

# The ethnobotany of the Midzichenda tribes of the coastal forest areas in Kenya: 1. General perspective and non-medicinal plant uses

M Pakia and JA Cooke\*

School of Life and Environmental Sciences, George Campbell Building, University of Natal, Durban 4041, South Africa

\* Corresponding author, e-mail: [cooke@nu.ac.za](mailto:cooke@nu.ac.za)

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The coastal forests of Kenya represent a rare and threatened forest type, rich in biodiversity, with an estimated flora of over 3 000 plant taxa, of which about 550 taxa are endemic. The existing forest patches include sacred kaya forests, which are the historical forest village homes of Midzichenda tribes. Living in the kaya forest villages, the Midzichenda have had diverse experiences over generations, giving rise to a rich traditional knowledge of plants. This paper presents some of this traditional knowledge of plants among three Midzichenda tribes: Duruma, Giriama and Digo. The plant resources found in the forest areas are significantly important to

the Midzichenda for basic domestic needs, cultural obligations and to understand their natural environment. In addition some forest plant resources are traded at a low scale by some members of the community. The plant usage is based on 'fitness' for purpose, as well as on traditional virtues (faith, traditions and taboos) in the Midzichenda social system. There is a significant relationship between utility and labelling of plant taxa, but utility is not the only basis used in the traditional plant classification. Some traditional preparation procedures of plants for usage are important and can be justified by orthodox science.

## Introduction

The coastal forests of Kenya are part of the 'ancient coastal vegetation mosaic' of eastern Africa, which is rich in biodiversity and forms one of the most important biological systems in the world (Robertson and Luke 1993). Mugabe and Clark (1998) noted in general terms that most of Africa's biodiversity is a source of cultural development, as plants and animals play specific major roles in the cultural evolution of local human societies. Despite its biotic capital, Africa is the World's poorest continent, experiencing economic decline and food insecurity. These problems result, in part, from environmental degradation and loss of biodiversity (Mugabe and Clark 1998). Although debates on sustainable development have taken place since the 1992 World Summit in Rio, loss and degradation of natural habitats in Africa have continued unabated (Balmford *et al.* 2002), mainly through over-exploitation and habitat change.

In Kenya there are about 70 coastal forest patches (Burgess *et al.* 1998) and these include the kaya forests, the historical forest village homes of Midzichenda tribes established in the 16<sup>th</sup> Century (Spear 1978). After living in and interacting with the natural forest for centuries, the Midzichenda developed a rich heritage of traditional plant knowledge. However, information on the interaction between plants and people, folk taxonomies, and plant-related mythology still remain poorly recorded (Van Wyk 2002). The major current concern is the rapid loss of this traditional knowledge before it is accurately recorded for the benefit of

current and future generations (Hutchings *et al.* 1996). The need to systematically document indigenous knowledge on traditional plant use cannot be over-exaggerated (Van Wyk 2002), hence the necessity to see conservation areas through the eyes of the plant resource users (Cunningham 2001), and for ethnobotanical studies to be seen as indispensable to many conservation and management issues. In the recent past, ethnobotanical studies have gained momentum in Africa (Cunningham and Höft 1997) and at the Kenyan coast a number of ethnobotanical publications have been produced (Greenway 1940, Glover *et al.* 1969, Schmidt 1991, Beentje 1994, Heine and Legáere 1995).

This study presents an overview of the traditional plant knowledge of Midzichenda tribes, through a qualitative analysis of plant labelling and usage, and is presented in two papers. In this first paper, non-medicinal plant uses (building, food, crafting, tying material, poison, symbolic etc.) and the general perspectives of the traditional plant knowledge system (plant identification and classification) are discussed. The medicinal plant usage, which was noted to be the most important category of use is addressed separately in a second paper.

## Material and Methods

Ethnobotanical information was collected by interviewing 18 reputable persons in the community, whose profession

involved significant contact with and good knowledge of plants: kaya elders, local healers, house constructors and blacksmiths. Ethnobotanical information on the Digo was gathered from eight respondents in six kaya forest areas and four respondents in other nearby forest areas. These respondents were interviewed between April 1995 and February 1996. Three Duruma respondents in kaya Mtswakara and three Giriama respondents in kaya Fungo were interviewed between March 1998 and June 1999. These 18 respondents are listed in the citations. Interviews were conducted with an individual respondent while walking along specific transects in the forests, crossing through pre-determined different vegetation types, thus allowing for identifying and discussing as many different plant taxa as possible. Ethnobotanical information collected included: vernacular names of plants, plant uses, harvesting procedures and preparation methods. Differences between respondents were considered intra-cultural diversity and most of the information gathered was considered genuine, except where, by subjective assessment, the information seemed unreliable.

## Results and Discussion

### General plant usage among the Midzichenda

The information concerning the species names, uses and other anecdotal evidence from the respondents were combined into an ethnobotanical inventory, which is presented as Appendix 1. The species in the inventory have been grouped according to plant families. The species within each family are arranged alphabetically. After each scientific name, the vernacular name is given, with an abbreviation of the dialect i.e. 'Dur' for Duruma, 'Gir' for Giriama, and 'Dig' for Digo. All the plant names and plant uses by the different tribal groups are given (except for medicinal and magical values), including alternative names and uses either given by the same or different respondents. The authors' conclusions from the ethnobotanical data collected were based upon a qualitative analysis of the information given by the respondents.

In this study a total of 184 taxa, in 58 plant families, were recorded to be of ethnobotanical importance, exclusive of medicinal values, to communities living around the kaya

forests, specifically the Digo, Duruma and Giriama. The plant families Fabaceae and Euphorbiaceae were the most utilised (Figure 1). The main plant-use categories, based on the number of taxa used in each category (utility index), in descending order of importance were: building/timber, craft, food, tying material, symbolic and poison. It is worth noting here that in this analysis, two of the major uses (medicinal/magical and firewood) have been excluded. On the basis of plant parts used (for the above listed uses), the stem was the most important and the latex was the least important. The relative importance of each main use category (utility index) and the relative importance of each plant part (plant-part index) is summarised in Table 1.

