

UNITED REPUBLIC OF TANZANIA

MINISTRY OF NATURAL RESOURCES AND TOURISM

GAME DIVISION

MIOMBO RESEARCH CENTRE

THE VEGETATION OF

THE EASTERN SELOUS GAME RESERVE

W. A. RODGERS
R. J. LUDANGA

GAME RESEARCH OFFICER
RESEARCH ASSISTANT

MAY 1973.

DENNIS HERLOCKER
DEPT. RANGESCIENCE
TEXAS A&M UNIVERSITY
COLLEGE STATION, TEXAS
77840
UNITED REPUBLIC OF TANZANIA

With best wishes.
Alan

MINISTRY OF NATURAL RESOURCES & TOURISM

GAME DIVISION

MIOMBO RESEARCH CENTRE

THE VEGETATION OF

THE EASTERN SELOUS GAME RESERVE

W.A. RODGERS
R.I. LUDANGA

GAME RESEARCH OFFICER
RESEARCH ASSISTANT

MAY 1973

THE VEGETATION OF THE EASTERN SELOUS GAME RESERVE

Section One: Introduction and General Methods

This Study area of the Miombo Research Centre, (38°30'E, 8°30'S) and virtually the whole of the Selous Game Reserve, fall into the south-east Tanzania block of deciduous woodland or "miombo" (Gillman 1949: Russell 1961). This vegetation type covers large areas of East and Central Africa, from Rhodesia in the south through parts of Mozambique, Angola, Zaire and through Zambia into south-western and eastern Tanzania. A physiognomically similar woodland exists in West Africa, the "Guinea savanna" (Ramsay & Rose-Innes 1963).

Within Tanzania this formation is estimated to cover almost 450,000 square kilometres, or just under half the total land surface. The south-eastern block is separated from the western areas by a drier zone running from the Rukwa through to Dodoma. This dry belt had suggested importance as a past link between the arid communities of Somalia and South West Africa (Carcasson 1964: van Zinderen Bakker 1967). The south-eastern block differs from the more typical western and Zambezian miombo floras by having less endemic miombo elements and by the inclusion of coastal elements, especially in the riverine and thicket communities. (Rodgers 1968: Hedberg 1966).

The miombo formation can be defined as follows: "A deciduous unarmed woodland occurring in the unimodal rainfall areas of East and Central Africa on old, acid, sandy soils. It is characterised by Caesalpinaceous trees, especially species of Brachystegia and Julbernardia. The ground cover varies from a dense coarse grass growth to a sparse cover of herbs and small grasses. The shrub layer is variable in density and species composition, often dominated by Diplorhynchus condylocarpon and species of Combretum. The whole is maintained by periodic dry season fires."

Major plant taxonomic collections of this area are those of Busse, 1900 to 1903 and Schlieben from 1932 to 1934. These collections and species lists were not available for reference, and so a herbarium collection was initiated. This herbarium is maintained as a fully mounted, annotated herbarium at the Centre, with duplicates at Nairobi and Dar es Salaam. To date over 900 species have been identified by the East African Herbarium. This collection probably covers over 95% of the grass and woody species of the area; herbs are less well represented. An annotated species list, giving local vernacular and scientific names, is included.

Full aerial photograph coverage of the study area is available as follows:

1947 to 1952	Occasional flight lines RAF	1:32,000
1965	Full stereo cover	1:48,000
1970	Selected flight lines	1:10,000

Vegetation communities were recognised qualitatively over five years of field studies and located on air photographs. Species lists and determination of dominants were made for various communities, and these and data from collected specimens were mounted on punch cards, cross referenced for habitat, dominance and regional floristic affinities.

Selected areas were assessed quantitatively in terms of woody basal cover and species frequency. Grassland communities were assessed by a species frequency inventory at mile intervals along the road transect system.

A vegetation map, at a scale of 1:125,000, was drawn on to a base map from aerial photographs using a Zeiss Sketchmaster to reduce the photo scale of 1:48,000. The base map was overdrawn with the air photo flight lines and photo centres. A geometric diagram of a scaled down photograph showing photo centre, photo limits, stereo overlap and diagonals was used to minimise edge distortion. A mirror stereoscope was used to clarify vegetation boundaries. (Howard 1972).

Vegetation mapping at this scale necessitates some sacrifice of detail for final visual clarity. In practice any vegetation unit of less than 2 mm on the final map was not shown (Kuchler 1967).

Several of the vegetation boundaries are not discrete, and communities tend to merge rather than end abruptly: in such cases boundary lines are rather subjectively positioned.

Final colouration of the map was chosen to show major physiognomic types as well as individual associations.

No standard procedure of hierarchical classification exists for African vegetation. The following procedure is adopted for this report. The miombo woodlands of Africa as a whole are referred to as a "formation type". The word formation is used to denote separate physiognomic vegetation types - e.g. forest or grassland. These formations are divided into associations, which are frequently occurring vegetation groupings characterised by similar broad species dominance, physiognomy and ecology. Their terminology follows that described by Pratt, Greenway and Gwynne (1966) in their paper on the classification of East African rangeland. In this method, association names are compounded of dominant genera and physiognomic characters. In some cases, as in thickets, the choice of dominants is difficult, and I have resorted to geographical and ecological criteria. Two vernacular terms are partly retained in the terminology and text, both of which have extensive usage in East and Central Africa. These are "miombo", which now specifically refers to the Brachystegia/Julbernardia

communities, and "chipya", a Zambian term used to describe the fierce fire woodland communities with dense grass cover. The terms "upper valley" and "lower valley" as defined by Trapnell (1953) are useful categories, and they are partly retained in association names. Their relevance is discussed in the text.

Five physiognomic formations are recognised. These are:

- (A) Forest - here defined as a closed stand of trees over 8 metres in height whose canopies touch. There may or may not be an understorey of shrubs or small trees. The ground layer, if present, is sparse.
- (B) Thicket - here defined as a closed vegetation type dominated by shrubs and trees of less than 8 metres. Where emergents occur their crowns are not touching. A sparse ground cover may be present.
- (C) Woodland - here defined as a vegetation type dominated by trees, but whose crowns are not touching and the ground layer is predominantly grass. An understorey of trees or shrubs may or may not occur.
- (D) Scattered Tree Grassland - defined as an open vegetation type, dominated by grassland, with occasional trees or groups of trees. Canopy cover is less than 20%.
- (E) Grassland - a completely open type with no, or very few, woody elements.

Within these formations, nineteen associations are recognised. These are:

- (A) Forest Formation:
 - 1. Ground Water Forest
 - 2. Riverine Forest
 - 3. Coastal Dry Evergreen Forest
- (B) Thicket Formation:
 - 1. Riverine Thicket
 - 2. Brachystegia microphylla Thicket
 - 3. Coastal Dry Thicket on Clays
 - 4. Coastal Dry Thicket on Sands
- (C) Woodland Formation:
 - 1. Brachystegia woodland (Miombo)
 - 2. Pterocarpus-Pseudolachnostylis woodland (Chipya)
 - 3. Pteleopsis-Millettia woodland (Chipya)
 - 4. Combretum-Terminalia sericea woodland

5. Upper Valley Mixed Woodland
6. Lower Valley, Combretum-Sclerocarya woodland
7. Shallow Soil Stunted woodland

(D) Scattered Tree Grassland Formation:

1. Terminalia spinosa-Spirostachys Wooded Grassland
2. Acacia-Combretum Shrub Short Grassland
3. Cassia-Combretum Shrub Medium Grassland

(E) Grassland Formation:

1. Seasonally Flooded Tall Grass Swamp

(F) Oddments:

1. Anthill Communities

This report is concerned only with the vegetation description, map and species list. More detailed treatment of vegetation succession, habitat affinities and productivity will be published at a later stage.

Section Two: The Habitat

The topography varies from a flat flood plain of recent origin at 120 metres a.s.l to low rolling hills of 800 metres a.s.l in the east. The underlying geology is the Karoo sandstone formation, which to the east becomes overlaid by Pleistocene gravels and sands and Recent alluvial clays (Rodgers 1968).

Three main soil types are recognised:

- (1) Deep, well-drained, acid, old, red sandy earths on the Karoo formations. pH 4.5 to 6, very low N.P.K status.
- (2) Alkaline grey clay sands, calcareous nodular hard pan at 30 cms depth, poorly drained. pH 9 to 9.5, low N.P.K status.
- (3) Deep, black, cracking vertisolic clays. neutral pH, low N.P.K.status.

Annual rainfall averages 760 mm in a single rainy season from late November to early May. Temperatures and humidities are high.

Fires have been a feature of this environment for as long as settlement has been in existence. At present, policy is to early burn a mosaic approximately 60% burns every year.

Section Three: Vegetation Description

A.1 Ground Water Forest:

This association occurs as a discrete 10 km² area at the northern end of a large flood plain, where there is permanent water seepage. The southern half of the forest consists largely of mature wild date palms, Phoenix reclinata, overlooking muddy swamp pools. The northern half, away from the water seepage, becomes more similar to riverine forest. The canopy cover is dense, but no well-defined layering exists. Forest trees have buttressed boles and lianes are common, but not epiphytes. A ground cover exists only where the canopy is broken. The whole area is criss-crossed by the trails of hippopotamus, for which the forest offers a dry season refuge. The edge is sharply defined by the action of fire. Several small alkaline streams enter from the east, and saline plant species occur - e.g. Haplocoelum mombasense, Salvadora persica and Sporobolus virginicus.

Common trees are Phoenix reclinata, Hyphaene spp, Lepisanthes senegalensis, Alangium salviifolium, Balanites wilsoniana, Celtis wightii, Azanza garkeana, Sorendeia madagascariensis, Mimusops kummel and M. fruticosa, Calancoba and Memecylon spp, which present a continual evergreen aspect.

The understorey contains many Rubiaceae and Celastraceae - e.g. Tarenna, Canthium, Coffea, Psychotria and Tricalysia, and Elaedenron, Salacia and Mystroxyton. Commiphora species are common.

Several small isolated clumps are scattered around the edge. Tamarindus indica, Azalia guanzensis, Hyphaene and Euphorbia species are common elements.

Grasses are mainly riverine - e.g. Leptochloa and Eleusine species. Cynodon dactylon and Chloris gayana are common in the clearings.

A small area of ground water forest occurs to the north of the study area, at Maua (38°10'E, 8°20'S), around a fresh water spring. Dominant species are Khaya nyassica, Ficus species and Sterculia appendiculata. Syzygium guineense and Majidea zanguebarica are common in the understorey. This is more similar to the ground water forests of Zambia (Lawton 1963 and Wild 1964).

A.2 Riverine Forest:

This is a varied association, occurring as true gallery forest along only two rivers - the Lungonyo and lower Lihangwa, isolated patches

occur on the Mwende. In all these cases the forest is rapidly decreasing due to both fire and river bank encroachment.

The gallery forest varies from a few metres to over 100 metres in width, with discrete fire maintained edges and several game trails. Where the forest has been cleared, many such trails lead to severe erosion gulleys. Dominant trees are Pterocarpus holtzii, Diospyros kirkii and D. mespiliformis, Sterculia appendiculata and Terminalia kilimandscharica. Albizia amara and A. zimmermanii are occasional elements. Common understorey trees are Garcinia livingstonei, Dalbergia arbutifolia, Erythroxylum emarginatum, Haplocoelum mombasense, Commiphora zanzibarica, Cleistochlamys kirkii, and Cola species.

The shrub layer contains many species, especially Rubiaceous elements - e.g. Lamprothamnus, Pavetta, Polysphaeria, Tricalysia etc. Grasses such as Leptochloa, Rottboelia, Heteropogon melanocarpus, Oryza are common in open glades.

Climbers such as Artabotrys, Abrus, Monodora and Entada are common. A fringe zone of shrubs such as the Malvaceae - Thespesia, Urena and Hibiscus species with Deinbollia borbonica and Combretum goetzei is common.

One small relict forest of primarily riverine species occurs on clay soils away from major rivers. Examination of air photographs from 1949 shows these patches were more frequent even twenty years ago. Dominant trees are Diospyros, Mimusops, Sterculia and Afzelia.

There are a very few forest patches in the upland areas on more sandy acid soils. Where they occur Pterocarpus holtzii is common as a riverine tree. Mention must be made of a small (one hectare) forest at Mpapule on alluvium by permanent water. This forest patch is dominated by tall Trichilia emetica trees, with Ficus spp. The understorey is largely composed of Markhamia accuminata, Vangueria acutiloba and Cleistochlamys.

A.3 Coastal Dry Evergreen Forest:

Restricted to the higher areas (above 700 metres) of the western watershed, with an estimated rainfall of 1000 to 1200 mm per annum. The forest shows a dense stunted aspect on steep slopes with a closed shrub layer. Taller stands with an open ground layer occur on deep soil ridge tops. Usnea is common, but other epiphytes are rarely seen. The soil shows a permanent litter/humus layer of up to 5 cm and the top soil is a rich sandy loam.

Common canopy trees are Mimusops busseana, Albizia adianthifolia, Trachylobium, Brachylaena, Dracaena, Ricinodendron tomentellum, Ficus zanzibaricus, Manilkara discolor and M. sulcata, Pteleopsis, Strychnos sp. and Lannea sp.

Sapium, Drypetes, Fagara chalybea, Byrsocarpus bovinianus, Calancoba gigantocarpa and Hymenocardia are common in the understorey.

Typical thicket species occur on the slopes as a shrub layer - e.g. Croton pseudopulchellus, Grewia conocarpa, Salacia senegalensis, Lingelsheimia, Memecylon, Maerua and Uvaria species.

Climbers such as Combretum trothae and C. padoides, Acacia brevispica and Schlechterina mitostemmatoides are frequent.

Polyneura squarrosa is a sparse creeping grass on the open floor.

B.1 Riverine Thicket:

As with the gallery forest, analysis of photographs reveals a general decrease in extent since 1949. This formation occurs in several forms:

1. Degraded riverine forest, still with occasional emergents such as Pterocarpus holtzii. Dense groves of Lamprothamnus, Poly-sphaeria, Haplocoelum etc.
2. Flood plain, fringing the major channels - Combretum constrictum with small composite shrubs - e.g. Pluchea dioscoridis, Vernonia exsertifolia.
3. Drier areas on clay - Maytenus putterlickioides, Albizia anthelmintica, Capparis tomentosa, Harrisonia abyssinica, Dalbergia melanoxylon and the occasional baobab - Adansonia digitata.
4. Wetter areas on clay - Markhamia accuminata, Heinsia crinita.
5. On deep alluvial sands, often in association with trees such as Stereospermum, Trichilia, Kigelia and Dalbergia boehmii. Typical shrub species are Xylothea glutinosa, Antidesma venosum, Psorospermum febrifugum, Canthium zanzibaricum, Dichrostachys cinerea etc.
6. In miombo valleys where fire protected - Ziziphus abyssinica, Dichrostachys, Harrisonia, Maytenus senegalensis. etc.

B.2 Brachystegia microphylla Thicket:

Restricted to steep upper slopes of major hill systems, on poor soils. The canopy, which is light and feathery, is virtually restricted to B. microphylla and the occasional Rhodo-

gnaphalon schumannianum. On better sites such trees as Cleistachne sp. Azelia, Cussonia zimmermanii, Albizia petersiana and even Tamarindus indica have been seen as occasional emergents.

Common shrubs and small trees are Gardenia resiniflua and Gardenia sp. = Mgaza 272 (both restricted to this association), Hymenocardia ulmoides, Strychnos henningsii and S. panganensis, Maerua kirkii, Lingelsheimia, Croton, Paropsia braunii, Rothmannia englerana, Vernonia zanzibarica, Acokanthera schimperi and Alchornea laxiflora. Usnea is common, grasses are rare, the ground usually being covered by B. microphylla seedlings.

B.3 Coastal Thicket on Clay:

This association occurs in small patches in this study area, but occupies a high proportion of the clay soil to the north. The soil is highly alkaline (pH 9.0 with high sodium content) and sets very hard in the dry season. The association is semi-deciduous and xeric in character.

Common emergents are Spirostachys africana, Azelia, Manilkara mochisia and M. sp. (Muhike), Tamarindus and Millettia stuhlmannii. Diospyros cornii and D. bussei are common, as is Euphorbia candelabrum. Several shrub species occur, chiefly Cola species, Cleistochlamys, Commiphora, Suregada zanzibarensis, Erythroxylum emarginatum, Euphorbia grandicornis, Sansevieria species, Lamprothamnus, Teclea simplicifolia, Securinega virosa, Indigofera schimperi, Toddaliopsis, Dichapetalum, Croton and Harrisonia.

Several large seasonal water pans occur, often with hippopotamus, especially when fire produced open open woodland areas are close.

B.4 Coastal Thicket on Sands:

This occupies several large areas in the study area (totalling almost 150 km²). Nearly always restricted to ridge tops or the upper slopes on deep sandy soils. It is semi-deciduous, with a virtually open ground layer and a sharp fire controlled edge.

Dominant emergents are Pteleopsis myrtifolia and Millettia stuhlmannii with occasional to common Commiphora serrata, Lannea sp. (Mumbo), Vitex species, Manilkara discolor and Oldfieldia somalensis. Understorey trees are: Calancoma, Markhamia obtusifolia, Drypetes gerrardii, Ochma holstii, Citropsis dawsoni, Cola microcarpa, Hymenocardia ulmoides, Memecylon sp, Fagara chalybea, Haploccelum inopleum, Wrightia sp, Erythroxylum emarginatum and Strychnos henningsii.

Common shrubs are Polyalthia sp., Uvaria acuminata, Salacia senegalensis, Dichapetalum spp., Croton pseudopulchellus, Grewia conocarpa, Lingelsheimia sp., Leptactina bussei, Strophanthus hispidus, Lindackeria sp., Alchornea laxiflora, Chassalia umbraticola, Clerodendrum spp., Pentas parvifolia and Mildbraedia carpinifolia.

