (M 3277)	? <i>Belonophora coffeoides</i> <i>Hook.f.</i>
Tricalysia sp. (DF 8347)	??
Tricalysia allenii	Tricalysia junodii (<i>Schinz</i>) <i>Brenan</i> var. kirkii (<i>Hook.f.</i>) <i>Robbr.</i>
Tricalysia andongensis	Sericanthe andongensis (<i>Hiern</i>) <i>Robbr.</i> var. andongensis
Tricalysia angolensis	Tricalysia ? angolensis <i>DC.</i>
Tricalysia cacondensis	Tricalysia cacondensis <i>Hiern</i>
Tricalysia congesta	Tricalysia congesta (<i>Oliv.</i>) <i>Hiern</i> subsp. congesta
Tricalysia coriacea	Tricalysia coriacea (<i>Benth.</i>) <i>Hiern</i> subsp. coriacea
Tricalysia dekindtiana	? <i>Trichodesma ambacense</i> <i>Welw.</i> subsp. ambacense
Tricalysia griseiflora	Tricalysia griseiflora <i>K.Schum.</i>
Tricalysia myrtifolia	Tricalysia pallens <i>Hiern</i>
Tricalysia revoluta	Tricalysia revoluta <i>Hutch.</i>
Tricalysia suffruticosa	Sericanthe suffruticosa (<i>Hutch.</i>) <i>Robbr.</i>
Trichilia emetica	Trichilia emetica <i>Vahl.</i>
Trichilia quadrivalvis	Trichilia quadrivalvis <i>C.DC.</i>
Trichodesma hockii	Trichodesma ambacense <i>Welw.</i> subsp. hockii (<i>De Wild.</i>) <i>Brummitt</i>
Trichodesma physaloides	Trichodesma physaloides (<i>Fenzl</i>) <i>A.DC.</i>
Trichodesma zeylanicum	Trichodesma zeylanicum (<i>Burm.f.</i>) <i>R.Br.</i>
Trichoneura grandeglumis	Trichoneura grandiglumis (<i>Nees</i>) <i>Ekman</i>
Trichoscypha silveirana	Trichoscypha silveirana <i>Exell & Mendonça</i>
Tridax procumbens	Tridax procumbens <i>L.</i>
Triplochiton zambesiacus	Triplochiton zambesiacus <i>Milne-Redh.</i>
Tripogon abyssinicus	Tripogon minimus (<i>A.Rich.</i>) <i>Steud.</i>
Triraphis schinzii	Triraphis schinzii <i>Hack.</i>
Tristachya hitchcockii	Tristachya lualabensis (<i>De Wild.</i>) <i>J.B.Phipps</i>
Tristachya superba	Tristachya superba (<i>De Not.</i>) <i>Schweinf. & Asch.</i>
Tristicha trifaria	Tristicha trifaria (<i>Willd.</i>) <i>Spreng</i>
Triumfetta angolensis	Triumfetta angolensis <i>Sprague & Hutch.</i>
Triumfetta annua	Triumfetta annua <i>L.</i>
Triumfetta cordifolia	Triumfetta cordifolia <i>A.Rich.</i>
Triumfetta dekindtiana	Triumfetta dekindtiana <i>Engl.</i>
Triumfetta digitata	Triumfetta digitata (<i>Oliv.</i>) <i>Sprague & Hutch.</i>
Triumfetta heliocarpa	Triumfetta heliocarpa <i>K.Schum.</i>
Triumfetta pedunculata	Triumfetta pedunculata <i>De Wild.</i>
Triumfetta rhomboidea	Triumfetta rhomboidea <i>Jacq.</i>
Triumfetta setulosa	Triumfetta setulosa <i>Mast.</i>
Triumfetta tomentosa	Triumfetta tomentosa <i>Bojer</i>
Triumfetta trichocarpa	Triumfetta trichocarpa <i>A.Rich.</i>
Triumfetta welwitschii	Triumfetta welwitschii <i>Mast.</i>
Tryplostemma hanningtonianum	Basananthe hanningtonia (<i>Mast.</i>) <i>W.J. de Wilde</i>
Turbina holubii	Turbina holubii (<i>Baker</i>) <i>A.Meeuse</i>
Turbina shirensis	Paralepistemon shirensis (<i>Oliv.</i>) <i>Lejoly & Lisowski</i>
Turraea nilotica	Turraea nilotica <i>Kotschy & Peyr.</i>
Turraea zambesica	Turraea zambesica <i>Hutch.</i>
Tylosema fassoglensis	Tylosema fassoglense (<i>Schweinf.</i>) <i>Torre & Hillc.</i>

Typha angustifolia	Typha domingensis Pers.
Typha domingensis	Typha domingensis Pers.