### Plants for building and timber

The species used for building residential houses, granaries, livestock yards and sacred huts are selected from among tree and shrub species that have strong, hard and durable wood. *Cynometra suaheliensis*, *Cynometra webberi*, *Manilkara sulcata*, *Craibia brevicaudata* and *Scorodophloeus fischeri* are a few notable examples.

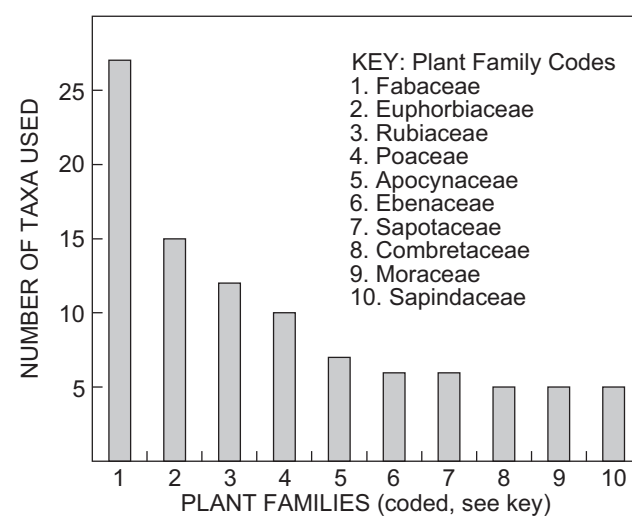


Figure 1: Important plant families for general ethnobotanical use

Table 1: Number of plant taxa used for each use-category and for each plant part

Plant-part used Use category	Stem	Fruits	Leaves	Roots	Bark	Latex	Whole plant	Relative utility-index (100% = 239)
Building/timber	63	0	0	0	0	0	5	28.5%
Craft/carving	42	1	4	3	0	1	1	21.8%
Food/spices	1	37	10	3	0	0	0	21.3%
Tying material	8	0	5	0	7	0	0	8.4%
Symbolic	7	0	0	0	0	0	0	2.9%
Poison	0	1	2	0	0	1	3	2.9%
Tabooed for certain use	0	0	0	0	0	0	7	2.9%
Cosmetics	0	1	1	1	0	0	0	1.3%
Meteorological indicators	0	0	0	0	0	0	5	2.1%
Other uses	6	3	4	0	0	2	4	7.9%
Relative plant-part index (100% = 239)	53.1%	18.0%	10.9%	2.9%	2.9%	1.7%	10.5%	

Although stems make up most of the building materials used (Table 1), specific reeds (*Cyperus exaltatus*) and grasses (*Panicum maximum* and *Panicum* sp.) are used for roof thatching. Hardwood and good quality timber species (*Azelia quanzensis*, *Milicia excelsa*) are preferred for timber. However, because these species are becoming rare due to over-exploitation, other species (*Brachystegia spiciformis*, *Albizia* spp. and *Syzygium guineense*) are becoming alternative sources of sawn timber.

#### Plants for craft work and tying material

Plant species with elastic and/or durable woods are used for making a variety of traditional household items: e.g. mortars (*Dobera loranthifolia*), pestles (*Manilkara sansibarensis*, *Terminalia spinosa*), coconut-graters (*Bombax rhodog-naphalon*), traditional plates (*Milicia excelsa*) and cooking sticks (*Garcinia livingstonei*). Due to their elasticity, some lianas (e.g. *Combretum illairii*) and scandent shrub species (e.g. *Grewia plagiophylla*, *Millettia usaramensis*, and *Lantana camara*) are used for making fish-traps, bird-traps and bows, while the relatively water-resistant inner bark fibres of *Brachystegia spiciformis* and *Julbernardia magnistipulata* are used to weave fish traps. The straight growing and relatively lightweight species (e.g. *Heinsia crinita*) are used for making arrow shafts. The fibrous leaves of *Hyphaene compressa* are woven into floor mats, baskets and hats, while the rachis of the leaves of *Encephalartos hildebrandtii* are woven into traditional baskets. Spreading inflorescences (*Panicum maximum*) and soft branches (*Indigofera* sp.) are used for making brooms. The shells of baobab fruits are used to make containers used in traditional sap tapping.

Stems of selected climber species (e.g. *Schlechterina mitostemmatooides*, *Lagenaria sphaerica*, *Combretum illairii*, *Loeseneriella africana* and *Cissus* spp.), and the inner bark of some tree and shrub species (*Brachystegia spiciformis*, *Julbernardia magnistipulata*, *Ficus* spp., *Acacia* spp., *Grewia plagiophylla* and *Sterculia rhynocharpa*) are important tying materials. These are in addition to leaf-fibres of palm species (*Hyphaene compressa*) and sisal-like species (*Sansevieria* spp.). Although the plant materials used for tying have been considered as a separate use category (Table 1), these are very much encompassed into building and crafting uses.

#### Food, spice and poisonous plants

In addition to cultivated crop plants, the Midzichenda tribes rely considerably on wild food plants, particularly fruits, vegetables, root-tubers, food-spices and food-flavours. Wild fruits represent the most utilised wild food plants (Table 1), sourced from mainly shrub and vine species. Wild edible fruit species include: *Deinbollia borbonica*, *Lecaniodiscus fraxinifolius*, *Syzygium guineense*, *Diospyros squarrosa*, *Carissa tetramera*, *Vitex payos*, *Saba comorensis* and *Ancylobotrys petersiana*. The wild fruits were described as hardship foods, eaten mainly during hunting, pole cutting and fishing, when individuals are away from home for a relatively long period. To some community members though, the collection of selected wild fruits is a commercial activity and, therefore, occurs regularly when the fruits are in sea-

son. The wild fruits locally commercialised include: *Ancylobotrys petersiana*, *Dialium orientale*, *Saba comorensis*, *Syzygium guineense* and *Landolphia kirkii*. Collection of wild fruit for consumption in a household was usually carried out by children.