Climbers are common, viz: Hugonia castaneifolia, Combretum trothae and C. padoides, Acacia brevispica (sp. aff), Schlecterina, Monodora junodii, Ancyclobothrys petersiana and Landolphia sp.

Small ephemeral herbs are common in the ground layer - e.g. Triumfetta kirkii. Thicket grasses such as Megastachya mucronata and Panicum heterostachyon occur.

An occasional variant of this type is a thicket dominated by Manilkara discolor and M. sulcata often found just above the Brachystegia microphylla zone.

The thicket to the west of Balani is unusual in that it is completely deciduous and poor in species composition. Pteleopsis and Millettia are complete dominants, and Leptactina bussei the commonest shrub. This community gives rise to the Pteleopsis, Millettia woodlands when opened up by fire.

Isolated thicket and pioneer thicket clumps are occasionally found. Landolphia spp., Markhamia obtusifolia, Grewia conocarpa, Monodora junodii, Hymenodictyon floribundum and Vernonia zanzibarica are amongst the earliest pioneer species.

On isolated steep scarps a drier variant occurs, composed almost entirely of Diospyros bussei, Croton pseudopulchellus and Strychnos hemmingii.

C.1 Brachystegia Woodland (Miombo):

This association is the true "miombo" of Central Africa. It rarely reaches the height, density or species richness of the Zambian form, and often contains coastal elements. Here it is dominated by Brachystegia spiciformis and Julbernardia globifera, either together or separately. Julbernardia appears to dominate on poorer soils. The shrub layer is dominated by Diplorhynchus condylocarpon and Byrsocarpus orientalis; occasional Xeromphis obovata, Tetracera masuiana, Ximenia caffra and Flacourtia indica occur. Hugonia busseana and Lonchocarpus eriocalyx are common understorey trees. The ground layer is more open than the fierce fire woodland; rarely are dense, coarse strands of grass present. Herbs, sedges and

Common shrubs are Polyalthia sp., Uvaria acuminata, Salacia senegalensis, Dichapetalum spp., Croton pseudopulchellus, Grewia conocarpa, Lingelsheimia sp., Leptactina bussei, Strophanthus hispidus, Lindackeria sp., Alchornea laxiflora, Chassalia umbraticola, Clerodendrum spp., Pentas parvifolia and Mildbraedia carpinifolia.

Climbers are common, viz: Hugonia castaneifolia, Combretum trothae and C. padoides, Acacia brevispica (sp. aff), Schlecterina, Monodora junodii, Ancyclobothrys petersiana and Landolphia sp.

Small ephemeral herbs are common in the ground layer - e.g. Triumfetta kirkii. Thicket grasses such as Megastachya micronata and Panicum heterostachyon occur.

An occasional variant of this type is a thicket dominated by Manilkara discolor and M. sulcata often found just above the Brachystegia microphylla zone.

The thicket to the west of Balani is unusual in that it is completely deciduous and poor in species composition. Pteleopsis and Millettia are complete dominants, and Leptactina bussei the commonest shrub. This community gives rise to the Pteleopsis, Millettia woodlands when opened up by fire.

Isolated thicket and pioneer thicket clumps are occasionally found. Landolphia spp., Markhamia obtusifolia, Grewia conocarpa, Monodora junodii, Hymenodictyon floribundum and Vernonia zanzibarica are amongst the earliest pioneer species.

On isolated steep scarps a drier variant occurs, composed almost entirely of Diospyros bussei, Croton pseudopulchellus and Strychnos hemingsii.

C.1 Brachystegia Woodland (Miombo):

This association is the true "miombo" of Central Africa. It rarely reaches the height, density or species richness of the Zambian form, and often contains coastal elements. Here it is dominated by Brachystegia spiciformis and Julbernardia globifera, either together or separately. Julbernardia appears to dominate on poorer soils. The shrub layer is dominated by Diplorhynchus condylocarpon and Byrsocarpus orientalis; occasional Xeromphis obovata, Tetracera masuiana, Ximenia caffra and Flacourtia indica occur. Hugonia busseana and Lonchocarpus eriocalyx are common understorey trees. The ground layer is more open than the fierce fire woodland; rarely are dense, coarse strands of grass present. Herbs, sedges and

suffrutices are common. Grasses are sweet, chiefly Panicum infestum, with several small species such as Sporobolus ioclados and Sporobolus subglobosus.

Other Brachystegia species are more restricted in their distribution. Mention has been made of B. microphylla, which can occur as a woodland dominant on steep, rocky soils, without a thicket understorey.

B. utilis is rare in this area, but can be found on steep slopes below the B. microphylla zone.

B. bussei is usually restricted to poor, steep slopes, but is occasionally found in dense groves in valley bottoms.

B. boehmii is common on lower slopes of higher clay content, often in poorly drained areas.

In deep shade, and usually fire protected, thicket pioneer clumps occur: Landolphia and Leptactina bussei are common.

Throughout this association, occasional trees of Afzelia, Ficus sp., Pterocarpus angolensis, Pteleopsis, Millettia stuhlmannii, Pseudolachnostylis and Strychnos innocua occur.

C.2 Pterocarpus-Pseudolachnostylis Woodland (Chipya):

Referred to as "chao" in this area, this is the basic fierce fire woodland, with a dense coarse grass cover. Dominant and common trees are Pseudolachnostylis, Pterocarpus angolensis, Pteleopsis myrtifolia, Millettia stuhlmannii, Combretum zeyheri and C. binderamum, Strychnos innocua, Boscia salicifolia and Xeroderris stuhlmannii.

Shrubs are rare and subject to severe die back due to fierce annual fires. Terminalia sericea seedlings may be common. Grasses are sour and coarse, and dominated by Andropogon schirensis and Hyparrhenia spp. Sedges, small grasses and herbs are not common. Herbs, where they do occur, are semi-suffruticose, such as Crotalaria and Phyllanthus.

A richer form occurs, dominated by Burkea, Amblygonocarpus and Erythrophleum africanum. It is not known whether this is a successional series or edaphically controlled.

A related form occurs on the slopes of the Tundu Hills, which is dominated by Boscia salicifolia, Pseudolachnostylis and some Pterocarpus and Millettia. Grewia monticola is a common constituent of the shrub layer.

On the lower slopes of upland valleys, a woodland dominated by Pseudolachnostylis is common. The grass layer is dominated by Loudetia arundinacea and Tristachya bequaertii. The lack of fire sensitive elements, and a dense grass layer, warrants its inclusion in this association.

C.3 Pteleopsis-Millettia Woodland (Chipya):

Possibly a variant of C.2 (above), but is discrete and readily identifiable. Trees are almost exclusively Millettia stuhlmannii and Pteleopsis, with a few Schrebera trichoclada. One occurrence of this community is adjacent to the deciduous thicket variant discussed under B.4. Markhamia obtusifolia and Millettia micans are dominant shrubs. Pseudolachnostylis has only been seen as a rare seedling and sapling.

C.4 Combretum-Terminalia Tall Grass Woodland:

As will be shown later, this is a successional stage following cultivation, and will revert to a miombo or chipya form in time.

The woodland is dominated by trees of Terminalia sericea, Combretum zeyneri, Pseudolachnostylis and Ostryaoderris. Suffrutices of T. sericea are very conspicuous in the ground layer. Grasses are predominantly tall and coarse, Andropogon schirensis, Loudetia simplex. Tristachya and Themeda are common.

Other trees found are Combretum binderamum and C. molle, Lannea sp. (Mpwipwi), and Lonchocarpus eriocalyx and Pterocarpus angolensis. More mature woodland contains more Pterocarpus, Burkea, Erythrophloeum, Millettia and Afzelia. Shrubs are more common, especially Diplorhynchus, Byrsocarpus orientalis and Xeromphis. Saplings of B. spiciformis occur. The grass cover becomes more open and sweet, with Panicum infestum and several herbs.

Occasional copses of mature B. spiciformis occur.

C.5 Upper Valley Mixed Woodland:

A complex and heterogenous zone with many variants. They occur in the valley bottoms of all upland sandy alluvial valleys or "dambos". As such they are aptly described by the blanket association term "upper valley mixed woodland".

Type 1: Dominated by Pericopsis angolensis, Vitex doniana and Hyphaene species. Albizia versicolor, A. harveyi and

Acacia nigrescens are common, with the occasional Tamarindus and Dalbergia boehmi and Kigelia aethiopum and Cleistachne. Tamarindus, Ziziphus sp. and Boscia angustifolia are common on anthills. Grasses are tall and dense, and include Panicum maximum, P. aphanoneurum, Cymbopogon giganteum and the occasional Setaria.

Type 2: On more sandy soils. Acacia sieberana, Piliostigma thommingii, Lonchocarpus capassa and several Combretum species - e.g. C. collinum, C. psidiodes, C. fragrans and C. molle. Annona senegalensis is common. Ricinodendron rautanenii sometimes occurs.

Shrubs of Xeromphis, Maytenus senegalensis, Mimosa pigra, Securinega, Dichrostachys and Ziziphus are common to both forms.

C.6 Lower Valley, Combretum-Sclerocarya Woodland:

An equally heterogenous associates. Found on the more extensive and gentle slopes of the lower valleys. It also shows sandy and clay communities. Soils are usually pale, and the community is an inter-zone between the woodland and scattered tree grassland.

Type 1: On more sandy soils of drainage lines such as Chimbiriri and Balenje, Sclerocarya caffra, Crossopteryx febrifuga, Combretum species, Manilkara mochisia and the occasional Brachystegia boehmi, Pseudolachnostylis and Xeroderris are common.

Type 2: On clay soils, drying hard and slightly alkaline, the following are common: Dalbergia melanoxylon, Acacia nigrescens, Albizia harveyi, Dobera glabra, Berchemia discolor, Sclerocarya caffra, Combretum species, Lonchocarpus capassa and L. ericalyx. Combretum imberbe and Balanites aegyptiaca in some lower areas. Mimusops schliebenii, Manilkara mochisia and Tamarindus are common on anthills. The occasional water pan occurs with fringing thicket. The baobab and Sterculia africana are characteristic elements.

In both types the shrub layer is poorly developed. Diospyros usum-barensis, Ziziphus sp., Turraea nilotica and Cassia petersiana are common. Acacia nilotica and A. clavigera occur.

Grasses vary from tall Themeda, Hyparrhenia, Loudetia communities to medium Hereropogon contortus and Digitaria milaniana on heavier soils. Panicum infestum is common in shade.

C.7 Stunted Woodland on Stony Slopes:

Common in other parts of the Selous, here restricted to small areas near Balenje and Nunga to Mpapule. Stunted Julbernardia and Brachystegia boehmi occur. Uapaca nitida is restricted to this community in this area. Diospyros bussei and Dalbergia melanoxylon are common, as is Acacia robusta. Alloteropsis semialata is a characteristic grass species.

D.1 Terminalia spinosa-Spirostachys Wooded Short Grassland:

The dominant vegetation type on alkaline, poorly-drained, sandy clay soils in the absence of thicket.

Terminalia spinosa is the characteristic dominant, although in some areas it gives way to pure Spirostachys africana. Other common trees are Acacia nigrescens, Azelia, Sterculia africana, Cassia petersiana, Albizia harveyi, Sclerocarya caffra, Dobera glabra and, on anthills, Tamarindus, Euphorbia candelabrum, Mimusops schliebenii, Manilkara mochisia and Perchemia discolor.

Common small trees and shrubs are Diospyros usumbarensis, Cassia petersiana, Acacia senegal, A. zanzibarica and A. robusta, Dalbergia melanoxylon, Turraea nilotica and Markhamia acuminata; Combretum hereroense is very common.

The grass cover is short, usually less than 60 cms., and sweet. Common species are Sporobolus ioclados, Digitaria milaniana, Panicum infestum and many annual species of Eragrostis, Brachiaria, Dactyloctenium, Urochloa, Aristida and Chloris. Sedges, especially Mariscus mollipes, are common. The herb layer is dominated by Cyathula lanceolata, Heliotropium strigosum, Cassia mimosoides, and Tephrosia pumila. Patches of ungrazed fire-resistant Bothriochloa pertusa are common.

To the south, on heavier clays, trees, especially Terminalia spinosa, become less conspicuous, although several dead stumps indicate greater densities in the past. The grass cover becomes more dense and dominated by Heteropogon contortus and Digitaria milaniana.

Several permanent and semi-permanent water pans occur with a fringing thicket of Markhamia acuminata, Iamprothammus and Polysphaeria, and trees of Mimusops and Tamarindus and the occasional baobab.

D.2 Acacia-Combretum Shrub Short Grassland:

Small areas in the vicinity of the Miombo Research Centre headquarters

show a community dominated by Acacia robusta, A. senegal, and what is probably A. gerrardii. Combretum hereroense and some C. zeyheri are present. Both Terminalia spinosa and Spirostachys africana are absent. The status of this community is not known.

D.3 Cassia-Combretum Shrub Medium Grassland:

Running across types D.1 and D.2 are low sandy ridges which bear a characteristic vegetation type. Both Terminalia spinosa and Spirostachys are absent, and common trees are Xeroderris, Sclerocarya and the occasional Pseudolachnostylis, Burkea, Lonchocarpus ericalyx and Lannea sp. (Mpwipwi). Combretum zeyheri, C. molle and Cassia petersiana dominate the shrub layer, with some Diospyros usumbarensis, Turraea nilitica and both Markhamia acuminata and M. obtusifolia. occur in this type.

Grasses are dense, and chiefly Themeda, Heteropogon and Hyparrhenia spp., with some Panicum infestum in shade. Astipomoea malvacea is dominant in the herb layer.

E.1 Seasonally Flooded Tall Grass Swamp:

Occurs in two major localities, the main flood plain of the upper Lungonyo River (c. 125 km²) and a smaller plain at Nangue (c. 25 km²).

Nangue is dominated by Sataria sphacelata, Echinochloa haploclada and Andropogon gyanus. Several dead tree stumps (mainly Dalbergia melanoxylon) indicate a possible recent increase in area.

The Lungonyo flood plains is bordered by trees of Combretum imberbe and Balanites aegyptiaca. Major channels are bordered by Combretum constrictum.

Grass dominants are Echinochloa haploclada, Ischaemum afrum, Setaria sphacelata, Andropogon gyanus, Bothriochloa glabra and Vetiveria nigritana and V. zizanioides. The edges are characteristically Echinochloa, Themeda and Digitaria milaniana, and tussock Sporobolus such as S. pyramidalis; Imperata cylindrica occurs in small areas.

There is a rich herb flora and occasional outcrops of Sesbania hirtistyla and Aeschynomene spp.

F.1 Ant Hill Communities:

These present a very diverse flora, only partially related to the surrounding community. In general, anthills provide a more alkaline base rich habitat and this is reflected by the vegetation cover.

Tamarindus, Mimusops schliebenii and Manilkara mochisia have already been mentioned as common anthill trees. Smaller trees are Commiphora spp., Salvadora, Cleistochlamys, Ziziphus spp., including Z. pubescens, and Ehretia amoena and Cordia spp. Euphorbia candelabrum and several fleshy climbers are common, as are species of Pavetta and other Rubiceae. Grasses are often sweet, and include Leptochloa, Cynodon, Sporobolus and Chloris virgata.

Section Four: Annotated Species List for the Eastern Selous Game Reserve

1. Families are arranged alphabetically, as are the generic and specific names.

2. Full authorities are given for each name.

3. The abbreviations indicate the following:

(a) First column (in capitals) Habit

e.g. H = Herb
 F = Suffrutex
 C = Climber
 S = Shrub
 T = Tree
 A = Annual
 P = Perennial

Combinations may be used.

(b) Second column (small letters) Distribution and frequency

e.g. l = local
 w = widespread
 r = rare
 o = occasional
 c = common
 d = dominant

(c) Third column (capital letters) Habitat

e.g. M = Woodland (all types, miombo, chipya, valley etc.)
 OW = Scattered Tree Grassland and Scrubland (all types)
 T = Thicket and forest
 R = Riverine communities
 GW = Ground Water Forest
 S = Swamp and flood plain

(d) Fourth column: R and a number is the collecting reference number. SN indicates no number has been assigned.

4. The vernacular name in common use is given.

This is nearly always Kingindo: 'S' indicates Swahili.

5. The suffix (P) after a family name denotes a Pteridophyte; the suffix (M) denotes a monocotyledon.

6. F.T.E.A. and a year in brackets after a family name indicates the year the family was published for the Flora of Tropical East Africa. In a few cases, more recent authorities for the family are cited as well.