Uapaca benguelensis	Uapaca kirkiana Müll.Arg.
Uapaca guineensis	Uapaca lissopyrena Radcl.-Sm.
Uapaca kirkiana	Uapaca kirkiana Müll.Arg.
Uapaca nitida	Uapaca nitida Müll.Arg. var. nitida
Uapaca pilosa	Uapaca pilosa Hutch.
Uapaca robynsii	Uapaca robynsii De Wild.
Uapaca sansibarica	Uapaca sansibarica Pax
Urena lobata	Urena lobata L.
Urera cameroonensis	Urera trinervis (Hochst.) Friis & Immelman
Urginea altissima	Urginea altissima (L.f.) Baker
Urginea sanguinea	Urginea sanguinea Schinz
Urochloa brachyura	Urochloa brachyura (Hack.) Stapf
Urochloa mosambicensis	Urochloa mosambicensis (Hack.) Dandy
Urochloa pullulans	Urochloa mosambicensis (Hack.) Dandy
Urochloa trichopus	Urochloa trichopus (Hochst.) Stapf
Utricularia arenaria	Utricularia arenaria A.DC.
Utricularia firmula	Utricularia firmula Oliv.
Utricularia gibba	Utricularia gibba L.
Utricularia inflexa	Utricularia inflexa Forssk.
Utricularia scandens	Utricularia scandens Benj.
Utricularia subulata	Utricularia subulata L.
Uvaria angolensis	Uvaria angolensis Oliv.
Uvaria edulis	Uvaria edulis N.Robson
Uvariastrum hexaloboides	Uvariastrum hexaloboides (R.E.Fr.) R.E.Fr.
Uvariopsis congensis	Uvariopsis congensis Robyns & Ghesq.
Vangueria infausta	Vangueria infausta Burch. subsp. rotundata (Robyns) Verdc.
Vangueria randii	Vangueria randii S.Moore subsp. randii
Vangueria tomentosa	Vangueria infausta Burch. subsp. infausta
Vangueriopsis lanciflora	Vangueriopsis lanciflora (Hiern) Robyns
Vanilla polylepis	Vanilla polylepis Summerh.
Vausagesia africana	Vausagesia africana Baill.
Vellozia equisetoides	Xerophyta equisetoides Baker
Vellozia humilis	Xerophyta humilis (Baker) T.Durand & Schinz
Vepris fanshawei	Vepris fanshawei Mendonça
Vepris stolzi	Vepris stolzii I.Verd.
Vepris termitaria	Vepris termitaria Mendonça
Vepris zambesiaca	Vepris zambesiaca S.Moore
Vernonia sp. (3124)	??
Vernonia sp. (M 3132)	Vernonia catumbensis Hiern
Vernonia adoensis	Vernonia adoensis Walp. var. kotschyana (Walp.) G.V.Pope
Vernonia ampla	Vernonia myriantha Hook.f.
Vernonia amygdalina	Vernonia amygdalina Delile
Vernonia aurantiaca	Vernonia aurantiaca (O.Hoffm.) N.E.Br.
Vernonia bellinghami	Vernonia bellinghami S.Moore
Vernonia cinerea	Vernonia cinerea (L.) Less. var. cinerea
Vernonia cistifolia	Vernonia karaguensis Oliv.
Vernonia colorata	Vernonia colorata (Willd.) Drake subsp. colorata
Vernonia glaberrima	Vernonia glaberrima O.Hoffm.
Vernonia glabra	Vernonia glabra (Steetz) Vatke var. glabra
Vernonia guineensis	Vernonia guineensis Benth.
Vernonia incompta	Vernonia incompta S.Moore
Vernonia kirki	Vernonia kirkii Oliv. & Hiern
Vernonia leucocalyx	Vernonia calvoana (Hook.f.) Hook.f. subsp. leucocalyx (O.Hoffm.) C.Jeffrey
Vernonia manikensis	Vernonia longipedunculata De Wild. var. manikensis (De Wild.) G.V.Pope
Vernonia nestor	Vernonia nestor S.Moore
Vernonia perrottetii	Vernonia perrottetii Walp.