Wild food plants utilised for their leaves are mainly the vegetable species which include: *Amaranthus* sp., *Solanum nigrum*, *Launea cornuta*, *Oxygonum* sp, *Bidens pilosa*, *Talinum caffrum*, *Talinum portulacum* and *Cleome* sp. Although most of these are collected from the wild, it is common for farmers to nurture small populations of wild vegetable species occurring on their farms. A few introduced vegetable species e.g. *Solanum hybridus* are actively cultivated, but not the indigenous wild species. Some of the wild vegetable species listed above are very popular and are commonly found in local markets.

Fruits of *Adansonia digitata* and *Tamarindus indica* are common food spices and food flavours, collected both for commercial and for domestic use. *Tamarindus indica* is grown at homesteads for shade, fruit (food spice/flavour) and leaves (medicine), while *Adansonia digitata* is nurtured in farm fields for its fruits (food spice/flavour), leaves (medicine, vegetable) and fruit-shells (palm sap containers). The *Adansonia digitata* 'caves' are revered as sacred areas where healers treat their patients. A stem used as a condiment was that of *Croton pseudopulchellus*, which is burnt and the smoke used to flavour fresh milk.

The root tubers of only three wild plant species were recorded as being utilised for food by the Midzichenda: *Dioscorea dumetorum*, *Thilachium africanum* and *Gonatopus boivinii*. The wild root tubers were described as 'famine foods'. This perhaps was not surprising, considering the labour intensive process of making the tubers edible. The *D. dumetorum* tubers are collected and sliced into very small pieces that are soaked in running water for 2–3 days, to reduce the 'bitter taste'. However, from an orthodox scientific perspective, the *D. dumetorum* tubers contain a toxic alkaloid *dioscorine* (Watt and Breyer-Brandwijk 1962) and soaking in running water leaches out the water soluble toxicant to the point where the flesh is palatable. Most wild plant roots utilised for food need a longer and more complicated preparation time (Guinand and Lemessa 2001) which probably justifies the restriction of their use to times such as famine periods. The use of the wild tuber species for food by the Midzichenda is shared with other communities. *Dioscorea dumetorum* is a famine food in many parts of Africa and *Thilachium africanum* is a famine-food in Tanzania (Watt and Breyer-Brandwijk 1962). *Gonatopus boivinii* is used as famine food in Ethiopia (Guinand and Lemessa 2001).

The existence of extensive knowledge of wild food plants is an indication that the Midzichenda probably combined a hunter-gatherer lifestyle with animal and crop farming in the past. However, the observed lower reliance on wild food plants today was most likely facilitated by the introduction of new crop varieties and new farming technologies from the Middle East, Far East and Europe, in the pre- and post-colonial era. This led to the increasing settlement of people outside the forest areas (Spear 1978).

Most poisonous plants are locally recognised as such and

in everyday life these plants are used for their toxicity such as in fish poisoning, as arrow poisons and against pests. It is understood that one would suffer from poisoning if any part of a poisonous plant e.g. *Adenium obesum* and *Strophanthus kombe*, is taken orally. These species are known to contain toxic compounds (Beentje 1994, Watt and Breyer-Brandwijk 1962); for example *Strophanthus kombe* contains the poisonous glycosides *strophanthoside* and *cymarol* (Watt and Breyer-Brandwijk 1962).

#### *Cosmetic and other plant uses*

Although only a few plant species used for cosmetics and fragrance were recorded, this shows the traditional recognition of plants as being part of a 'seductive world'. Leaf buds (*Caesalpinia insolita*) are used as lipsticks, root-bark (*Dalbergia boehmii*) as perfume and fruits (*Zanthoxylum holtzianum*) are burnt for their fragrance and as air freshener. Other minor plant uses included: toiletry (leaves of *Abutilon zanzibaricum*), as candles (sticks of *Euphorbia nyikae*), in apiculture (*Ocimum gratissimum* leaves as bee-hive baits and sticks of *Grewia forbesii* used in honey harvesting), as detergents (fruits of *Jatropha* sp.) and toothbrushes (sticks of *Salvadora persica*, *Diospyros cornii* and *Euclea natalensis*). Leaves of *Zanthoxylum chalybeum* are used for making a tea that has medicinal value. The phenology of some species (*Deinbollia borbonica*, *Milicia excelsa*, *Lamprothamnus zanguebaricus* and *Chlorophytum comosum*) is interpreted as a meteorological signal by the Midzichenda, to spell out seasonal changes, particularly related to crop farming; while the presence of *Stylochaeton salaamicus* indicates a high water table.

Generally, the above observations indicate that the plant species are selected and used mainly on the basis of 'quality' features i.e. fitness for purpose. However, the reasoning behind the prohibition of some species for building poles (e.g. *Vangueria infaustia*, *Myroxylon aethiopicum*, *Canthium kilifiensis* and *Meyna tetraphylla*) and for firewood (e.g. *Vangueria infausta*, *Pyrostria bibracteata* and *Pyrostria phyllanthoidea*) and the restriction of poles of only *Grewia plagiophylla* and *Ormocarpum kirkii* for building sacred huts, were not understood. The species tabooed for building and/or for firewood were in most cases used for other purposes, particularly medicinal. Also there was a restriction on the plant species used for funeral rites (*Grewia plagiophylla*, *Thespesia danis*, *Ormocarpum sennoides* and *Cussonia zimmermannii*), and the species used to commemorate a deceased family member (*Terminalia spinosa* and *Grewia plagiophylla*). It is clear that in addition to fitness for purpose, traditional values and social norms form part of the selection criteria of species to be used for a given purpose, proving that socio-cultural systems are more complex (Prince and Thomson 1997) than were probably assumed.