ACANTHACEAE

<i>Asystasia gangetica</i> (L) Anders	H	-	-	R219-379
<i>Barleria prionitis</i> (L)	HC	-	-	R385-654
<i>B. setigera</i> Rendle	HC	-	-	R40
<i>B. sp.</i>	H	-	-	R603
<i>Blepharis maderaspatensis</i>	H	-	-	R1306
<i>B. panduriformis</i> Lindau	H	-	-	R297
<i>B. sp.</i>	H	-	-	R302
<i>Brillantaisia pubescens</i> Oliv	H	-	-	R1337
<i>Dyschoriste sp.</i>	H	-	-	R435
<i>Echolium sp.</i>	H	-	-	R993
<i>Hygrophila sp.</i>	H	-	-	R1007
<i>Hypoestes verticillaris</i> (L.f) R.Br.	H	-	-	R1081
<i>Justicia fittonioides</i> S. Moore	H	-	-	R1367
<i>J. insularis</i> T.Anders	H	-	-	R968-969
<i>J. nyassana</i> Lindau	H	-	-	R1332
<i>J. stackytarphetoides</i> (Lindau) C.B. Cl.	H	-	-	R1103
<i>J. uncimulata</i> Oliv	C	-	-	R177
<i>J. sp. nr. nyassana</i> Lindau	H	-	-	R286
<i>J. sp.</i>	H	-	-	R324-189
<i>Monechma doBILE</i> (Forsk) Nees	H	-	-	R1402
<i>Phaulopsis sp.</i>	H	-	-	R1060
<i>Pseuderanthemum hildebrandtii</i> (Lindau) C.B. Cl.	H	-	-	R322
<i>Ruspolia seticalyx</i> (C.B.Cl) Milne-Redh.	S	-	-	R.319
<i>Schlerochiton vogelii</i> (Nees) T.Anders ssp. <i>holstii</i> (Lindau) Napper	S	1c	T	R896
<i>Thunbergia sp.</i>	H	-	-	R215

AGAVACEAE

<i>Dracaena usambarensis</i> Engl.	T	1c	T	R933	Mtetema	S
<i>Sansevieria sp.1</i>	S	1c	T	R560	Konge Mwituu	S
<i>S. sp.2</i>	S	1c	T	R1066	Konge Mwituu	S

AIZOACEAE F.T.E.A. (1961)

<i>Gisekia pharnaceoides</i> L	H	-	-	R1218
<i>Glinus latoides</i> L.	H	-	-	R373-485
<i>Limeum viscosum</i> (Gay) Fenzl	H	-	-	R485+1324
<i>Mullugo nudicaulis</i> Lam.	H	-	-	R1407

ALISMATICEAE F.T.E.A. (1960)

<i>Burnatia enneandra</i> Micheli	H	-	-	R981
-----------------------------------	---	---	---	------

ALANGIACEAE F.T.E.A. (1958)

<i>Alangium salviifolium</i> (L.f)Wangerin	T	o	GW	R847
--	---	---	----	------

AMARANTHACEAE

<i>Aerva lanata</i> (L) Juss.	H	-	-	R325
<i>A. leucura</i> Moq. var. <i>lanatoides</i> Suesseng.	H	-	-	P386
<i>Alteranthera sessilis</i> (L) R.Br.	H	-	-	R374
<i>Centemopsis Kirkii</i> (Hook.f) Schinz	H	-	-	R1313
<i>Cyathula lanceolata</i> Schinz	H	-	-	R179
<i>Pupalia lappacea</i> Juss	H	-	-	Rsn(DSM614)
<i>Psilotrichum scleranthum</i> Oliv	S	lo	RT	R1014
<i>Pupalia atropurpurea</i> Moq.	H	-	-	R176

AMARYLLIDACEAE (M)

<i>Ammocharis tinneana</i> (Kotschy & Peyr) Milne-Redh. & Schweick	H	-	-	R87
<i>Haemanthus filiflorus</i> Bak.	H	-	-	R550

ANACARDIACEAE

<i>Lannea schimperi</i> (A.Rich.) Engl	T	r	M	R1227	Mumbo ya Bondi K
<i>L. stuhlmannii</i> (Engl.) Engl	T	f	M/OW	R68	Mpwipwi K
<i>Ozoroa reticulata</i> (Bak.f) Engl	T	r	M	R206	Mtukwambako K
<i>Sclerocarya caffra</i> Sond.	T	c	OW/M	R54	Mng'ongo S
<i>Sorindeia madagascariensis</i> DC	T	r	GW/R	R781	Mpilipili S

ANNONACEAE F.T.E.A. (1971)

<i>Artabotrys</i> sp. nr. <i>brachypetalus</i> Benth.	C	o	R	R771	Mng'ombe K
<i>Ammona senegalensis</i> Pers.	T	ol	M	R1070	Mtopetope S
<i>Cleistochlamys kirkii</i> Oliv	T	f	TR	R663	Mgongolo K
<i>Hexalobus monopetalus</i> (A.Rich) Engl.	T	lf	MR	R704-778	Mkungumwali K
<i>Monanthotaxis buchananii</i> (Engl) Verde.	C	lo	T	R858	
<i>Monodora grandidieri</i> Baill.	S	lo	T	R1359	
<i>M. junodii</i> Engl. & Diels	S	lc	T	R1003	Mngamba Kamba K
<i>Polyalthia</i> sp. near <i>P. korinti</i> (Dun) Hook.f. & Thoms	S	fw	T	R608	Munjechwe K

ANNONACEAE (continued)

<i>Uvaria acuminata</i> Oliv	S	fw	T	R166-651	Muhou	K
<i>U. kirkii</i> Hook.f.	S	lc	R	R816	Mkonjiganga	K
<i>Xylopia parvifolia</i> (A.Rich) Benth	T	lo	T/OW	R1193		
<i>X. odoratissima</i> Oliv	T	wo	M	R1166	Kipondo	

APOCYNACEAE

<i>Acokanthera schimperi</i> (A.D/C) Benth	T	lc	T	R	Sumu	S
<i>Adenium obesum</i> (Forsk.) Roem.& Schult. H		o	OW	R736-42		
<i>Ancylobothrys petersiana</i> (Kl.) Pierre	C	o	T	R521	Mambome	K
<i>Carissa edulis</i> (Forsk.) Vahl	S	o	OW/R	R676		
<i>Carvalhoa macrophylla</i> K. Schum.	T	o	RT	R932	Lulaa	K
<i>Diplorhynchus condylocarpon</i> (Muell./Arg.) Pichon	T	dw	M	R67-430	Mtomoni	K.S
<i>Holarrhena febrifuga</i> Klotzsch	T	o	MT	R646	Litogo Lilume	K
<i>Landolphia kirkii</i> Dyer	S	w	MT	R249-95-730	Kibungo	K
<i>L. parvifolia</i> K. Schum.	C	o	T	R354		
<i>Schizozygia coffaeoides</i> (Boj.) Baill.	S	c	R	R20		
<i>Strophanthus hispidus</i> DC	S	lo	T	R1054	Lipembe-ya- mbawala	
<i>Wrightia natalensis</i> Stapf.	T	lr	T	R1051	Umbwiga	

ARALIACEAE F.T.E.A. (1968)

<i>Cussonia zimmermannii</i> Harms	T	r	T	R910	Mtumbitumbi	
------------------------------------	---	---	---	------	-------------	--

ASCLEPIADACEAE

<i>Aspidoglossum interruptum</i> (E.Mey.) Bullock	H	-	-	R1221		
<i>Calotropis gigantea</i> (L) Ait.	H	-	-	R1430		
<i>Cryptolepis</i> sp.	H	-	-	R1329		
<i>Pachycarpus spurius</i> (N.E.Br) Bullock	S	r	M	R966	Mwembere	
<i>Stathmostelma pauciflorum</i> (Klotzsch) K. Schum.	H	-	-	R460		
<i>Tylophora stenoloba</i> (K.Schum.) N.E. Br.	C	lc	R	R819		

BALANITACEAE

<i>Balanites aegyptiaca</i> (L.) Del.	T	wc	OW	R1115	Mnuwili	S
<i>B. wilsoniana</i> Dawe & Sprague	T	lc	GW/R	R868		
<i>B. sp.</i>	T	o	T	R278	Mnuwili ya Msitu	S

BIGNONIACEAE

<i>Fernandoa magnifica</i> Seem	T	lo	T	R1247		
<i>Kigelia africana</i> (Lam.) Benth.	T	lc	R	R669	Mtandi	S
<i>Markhamia acuminata</i> (Klotzsch) K.Schum.	ST	o	OW/R	R86	Mtandawala	S
<i>M. obtusifolia</i> (Bak.) Sprague	ST	lc	T/M	R575	Mpugupugu	S.K
<i>M. zanzibarica</i> Engl.	ST	r	R	R497	Mtalawanda	S
<i>Stereospermum kunthianum</i> Cham.	T	lo	R/M	R405	Mngongolo	

BOMBACACEAE

<i>Adansonia digitata</i> L.	T	wo	OW/R/M	R472	Mbuyu	S
<i>Rhodognaphalon schumannianum</i> A.Robyns	T	lo	T/M	R s.n	Msufi Pori	S

BORAGINACEAE

<i>Cordia goetzei</i> Guerke	S	o	R	R731		
<i>C. sp. near C. myxa</i> L	S	lo	R	R1147	Mnamata mpiata	
<i>C. ovalis</i> DC.	S	o	R/OW	R826		
<i>C. sinensis</i> Lam. (<i>C. gharaf</i>)	S	lc	R	R794		
<i>C. sp.</i>	T	o	GW	R829	Ubavu wa faro	S
<i>Ehretia amoena</i> Klotzsch	S	c	R/OW	R551	Mkakatale	
<i>E. litoralis</i> Guerke	S	lc	GW	R1204		
<i>Heliotropium baclei</i> DC var. <i>rostratum</i> Johnston	H	-	-	R4		
<i>H. indicum</i> L.	H	-	-	R351		
<i>H. ovalifolium</i> Forsk.	H	-	-	R7		
<i>H. strigosum</i> Willd.	H	-	-	R178		
<i>H. subulatum</i> (DC.) Martelli	H	-	-	R427		
<i>H. supinum</i> L.	H	-	-	R366		

BURSERACEAE

<i>Commiphora fulvotomentosa</i> Engl.	T	lo	T	R1294	Mpome	
<i>C. pteleifolia</i> Engl.	T	l	T/R	R1211	Mpome	
<i>C. serrata</i> Engl.	T	c	T	R798	Mpome	
<i>C. ugogensis</i> Engl.	T	o	T	R576/1215	Mpome	
<i>C. zanzibarica</i> (Baill.) Engl.	T	o	GW/R/OW	R610	Mjengaua	S
<i>C. sp. nr. C. puguensis</i> Engl.	T	l	R/GW	R988	Ubavu	S
<i>C. sp. nr. C. madagascariensis</i> Jacq.	TS	o	T	R515	Mpome was	Msitu
<i>C. sp. = Harris</i> 384	T	o	T	R528		
<i>C. sp.</i>	S			R564		

CAESALPINIACEAE (FTEA (1967))

<i>Afzelia quanzensis</i> Welw.	T	wo	M/T/OW	R1345	Mkongo	S
<i>Bauhinia tomentosa</i> L.	S	c	R	R238	Kiubakuba	
<i>Brachystegia boehmii</i> Taub.	T	wf	M	R52	Muyombo	S
<i>B. bussei</i> Harms	T	lc	M	R105	Mgelegale	
<i>B. microphylla</i> Harms	T	d	T	R715	Muhani	
<i>B. spiciformis</i> Benth.	T	d	M	R51	Mtondo	S
<i>B. utilis</i> Hutch. & Burt Davy	T	o	M	R699	Muhiga	
<i>Burkea africana</i> Hook.	T	wf	M	R210	Mpuga	
<i>Cassia abbreviata</i> Oliv.	T	c	OWM	R	Mkundekunde	S
<i>C. absus</i> L.	H	-	-	R983		
<i>C. burtii</i> Bak. f.	S	lo	R	R1352		
<i>C. grantii</i> Oliv.	H	-	-	R959		
<i>C. mimosoides</i> L.	H	-	-	R200		
<i>C. obtusifolia</i> L.	S	lo	M	R1302		
<i>C. petersiana</i> Bolle	S	f	OW	R211	Mkundekunde	S
<i>C. siamea</i> Lam.	T	o	OW	R	Msonobali	S
<i>C. singueana</i> Del.	S	l	OW	R518		
<i>C. sp.</i>	T	o	M	R688		
<i>Cordyla africana</i> Lour.	T	r	M	R416	Mndundu	
<i>Cryptosepalum maraviense</i> Oliv.	F	lo	M	R542	Mgome	
<i>Dialium holtzii</i> Harms	T	lo	T/M	R1162		
<i>Erythrophleum africanum</i> (Benth.) Harms	T	f	M	R205	Mkaa	S
<i>Julbernardia globiflora</i> (Benth.) Troupin	T	d	M	R717	Mchenga	S
<i>Tamarindus indica</i> L.	T	c	OW/T/M	R	Mkwachu	S
<i>Tessmannia densiflora</i> Harms	T	o	T	R1319	Muindeu	
<i>Trachylobium verrucosum</i> (Gaertn.) Oliv.	T	ol	T	R418	Mtandalusi	S
<i>Tylosema fassoglensis</i> (Schweinf.) Torre and Hillcoat	H	-	-	R740		

CAMPANULACEAE

<i>Lightfootia leptophylla</i> L.H. Wright	H	-	-	R1046		
--	---	---	---	-------	--	--

CAPPARACEAE FTEA (1964) (Capparidaceae)

<i>Boscia angustifolia</i> A. Rich. var. <i>corymbosa</i> (Gilg) De Wolf	T	l	M	R421	Mkondamunga	
<i>B. salicifolia</i> Oliv.	T	c	M	R50	Mlindinde	
<i>Cadaba farinosa</i> Forsk.	S	lo	OW	R1159		
<i>Capparis tomentosa</i> Lam.	S	lc	R	R674		
<i>Cleome hirta</i> (Klotzsch) Oliv.	H	-	-	R1398		
<i>Gynandropsis gynandra</i> (L.) Briq.	H	-	-	R1399		

CAPPARACEAE (continued)

<i>Maerua angolensis</i> DC.	T	o	OW	R543	
<i>M. bussei</i> (Gilg & Bened.) Wilczek	T	o	T	R763	
<i>M. edulis</i> (Gilg & Bened.) De Wolf	H	c	OW	R425	
<i>M. holstii</i> Gilg	S	l	OW	R1069	Muhanga mbwile
<i>M. kirkii</i> (Oliv.) F. White	T	o	T/OW	R417	Muhakala
<i>M. sp. near bussei</i> (Gilg & Bened.) Wilczek	F	lc	M	R452	

CARYOPHYLLACEAE FTEA (1956)

<i>Polycarpaea corymbosa</i> (L.) Lam.	H	-	-	R223	
--	---	---	---	------	--

CELASTRACEAE (including Hippocrateaceae)

<i>Elaeodendrum buchananii</i> (Loes.) Loes	T	r	OW/M	R247	Kihokole
<i>E. schlechteramm</i> (Loes.) Loes.	S	l		R1344	Mtolob
<i>E. schweinfurthianum</i> (Loes.) Loes.	S	lc	GW	R1102	Mtoloba
<i>E. sp.</i>	S	lo	GW	R1125	Mtoloba
<i>Hippocratea sp.</i>	C	lo	T	R939	Umbula
<i>Maytenus senegalensis</i> (Lam.) Exell	T	f	R/M	R270	Muhokoveli
<i>M. putterlickioides</i> (Loes.) Exell & Mendonca	S	o	R	R400	Muhokoveli mwitu
<i>Myxoxylon aethiopicum</i> (Thunb.) Loes.	T	l	R	R1133	
<i>Salacia bussei</i> Loes.	F	lc	M	R733	
<i>S. senegalensis</i> (Lam.) DC.	SC	f	T	R412	Madumbi
<i>S. madagascariensis</i> (Lam.) DC.	SC	lo	T/R	R1110	
<i>S. stuhlmanniana</i> Loes.	SC	lc	R/GW	R1121	Madumbi ya bonde
<i>S. sp. = Mgaza</i> 356	S	lc	T	R1228	Mchengechenge

CHAILETTIACEAE

<i>Dichapetalum mossambicense</i> (Klotzsch) Engl.	S	o	T	R776	Kibaba
<i>D. stuhlmannii</i> Engl.	TS	c	T	R411	Muhunihuni

COMBRETACEAE

<i>C. Combretum collinum</i> Fres. ssp <i>binderamm</i> (Kotschy) Okafor	T	wc	M	R356	Muhindila
<i>C. collinum</i> Fres. ssp. <i>suluense</i> (Engl. & Diels) Okafor	T	lc	M	R420	Muhulalio mwitu
<i>C. collinum</i> Fres. ssp. <i>taborense</i> (Engl.) Okafor	T	lc	M	R207	Muhulalio
<i>C. constrictum</i> (Benth.) Laws.	S	lc	R	R46	Kipupulu
<i>C. fragrans</i> F. Hoffm.	T	f	M	R429	Litope liboile
<i>C. goetzei</i> Engl. & Diels	S	lc	R	R422	Kipupulu
<i>C. hereroense</i> Schinz	T	f	OW	R424	Mtikanyumbu

COMBRETACEAE (continued)

<i>C. imberbe</i> Engl.	T	lc	OW	R581	Mpangati	
<i>C. molle</i> G. Don	T	wf	M	R235	Kimbilia	
<i>C. obovatum</i> O. Hoffm.	T	o	M	R272	Mlama	S
<i>C. padoides</i> Engl. & Diels	C	lc	T	R278	Likochokununga	
<i>C. pentagonum</i> Laws.	S	lc	R	R535	Kiyukulu	
<i>C. psidoides</i> Welw.	S	o	M	R913	Kimbilia kubwa	
<i>C. trothae</i> Engl. & Diels	S	lc	T	R879	Likocho kununga	
<i>C. zeyheri</i> Sond.	T	wf	OWM	R196	Mgonogo	
<i>Pteleopsis myrtifolia</i> (Laws.) Engl. & Diels	T	wf	M/T	R15	Mnepa	S
<i>Terminalia kilimandscharica</i> Engl.	T	lc	R	R262	Mkuliungu	
<i>T. mollis</i> Laws.	T	lc	M	R743		
<i>T. sericea</i> Burch.	T	wf	M	R423	Mchuya	
<i>T. spinosa</i> Engl.	T	wd	OW	R352	Mkambale	
<i>T. stenostachya</i> Engl. & Diels	T	lc	M	R950	Mchuya mkubwa	

COMMELINACEAE (M)

<i>Aneilema pedunculatum</i> C.B.Cl.	H	-	-	R320		
<i>Commelina bracteosa</i> Hassk.	H	-	-	R76	Nelela	
<i>C. erecta</i> ssp. <i>livingstonii</i> (C.B.Cl.) J.K. Morton	H	-	-	R129		
<i>C. forskalaei</i> Vahl	H	-	-	R1403		
<i>C. subulata</i> Roth vel sp. aff.	H	-	-	R1299		
<i>Cyanotis lanata</i> Benth.	H	-	-	R1002	Likolowa	
<i>Murdannia simplex</i> (Vahl) Brenan	H	-	-	R99		