Vernonia petersii	Vernonia petersii <i>Oliv.</i>
Vernonia poskeana	Vernonia poskeana <i>Vatke & Hildebrandt</i> subsp. <i>poskeana</i>
Vernonia potamophila	Vernonia potamophila <i>Klatt</i>
Vernonia rosenii	Vernonia rosenii <i>R.E.Fr.</i>
Vernonia shirensis	Vernonia adoensis <i>Walp.</i> var. <i>mossambiquensis</i> (<i>Steetz</i>) <i>G.V.Pope</i>
Vernonia sp. (DF 6410)	Vernonia amoena <i>S.Moore</i>
Vernonia stenocephala	Vernonia stenocephala <i>Oliv.</i>
Vernonia stenolepis	Vernonia anthelmintica (<i>L.</i>) <i>Willd.</i>
Vernonia thomsoniana	Vernonia thomsoniana <i>Oliv.</i>
Vernonia turbinella	Vernonia turbinella <i>S.Moore</i>
Vetiveria nigritana	Chrysopogon nigritanus (<i>Benth.</i>) <i>Veldkamp</i>
Vigna frutescens	Vigna frutescens <i>A.Rich.</i> subsp. <i>frutescens</i>
Vigna lancifolia	Vigna oblongifolia <i>A.Rich.</i> var. <i>oblongifolia</i>
Vigna luteola	Vigna luteola (<i>Jacq.</i>) <i>Benth.</i>
Vigna maranguensis	Vigna parkeri <i>Baker</i> subsp. <i>maranguensis</i> (<i>Taub.</i>) <i>Verdc.</i>
Vigna vexillata	Vigna vexillata (<i>L.</i>) <i>A.Rich.</i> var. <i>vexillata</i>
Vincentella passargei	Synsepalum passargei (<i>Engl.</i>) <i>T.D.Penn.</i>
Viridivia suberosa	Viridivia suberosa <i>J.H.Hemsl. & Verdc.</i>
Vitex amboniensis	Vitex ferruginea <i>Schum. & Thonn.</i> subsp. <i>amboniensis</i> (<i>Gürke</i>) <i>Verdc.</i>
Vitex fischeri	Vitex fischeri <i>Gürke</i>
Vitex madiensis	Vitex madiensis <i>Oliv.</i> subsp. <i>madiensis</i>
Vitex mombassae	Vitex mombassae <i>Vatke</i>
Vitex payos	Vitex payos (<i>Lour.</i>) <i>Merr.</i>
Vitex petersiana	Vitex petersiana <i>Klotzsch</i>
Voacanga thouarsii	Voacanga thouarsii <i>Roem. & Schult.</i>
Vossia cuspidata	Vossia cuspidata (<i>Roxb.</i>) <i>Griff.</i>
Walafrida angolensis	Walafrida angolensis (<i>Rolfe</i>) <i>Rolfe</i>
Waltheria indica	Waltheria indica <i>L.</i>
Wissadula rostrata	Wissadula rostrata (<i>Schumach. & Thonn.</i>) <i>Hook.f.</i>
Withania somnifera	Withania somnifera (<i>L.</i>) <i>Dunal</i>
Wormskioldia longipedunculata	Tricliceras longepedunculatum (<i>Mast.</i>) <i>R.Fern.</i> var. <i>longepedunculatum</i>
Xanthium strumarium	Xanthium strumarium <i>L.</i>
Xeroderris stuhlmannii	Xeroderris stuhlmannii (<i>Taub.</i>) <i>Mendonça & E.P.Sousa</i>
Xeromphis obovata	Catunaregam obovata (<i>Hochst.</i>) <i>A.E.Gonç.</i>
Ximenia americana	Ximenia americana <i>L.</i> var. <i>americana</i>
Ximenia caffra	Ximenia americana <i>L.</i> var. <i>caffra</i> (<i>Sond.</i>) <i>Engl.</i>
Xylopiya acutiflora	Xylopiya acutiflora (<i>Dunal</i>) <i>A.Rich.</i>
Xylopiya aethiopica	Xylopiya aethiopica (<i>Dunal</i>) <i>A.Rich.</i>
Xylopiya katangensis	Xylopiya katangensis <i>De Wild.</i>
Xylopiya odoratissima	Xylopiya odoratissima <i>Oliv.</i>
Xylopiya rubescens	Xylopiya rubescens <i>Oliv.</i>
Xylopiya tomentosa	Xylopiya tomentosa <i>Exell</i>
Xyzmalopium undulatum	Xysmalobium undulatum (<i>L.</i>) <i>W.T.Aiton</i>
Zanha africana	Zanha africana (<i>Radlk.</i>) <i>Exell</i>
Ziziphus abyssinica	Ziziphus abyssinica <i>A.Rich.</i>
Ziziphus mauritiana	Ziziphus mauritiana <i>Lam.</i>
Ziziphus mucronata	Ziziphus mucronata <i>Willd.</i> subsp. <i>mucronata</i>
Zornia glochidiata	Zornia glochidiata <i>DC.</i>
Zornia milneana	Zornia milneana <i>Mohlenbr.</i>
Zornia pratensis	Zornia pratensis <i>Milne-Redh.</i> subsp. <i>barbata</i> <i>J.Léonard & Milne-Redh.</i>