#### **Traditional plant identification**

In the field, respondents identified plant taxa by colour, texture and shape of parts, particularly leaves, fruits, bark of stem, roots and flowers. Occasionally, the taste of the roots was employed. Leaf features (shape, texture and size) were the most commonly used features for the identification of

plant taxa, criteria which are equally significant in modern taxonomy (Beentje 1994). Interestingly though, the respondents failed to correctly identify *Schlechterina mitostemma-toides* in its sapling stages. The leaves of *S. mitostemma-toides*, the main identification part, transform from small linear leaves, with deeply dentated lobes at the sapling stage, to a relatively larger elliptic ones with a cunate base, and acute apex at the mature stage. However, all the respondents consistently and correctly identified *S. mitostemma-toides* at its mature stage, a reflection that developmental stages, which are structurally varied, remain unnoticed. In differentiating *Cynometra suaheliensis* from *Scorodophloeus fischeri* the leaf features were not reliable, thus the bark of the stem was used as a supporting identification feature. The bark of *C. suaheliensis* was described as 'black' and that of *S. fischeri* as 'white' by the respondents, while Beentje (1994) describes them as 'reddish brown' and 'grey' respectively. The colour of the bark of the stem was also important to distinguish between *Euclea natalensis* (black) and *Euclea racemosa* (white). Also *Hugonia castaneifolia* was correctly identified only from stem features. Root colour and taste were important to distinguish *Uvariadendron kirkii* from *Artabotrys modestus*, but the exact details in this identification were not understood.

As shown above, neither the identification criteria nor the plant part used for identification were consistent for all taxa. In addition, identification methods were not necessarily similar between respondents.

#### **Folk taxonomy**

Based on field observations, the respondents recognised and identified most plants by name or by attribute, mainly on the basis of utility attachment. Commonly, a plant has a positive or a negative value, sometimes both, and hence gets to be recognised and labelled. This observation is similar to that of Malinowski (1954), who argued that 'the road from the wilderness to the savage's belly and consequently to his mind is very short', interpreted as 'the pre-literate people think with their stomach' (Morris 1984). However, in the inventory (Appendix 1) some plant taxa were lexicalised, yet had no known use (e.g. *Sellaginella eublepharis*, *Cynanchum gerrardii*, *Laportea lanceolata* and *Memecylon amaniense*). Other species were unlabelled but had a use (e.g. *Hibiscus altissimus* and *Pycnocoma littoralis*). These examples tend to disqualify Malinowski's argument that traditional communities have a 'utilitarian eye'. Probably by just being conspicuous (*Memecylon amaniense*, *Cynanchum gerrardii* and *Clerodendrum sansibarense*) or by being a notorious weed (*Chlorophytum suffruticosum*, *Cenchrus ciliaris*, *Dactyloctenium geminatum*, *Enteropogon sechellensis*, *Megastachya acronata*, *Setaria* sp. and *Sporobolus fimbriatus*) a taxon is recognised and is lexicalised. Mostly, the unlabelled species were small, herbaceous, undergrowth species e.g. *Dorstenia* sp., *Huernia archeri*, *Siphonochilus kirkii* and *Crossandra pungens*. Most of the unlabelled species were, however, consistently and correctly remembered in subsequent encounters, meaning that among the taxa referred to in interviews, none was completely unconceived even though not labelled or used.



In the folk taxonomy, some basic categories were parallel to the 'species' level of Linnean nomenclature. For example, different species in the same genera were identified as such e.g. *Cynometra suaheliensis* (mufunda-uche) and *Cynometra webberi* (mufunda-ulume); *Acacia adenocalyx* (munga), *Acacia etbaica* (mugundi), and *Acacia mellifera* (chikwata-kombe); and *Acacia nilotica* (muoti), *Acacia reficiens* (kirerengwa), *Acacia robusta* (mutsemeri), and *Acacia zanzibarica* (muhega-kululu). However, some species in different genera or families were placed in one basic category in the folk taxonomy. For example, 'Muvundza-jembe' referred to *Grandidiera boivinii* (in Flacourtiaceae), *Acalypha fruticosa*, *Acalypha echinus* and *Mildbraedia carpinifolia* (the last three are all in Euphorbiaceae); while 'Mufunga-mambo' in Giriama, referred to *Ceropegia seticorona* (in Asclepiadaceae) and *Ipomoea shupangensis* (in Convolvulaceae); and in Duruma it referred to *Pentarhopalopilium umbellulata* (in Opiliaceae) and *Rhoicissus revouillii* (in Vitaceae).

From this study it could not be precisely concluded that the Midzichenda folk classification is an expression of intellectual interest using structural and morphological components as suggested by Berlin *et al.* (1974). Nor can it be termed a system of symbolic logical ordering of the natural world from the perspective of social reality and practical interests, as argued by Levi-Strauss (1966). But generally, as observed by Brokensha and Riley (1980), while working with the Mbeere in Kenya, utility was a major factor in plant labelling and folk taxonomy. There was no simple correlation between utility and the traditional nomenclature, contrary to the argument of Hargreaves (1976). Since the vernacular plant names and tribal uses of plants is a large field of knowledge, criss-crossing different social groups, a further study targeting different social groups as respondents is necessary to establish a holistic view of the Midzichenda folk taxonomy. The unlabelled species, or species not associated with any use, could be reflecting the limited knowledge of the respondents selected, rather than portraying a tribal knowledge status.

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#### Citations (List of Respondents)

Abdallah Ali Mnyenze, kaya elder for kaya Kinondo, and traditional healer, Kwale District.  
 Ali Ali Mwadzipea, retired ranger with Kenya Wild Life Services, Chirimani, Kwale District.  
 Athuman Mwachausa, kaya elder for kaya Diani, Kwale District.  
 Badi Omar Mwamarifah, traditional healer in Tiwi, Kwale District.  
 Bakari Ali Jiza, traditional house constructor, kaya Muhaka, Kwale District.  
 Charo Ngoba, local house constructor, near kaya Fungo, Kilifi District.  
 Gatoka Foyo, practising spiritual healer for kaya Mtswakara, Kwale District.