COMPOSITAE

<i>Ageratum conyzoides</i> L.	H	-	-	R468		
<i>Aspilia kotschyi</i> (Hochst.) Oliv.	H	-	-	R1058		
<i>A. sp.</i>	H	-	-	R1024		
<i>Bidens grantii</i> (Oliv.) Sherff	H	-	-	R217	Lipigipigi	
<i>Blumea aurita</i> (L.f.) Wight	H	-	-	R384		
<i>Brachylaena hutchinsii</i> Hutch.	T	lc	T	R684	Mmelendende	
<i>Conyza sp.</i>	H	-	-	R481		
<i>Dicoma sessiliflora</i> Harv.	H	-	-	R701	Lihomanga	
<i>Eclipta prostrata</i> (L.) L.	H	-	-	R554	Linyunyu	
<i>Emilia integrifolia</i> Bak.	H	-	-	R980		
<i>Erythrocephalum minus</i> Oliv. & Hiern	H	-	-	R198		
<i>Gnaphalium luteoalbum</i> L.	H	-	-	R484		
<i>Grangea maderaspatana</i> Poir.	H	-	-	R483		

COMPOSITAE (continued)

<i>Gutenbergia</i> sp.	H	-	-	R221	
<i>Hypericophyllum compositarum</i> Steetz s.lat.	H	-	-	R203	
<i>Lactuca capensis</i> Thunb.	H	-	-	R458	Sunga S
<i>Launaea cornuta</i> (Oliv. & Hiern) C. Jeffrey	H	-	-	R326	
<i>Melanthera albinervia</i> O. Hoffm. ssp. <i>albinervia</i>	H	-	-	R1234	
<i>Pluchea dioscoridis</i> (L.) DC.	S	lc	R	R22	
<i>Sonchus</i> sp.	H	-	-	R130	
<i>Sphaeranthus africanus</i> L.	H	-	-	R557	
<i>S. ukambensis</i> Volken & O. Hoffm.	H	-	-	R434	
<i>Vernonia aemulans</i> Vatke	H	-	-	R119	
<i>V. chloropappa</i> Bak.	H	-	-	R605	
<i>V. exsertiflora</i> Bak.	S	o	GW	R340	
<i>V. glabra</i> (Steetz) Vatke	S	o	R	R1009	
<i>V. pauciflora</i> Less.	H	-	-	R214	
<i>V. petersii</i> Oliv. & Hiern	H	-	-	R1305	
<i>V. poskeana</i> Vatke & Hildebr.	H	-	-	R1314	
<i>V. stuhlmannii</i> O. Hoffm.	S	l	T	R1057	
<i>V. zanzibarensis</i> Less.	S	l	T	R705	Lipuyungu
<i>V. sp.</i>	H	-	-	R213	

CONNARACEAE FTEA (1956)

<i>Byrsocarpus boivinianus</i> (Baill.) Schell.	CS	r	T	R522	
<i>B. orientalis</i> (Baill.) Bak.	T	wf	M	R493	Dawa ya Moto S
<i>Vismianthus punctatus</i> Mildbr.	S	lo	T	R1334	

CONVOLVULACEAE

<i>Astripomoea malvacea</i> (Klotzsch) Meeuse	H	-	-	R308	
<i>Bonamia mossambicensis</i> (Klotzsch) Hall.f.	C	-	-	R287	
<i>Hewittia sublobata</i> (L.f.) Ktze.	C	-	-	R285	
<i>Ipomoea aquatica</i> Forsk.	C	-	-	R132	
<i>I. cairica</i> (L.) Sweet	C	-	-	R323	
<i>I. crepidiformis</i> Hall.f. var. <i>crepidiformis</i>	C	-	-	R1393	
<i>I. intrapilosa</i> Rose	C	-	-	R713	
<i>I. sp.</i>	C	-	-	R321	
<i>Jacquemontia paniculata</i> (Burm.f.) Hall.f.	H	-	-	R1384	Bwalabwaya
<i>J. tamnifolia</i> (L.) Griseb.	H	-	-	R1077	
<i>Merremia pinnata</i> (Choisy) Hall.f.	H	-	-	R1076	
<i>Seddera hirsuta</i> Hall.f. var. <i>gracilis</i>	H	-	-	R1395	
<i>Turbina stenophyllon</i> (Hall.f.) Meeuse	C	-	-	R246	

CRASSULACEAE

<i>Kalanchoe</i> sp.	H	-	-	R403
----------------------	---	---	---	------

CRUCIFERAE

<i>Rorippa madagascariensis</i> (DC.) Hara	H	-	-	R370
--	---	---	---	------

CUCURBITACEAE FTEA (1967)

<i>Coccinia grandiflora</i> Cogn.	C	lr	T	R1067	
<i>Corallocarpus</i> sp. = Koritschoner 2109	C	-	-	R1400	
<i>Kedrostis foetidissima</i> (Jacq.) Cogn.	C	-	-	R383	
<i>Momordica trifoliolata</i> Hook.f.	C	-	-	R41	
<i>Cucumis hirsutus</i> Sond.	C	-	-	R954	Lutanga kanyai
<i>C.</i> sp.	C	-	-	R301	

CYPERACEAE (M) see papers by D.M. Napper in J.E.A.N.H.S. (1963-71)

<i>Bulbostylis aphyllanthoides</i> (Ridl.) C.B.Cl.	R1026
<i>B. barbata</i> (Rottb.) C.B.Cl.	R9
<i>B.</i> sp.	R102
<i>Cyperus compressus</i> L.	R185
<i>C. holstii</i> Kukenth.	R1025
<i>C. longus</i> L. ssp. <i>tenuiflorus</i> L. Rottb.) Kukenth.	R3
<i>Fimbristylis bisumbellata</i> (Forsk.) Bub.	R487
<i>F. exilis</i> (H.B.K.) Roem. & Schult.	R100
<i>F. triflora</i> (L.) K. Schum.	R103
<i>F.</i> sp.	R101
<i>Fuirena calolepis</i> K. Schum.	R157
<i>Mariscus hemisphaericus</i> (Boeck.) C.B.Cl.	R978
<i>M. macropus</i> C.B.Cl.	R81
<i>M. mollipes</i> C.B.Cl.	R69
<i>Pycneus pumila</i> Domin.	R292
<i>Scleria foliosa</i> A Rich.	R1413

DILLENIACEAE FTEA (1968)

Tetracera masuiana De Wild. & T. Dur. T c M R363 Lijenge

DIOSCOREACEAE M.

Dioscorea sansibarensis Pax C O R R1010

DIPTEROCARPACEAE

Monotes africanus A.D.C. T r M R180 Mragati

EBENACEAE

<i>Diospyros consolatae</i> Chiov.	T	lc	T	R714	Kijibajiba
<i>D. cornii</i> Chiov.	T	lc	T	R1101	Mkalakawa
<i>D. usambarensis</i> F. White	T	wf	OW	R463	Mdaa S
<i>D. kirkii</i> Hiern	T	lc	OW/R	R768	Mkalakawa
<i>D. verrucosa</i> Hiern	T	lo	M	R1374	
<i>D. sp. 1</i>	T	1	OW	R263	
<i>Euclea divinorum</i> Hiern	T	lc	GW	R721	Mpuchupuchu
<i>E. sp.</i>	T	r	M	R437	

ERYTHROXYLACEAE

<i>Erythroxylum emarginatum</i> Schumach. & Thonn.	T	lc	GW/R/T	R843	
<i>E. fischeri</i> Engl.	T	o	T	R631	Mtunda

EUPHORBIACEAE

<i>Acalypha glomerata</i> Hutch.	H	-	-	R1396	
<i>Alchornea laxiflora</i> (Benth.) Pax & Hoffm.	T	o	T	R519	
<i>Antidesma venosum</i> Tul.	T	wo	R/M	R23	Mkundahobi
<i>Bridelia cathartica</i> Bertol.f. ssp. <i>melanthesoides</i> (Klotz) J. Leonard	S	wo	M	R1276	Mnong'omela
<i>Cleistanthus</i> sp.	T	lo	M/R	R821	Mtache
<i>Croton dichogamus</i> Pax	S	o	T	R805	Kipiata
<i>C. pseudopulchellus</i> Pax	S	f	T	R523	Naiolo
<i>C. sp.</i> = Gillman 1356	S	lo	T	R1227A	
<i>Cyathogyne bussei</i> Pax	S	o	R	R1032	
<i>Drypetes gerrardii</i> Hutch.	T	o	T/GW	R725	Kipondo ya msitu
<i>Erythrococca atrovirens</i> (Pax) Prain	S	wo	R/M	R641	Kipalapala
<i>E. kirkii</i> (Muell. Arg.) Prain	S	lo	OW	R1282	
<i>Euphorbia engleri</i> Pax	ST	lo	T	R1246	
<i>E. candelabrum</i> Trem. ex Kotschy	T	c	OWT	Rs.n.	Mpanga panga
<i>E. grandicornis</i> Goebel	T	lc	T	Rs.n.	
<i>E. hypericifolia</i> L.	H	-	-	R342	Kipiliili
<i>E. tirucalli</i> L.	T	o	T	R948	Lung'ou
<i>Hymenocardia acida</i> Tul.	S	lr	T	R1154	
<i>H. ulmoides</i> Oliv.	T	o	T	R410	Mtete
<i>Jatropha stuhlmannii</i> Pax	H	-	-	T1031	Mnalika
<i>Lingelsheimia</i> sp. = Gillman 1147	S	c	T	R764	Kiwagawaga
<i>Mallotus oppositifolius</i> (Geiseler) Muell.-Arg.	S	lo	T	R1190	
<i>Margaritaria discoidea</i> (Baill.) Webster	S	lo	T	R1216	Kipala ngwale
<i>Micrococca mercurialis</i> (L.) Benth.	H	-	-	R977	
<i>Mildbraedia carpinifolia</i> (Pax) Hutch.	S	o	OW/R	R1013	

EUPHORBIACEAE (continued)

<i>Oldfieldia somalensis</i> (Chiov.) Milne-Redh.	T	o	T	R681	Mmulubulu
<i>Phyllanthus baillei</i> Hutch.	S	lo	T	R1244	
<i>P. leucanthus</i> Pax	H	-	-	Rs.n.	
<i>P. maderaspatensis</i> L.	H	-	-	R381	
<i>P. reticulatus</i> Poir.	S	c	R	R680	Muhimera
<i>P. sp.</i>	H	-	-	R465	
<i>Pseudolachnostylis maprouneifolia</i> Pax	T	dw	M	R60	Msolo S
<i>Ricinodendron rautanenii</i> Schinz	T	o	M	R545	Mkanganangu
<i>R. tomentellum</i> Hutch. & E.A. Bruce	T	lr	T	R1160	
<i>Sapium armatum</i> Pax & K. Hoffm.	T	o	T	R875	
<i>Securinega virosa</i> (Willd.) Pax & K. Hoffm.	S	ow	R/T	R491	Kipalapala bonde
<i>Spirostachys africana</i> Sond.	T	wd	OW/T	R512	Msagawi
<i>Suregada zanzibariensis</i> Baill.	T	c	T	R686	Mdimu Poli S
<i>Tragia furialis</i> Boj.	C	-	-	R957	Iupiupiu
<i>T. hildebrandtii</i> Muell.Arg.	C	-	-	R378	
<i>T. sp.</i>	C	-	-	R456	
<i>Uapaca nitida</i> Muell. Arg.	T	lc	M	R711	Muhekela

FLACOURTIACEAE

<i>Buchnerodendron lasiocalyx</i> (Oliv.) Gilg	S	o	M	R958	Namata
<i>Caloncoba gigantocarpa</i> Perkins & Gilg	T	o	T	R940	
<i>C. welwitschii</i> (Oliv.) Gilg	T	o	T/R/GW	R583	Malwanjai
<i>Flacourtia indica</i> (Burm.f.) Merr.	T	we	M	R961	Mtaba
<i>Lindackeria</i> sp.	S	l	T	R1061	
<i>Xylothea tettensis</i> (Klotzsch) Gilg					
var. <i>kirkii</i> (Oliv.) Wild	T	c	R	R212	Miyambopo
<i>X. tettensis</i> (Klotzsch) Sleumer					
var. <i>macrophylla</i>	T	o	R	R627	

FLAGELLARIACEAE (M) FTEA (1971)

<i>Flagellaria guineensis</i> Schumach.	H	-	-	R382	
---	---	---	---	------	--

GENTIANACEAE

<i>Enicostema hyssopifolium</i> (Willd.) Verdoorn	H	-	-	R125	
<i>E. latiloba</i> N.E. Br.	H	-	-	R1414	

GRAMINEAE (M) FTEA part I (1970) D.M. Napper Grasses of Tanganyika (1965)

<i>Alloteropsis cimicina</i> (L.) Stapf	P	o	OW	R1533	
<i>A. semialata</i> (R.Br.) Hitchc. var. <i>semialata</i>	P	lc	M	R945	
<i>Andropogon gayanus</i> Kunth var. <i>squamulatus</i> (Hochst.) Stapf	P	lf	S	R32	Nambanda
<i>A. schirensis</i> A. Rich.	P	wd	M	R222	Nambanda
<i>Aristida adscensionis</i> L.	A	o	OW	R753	
<i>A. barbicollis</i> Trin. & Rupr.	A	o	OW	R168	
<i>A. funiculata</i> Trin. & Rupr.	A	o	OW	R754	
<i>A. hordeacea</i> Kunth	A	c	OW	R184	
<i>Bothriochloa glabra</i> (Roxb.) A. Camus	P	lc	S	R14	
<i>B. pertusa</i> (L.) A. Camus	P	wc	OW	R38	
<i>Brachiaria brizantha</i> (A. Rich.) Stapf	P	wc	M/OW	R42	
<i>B. deflexa</i> (Schumacher.) Robyns	A	wc	OW	R141	
<i>B. leucacrantha</i> (K. Schum.) Stapf	A	o	OW	R997	
<i>B. pubifolia</i> Stapf	A	lc	OW	R138	
<i>B. serrata</i> (Spreng.) Stapf	P	lc	M	R98	
<i>Chloris gayana</i> Kunth	P	lo	S	R136	
<i>C. virgata</i> Sw.	A	wc	OW	R37	
<i>Cleistachne sorghoides</i> Benth.	A	lo	S	R339	
<i>Cymbopogon giganteus</i> (Hochst.) Chiov.	P	wc	M	R142	
<i>Cymbosetaria sagittifolia</i> (A. Rich.) Schweickt.	A	lo	OW	R140	
<i>Cynodon dactylon</i> (L.) Pers.	P	lc	M/R	R158	
<i>C. nlemfuensis</i> Vanderyst var. <i>nlemfuensis</i>	P	lo	M	R1377	
<i>Dactyloctenium giganteum</i> Fischer & Schweickt.	A	wf	OW	R139	Kiaga
<i>D. sp.</i>	A	wf	OW	R135	Kiaga
<i>Dichanthium papillosum</i> (A. Rich.) Stapf	P	lo	S	R117	
<i>Digitaria adscendens</i> (H.B.K.) Herr.	A	lo	R	R333	
<i>D. debilis</i> (Desf.) Willd.	A	lo	S	R1363	
<i>D. gymnostachys</i> Pilg.	P	lo	T	R1039	
<i>D. gayana</i> (Kunth.) Stapf	A	lo	M	R1047	
<i>D. milaniana</i> (Rendle) Stapf	P	wd	OW/M	R1	Lukomba
<i>Echinochloa crus-gavonis</i> (H.B.K.) Schult.	A	r	R	R242	
<i>E. haploclada</i> (Stapf) Stapf	P	wf	OW/S	R33	Timba ndembo
<i>Eleusine africana</i> Kennedy O'Byrne	P	lo	M/R	R156	
<i>E. multiflora</i> A. Rich.	A	lo	T/GW	R328	

GRAMINEAE (continued)

<i>Elymandra grallata</i> (Stapf) Clayton	P	lo	M	R183	
<i>Enteropogon macrostachyus</i> (A.Rich.) Benth.	AP	lo	OW	R255	
<i>Eragrostis aethiopica</i> Chiov.	A	lo	OW	R986	
<i>E. aspera</i> (Jacq.) Nees	A	lo	GW	R329	
<i>E. atrovirens</i> (Desf.) Steud. var. <i>atrovirens</i>	P	lc	S	R94	
<i>E. castellaneana</i> Busc. & Muschl.	P	fw	OW/M	R303	
<i>E. chapelieri</i> (Kunth) Nees	P	c	M	R254	
<i>E. ciliaris</i> (L.) R.Br.	A	wc	OW	R299	
<i>E. lappula</i> Nees var. <i>divaricata</i> Stapf	P	lo	OW	R167	
<i>E. namaquensis</i> Schrad.	A	lo	R	R1409	
<i>E. pilosa</i> (L.) Beauv.	P	lo	OW	R1300	
<i>E. racemosa</i> (Thunb.) Steud.	P	o	M	R160	
<i>E. setulifera</i> Pilg.	A	c	OW	R34	
<i>E. superba</i> Peyr.	P	wc	OW/M	R93	
<i>Eragrostiella bifaria</i> (Vahl) Bor	P	wo	OW/M	R78	
<i>Eriochloa procer</i> a (Retz.) C.E. Hubb.	A	lc	S	R336	
<i>E. parvispiculata</i> C.E. Hubb.	A	lc	R/S	R314	
<i>Eustachys paspaloides</i> (Vahl) Lanza & Mattei	P	lc	M	R92	
<i>Heteropogon contortus</i> (L.) Roem. & Schult.	P	wf	M/OW	R39	Kisuki
<i>H. melanocarpus</i> Benth. (Hochst.) Stapf	A	r	R	R244	
<i>Hyparrhenia filipendula</i> var. <i>filipendula</i>	P	w	OW/M	R35	
<i>Hyperthelia dissoluta</i> (Steud.) Clayton	P	wf	OW/M	R192	
<i>Imperata cylindrica</i> (L.) Beauv. var. <i>major</i> (Nees) C.E. Hubb.	P	lo	S	R115	
<i>Ischaemum afrum</i> (J.F. Gmel.) Dandy	P	wc	S	R112	
<i>Leptocarydion vulpiastrum</i> (De Not.) Stapf	A	lc	M	R1309	
<i>Leptochloa panicea</i> (Retz.) Ohwi	A	lo	R/T	R337	
<i>L. squarrosa</i> Pilg.	A	lo	R/T	R338	
<i>L. uniflora</i> A. Rich.	A	lo	R	R250	
<i>Loudetia arundinacea</i> (A. Rich.) Steud.: var. <i>hensii</i> (De Wild.) Pichi-Serm.	P	wf	M	R229	
<i>L. pennata</i> (Chiov.) C.E. Hubb.	P	r	M	R252	
<i>L. simplex</i> (Nees) C.E. Hubb.	P	wd	M	R234	
<i>Megastachya mucronata</i> (Poir.) Beauv.	A	l	T	R230	
<i>Miscanthidium</i> sp.	P	r	OW	R45	
<i>Oryza eichingeri</i> Peter	P	lc	S	R29	
<i>O. longistaminata</i> Chev. & Roehr.	P	lc	S	R30	Pungapunga S
<i>O. punctata</i> Steud.	P	lc	S	R316	Pungapunga S
<i>Oxytenanthera abyssinica</i> (A.Rich.) Munro	P	lc	T/R	R	Muanzi

GRAMINEAE (continued)

<i>Panicum aphanoneurum</i> Stapf	P	lc	M/R	R1065	
<i>P. deustum</i> Thunb.	P	lo	M/R	R1272	
<i>P. heterostachyum</i> Hack.	A	lo	T	R231	
<i>P. infestum</i> Anderss.	P	wf	M/OW	R161	Liputu
<i>P. massaiense</i> Mez	A	c	OW	R318	Nambole wa Bonde
<i>P. maximum</i> Jacq.	P	wf	OW/M	R163	Iiheha
<i>P. meyeranum</i> Nees	P	lo	S	R390	
<i>P. subalbidum</i> Kunth.	P	lo	S/OW	R1389	
<i>P. trichocladum</i> K. Schum.	P	lc	R	R21	
<i>Paspalum auriculatum</i> J. Presl.	P	lo	S	R313	
<i>Pennisetum polystachyon</i> (L.) Schult.	AP	r	R	R710	
<i>Perotis hildebrandtii</i> Mez	AP	wc	M/OW	R257	
<i>P. patens</i> Gand.	AP	lo	R	R97	
<i>Pogonarthria squarrosa</i> (Roem. & Schult.) Pilg.	P	o	M	R236	
<i>Polyneura squarrosa</i> Peter	A	lo	T	R934	
<i>Rottboelia exaltata</i> L.f.	A	lo	S/R	R240	
<i>Sacciolepis curvata</i> (L.) Chase	P	lo	M	R1315	
<i>Schizachyrium sanguineum</i> (Retz.) Alston	P	wo	M	R253	
<i>Schoenefeldia transiens</i> (Pilg.) Chiov.	P	wo	OW	R1236	
<i>Setaria holstii</i> Herrm.	P	c	S	R11	
<i>S. incrassata</i> (Hochst.) Hack.	P	lc	S	R110	
<i>S. pallidifusca</i> (Schult.) Stapf & C.E. Hubb.	A	wc	M	R s.n.	
<i>S. planifolia</i> Stapf	P	lc	S	R154	
<i>S. sphacelata</i> Stapf & C.E. Hubb.	P	lc	S	R368	
<i>Sorghum brevicarinatum</i> Snowden	P	lo	R	R964	
<i>S. verticilliflorum</i> (Steud.) Stapf	P	lc	OW	R2	
<i>S. versicolor</i> Anderss.	P	lc	R	R237	
<i>Sporobolus festivus</i> A. Rich.	P	lc	OW	R82	
<i>S. fimbriatus</i> Nees	P	lc	R/S	R867	
<i>S. ioclados</i> (Trin.) Nees. (S. marginatus)	P	wd	OW	R83 R1237	
<i>S. pyramidalis</i> Beauv.	P	wc	OW/S	R147	
<i>S. stolzii</i> Mez	A	lo	OW	R999	
<i>S. subglobosus</i> A. Chev.	P	lo	M	R1042	
<i>S. virginicus</i> (L.) Kunth	P	lc	G/W	R1091	Ukoka S
<i>Thelepogon elegans</i> Roem. & Schult.	A	r	S	R269	
<i>Themeda triandra</i> Forsk.	P	wf	OW/M/S	R143	Inkubi
<i>Tragus berteronianus</i> Schult.	A	lo	OW	R572	
<i>Tristachya bequaertii</i> De Wild.	P	wf	M	R144	
<i>T. nodiglumis</i> K. Schum.	P	lo	M	R1296	
<i>Urochloa pullulans</i> Stapf	P	lc	OW	R151	
<i>U. trichopus</i> (Hochst.) Stapf	A	lc	OW	R137	Likakata

GRAMINEAE (continued)

<i>Vetiveria nigritana</i> (Benth.) Stapf	P	lc	S	R384
<i>V. zizanioides</i> (L.) Nash	P	lc	S	R113
<i>Zonotriche inamoena</i> (K. Schum.) Clayton	P	lc	M	R960

GUTTIFERAE

<i>Garcinia livingstonei</i> T. Anders.	T	lc	R	R1123	Mtiko
<i>Psorospermum febrifugum</i> Spach					
var. <i>ferrugineum</i> Keay & Milne-Redh.	T	lc	R/M	R404	Kalijenge

HYDROPHYLLACEAE

Hydrolea sensibarica Gilg	H	-	-	R309
---------------------------	---	---	---	------

HYPERICACEAE

Vismia orientalis Engl.	T	lo	T	R1287	Kalijenge ya msitu
-------------------------	---	----	---	-------	-----------------------

HYPOXIDACEAE (M)

Hypoxis angustifolia Lam.	H	-	-	R127
---------------------------	---	---	---	------

ICACTINACEAE FTEA (1968)

Pyrenacantha kaurabassana Baill. C - - R857 Likupula

IRIDACEAE (M)

Gladiolus psittacinus Hook.f. H - - R942

LABIATAE

<i>Becium</i> sp.	H	-	-	R284	
<i>Endostemon</i> sp.	H	-	-	R1386	
<i>Englerastrum</i> djalonsense A. Chev.	H	-	-	R1043	
<i>Leonotis</i> nepetifolia (L.) R.Br.	H	-	-	R1038	
<i>Leucas</i> deflexa Hook.f.	H	-	-	R75	
<i>L. glabrata</i> R.Br.	H	-	-	R970	
<i>L. stenophylla</i> Guerke	H	-	-	R1017	
<i>Ocimum</i> sp.	H	-	-	R371	
<i>Plectranthus</i> lasianthus Guerke	H	-	-	R1321	
<i>P. flaccidus</i> Guerke	H	-	-	R1388	
<i>P.</i> sp.	H	-	-	R72	
<i>P. sp.</i> novum	H	-	-	R1000, R1301	
<i>Timea</i> aethiopica Kotschy & Peyr	S	lo	M	R1279	
Labiatae - Anderson 1235	H	-	-	R305	

LENTIBULARIACEAE

<i>Utricularia</i> gibba L.	H	-	-	R359	
-----------------------------	---	---	---	------	--

LILIACEAE (M)

<i>Anthericum</i> subpapillosum Von Poell.	H	-	-	R19	
<i>A.</i> sp.	H	-	-	R70	
<i>Asparagus</i> setaceus (Bak.) Jessop	C	-	-	R906	Lututu
<i>A.</i> sp.	H	-	-	R31	
<i>Chlorophytum</i> gallabatense Bak.	H	-	-	R1351	
<i>C. inopinum</i> Von Poell.	H	-	-	R1111	
<i>Drimiopsis</i> sp.	H	-	-	R128	
<i>Gloriosa</i> simplex L.	H	-	-	R251	
<i>Scilla</i> edulis Engl.	H	-	-	R1205	

LINACEAE FTEA (1966) including Hugoniaceae

<i>Hugonia</i> bussoana Engl.	T	wc	M	R63	Muhondoka
<i>H. castaneifolia</i> Engl.	C	lc	T	R563	Muhondoka mwitu

LOBELIACEAE

<i>Lobelia</i> anceps L.f.	H	-	-	R1415	
----------------------------	---	---	---	-------	--

LOGANIACEAE FTEA (1960)

<i>Mostuea brunonis</i> Didr. var. <i>brunonis</i>	F	lo	M	R799	
<i>M. microphylla</i> Gilg	S	lo	R	R818	
<i>Strychnos hemmingsii</i> Gilg	T	lc	T	R682	Mbalambao
<i>S. innocua</i> Del. var. <i>pubescens</i> Solered.	T	wf	M	R1150	Mtonga tonga
<i>S. panganensis</i> Gilg	S	o	M	R909	Kibulu
<i>S. potatorum</i> L.	T	o	R	R995	
<i>S. sp.</i>	T	lc	T	R936	Mkwiro

LORANTHACEAE

<i>Englerina</i> sp.	P	-	-	R279	Changula
<i>Helixanthera kirkii</i> (Oliv.) Danser	P	-	-	R233/1269	Changula
<i>Phragmanthera proteicola</i> Engl.	P	-	-	R709	Changula

LYTHRACEAE

<i>Ammannia prieureana</i> Guill. & Perr.	H	-	-	R480	
<i>A. sp.</i>	H	-	-	R121	
<i>Nessaea radicans</i> Guill. & Perr.	H	-	-	R360	

MALPIGHIACEAE FTEA (1968)

<i>Acridocarpus chloropterus</i> Oliv.	S	lc	R	R595	
<i>Tristellateia africana</i> S. Moore	H	-	-	R1327	

MALVACEAE

<i>Abutilon hirtum</i> (Lam.) Sweet	S	wc	OW	R25	
<i>Azanza garkeana</i> (F.Hoffm.) Exell & Hillcoat	T	lo	GW	R611	Mtobo
<i>Gossypioides kirkii</i> (Mast.) J.B. Hutch.	C	wc	T	R409	Pambamwitu S
<i>Hibiscus aethiopicus</i> L.	S	wc	OW	R122	
<i>H. cannabinus</i> L.	S	wc	OW	R194	
<i>H. micranthus</i> L.f.	S	r	T	R220	
<i>H. sabdariffa</i> L.	H	-	-	R1427	
<i>H. surattensis</i> L.	H	-	-	R1325	
<i>H. vitifolius</i> L.	S	lo	R/OW	R226	
<i>H. sp.?aponeurus</i> Sprague & Hutch.	S	o	R	R984	
<i>H. sp.</i>	S	o	R	R258	
<i>Pavonia leptocalyx</i> (Sond.) Ulbr.	S	o	T	R280	
<i>Sida ovata</i> Forsk.	S	o	OW	R974	
<i>Thespesia danis</i> Oliv.	S	lo	R	R1158	
<i>Urena lobata</i> L.	S	o	R	R471	

MELASTOMATACEAE

<i>Dissotis debilis</i> (Sond.) Triana	H	-	-	R1428	
<i>Memecylon sansibaricum</i> Taub.	T	l	GW	R1134	
<i>M. sp.</i>	T	lc	T	R801	Mmete

MELIACEAE

<i>Trichilia emetica</i> (Forsk.) Chiov.	T	lc	R	R407	Muhukulilo
<i>Turraea nilotica</i> Kotschy & Peyr.	T	lc	OW	R44	Mlelewana
<i>T. sp.</i>	T	o	T	R586	

MENISPERMACEAE FTEA (1956)

<i>Cissampelos pareira</i> L.					
var. <i>orbiculata</i> (DC.) Miq.	C	-	-	R856	Ligugu

MIMOSACEAE FTEA (1959)

<i>Acacia brevispica</i> Harms	C	wc	T	R649	Ligobe
<i>A. robusta</i> Burch. ssp. <i>usambarensis</i> (Taub.) Brenan	T	wc	OW/GW	R392	Muhungo
<i>A. hockii</i> De Wild.	T	o	OW	R540	Kinjacha

MIMOSACEAE (continued)

<i>Acacia macrothyrsa</i> Harms	T	o	M	R1255	
<i>A. nigrescens</i> Oliv.	T	wf	OW	R43	Msengele
<i>A. nilotica</i> (L.) Del. ssp. <i>Kraussiana</i> (Benth.) Brennan	T	wc	OW	R498	Kinjacha
<i>A. senegal</i> (L.) Willd.	T	lc	OW	R266	Kiluma
<i>A. sieberana</i> DC. var. <i>sieberana</i>	T	lc	R	R770	Mchonda
<i>A. zanzibarica</i> (S. Moore) Taub.	T	wc	OW	R440	Kijimba
<i>Albizia amara</i> (Roxb.) Boiv.	T	lc	R	Rs.n.	Mtanga wa bonde S
<i>A. adianthifolia</i> (Schumach.) W.F. Wight	T	lc	T	R438	Mtanga wa msito S
<i>A. anthelmintica</i> (A.Rich.) Brogn.	T	lc	OW/R	R396	Mfwilete
<i>A. harveyi</i> Fourn.	T	wo	OW/M	R310	Mjanda
<i>A. petersiana</i> (Bolle) Oliv.	T	lc	R/T	R1034	Mtanga mbeleti
<i>A. versicolor</i> Oliv.	T	lo	M	R716	Mtanga S
<i>A. zimmermannii</i> Harms	T	r	R	R239	Mtanga ya bonde S
<i>Amblygonocarpus andongensis</i> (Oliv.) Exell & Torre	T	wc	M	R61	Mjেকে
<i>Dichrostachys cinerea</i> (L.) Wight & Arn.	T	wc	R/T/M	R	Kingunguti
<i>Elephantorrhiza goetzii</i>	S	lc	M	R445	Mianjati
<i>Entada chrysostachys</i> (Benth.) Drakei	C	o	R	R772	Mkurumu
<i>Mimosa busseana</i> Harms	C	lc	T	R1217	Iutatangima
<i>M. pigra</i> L.	S	lc	R	R1095	Kigonimamba
<i>Neptunia oleracea</i> Lour.	C	o	OW/R	R994	

MONTINIACEAE

<i>Grevea eggelingii</i> Milne-Redh.	S	lo	T	R1243	
--------------------------------------	---	----	---	-------	--

MORACEAE

<i>Ficus cardiogyne africana</i> Bureau	S	lo	GW	R1086	Ungaka
<i>F. Fischeri</i> Mildbr. & Burret	T	lo	T/M	R1149	Mpumbe
<i>F. ingens</i> (Miq.) Miq.	T	wo	M	R708	Mlandege
<i>F. sansibaricus</i> Warb.	T	lo	T	R1082	Mpondopondo
<i>F. sycomorus</i> L.	T	wo	OW/R/M	Rn.n.	Mayu S

MORINGACEAE

<i>Moringa oleifera</i> Lam.	S	o	M	R517	Mlongilongi
------------------------------	---	---	---	------	-------------

MYRTACEAE

<i>Syzygium cordatum</i> Krauss.	T	o	GW	R1375	
<i>S. guineense</i> (Willd.) DC.	T	o	R	R777	Muhuluhuti

OCHNACEAE

<i>Ochna holstii</i> Engl.	T	o	T	R524	Muhindama mwitu
<i>O. macrocalyx</i> Oliv.	T	lo	R	R537	Muhindama mwitu
<i>O. mossambicensis</i> Klotzsch	T	wf	M	R104	Muhindama
<i>O. polyneura</i> Gilg	T	lo	T	R1157A	Nungamu
<i>O. rooimensis</i> Gilg	T	o	R	R807	Muhindama
<i>O. sp. nr. ovata</i> F. Hoffm.	T	lc	T	T809	Mbalala
<i>O. sp.</i>	T	lc	T	R532	

OLACACEAE FTEA (1968)

<i>Olax dissitiflora</i> Oliv.	S	lc	T	R1320	Miyambunju
<i>Ximenia caffra</i> Sond.	T	wc	M	R448	Mpingi

OLEACEAE FTEA (1952)

<i>Jasminum biflorum</i> Knobl.	C	lo	T	R890	
<i>J. fluminense</i> Vell.	C	wc	OW	R614	
<i>J. meyeri-johannis</i> Engl.	S	lc	R	R622	
<i>J. stenolobum</i> Rolfe	S	lo	R	R820	
<i>Schrebera trichoclada</i> Welw.	T	lc	M	R275	Mnangangwalu

ONAGRACEAE FTEA (1953) Emend. Raven (1964)

<i>Ludwigia erecta</i> L.	H	-	-	R482	
<i>L. perennis</i> L.	H	-	-	R1422	
<i>L. stenorrhapha</i> (Brenan) Hara	H	-	-	R469	

OPHTIOGLOSSACEAE (P)

<i>Ophioglossum polyphyllum</i> A.Br.	H	-	-	R979	Ngwanga
---------------------------------------	---	---	---	------	---------

ORCHIDACEAE FTEA Part I (1968)

<i>Ansellia gigantea</i> (Reichb) f. V. nilotina	H	-	-	R1243	
<i>Eulophia</i> sp. nr. <i>E. walleri</i> (Reichb.f.) Kraenzl.	H	-	-	R202	
<i>Habenaria clavata</i> Lindl.	H	-	-	R1022	

OXALIDACEAE FTEA (1971)

<i>Biophytum petersianum</i> Klotzsch	H	-	-	R1100	Kakuwi
---------------------------------------	---	---	---	-------	--------

PALMAE (M)

<i>Borassus aethiopum</i> Mart.	T	lo	R	Rs.n.	Mvumo	S
<i>Hyphaenae coriacea</i> Gaertn.	T	lc	R	Rs.n.	Mkoche	S
<i>Phoenix reclinata</i> Jacq.	T	lc	GW	R559	Mkindu	S

PAPILIONACEAE FTEA (1972)