Hamisi Kazungu Kalume, kaya guard for kaya Gandini (Duruma) and healer trainee, Kwale.  
 Hassan Humbo, kaya elder for kaya Segga in Kwale District.  
 Hussein Siwa, kaya elder for kaya Diani, Kwale District.  
 Majaliwa Mwalimu, traditional healer, Vuga, Kwale District.  
 Mtaveta Kadzomba, local blacksmith near kaya Fungo, Kilifi District.  
 Mungwari Mwagwaha, a practising spiritual healer for kaya Fungo, Kilifi District.  
 Mwanasha Ganzori, traditional healer in Tiwi, Kwale District.  
 Mwayaya Chuphi, kaya elder for kaya Mtswakara and retired local house constructor, Kwale.  
 Mzee Ali Mwagoga, kaya elder for kaya Lunguma, and traditional healer, Kwale District.  
 Rashid Mambeya, kaya elder for kaya Gonja in Kwale District.  
 Swaleh Dzilala, kaya elder for kaya Waa, and traditional healer, Kwale District.

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**Appendix 1:** A list of plant species of general ethnobotanical importance to Midzichenda tribes. The species in the inventory below have been grouped according to plant families (in upper case and bold). The species (in bold and italics) within each family are arranged alphabetically. The vernacular names are given with an abbreviation of the dialect in reference: 'Dur' for Duruma, 'Gir' for Giriama, and 'Dig' for Digo

#### ACANTHACEAE

***Asystasia gangetica*** (L.) T. Anders. s.l.  
*Tsalakushe* (Dur/Gir); *Vongonya* (Gir); *Futswe* (Dig)  
The species is used as a vegetable.

#### AMARANTHACEAE

***Psilotrichum sericeum*** (Roxb.) Dalz.  
*Demu* (Dur)  
The Duruma use the species as a vegetable.

#### ANACARDIACEAE

***Lannea schweinfurthii*** (Engl.) Engl. var. ***stuhmannii*** (Engl.)  
Kokwaro  
*Munyumbu* (Dur/Gir); *Mnyumbu/Mnyumbu-madzi/Mchumbu* (Dig)  
The Giriama use the stem to make traditional three-legged stools.

***Ozoroa insignis*** Del. ssp. ***reticulata*** (Bak. f.) J.B. Gillett  
*Mtsalatsanga* (Dur); *Msalasanga* (Dig)  
The Digo use the bark of the root on traditional baskets to prevent leakage.

***Ozoroa obovata*** (Oliv.) R. & A. Fernandes  
*Msalasanga/Mtsalatsanga* (Dur); *Msalasanga* (Dig)  
The Digo use the bark of the root on traditional baskets to prevent leakage.

***Sclerocarya birrea*** (A. Rich.) Hochst.  
*Mung'ongo* (Dur); *Mng'ongo* (Dig)  
The fruits are edible and the wood is a source of sawn timber planks.

#### ANNONACEAE

***Uvaria lucida*** Benth. ssp. ***lucida***  
*Mudzala-komba/Mudzala-ubomu/Dzala-bomu* (Dur); *Mudzala* (Gir); *Mngweni-mlume/Mngweni-madevu/Mngweni-mkulu* (Dig)  
The fruits are edible.

***Uvariadendron kirkii*** Verdc.  
*Mwangajine* (Dur); *Murori* (Gir); *Mwangajine-mlume/Mzondohera-nguluwe* (Dig)  
The stem is used for building poles.

#### APOCYNACEAE

***Adenium obesum*** (Forssk.) Roem. & Schult.  
*Mwadiga* (Dur/Dig), *Mwanyoka/Mwadiga* (Gir)  
The species is understood to be poisonous.

***Ancylobotrys petersiana*** (Klotzsch) Pierre  
*Muhonga/Muhonga-udide* (Dur); *Mutongazi/Mutungazi* (Gir); *Mbohoya* (Dig)  
The fruits are edible. The Giriama use the leaves as fodder to improve milk production from livestock.

***Carissa tetramera*** (Sacleux) Stapf  
*Muloe* (Dur); *Mtandambo/Nvuje-ya-tsi* (Gir)  
The fruits are edible.

***Landolphia kirkii*** T.-Dyer  
*Muhonga-ulume* (Dur); *Mpira* (Dig)  
The fruits are edible. The Digo use the latex to make a birdlime and the stem for crafting.

***Saba comorensis*** (Bojer) Pichon  
*Muhonga* (Dur); *Muungo* (Dig)  
The fruits are edible. The Duruma and Digo use the latex to make a birdlime and the stem for crafting.

***Strophanthus kombe*** Oliv.  
*Muzigande* (Dur); *Mwambalu* (Gir)  
The species is understood to be poisonous.

***Tabernaemontana elegans*** Stapf  
*Mudigizo* (Gir); *Chibombo* (Dig)  
The Digo describe the species as poisonous.

#### ARACEAE

***Gonatopus boivinii*** (Decne.) Engl.  
*Chera* (Dur); *Konzwi* (Gir); *Kundzwi/Uluanga* (Dig)  
The root-tubers are used as famine food.

***Stylochaeton salaamicus*** N.E. Br.  
*Toro-nyika* (Dur); *Kirazi/Konzwi* (Gir); *Nyaa/Chinyaa* (Dig)  
The presence of this species is an indicator of a high water table.

#### ARALIACEAE

***Cussonia zimmermannii*** Harms  
*Munyala* (Dur/Gir); *Mnyala* (Dig)  
The Digo use the timber for funeral rites.

#### ASCLEPIADACEAE

***Cynanchum gerrardii*** (Harv.) Liedtke  
*Katudi* (Dur)  
There was no use identified for this species.

#### ARECACEAE

***Hyphaene compressa*** H. Wendl.  
*Mukoma/Mulala* (Dur/Dig)  
The fruits are edible. Leaf fibres are used for weaving mats, baskets and hats and also as tying materials. A local palm sap is tapped from the species.

#### ASPHODELACEAE

***Chlorophytum comosum*** (Thunb.) Jacq.  
*Asichana-amwaka/Ria* (Gir)  
The flowering time of the species is understood to indicate the onset of long rains.

***Chlorophytum subpetiolatum*** (Baker) Kativu ined.  
*Mundogo* (Dur)  
The fruits are used in a traditional game.

***Chlorophytum suffruticosum*** Bak.  
*Bunduki* (Dur)  
No use was identified for this species.

#### ASTERACEAE

***Bidens pilosa*** L.  
*Todza* (Dur/Dig)  
The Duruma use the species as a vegetable.

***Brachylaena huillensis*** O. Hoffm.  
*Muphuphu* (Dur/Gir); *Muhuhu* (Gir/Dig)  
The stem is used for building poles, and is preferred for fuel and for carving.

#### BIGNONIACEAE

***Markhamia zanzibarica*** (DC.) Engl.  
*Mtwawanda/Mtalawanda* (Dur); *Mpalawanda/Mlangazuka* (Dig)  
The Duruma use the stem for building poles, for making traditional beds, bows, and in making snares. The Digo used to make sandals from the wood.

#### BOMBACACEAE

***Adansonia digitata*** L.  
*Muuyu* (Dur/Gir/Dig); *Mkulu-kazingwa* (Dig)  
The fruits are edible and used as food spice/flavour. The Duruma

use the fruit shell to make a container used for collecting palm sap during tapping.

***Bombax rhodognaphalon*** K. Schum.

*Mware* (Dur/Gir/Dig)

The stem is a source of timber.

**BORAGINACEAE**

***Cordia monoica*** Roxb.

*Musasa* (Dur); *Mzondohera-nguluwe* (Dig)

The Duruma use the stem for building poles. The Duruma and Digo use the leaves as sandpaper to smooth arrow shafts.

**BURSERACEAE**

***Commiphora africana*** (A. Rich.) Engl. var. *africana*

*Mubambara* (Dur); *Tola* (Gir)

The stem is used for making domestic tools e.g. three-legged stools.

***Commiphora edulis*** Engl. ssp. *boiviniana* (Engl.) Gillett

*Murya-kwembe* (Dur); *Mukwembe* (Dur/Gir); *Mryakwembe* (Dig)

The Duruma and Giriama use the species to make a living fence.

***Commiphora eminii*** Engl. ssp. *zimmermannii* (Engl.) Gillett

*Mudendende* (Dur); *Mukaya* (Gir)

The stem is source of sawn timber planks, which the Giriama use to make traditional coffins. The Duruma use it to make coconut graters.

**CACTACEAE**

***Opuntia vulgaris*** Mill.

*Mwatsa* (Dur)

The fruits are edible and the species is used as a living fence.

**CAPPARACEAE**

***Boscia angustifolia*** A. Rich. var. *angustifolia*

*Mugu* (Dur)

The Duruma use the stem for building poles.

***Cleome*** sp.

*Mwangani* (Dur)

The species is used as a vegetable.

***Thilachium africanum*** Lour.

*Mkizataa/Mtunguru* (Dur)

The Duruma and Giriama use the roots as famine food.

**CELASTRACEAE**

***Elaeodendron schlechteranum*** (Loes.) Loes.

*Mukibuthri* (Gir); *Chikunguni-chilume* (Dig)

The Digo use the stem for building poles and for firewood.

***Maytenus undata*** (Thunb.) Blakelock

*Mulimbolimbo* (Dur)

The Duruma use the inner bark for making birdlime.

***Mystroxydon aethiopicum*** (Thunb.) Loes.

*Mubafyebafye* (Dur)

To the Duruma it is taboo to use the species for firewood and for building.

**CLUSIACEAE**

***Corchorus olitorius*** L.

*Chikoshu* (Dur)

The species is used as a vegetable.

***Grewia forbesii*** Mast.

*Mubavubavu* (Dur/Dig); *Mubavu-ng'ombe* (Gir); *Mubavubavumkulu* (Dig)

Dry sticks are burnt to smoke off bees during honey harvesting.

***Grewia plagiophylla*** K. Schum.

*Mukone* (Dur/Gir); *Mkone* (Dig)

This an important species in symbolic values i.e. the Duruma use the stem in burial rites; the Giriama use the stem to make ancestral markers (koma); and the Digo use the stem for building poles

of a sacred hut. The fruits are edible, the stem is used for building and for making domestic tools, and the inner bark is used as tying material.

**COMBRETACEAE**

***Combretum illairii*** Engl.

*Mwamba-ngoma* (Dur/Dig); *Muchirang'ombe* (Dur); *Mufungamambo* (Gir)

The stem is used as tying material and sticks for making fish traps.

***Combretum schumannii*** Engl.

*Muryanyani/Mukongolo* (Dur); *Muryanyani* (Gir); *Mkongolo/Mryanyani* (Dig)

This species is popular for building poles and for fuel. The hollow stem is used to make traditional beehives.

***Pteleopsis*** sp.

*Mutula-makwalala* (Gir)

The stem is used for building poles.

***Terminalia prunioides*** Laws.

*Mwarambe/Mwanga-msuhu* (Dur)

The stem is used for poles and for firewood.

***Terminalia spinosa*** Engl.

*Mwanga* (Dur/Gir/Dig)

The Duruma and Giriama use the stem for building poles and for making pestles. The Giriama use the stem to make spiritual marker posts (vigango) to commemorate respectable deceased family relatives.

**CUCURBITACEAE**

***Lagenaria sphaerica*** (Sond.) Naud.

*Mwambo/Mzigande* (Dur)

The stem is used as a tying material.

**CYPERACEAE**

***Cyperus exaltatus*** Retz.

*Mkangaga* (Gir)

This species is used for thatching traditional grass houses.

**DICHAPETALACEAE**

***Dichapetalum zenkeri*** Engl.

*Mtundukula* (Dur); *Mtsonga-nyomba* (Dig)

The fruits are edible.