<i>Abrus precatorius</i> L.	C	-	-	R613	Nakandumbwa	
<i>Aeschynomene cristata</i> Vatke var. <i>pubescens</i> J. Leonard	S	lc	R	R8		
<i>A. minutiflora</i> Taub.	S	lo	OW	R1001		
<i>A. uniflora</i> E. Mey.	S	lc	R	R1020		
<i>Alysicarpus glumaceus</i> (Vahl) DC. ssp. <i>glumaceus</i>	C	-	-	R380		
<i>A. ovalifolius</i> (Schumach.) J. Leonard	H	-	-	R1135		
<i>Baphia massaiensis</i> Taub.	T	lo	M	R864		
<i>Clitoria ternatea</i> L.	C	-	-	R133		
<i>Crotalaria axillaris</i> Ait.	H	-	-	R1245		
<i>C. barkae</i> Schweinf. f.	H	-	-	R766		
<i>C. cephalotes</i> A. Rich.	H	-	-	R274		
<i>C. goodiiformis</i> Vatke	H	-	-	R1041		
<i>C. hyssopifolia</i> Klotzsch	H	-	-	R1045		
<i>C. pterocalyx</i> Harms	H	-	-	R1274		
<i>C. reptans</i> Taub.	H	-	-	R1391		
<i>C. vasculosa</i> Benth.	H	-	-	R1392		
<i>C. virgalata</i> Klotzsch	H	-	-	R1408		
<i>C. zanzibarica</i> Benth.	H	-	-	R186		
<i>C. sp.</i>	H	-	-	R191		
<i>Dalbergia arbutifolia</i> Bak. ssp. <i>arbutifolia</i>	T	r	R	R271		
<i>D. armata</i> E. Mey.	S/C	lo	T	R1267	Mtambula	
<i>D. boehmii</i> Taub. ssp. <i>boehmii</i>	T	lo	M	R780		
<i>D. melanoxylon</i> Guill. & Perr.	T	wf	OW	R510	Mpingo	
<i>Desmodium triflorum</i> (L.) DC.	H	-	-	R1322		
<i>Droogmansia pteropus</i> (Bak.) De wild.	T	lc	M	R1122	Mgelekana	
<i>Indigofera cuneata</i> Bak.	H	-	-	R294		
<i>I. erythrogramma</i> Bak.	H	-	-	R1405		
<i>I. garckeana</i> Vatke	S	lo	R	R502		
<i>I. hirsuta</i> L.	H	-	-	R1371		
<i>I. lobata</i> Gillett.	H	-	-	R1406		
<i>I. malongensis</i> Cronq.	S	lo	T	R1261		
<i>I. praticola</i> Bak.f.	H	-	-	R1016		
<i>I. rhynchocharpa</i> Bak. var. <i>rhynchocharpa</i>	S	lo	R/M	R963	Muhimira	

PAPILIONACEAE (continued)

<i>Indigofera schimperi</i> Jaub. & Spach	S	lc	R/T/GW	R347	
<i>I. subargentea</i> De Wild.	H	-	-	R1411	
<i>I. subcorymbosa</i> Bak.	S	lc	T	R1064	
<i>I. tinctoria</i> L.	S	lc	M	R228	
<i>I. viscidissima</i> Bak. esp. <i>orientalis</i> Gillett.	S	lo	M	R1278	
<i>Lonchocarpus bussei</i> Harms	T	l	R	R413	Muundu; Kigwaya
<i>L. capassa</i> Rolfe	T	wc	OW	R209	Mkouya
<i>Macrotyloma maranguense</i> (Taub.) Verdc.	H	-	-	R1029	Kinjekule
<i>Millettia eetveldeana</i> (Micheli) Hauman	T	r	T	R1214	
<i>M. micans</i> Taub.	T	lc	T/M	R91	Mkwala
<i>M. stuhlmannii</i> Taub.	T	wf	M/T	R444	Mnamwezi
<i>Mundulea sericea</i> (Willd.) A.Chev.	T	lc	M/OW	R449	Mgelekana bonde
<i>Neorantamenia mitis</i> (A.Rich.) Verdc.	H	-	-	R1290	
<i>Ormocarpum</i> sp.	S	lc	M	R245	
<i>Pericopsis angolensis</i> (Welw.) Van Meeuwen	T	lc	M	R707	Manga
<i>Pseudarthria hookeri</i> Wight & Arn	S	-	-	R232	
<i>Pterocarpus angolensis</i> DC.	T	wc	M	R442	Mtumbati
<i>P. tinctorius</i> Welw. var. <i>megalocarpus</i>	T	lc	R	R698	Mtumbati jito
<i>P. rotundifolius</i> (Sond.) Druce	T	o	M	R599	Lindulu
<i>Rhynchosia minima</i> (L.) DC. var. <i>minima</i>	C	-	-	R585	
<i>Sesbania hirtistyla</i> Gillett. var. <i>hirtistyla</i>	T	lo	S	R1091	Lipatako
<i>Stylosanthes fruticosa</i> (Retz.) Alston	H	-	-	R1170	
<i>Tephrosia pumila</i> (Lam.) Pers.	H	-	-	R295	
<i>Vigna pubescens</i> Wilczek	C	-	-	R182	
<i>V. vexillata</i> (L.) A. Rich.	C	-	-	R131	
<i>Xeroderris stuhlmannii</i> (Taub.) Mendonca & E.P. Sousa	T	wf	M	R57	Mlondondo
<i>Zornia brevipes</i> Milne-Redh.	H	-	-	R289	

PASSIFLORACEAE

<i>Adenia</i> sp.	H	-	-	R1288	
<i>Paropsia braunii</i> Gilg	S	o	T	R785	
<i>Schlechterina mitostemmatoides</i> Harms	C	lc	T	R525	Kindetete
<i>Tryphostemma lanceolatum</i> Engl.	H	-	-	R985	

PEDALIACEAE FTEA (1953)

<i>Sesamum angustifolium</i> (Oliv.) Engl.	H	-	-	R65	
<i>S. indicum</i> L.	H	-	-	R470	Linyololo

PLUMBAGINACEAE

Plumbago zeylanica L.	H	-	-	R1311
-----------------------	---	---	---	-------

POLYGALACEAE

Polygala erioptera DC.	H	-	-	R1015
P. petitiana A.Rich.	H	-	-	R1033
P. sphenoptera Fres.	H	-	-	R1341
P. wadibomica Chod.	H	-	-	R1385

POLYGONACEAE

Oxygonum magdalenae	H	-	-	R	Mbigili
---------------------	---	---	---	---	---------

PORTULACACEAE

Talinum portulacifolium (Forsk.) Schweinf.	H	-	-	R855
Portulaca pilosa L.	H	-	-	R18

RHAMNACEAE FTEA (TS)

<i>Berchemia discolor</i> (Klotzsch) Hemsl.	T	wo	OW	R566	Mkelienge
<i>Scutia myrtina</i> (Burm.f.) Merr.	S	lo	GW	R1144	
<i>Ziziphus abyssinica</i> A.Rich.	S	wc	M	R565	Mpengere
<i>Z. mucronata</i> Willd.	T	lc	R	R637	Mpengere ya bonde
<i>Z. pubescens</i> Oliv.	T	lc	OW	R88	Mlaba tatu S

ROSACEAE FTEA (1960)

<i>Parinari curatellifolia</i> Benth.	T	r	OW/M	R633	Mula
---------------------------------------	---	---	------	------	------

RUBIACEAE

<i>Adina microcephala</i> (Del.) Hiern	T	lc	R	R732	Mgwina
<i>Borreria subvulgata</i> K. Schum.	H	-	-	R364	
<i>Canthium huillense</i> Hiern	S	o	T	R938	Kiti cha mbutuka
<i>C. kaessneri</i> S. Moore	S	o	R/T	R346	
<i>C. pallidum</i> (K. Schum.) Bullock	S	o	T	R902	Mkandaa ya msito
<i>C. zanzibaricum</i> Klotzsch	S	lc	R	R408	
<i>C. sp. 1</i>	S	o	GW	R612	Mneu
<i>C. sp. 2</i>	S	o	T	R899	Kicha kanje
<i>Chassalia umbraticola</i> Vatke	S	lc	R	R774	
<i>Coffea</i> sp.	S	o	GW/R	R834, R1220	
<i>Crossopteryx febrifuga</i> (G. Don) Benth.	T	wc	M	R201	Mchonjele
<i>Cuviera semseii</i> Verdcourt	S	lo	T	R1212	
<i>Fadogia</i> sp. = Welch 450	H	-	-	R567	
<i>Feretia</i> sp.	S	lo	R	R538	
<i>Gardenia lutea</i> Fres.	T	wc	M	R362	Kilimandembo
<i>G. sp. nr. resiniflua</i> Hiern	S	r	T	R947	
<i>G. sp.</i> = Mgaza 272	S	lc	T	R706	Kilogoti
<i>Heinsia bussei</i> Verdc.	S	lo	R/T	R746	
<i>H. crinita</i> (Afzel.) G. Taylor	S	lc	TR	R506	Kiumbaumba
<i>Hymenodictyon floribundum</i> (Hochst. & Steud.) B.L. Robinson	T	lc	TR	R601	Mpelema
<i>Kohautia effusa</i> (Oliv.) Brem.	H	-	-	R199	
<i>Kraussia kirkii</i> (Hook.f.) Bullock	S	o	R	R28	
<i>Lamprothamnus zanguebaricus</i> Hiern	T	lc	R	R387	Mpumbe
<i>Leptactina bussei</i> K. Schum. & Krause	S	wc	TM	R507	Mbanganachwena
<i>L. sp.</i> = Proctor 2894	S	lo	T	R1186	
<i>L. sp.</i> = Shabani 243	S	wo	M	R1283	
<i>Oldenlandia affinis</i> (Roem & Schult.) DC.	H	-	-	R283	
<i>O. verticillata</i> Brem.	H	-	-	R1316	

RUBIACEAE (continued)

<i>Oxyanthus speciosus</i> DC.	S	lo	T	R1208	
<i>O. sp.</i>	S	lo	T	R687	
<i>Pavetta albicaulis</i> S. Moore	S	o	M	R908	
<i>P. albertina</i> S. Moore	S	lc	R/T	R1207, R582	
<i>P. oliverana</i> Hiern	S	lo	R	R853	
<i>P. schumanniana</i> K. Schum.	S	o	M	R218	
<i>P. stenosepala</i> K. Schum.	S	o	R	R861	
<i>P. sp. 1</i>	S	lo	R	R539	
<i>P. sp. 2</i>	S	wo	T	R928	
<i>P. sp. 3</i>	T	lc	T	R1030	
<i>Pentas bussei</i> Krause	S	o	T	R505	
<i>P. parvifolia</i> Hiern	S	c	T	R884	Kikuchamembe
<i>Pentodon pentandrus</i> (Schum. & Thonn.) Vatke var. minor Brenan forma	H	-	-	R375	
<i>Polysphaeria dischistocalyx</i> Brenan	T	wc	T/R	R513	Mwembe
<i>P. sp. = Harris</i> 2966	S	lo	GW	R394	
<i>P. multiflora</i> Hiern	S	lo	R	R1012	
<i>P. parvifolia</i> Hiern	S	lo	T	R658	
<i>Psychotria abrupta</i> Hiern	S	lo	T	R1263	
<i>P. holtzii</i> (K. Schum.) Petit	S	lo	T	R859	
<i>P. linearisepala</i> Petit	S	l	T	R878	
<i>P. punctata</i> Vatke	S	wc	R/T	R865	
<i>P. riparia</i> (K. Schum. & K. Krause) Petit	S	l	GW/R	R1250, R739	
<i>P. sp. 1</i>	S	l	R	R990	Maigembanya
<i>P. sp. 2</i>	S	l	T	R931	
<i>P. sp. 3</i>	S	l	GW	R841	
<i>Rothmannia englerana</i> (K. Schum.) Keay	S	lo	T	R1084	
<i>R. fischeri</i> (K. Schum.) Oberm.	T	lo	T	R741	
<i>R. whitfieldii</i> (Lindley) Dandy	S	lo	T	R683	Mmbome
<i>Rytigynia amaniensis</i> (Krause) Bullock	S	lo	T	R1256	
<i>R. schumannii</i> Robyns	T	lo	T	R877	
<i>R. sp. nr. R. eickii</i> (Krause) Bullock	S	lo	GW	R1171	
<i>R. sp. nr. R. neglecta</i> Robyns	S	lc	T	R1182, R1286	
<i>R. sp. 1</i>	S	lo	R/T	R506, R1266	
<i>R. sp. 2</i>	S	lo	R/T	R514	
<i>R. sp. 3</i>	S	lc	T	R885	Kikuchamembe
<i>R. sp. 4</i>	S	lo	RT	R1035	
<i>Tapiphyllum fadogia</i> Bullock	S	lo	T	R989	
<i>T. sp. = Shabani</i> 247	S	lo	T	R1271	
<i>Tarenna nigrescens</i> (Hook.f.) Hiern	S	lo	GW	R849	
<i>Temnocalyx obovatus</i> (N.E.Br.) Robyns	S	lo	RT	R869	

RUBIACEAE (continued)

<i>Trianolepis africana</i> Hook.f.	S	1o	T	R571	
<i>Tricalysia allenii</i> (Stapf) Brenan var. <i>kirkii</i>	S	1r	RT	R1056	
<i>T. cacondensis</i> Hiern	S	1c	T	R765	
<i>T. ovalifolia</i> Hiern	S	1o	T	R845	
<i>Vangueria acutiloba</i> Robyns	T	1o	R	R534	Muhulo
<i>V. tomentosa</i> Hochst.	T	1o	M/R	R503	
<i>Xeromphis obovata</i> (Hochst.) Keay	T	wc	M	R265	Kihuluhulu

RUTACEAE

<i>Citropsis dawsoni</i> Swingle & Kellerm. forma vel. sp. aff.	T	1o	T	R1163	
<i>Clausena anisata</i> (Willd.) Benth.	S	o	T	R991	
<i>Fagara chalybea</i> (Engl.) Engl.	T	f	T	R874	Mulungu
<i>F. trijuga</i>	S	1o	OW/M	R.s.n	Ihulungu pori.
<i>Teclea simplicifolia</i> (Engl.) Verdoorn	T	o	R	R261	Kipondo
<i>T. sp.</i>	S	1c	T	R1105	Kimberete
<i>Toddaliopsis sansibarensis</i> Engl.	S	1c	R	R697	
<i>Vepris</i> sp.	T	o	T	R729	

SALVADORACEAE FTEA (1968)

<i>Dobera loranthifolia</i> (Warb.) Harms	T	wo	OW	R439	Mtele
<i>Salvadora persica</i> L.	S	wc	OW	R511	Mswaki

SANTALACEAE

<i>Thesium schweinfurthii</i> Engl.	H	-	-	R1225	
-------------------------------------	---	---	---	-------	--

SAPINDACEAE

<i>Allophylus africanus</i> P. Beauv.	S	lc	R/GWT	R175	Muhecha
<i>Cardiospermum halicacabum</i> L.	H	-	-	R5	
<i>Deinbollia borbonica</i> Scheff.	S	lc	R/GW	R391	Mpuga mahoka
<i>Dodonaea viscosa</i> Jacq.	T	lc	M	R1370	
<i>Haplocoelum inopileum</i> Radlk.	T	lc	T	R796	Kijunde
<i>H. mombasense</i> Bullock	T	lo	R/GW	R621	
<i>Lepisanthes senegalensis</i> (Poir.) Leenh.	T	lr	GW	R719	
<i>Majidea zanguebarica</i> Oliv.	T	lo	GW	R792	
<i>Sapindus saponaria</i> L.	T	lc	OW	R1050	Mtasubiri S
<i>Zanha africana</i> (Radlk.) Exell	T	r	M	R419	Mjuju

SAPOTACEAE FTEA (1968)

<i>Manilkara discolor</i> (Sond.) J.H. Hemsley	T	lc	T	R398	Mkwichimbe
<i>M. mochisia</i> (Bak.) Dubard	T	wc	OW	R573	Msama
<i>M. sulcata</i> (Engl.) Dubard	T	lc	T	R871	Muhamba
<i>M. sp.</i>	T	lo	R/T	R696	Muhike
<i>Mimusops fruticosa</i> A. DC.	T	r	GW	R393	
<i>M. kummel</i> A. DC.	T	lo	GW	R1089	
<i>M. schliebenii</i> Mildbr. & Schulze	T	wc	OW	R561	Mgama
<i>Sideroxylon innerme</i> L. ssp. <i>diospyroides</i> (Bak.) J.H. Hemsley	T	lc	R	R660	

SCROPHULARIACEAE

<i>Alectra kirkii</i> Hemsl.	H	-	-	R1312	
<i>Artenema longifolium</i> (L.) Vatke var. <i>amplexicaule</i>	H	-	-	R216	
<i>Bacopa crenata</i> (P. Beauv.) Hepper	H	-	-	R358	
<i>B. floribunda</i> (R.Br.) Wettst					
<i>Ilysanthes</i> sp.	H	-	-	R467	
<i>Limnophila indica</i> (L.) Druce	H	-	-	R1429	
<i>Lindernia</i> sp.	H	-	-	R377	
<i>Micrargeria filiformis</i> (Schumach. & Thonn.) Hutch. & Delz.	H	-	-	R298	

SCROPHULARIACEAE (continued)

<i>Rhamphicarpa jamesii</i> Skan	H	-	-	R123	
<i>R. tubulosa</i> Benth.	H	-	-	R1418	
<i>Striga asiatica</i> (L.) O. Kuntze	H	-	-	R169	
<i>S. gesnerioides</i> (Willd.) Vatke	H	-	-	R1394	
<i>S. pubiflora</i> Klotzsch	H	-	-	R62	

SIMAROURACEAE

<i>Harrisonia abyssinica</i> Oliv.	S	wo	OW/R	R267	Mlawali
------------------------------------	---	----	------	------	---------

SOLANACEAE

<i>Solanum goetzei</i> Dammer	S	wo	OWM	R987	Mbwenyenye
<i>S. incanum</i> L.	S	wo	OW/M	R941	Ndungulucha
<i>S. lamprocarpum</i> Bitter	S	lo	T	R1251	

SPHENOCLEACEAE

<i>Sphenoclea zeylanica</i> Gaertn.	H	-	-	R466	
-------------------------------------	---	---	---	------	--

STERCULIACEAE

<i>Cola clavata</i> Mast.	T	lc	RT	R797	Likubati
<i>C. cf. clavata</i> Mast. = Eggeling 6729	T	lc	RT	R260	Likubati
<i>C. microcarpa</i> Brenan	T	lc	T	R652	Likubati
<i>C. sp. nr. C. discoglypsemphylla</i> Brenan	T	lo	R	R618	
<i>Dombeya cincinnata</i> K. Schum.	T	w	R/OW	R273	Mngalagala
<i>Melochia corchorifolia</i> L.	H	-	-	R602	
<i>Sterculia africana</i> (Lour.) Fiori	T	wo	OW/R	R74	Mtubwi
<i>S. appendiculata</i> K. Schum.	T	lc	R	R	Mgude
<i>S. quinqueloba</i> (Garke) K. Schum.	T	o	N	R	Mvuja
<i>Waltheria indica</i> L.	H	-	-	R195	

TACCACEAE (M) FTEA (1962)

<i>Tacca leontopetaloides</i> (L.) O. Ktze.	H	-	-	R227	Utondwa
---	---	---	---	------	---------

THYMELAEACEAE

<i>Synaptolepis kirkii</i> Oliv.	S	le	M/R	R692	
<i>Synaptolepis longiflora</i> Gilg	S	we	M	R432	Lukubi

TILIACEAE

<i>Carpodiptera africana</i> Mast.	T	lc	R	R204	Nng'ongolo
<i>Corchorus fascicularis</i> Lam.	H	-	-	R372	
<i>C. olitorius</i> L.	H	-	-	R259	Mlanda S
<i>Grewia conocarpa</i> K. Schum.	S	f	T	R290	Mtao
<i>G. forbesii</i> Mast.	S	lc	R	R1171	
<i>G. sp. nr. microcarpa</i> K. Schum.	S	lo	T	R872	Mpuputu
<i>G. monticola</i> Sond.	S	we	M	R447	Mkolekole S
<i>G. sulcata</i> Mast.	S	we	OW	R174	Mpaya
<i>G. trichocarpa</i> A. Rich.	S	lc	R	R24	
<i>G. sp.</i>	S	lo	OW	R671	Mpei
<i>Triumfetta kirkii</i> Mast.	H	-	-	R1040	
<i>T. intermedia</i> De Wild.	S	lc	M	R224	
<i>T. pentandra</i> A. Rich.	H	-	-	R1027	
<i>T. sp.</i>	C	-	-	R282	

TURNERACEAE FTEA (1954)

<i>Wormskioldia brevicaulis</i> Urb.					
var. <i>brevicaulis</i>	H	-	-	R89	
<i>W. longipedunculata</i> Mast.	H	-	-	R1284	

TYPHACEAE (M) FTEA (1971)

<i>Typha domingensis</i> Pers.				R553	Iubele
--------------------------------	--	--	--	------	--------

UIMACEAE FTEA (1966)

<i>Celtis wightii</i> Planch.	T	1c	GW	R720
-------------------------------	---	----	----	------

UMBELLIFERAE

<i>Steganotaenia araliacea</i> Hochst.	H	-	-	R1340
--	---	---	---	-------

VAHLIACEAE

<i>Vahlia ? digyna</i> (Retz.) O. Ktze.	H	-	-	R369
---	---	---	---	------

VERBENACEAE

<i>Clerodendrum eriophyllum</i> Guerke	S	1c	R	R862	
<i>C. hildebrandtii</i> Vatke	S	1c	GW/R	R341	
<i>C. incisum</i> Klotzsch	H	-	-	R77	
<i>C. lanceolatum</i> Guerke	F	o	GW	R1203	
<i>C. myricoides</i> (Hochst.) Vatke	S	1c	T	R883	
<i>C. scheffleri</i> Guerke	S	1c	GW	R848	
<i>C. sp.</i>	H	-	-	R956	
<i>Lantana trifolia</i> L.	S	1c	T	R1270	
<i>L. ? viburnoides</i>	S	o	OW	R188	
<i>Lippia javanica</i> (Burm.f.) Spreng.	S	o	R	R712	Likupwa njenjema
<i>Premna angolensis</i> Guerke	S	o	GW	R840/1202	
<i>Vitex</i> aff. <i>V. altissima</i> L.f.	T	1c	T	R164	Mpujwa wa msitu
<i>V. buchananii</i> Guerke	T	1c	MT	R343	Mfuru S
<i>V. doniana</i> Sweet	T	1c	R	R459	Mfuru S
<i>V. mombassae</i> Vatke	T	1c	M	R.s.n	bonde S
<i>V. volkensii</i> Guerke	T	o	T	R1071	
<i>V. sp.</i>	T	1c	T	R1180	

VIOLACEAE

<i>Hybanthus enneaspermus</i> (L.) F.Muell. var. <i>enneaspermus</i>	H	-	-	R1028
<i>Rinorea elliptica</i> (Oliv.) Kuntze	H	-	-	R1112

VITACEAE

<i>Cayratia gracilis</i> (Guil.. & Perr.) Suesseng.	C	-	-	R903
<i>Cissus</i> sp.	H	-	-	R454
<i>Cyphostemma buchananii</i> (Planch.) Descoigns	H	-	-	R181
<i>C. hildebrandtii</i> (Gilg) Wild & Drum.	C	-	-	R996
<i>Rhoicissus reviolii</i> Planch.	C	-	-	R624

XYRIDACEAE (M)

<i>Xyris decipiens</i> N.E. Br.	H	-	-	R357	
---------------------------------	---	---	---	------	--

ZINGIBERACEAE (M)

<i>Kaempferia rosea</i> Benth. & Hook.f.	H	-	-	R16	Tungulu
--	---	---	---	-----	---------

ZYGOPHYLLACEAE

<i>Tribulus terrestris</i> L.	C	-	-	R84	Mbigili ng'ombe
-------------------------------	---	---	---	-----	--------------------

Section Five: Vernacular - Latin Dictionary

NOTE: The majority of names included here are of Kingindo origin. In some cases Kingindo and Kiswahili share the same word. Rarely, two names exist for the same species; where this happens both names are included. The Wangindo people occupy the area from south of the Rufiji River to Liwale along the eastern boundary of the Selous Reserve. Within this range local names for the same plant vary considerably; names quoted here are in general usage to the north of the range only.

Care must be taken over the use of the descriptive adjectives "msitu", "bonde", "pori", which are not always given. Similarly, interchange of the letters l and r, v and b, u and w, o and u must be noted.

<u>Vernacular name</u>	<u>Botanical name</u>	<u>Family</u>
Bamia poli	Hibiscus sp.	Malvaceae
Bwala bwala	Jacquemontia tannifolia	Convolvulaceae
Changula	Englerina sp.	Loranthaceae
Changula	Helixanthera kirkii	Loranthaceae
Changula pamba	Phragmanthera proteicola	Loranthaceae
Chungwa ya mbuke	Hypericophyllum compositarum	Compositae
Dawa ya moto	Byrsocarpus orientalis	Connaraceae
Kakuwi (Kijuti)	Biophytum petersianum	Oxalidaceae
Kalijenge ya msitu	Vismia orientalis	Hypericaceae
Kalijenge	Psorospermum febrifugum	Hypericaceae
Kalitengule	Cissus aphyllantha	Vitaceae
Kamba kamba	Ipomoea shupangensis	Convolvulaceae
Kandumbwa	Abrus precatorius	Mimosoideae
Kiaga	X Dactyloctenium aegyptium	Gramineae
Kibaba	Dichapetalum mossambicense	Chailletiaceae
Kibala njai	Byrsocarpus boivinianus	Connaraceae
Kibulu	Strychnos panganensis	Loganiaceae
Kibungo	Landolphia kirkii	Apocynaceae
Kichakanje	Canthium sp.	Rubiaceae
Kigoje	Ommocarpum kirkii	Papilionoideae
Kigonimamba	Mimosa pigra	Mimosoideae
Kigwaya	Lonchocarpus bussei	Papilionoideae
Kihegwa	Faurea speciosa	Proteaceae
Kihimbiti	Combretum psidoides	Combretaceae
Kihokole	X Elaeodendron buchananii	Celastraceae
Kihuluhulu	Xeromphis obovata	Rubiaceae
Kijibajiba	Diospyros consolatae	Ebenaceae
Kijimba	Acacia zanzibarica	Mimosoideae

Vernacular name	Botanical name	Family
Kijunde	<i>Haplocoelum inopleum</i>	Sapindaceae
Kijunde ya bondeni	<i>Haplocoelum mombassense</i>	Sapindaceae
Kikochongo	<i>Vigna pubescens</i>	Papilionoideae
Kikucha membe	<i>Rytigynia</i> sp.	Rubiaceae
Kikwegwe	<i>Vangueria</i> sp.	Rubiaceae
Kilaya	<i>Leptochloa squarrosa</i>	Gramineae
Kilei	<i>Eleusine africana</i>	Gramineae
Kilima ndembo	X <i>Gardenia lutea</i>	Rubiaceae
Kilogoti	<i>Gardenia</i> sp. = Mgaza 272	Rubiaceae
Kiluma	X <i>Acacia senegal</i>	Mimosoideae
Kimbelele dume	<i>Teclea</i> sp.	Rutaceae
Kimbelele jike	<i>Toddaliopsis sansibarensis</i>	Rutaceae
Kimbilia	X <i>Combretum molle</i>	Combretaceae
Kimbilia kubwa	<i>Combretum psidioides</i>	Combretaceae
Kindetete	<i>Schlecterina mitostemmatoides</i>	Passifloraceae
King'ala	<i>Nymphaea lotus</i>	Nymphaeaceae
Kingamba	<i>Ipomoea intrapilosa</i>	Convolvulaceae
Kingunguti	X <i>Dichrostachys cinerea</i>	Mimosoideae
Kinjacha	X <i>Acacia nilotica</i>	Mimosoideae
Kinjekule	<i>Macrotyloma maranguense</i>	Papilionoideae
Kipala ngwale	<i>Margaritaria discoidea</i>	Euphorbiaceae
Kipalapala	<i>Erythrococca atrovirens</i>	Euphorbiaceae
Kipiata	X <i>Croton dichogamus</i>	Euphorbiaceae
Kipilili	<i>Euphorbia hypericifolia</i>	Euphorbiaceae
Kipombo	<i>Cissus</i> sp.	Vitaceae
Kipondo	<i>Xylopia odoratissima</i>	Annonaceae
Kipondo ya msitu	<i>Drypetes</i> sp.	Euphorbiaceae
Kipupulu	<i>Combretum goetzei</i>	Combretaceae
Kiruma	<i>Acacia senegal</i>	Mimosoideae
Kisuki	X <i>Heteropogon contortus</i>	Gramineae
Kiteleka	X <i>Setaria sphacelata</i>	Gramineae
Kiticha mbutuka	<i>Canthium huillense</i>	Rubiaceae
Kiuba huba	<i>Bauhinia tomentosa</i>	Caesalpinioideae
Kiumbaumba	<i>Heinsia crinita</i>	Rubiaceae
Kiwaga waga	<i>Lingelsheimia</i> sp. = Gillman 1147	Euphorbiaceae
Kiyukulu	<i>Combretum pentagonum</i>	Combretaceae
Konge mwitu	<i>Sansevieria</i> sp.	Agavaceae
Ligobe	<i>Acacia pennata</i>	Mimosoideae
Ligugu	<i>Cissampelos pareira</i>	Menispermaceae
Liheha	X <i>Panicum maximum</i>	Gramineae
Lihomanga	<i>Dicoma sessiflora</i>	Compositae

<u>Vernacular name</u>	<u>Botanical name</u>	<u>Family</u>
Lijenge	<i>Tetracera boiviniana</i>	Dilleniaceae
Likakata	<i>Urochloa trichopus</i>	Gramineae
Likocho kununga	<i>Combretum padoides</i>	Combretaceae
Likoloa	<i>Cyanotis lanata</i>	Commelinaceae
Likope Iya himba	(Thicket grass)	Gramineae
Likubi	X <i>Themeda triandra</i>	Gramineae
Likupula	<i>Pyrenacantha kaurabassana</i>	Loasaceae
Likupwa njenjema	X <i>Lippia javanica</i>	Verbenaceae
Lilungwila	<i>Rottboellia exaltata</i>	Gramineae
Lindulu	<i>Pterocarpus rotundifolius</i>	Papilionoideae
Linyololo	<i>Sesamum indicum</i>	Pedaliaceae
Linyunyu	<i>Eclipta prostrata</i>	Compositae
Lipapwa nyani	<i>Loudetia simplex</i>	Gramineae
Lipetako	<i>Sesbania hirtistyla</i>	Papilionoideae
Lipembe mbabala	<i>Strophanthus hispidus</i>	Apocynaceae
Lipigipigi	<i>Bidens grantii</i>	Compositae
Lipungapunga	<i>Oryza punctata</i>	Gramineae
Liputu	<i>Panicum infestum</i>	Gramineae
Lipuyungu	<i>Vernonia zanzibarensis</i>	Compositae
Litogolilume	<i>Holarrhena febrifuga</i>	Apocynaceae
Litope liboile	<i>Combretum fragrans</i>	Combretaceae
Lubao	<i>Commiphora</i> sp. nr. <i>C. puguensis</i>	Burseraceae
Lubele	<i>Typha domingensis</i>	Typhaceae
Luhimbani	<i>Hyparrhenia filipendula</i>	Gramineae
Luhuguya	<i>Sporobolus ioclados</i>	Gramineae
Lukomba	X <i>Digitaria milaniana</i>	Gramineae
Lukubi	<i>Synaptolepis longiflora</i>	Thymelaeaceae
Lukubi wa msitu	<i>Synaptolepis kirkii</i>	Thymelaeaceae
Lugobi	<i>Acacia pinnata</i>	Mimosoideae
Lulaa	<i>Carvalhoa macrophylla</i>	Apocynaceae
Lung'ou	X <i>Euphorbia tirucalli</i>	Euphorbiaceae
Lunyegela	<i>Sorghum versicolor</i>	Gramineae
Lupio	<i>Tragia furialis</i>	Euphorbiaceae
Lutanga kanyai	<i>Cucumis hirsutus</i>	Cucurbitaceae
Lutata ngima	<i>Mimosa busseana</i>	Mimosoideae
Lututu	<i>Asparagus setaceus</i>	Liliaceae
Mahanga	<i>Lindlavia kirkii</i>	Apocynaceae
Mai ga mbanya	<i>Psychotria</i> sp.	Rubiaceae
Malwa njai	<i>Caloncoba welwitschii</i>	Flacourtiaceae
Mambone	<i>Rothmannia whitfieldii</i>	Rubiaceae
Manjwili	<i>Heinsia bussei</i>	Rubiaceae

<u>Vernacular name</u>	<u>Botanical name</u>	<u>Family</u>
Mbalala	Ochna sp. nr. ovata	Ochnaceae
Mbalambao	X Strychnos henningsii	Loganiaceae
Mbalikiwa (Mkongo)	Afzelia quanzensis	Caesalpinioideae
Mbanga nachwena	Leptactina bussei	Rubiaceae
Mbigili	Oxygonum magdalenae	Polygonaceae
Mbigili ng'ombe	X Tribulus terrestris	Zygophyllaceae
Mbuyu	- Adansonia digitata	Bigoniaceae
Mbwabwa	Psychotria punctuata	Rubiaceae
Mbwenyenye	Solanum goetzii	Solanaceae
Mchenga	Julbernardia globifera	Caesalpinioideae
Mchengechenge	Salacia senegalensis	Celastraceae
Mchenjele	Crossopteryx febrifuga	Rubiaceae
Mchonda	X Acacia sieberiana	Mimosoideae
Mchulochulo	Dalbergia boehmii	Papilionoideae
Mchuya	Terminalia sericea	Combretaceae
Mchuya mkubwa	Terminalia stenostachys	Combretaceae
Mchwili	Grewia sp.	Tiliaceae
Mdaa	Diospyros usambarensis	Ebenaceae
Mdimu poli	Suregada zanzibarensis	Euphorbiaceae
Mdonga tonga	Strychnos potatorum	Loganiaceae
Mdonga tonga	Strychnos sp.	Loganiaceae
Mfulu	Vitex sp.	Verbenaceae
Mfulu bonde	Vitex doniana	Verbenaceae
Mfwilete	Albizia anthelmintica	Mimosoideae
Mgama	Mimusops schliebenii	Sapotaceae
Mgelegele	Brachystegia bussei	Caesalpinioideae
Mgelekana	Droogmansia pteropus	Papilionoideae
Mgelekana dume	Mundulea sericea	Papilionoideae
Mgome	Cryptosepalum maraviense	Caesalpinioideae
Mgongolo	Cleistoclamys kirkii	Annonaceae
Mgonogo	Combretum zeyheri	Combretaceae
Mgwina	Adina microcephala	Rubiaceae
Mjanda	X Albizia harveyi	Mimosoideae
Mjanjati	Elephantorrhiza goetzei	Mimosoideae
Mjekele	Amblygonocarpus andogensis	Mimosoideae
Mjenga uwa	Commiphora zanzibarica	Burseraceae
Mjuju	Zanha africana	Sapindaceae
Mkaa	Erythrophleum africana	Caesalpinioideae
Mkagati	Monotes africana	Dipterocarpaceae
Mkakatale	Ehretia amoena	Boraginaceae
Mkalakawa	Diospyros sp.	Ebenaceae
Mkalakawa wa bondeni	Diospyros kirkii	Ebenaceae