**DIOSCORIACEAE**

***Dioscorea dumetorum*** (Kunth) Pax

*Mariga* (Dur/Gir/Dig); *Mani* (Dig)

The root-tubers are used as famine-food.

**DRACAENACEAE**

***Sansevieria arborescens*** Cornn.

*Chongwa* (Dur/Gir); *Kitengwa* (Gir)

Duruma and Giriama use the leaves as tying material. The Duruma use the leaves to make arrow poison.

***Sansevieria fischeri*** (Baker) Marais

*Konje-mutsi* (Dur)

The Duruma use the leaf fibres as tying material.

***Sansevieria kirkii*** Bak.

*Makonje-ga-msuhuni* (Dur); *Makonje-mala/Mwanangira* (Gir)

Duruma and Giriama use the leaf fibres as tying material.

***Sansevieria robusta*** N.E. Br.

*Chongwa* (Dur)

The Duruma use the leaf fibres as tying material.

**EBENACEAE**

***Diospyros consolatae*** Chiov.

*Muhi-wa-chidzomba* (Dur); *Mubate* (Gir)

The stem is used for building poles.



***Diospyros cornii*** Chiov.*Mukulu* (Dur/Gir); *Mkulu* (Dig)

The fruits are edible. The stem is used for building poles and as a source of sawn timber, which is used to make traditional beds and coconut-graters. Sticks are used as toothbrushes.

***Diospyros natalensis*** (Harv.) Brenan*Katsungwi-ka-tsakani/Mutsungwi* (Gir)

The fruits are edible.

***Diospyros squarrosa*** Klotzsch*Mdzungu-muho* (Dur); *Mupweke* (Dur/Gir); *Mpweke* (Dig)

The fruits are edible and the stem is used for building poles and for making bows and walking sticks.

***Euclea natalensis*** A. DC. ssp. ***obovata*** F. White*Mukipa* (Gir)

The stem is used for building poles and sticks are used as toothbrushes.

***Euclea racemosa*** Murray ssp. ***schimperi*** (A. DC.) F. White*Mubafyebafye* (Dur); *Muyesa* (Gir)

It is taboo to use this species for building purposes.

**ERYTHROXYLACEAE*****Nectaropetalum kaessneri*** Engl. var. ***kaessneri****Muryalutswa* (Dur)

The Duruma use the stems for building poles.

**EUPHORBIACEAE*****Acalypha echinus*** Pax & K. Hoffm.*Muvundza-jembe* (Dur); *Mubulushi-ulume* (Gir)

The stem is used for building poles.

***Acalypha fruticosa*** Forssk. var. ***fruticosa****Muvundza-jembe/Msasa-ngudu* (Dur); *Mutsatsa* (Gir); *Mtsatsa/Chitsasa/Mphatsa* (Dig)

The stem is used for building poles.

***Antidesma venosum*** E. Mey ex Tul.*Mdzenga-tsongo* (Dur/Dig)

The Digo use the root-bark to make fishing nets stronger.

***Aristogeitonia monophylla*** Airy Shaw*Mwembe-msuhu* (Dur)

The Duruma use the stem for building poles.

***Bridelia cathartica*** Bertol. f.*Mkalakala* (Dur/Gir); *Musimbiji* (Gir); *Mwambeberu* (Dig)

The fruits are edible.

***Croton pseudopulchellus*** Pax*Mulaga-pala* (Dur); *Muyama/Mufukizo* (Dur/Gir)

The stem is used for building poles. The Duruma and Giriama use smoke from dry sticks to add flavour to milk.

***Euphorbia nyikae*** Pax var. ***neovolkensii*** (Pax) Carter*Mwatsa/Mwatsa-komba* (Dur); *Ganga* (Dur/Dig); *Kithongothongo/Chaa/Chaa-komba* (Gir)

The Duruma and Giriama use the species as a living fence and dry sticks as candles.

***Euphorbia tirucalli*** L.*Muphila* (Gir)

The latex is used to fix feathers on to arrow shafts.

***Jatropha*** sp.*Msabuni/Kabono-koma* (Dur)

The Duruma use the fruits as a detergent.

***Mildbraedia carpinifolia*** (Pax) Hutch. var. ***carpinifolia****Muvundza-jembe* (Dur); *Mtsonga-nyomba* (Dig)

The Duruma use the stem for building poles and the Digo use the stem to make arrow shafts.

***Phyllanthus reticulatus*** Poir.*Mukwamba* (Dur); *Chikwamba/Mkambakamba/Mkwamba-lungo* (Dig)

The Digo use the bark of the roots to make fishing nets stronger.

***Pycnocomma littoralis*** Pax

No vernacular name was identified for this species.

The Duruma use the stem for building poles.

***Suregada zanzibariensis*** Baill.*Chikuro/Mudimu-tsaka* (Dur); *Mudimu-wa-tsakani* (Gir); *Mdimu-tsaka* (Dig)

The stem is used for building.

***Synadenium pereskiifolium*** (Baill.) Guill.*Kimangio* (Dur); *Mwatsa* (Gir); *Chiyuyu/Tupa* (Dig)

The latex is used for fish-poisoning. The Duruma use the latex as a pesticide.

***Uapaca nitida*** Müll. Arg.*Mkoko-luanda* (Dur)

The Duruma use the stem for building poles.

**FABACEAE****Subfamily CAEASALPINIOIDEAE*****Azelia quanzensis*** Welw.*Mubambakofi* (Dur/Gir); *Mwamba* (Gir); *Mbambakofi* (Dig)

The wood is a source of high quality timber. The Duruma and Giriama use the stem to make mortars and household utensils e.g. plates and traditional stools.

***Brachystegia spiciformis*** Benth.*Murihi* (Dur/Gir); *Mrihi* (Dig)

The wood is a source of sawn timber. The inner bark is used as a tying material and for weaving fish traps. The Duruma use the stem to make mortar and branches are used to make tool handles.