<u>Vernacular name</u>	<u>Botanical name</u>	<u>Family</u>
Mkalakawa wa msitu	Diospyros comii	Ebenaceae
Mkalanda	Acacia macrothyrsa	Mimosoideae
Mkambale	Terminalia spinosa	Combretaceae
Mkandaa	Lamprothamnus zanguebaricus	Rubiaceae
Mkanganangu	Ricinodendron rautanenii	Euphorbiaceae
Mkelienge	Berchemia discolor	Rhamnaceae
Mkindu	X Phoenix reclinata	Palmae
Mkoche	Hyphaena coriacea	Palmae
Mkolekole	Grewia monticolor	Tiliaceae
Mkolimbanga	Maerua angolensis	Capparaceae
Mkonda mgunga	Boscia corymbosa	Capparaceae
Mkongo (Mbalikiwa)	Afzelia quanzensis	Caesalpinioideae
Mkonjiganga	Uvaria kirkii	Annonaceae
Mkoya	Lonchocarpus capassa	Papilionoideae
Mkubati wa msitu	Cola clavata	Sterculiaceae
Mkubati wa msitu	Cola microcarpa	Sterculiaceae
Mkubati wa bondeni	Cola sp. nr. C. clavata	Sterculiaceae
Mkuliungu	Terminalia kilimandscharica	Combretaceae
Mkunda hobi	Antidesma venosum	Euphorbiaceae
Mkundekunde	Cassia abbreviata	Caesalpinioideae
Mkundekunde	Cassia petersiana	Caesalpinioideae
Mkundekunde	Cassia singueana	Caesalpinioideae
Mkundemiti	Indigofera rhynchocarpa	Papilionoideae
Mkungu mwali	Hexalobus monopetalus	Annonaceae
Mkunya (Mgude)	Sterculia appendiculata	Sterculiaceae
Mkurumu	Entada chrysostachys	Mimosoideae
Mlayu	X Ficus sycomorus	Moraceae
Mlawaju	X Tamarindus indica	Caesalpinioideae
Mlawala	Millettia micans	Papilionoideae
Mlawichimbe	Manilkara discolor	Sapotaceae
Mlawilu	Strychnos sp.	Loganiaceae
Mlaba tatu	Ziziphus pubescens	Rhamnaceae
Mlama	Combretum obovata	Combretaceae
Mlandege	X Ficus ingens	Moraceae
Mlawali	X Harrisonia abyssinica	Simaroubaceae
Mlela wana	Turraea nilotica	Meliaceae
Mlenda	Corchorus oliotus	Tiliaceae
Mlinia mbopo	Xylothea tettensis	Flacourtiaceae
Mlindinde	Boscia salicifolia	Capparaceae
Mlondondo	Xeroderris stuhlmannii	Papilionoideae
Mlongelonge	Moringa oleifera	Moringaceae
Mluluya	Vernonia sp.	Compositae

<u>Vernacular name</u>	<u>Botanical name</u>	<u>Family</u>
Mlungu	<i>Fagara chalybea</i>	Rutaceae
Mlungu wa msitu	<i>Fagara trijuga</i>	Rutaceae
Mlyambunju	<i>Olax dissitiflora</i>	Oleaceae
Mmalika	<i>Jatropha stuhlmannii</i>	Euphorbiaceae
Mmanga	<i>Pericopsis angolensis</i>	Papilionoideae
Mmanga wa msitu	<i>Millettia eetveldeana</i>	Papilionoideae
Mmanga ngwale	<i>Schrebera trichoclada</i>	Oleaceae
Mmelendende	<i>Brachylaena hutchinsii</i>	Compositae
Mnete	<i>Memecylon</i> sp.	Melastomataceae
Mmula	X <i>Parinari curatelliflora</i>	Rosaceae
Mmulubulu	<i>Oldfieldia somalensis</i>	Euphorbiaceae
Mmumbu wa bonde	<i>Lannea schimperii</i>	Anacardiaceae
Mmumbu	<i>Lannea</i> sp.	Anacardiaceae
Mnamata mpiata	<i>Cordia</i> sp. nr <i>C. myxa</i>	Boraginaceae
Mnamwezi	<i>Millettia stuhlmannii</i>	Papilionoideae
Mnangu mtandalusi	<i>Trachylobium verrucosum</i>	Caesalpinioideae
Mndumbi	<i>Salacia senegalensis</i>	Celastraceae
Mndumbi wa bondeni	<i>Salacia stuhlmanniana</i>	Celastraceae
Mndundu	<i>Cordyla africana</i>	Papilionoideae
Mnepa	<i>Pteleopsis myrtifolia</i>	Combretaceae
Mnepa wa msitu	<i>Pteleopsis myrtifolia</i>	Combretaceae
Mneu	<i>Canthium</i> sp.	Rubiaceae
Mngalagala	<i>Dombeya cincinnata</i>	Sterculiaceae
Mngambakamba	<i>Monodora junodii</i>	Annonaceae
Mng'eng'e	<i>Swartzia madagascariensis</i>	Papilionoideae
Mng'ombe	<i>Artabotrys brachypetalus</i>	Annonaceae
Mng'ongo	<i>Sclerocarya caffra</i>	Anacardiaceae
Mng'ongolo	<i>Carpodiptera africana</i>	Tiliaceae
Mngongolo	<i>Stereospermum kunthianum</i>	Dignonaceae
Mnong'omela	<i>Bridelia cathartica</i>	Euphorbiaceae
Mnundu	<i>Lonchocarpus bussei</i>	Papilionoideae
Mnuwili	X <i>Balanites aegypticum</i>	Balanitaceae
Mnuwili wa msitu	<i>Balanites wilsoniana</i>	Balanitaceae
Mpangapanga	X <i>Euphorbia candelabra</i>	Euphorbiaceae
Mpangati	<i>Combretum imberbe</i>	Combretaceae
Mpaya	<i>Grewia sulcata</i>	Tiliaceae
Mpei	<i>Grewia</i> sp.	Tiliaceae
Mpelema	<i>Hymenodictyon floribundum</i>	Rubiaceae
Mpengele	<i>Ziziphus abyssinica</i>	Rhamnaceae
Mpengele wa bondeni	X <i>Ziziphus mucronata</i>	Rhamnaceae
Mpilipili	<i>Sorindeia madagascariensis</i>	Anacardiaceae
Mpingi	X <i>Ximenia caffra</i>	Oleaceae

<u>Vernacular name</u>	<u>Botanical name</u>	<u>Family</u>
Mpingo	<i>Dalbergia melanoxylon</i>	Papilionoideae
Mpoloto	<i>Ficus sansibaricus</i>	Moraceae
Mpome	X <i>Commiphora madagascariensis</i>	Burseraceae
Mpome	<i>Commiphora</i> sp.. = Harris 384	Burseraceae
Mpome wa bondeni	<i>Commiphora</i> sp.	Burseraceae
Mpome wa msitu	<i>Commiphora serrata</i>	Burseraceae
Mpondopondo	<i>Ficus sansibaricus</i>	Moraceae
Mpuchupuchu	X <i>Euclea divinorum</i>	Ebenaceae
Mpuga	<i>Burkea africana</i>	Caesalpinioideae
Mpuga mahoka	<i>Deinbollia borbonica</i>	Sapindaceae
Mpugupugu	<i>Markhamia obtusifolia</i>	Bignoniaceae
Mpujwa wa bondeni	<i>Vitex buechananii</i>	Verbenaceae
Mpujwa wa msitu	<i>Vitex altissima</i>	Verbenaceae
Mpumbe	<i>Ficus fischeri</i>	Moraceae
Mpunju (Mtopetope)	<i>Annona senegalensis</i>	Annonaceae
Mpuputu	<i>Grewia microcarpa</i>	Tiliaceae
Mpwipwi	X <i>Lannea stuhlmannii</i>	Anacardiaceae
Msagawi	<i>Spyrostachys africana</i>	Euphorbiaceae
Msama	<i>Manilkara mochisia</i>	Sapotaceae
Msegese	<i>Piliostigma thonningii</i>	Caesalpinioideae
Msengele	<i>Acacia nigrescens</i>	Mimosoideae
Msolo	<i>Pseudolachnostylis</i> <i>maprouneifolia</i>	Euphorbiaceae
Msonobali	<i>Cassia simea</i>	Caesalpinioideae
Msufi poli	<i>Rhodognaphalon schumannianum</i>	Bombacaceae
Mswaki	X <i>Salvadora persica</i>	Salvadoraceae
Mtaba	<i>Flacourtia indica</i>	Flacourtiaceae
Mtachi	<i>Cleistanthus</i> sp.	Euphorbiaceae
Mtalawanda	<i>Markhamia zanzibarica</i>	Bignoniaceae
Mtambula	<i>Dalbergia amata</i>	Papilionoideae
Mtandalusi (Mnangu)	<i>Trachylobium verrucosum</i>	Caesalpinioideae
Mtandawala	<i>Markhamia acuminata</i>	Bignoniaceae
Mtandi (Muegeya)	X <i>Kigelia africana</i>	Bignoniaceae
Mtanga	<i>Albizia versicolor</i>	Mimosoideae
Mtanga mbelete	X <i>Albizia petersiana</i>	Mimosoideae
Mtanga wa bondeni	X <i>Albizia amara</i>	Mimosoideae
Mtanga wa msitu	<i>Albizia adianthifolia</i>	Mimosoideae
Mtao	<i>Grewia conocarpa</i>	Tiliaceae
Mtasubili	<i>Sapindus saponaria</i>	Sapindaceae
Mtatu	<i>Rhoicissus revouillii</i>	Vitaceae
Mtele	<i>Dobera loranthifolia</i>	Salvadoraceae
Mtetakana	<i>Securinega virosa</i>	Euphorbiaceae

<u>Vernacular name</u>	<u>Botanical name</u>	<u>Family</u>
Mtete	Hymenocardia ulmoides	Euphorbiaceae
Mtetema	Dracaena usambarensis	Agavaceae
Mtikanyumbu	Combretum hereroense	Combretaceae
Mtiko	Garcinia livingstonei	Guttiferae
Mtobo	✗ Azanza garckeana	Malvaceae
Mtoloba	Elaeodendron schweinfurthianum	Celastraceae
Mtomondo	Rauvolfia caffra	Apocynaceae
Mtomoni	Diplomhynchus condylocarpon	Apocynaceae
Mtondo	Brachystegia spiciformis	Caesalpinioideae
Mtongatonga	Strychnos cocculoides	Loganiaceae
Mtukwambako	Ozoroa reticulata	Anacardiaceae
Mtukwambako wa bondeni	Sideroxylon innerme	Sapotaceae
Mtumbati	Pterocarpus angolensis	Papilionoideae
Mtumbati jito	Pterocarpus tinctorius	Papilionoideae
Mtumbwi	Sterculia africana	Sterculiaceae
Mtunda	Erythroxylum fischeri	Erythroxylaceae
Mtundulus	Combretum sp. = WAR.277	Combretaceae
Muanzi	Oxytenanthera abyssinica	Gramineae
Muhakala	Maerua kirkii	Capparaceae
Muhamba	Manilkara sulcata	Sapotaceae
Muhanga mbwile	Maerua holstii	Capparaceae
Muhani	Brachystegia microphylla	Caesalpinioideae
Muhecha	✗ Allophyllus africana	Sapindaceae
Muegwa	Faurea speciosa	Proteaceae
Muekela	Uapaca nitida	Euphorbiaceae
Muhiga	Brachystegia utilis	Caesalpinioideae
Muhike	Manilkara sp.	Sapotaceae
Muhilu	✗ Vangueria acutiloba	Rubiaceae
Muhimila	Phyllanthus reticulatus	Euphorbiaceae
Muhindama	Ochna mossambicensis	Ochnaceae
Muhindana	Ochna sp.	Ochnaceae
Muhindama wa msitu	Ochna macrocalyx	Ochnaceae
Muhindeu	Tessmannia densiflora	Caesalpinioideae
Muhindila	Combretum collinum s.sp. binderanum	Combretaceae
Muhokobeli	✗ Maytemus senegalensis	Celastraceae
Muhokobeli wa msitu	Maytemus putterlickioides	Celastraceae
Muhondoka	Hugonia busseana	Linaceae
Muhondoka wa msitu	Hugonia castaneifolia	Linaceae
Muhondoka mkubwa	Sapium armatum	Euphorbiaceae
Muhou	Uvaria acuminata	Annonaceae
Muhuja	Sterculia quinqueloba	Sterculiaceae

<u>Vernacular name</u>	<u>Botanical name</u>	<u>Family</u>
Muhukuliro	Trichilia emitica	Meliaceae
Muhulalio	Combretum collinum	Combretaceae
Muhulalio wa msitu	Combretum aureonitens	Combretaceae
Muhuluhuti	Syzygium guineense	Myrtaceae
Muhungo	Acacia robusta	Mimosoideae
Muhungo njacha	x Acacia gerrardii	Mimosoideae
Muhunihuni	Dichapetalum stuhlmannii	Celastraceae
Mulubulu	Oldfieldia somalensis	Euphorbiaceae
Munjwechwe	Polyalthia korinti	Annonaceae
Muyombo	Brachystegia boehmii	Caesalpinioideae
Mvumo	x Borassus aethiopum	Palmae
Mwembe	Polysphaeria dischistocalyx	Rubiaceae
Mwembele	Pachycarpus spurius	Asclepiadaceae
Nakandumbwa	Abrus precatorius	Papilionoideae
Naiolo	Croton pseudopulchellus	Euphorbiaceae
Nalioto	Vernonia glabra	Compositae
Namata	Desmodium triflorum	Papilionoideae
Nambanda	Andropogon schirensis	Gramineae
Nambanda ya bondeni	Andropogon gayanus	Gramineae
Nambole ya bondeni	Panicum massaiense	Gramineae
Ndumbe tumbe	Gussonia zimmermannii	Araliaceae
Ndungulucha	x Solanum incanum	Solanaceae
Nelila	Commelina erecta	Commelinaceae
Ngombokwa	x Gloriosa simplex	Liliaceae
Ngwanga	Ophioglossum polyphyllum	Ophioglossaceae
Nnjunju	Ricinodendron tomentellum	Euphorbiaceae
Nungamu	Ochna polyneura	Ochnaceae
Pamba mwitu	Gossypioideis kirkii	Malvaceae
Sunga	Lactuca capensis	Compositae
Timba ndembo	Echinochloa haploclada	Gramineae
Tungulu	Kaemferia rosea	Zingiberaceae
Ubavu	Commiphora sp. nr. C. puguensis	Burseraceae
Ubavu wa faru	Cordia sp.	Boraginaceae
Uchungu (Sumu)	Acokanthera schimperi	Apocynaceae
Ukoka	Sporobolus virginicus	Gramineae
Umbula	Hippocratea sp.	Celastraceae
Umbwiga	Wrightia natalensis	Apocynaceae
Ungaka	Cardiogyne africana	Moraceae
Ung'ombe	Hippocratea obtusifolia	Celastraceae
Utondo	Tacca leontopetaloides	Taccaceae

By R.I. Ludanga
Herbarium in-charge
Miombo Research Centre
KINGUPIRA

Section Six: Acknowledgements

The senior author would like to acknowledge the work of the second author. Mr Ludanga has undertaken the bulk of the field collecting and the curation of the herbarium for the last three years. Mr Ludanga has compiled the vernacular dictionary. Both authors owe a great deal to the two herbarium field assistants, Messrs Mohammed Ligogi and Mchigage Mfaume, for their help in collecting, curating and supplying local names.

Our thanks are due to the staff of the East African Herbarium, Nairobi, especially Mr Gillett and Miss Kabuye, and to the herbarium staff of the Botany Department, University of Dar es Salaam, especially Dr Hariss and Mr Wingfield, for species identification, encouragement and assistance. Mr Gillett of the East African Herbarium very kindly reviewed this manuscript in an earlier stage.

This study has been greatly assisted by a generous grant from the Government of Denmark to the Miombo Research Centre.

REFERENCES

- CARGASSON R. H., (1964) A preliminary survey of the zoogeography of African butterflies E. Afr. Wildlife J., 2, 122.
- GILLMAN C., (1949) A vegetation types map of Tanganyika Territory. Geogr. Rev., 39 (1), 7.
- HEDEBERG A., (Ed.), (1966) Conservation of vegetation in Africa south of the Sahara. Uppsala, Sweden.
- HOWARD J., (1972) Aerial Photo Ecology, Academic Press, London.
- KUCHLER R., (1967) Vegetation Mapping, Ronald Press, New York.
- LAWTON R. M. (1963) Palaeoecological and ecological studies in the Northern Province of Zambia, Kirkia, 3, 46.
- PRATT D. J., GREENWAY P.J., & GWYNNE M.D., (1966) A classification of East African rangeland, J. Appl. Ecol., 3, 369.
- RAMSAY J. M. & ROSE INNES R., (1963) Some quantitative observations on the effects of fire on the Guinea Savanna of Ghana, Sols Afric., 8, 41.
- RODGERS W. A., (1968) Annual Report of the Miombo Research Centre, No. 1, 1968, Tanzania Game Division.
- RUSSELL E. W., (1961) Soil conditions and plant growth, Longmans, London.
- TRAPNELL C. G., (1953) The soils, vegetation and agriculture of N.E. Rhodesia, Govt. Printer, Lusaka.
- VAN ZINDEREN BAKKER E.M., (1967) Palaeoecology of Africa, Vol. 2. A. A. Balkena, Cape Town and Amsterdam.

Addenda and Corrigenda

- Page 25 - Under Caryophyllaceae. Add
P. eriantha A. Rich. var *effusa*
(Pax) Turrill H - - R1068
- Page 26 - Under Combretaceae.
Terminalia kilimandscharica should
read
T. sambesiaca Engl. & Diels
- Page 45/46- Under Papilionaceae. Add
Crotalaria kirkii Bak. H - - T186
and delete *C. zanzibarica*.
- Add
Indigofera podocarpa Bak.f. &
Martin H - - R1444
- Add
Pseudarthria hookeri Wight
& Arn. H - - R962
- Add
Swartzia madagascariensis Desv. T lo M Bs.n. Mngenge