***Caesalpinia bonduc*** (L.) Roxb.*Muburuga/Mutere* (Dur); *Mburuga/Mbate* (Dig)

The Digo use the fruits in a local game.

***Caesalpinia insolita*** (Harms) Brenan & Gillett*Mtambuu* (Dur)

The stem is used for building poles. The Duruma women chew stem buds to colour their lips.

***Cynometra suaheliensis*** (Taub.) Bak. f.*Mufunda/Mufunda-uche* (Dur); *Mfunda* (Dig)

The Duruma and Digo use the stem for building poles and for making pestles. The Duruma make traditional furniture from the timber. The fruits are said to be poisonous to goats.

***Cynometra webberi*** Bak. f.*Mufunda/Mufunda-ulume* (Dur)

The Duruma use the stem for building poles and for making pestles.

***Julbernardia magnistipulata*** (Harms) Troupin*Mukuwa* (Dur); *Muzaha* (Gir); *Mkuwa/Ukwe* (Dig)

The Duruma and Giriama use the stem to make tool handles and for building poles. The inner bark is used as tying material and the Duruma use it to weave fish traps. The Digo use the stem to make canoes.

***Scorodophloeus fischeri*** (Taub.) J. Leonard*Muphande* (Dur)

The Duruma use the stem for building poles and the timber is used to make traditional furniture.

***Tamarindus indica*** L.*Mukwaju* (Dur/Gir); *Mkwadzu* (Dig)

The fruits are used as food spices and to flavour food.

**FABACEAE****Subfamily MIMOSOIDEAE*****Acacia etbaica*** Schweinf. ssp. ***platycarpa*** Brenan*Mugundi/Chikwata/Magwada* (Dur)

The stem is used for building poles.

***Acacia mellifera*** (Vahl) Benth. ssp. ***mellifera****Chikwata-kombe* (Dur); *Kikwata* (Gir); *Chikwata* (Dig)

The stem is used for building poles.

***Acacia nilotica*** (L.) Willd. ex Delile ssp. ***subalata*** (Vatke) Brenan  
*Muoti* (Gir)

The wood of this species is highly preferred for fuel.

***Acacia reficiens*** Wawra ssp. ***miseria*** (Vatke) Brenan  
*Kirerengwa* (Gir)

The Giriama use the stems for building and the inner bark for tying material. The wood of this species is also highly preferred for fuel.

***Acacia robusta*** Burch. ssp. ***usamabarensis*** (Taub.) Brenan  
*Mtsemeri* (Gir)

The stem is used for building and the wood is preferred for fuel.

***Acacia*** sp.  
*Mkalino* (Gir)

The Giriama use the wood for fuel.

***Acacia zanzibarica*** (S. Moore) Taub. var. ***zanzibarica***  
*Mulozi/Mupiga-kululu/Mwongololi* (Dur); *Muhega-kululu* (Dur/Gir)

The wood is preferred for fuel.

***Albizia anthelmintica*** (A. Rich.) Brongn.  
*Mporojo* (Dur/Gir)

The Duruma and Giriama use the stem for making traditional furniture and household tools. The Giriama use the hollow stems to make traditional beehives.

***Albizia versicolor*** Welw. ex Oliv.  
*Mtsani/Mtsani-ndzovu* (Dur/Dig)

The wood is a source of sawn timber.

## FABACEAE

### Subfamily PAPILIONOIDEAE

***Craibia brevicaudata*** (Vatke) Dunn ssp. ***brevicaudata***  
*Muphande/Muchokoi* (Dur); *Muhande* (Gir); *Mphande/Chikunguni* (Dig)

The species is preferred for building and for fuel.

***Dalbergia boehmii*** Taub. ssp. ***boehmii***  
*Murandze* (Dur/Dig)

The Digo use root-bark chips in oil as a perfume.

***Dalbergia melanoxylon*** Guill. & Perr.  
*Muphingo* (Dur); *Muhingo* (Gir); *Mphingo* (Dig)

The species is popular for building and for carving.

***Erythrina sacleuxii*** Hua  
*Mgala* (Dur); *Mulungu* (Gir); *Mwamba-ngoma/Mbamba-ngoma* (Dig)

The stem is used for making the wooden trunks of drums.

***Indigofera*** sp.  
*Mushero/Kashero* (Gir); *Lihago* (Dig)

The species is used to make brooms.

***Lonchocarpus bussei*** Harms  
*Muphumbuluzi/Msumari-bara* (Dur)

The Duruma use the stem for building poles.

***Millettia usaramensis*** Taub. ssp. ***usaramensis***  
*Muvamva* (Dur); *Mvava/Msumari* (Dig)

The Duruma and Digo use the stem for building poles. The Digo use the sticks to make fish traps and wooden nails.

***Mundulea sericea*** (Willd.) A. Chev.  
*Mutupa* (Gir)

The Giriama use the leaves in fish poisoning.

***Ormocarpum sennoides*** DC. ssp. ***zanzibaricum*** Brenan & Gillett  
*Mupingwa/Kakwaju* (Dur); *Humbo-ra-nguluwe/Mpingwa/Chikwadzu* (Dig)

The Duruma use the sticks in burial rites. The Digo use the stem for poles to build a sacred hut.

## FLACOURTIACEAE

***Flacourtia indica*** (Burmf. f.) Merrill.  
*Munyondoya* (Dig)

The fruits are edible.

## GUTTIFERAE

***Garcinia livingstonei*** T. Anders.  
*Mfidzofidzo* (Dur/Dig); *Mufodzohi* (Gir)

The fruits are edible. Pronged twigs are used for making stirring rods for cooking.

## HERNANDIACEAE

***Gyrocarpus americanus*** Jacq. ssp. ***americanus***  
*Muhwahwa* (Dur); *Mchusa* (Dig)

The Duruma use the hollow stem to make drum trunks. The Digo use the stem to make canoes.

## HIPPOCRATEACEAE

***Hippocratea africana*** (Willd.) Loes. var. ***richardiana*** (Cambess.) N.K.B. Robson  
*Mukipesa* (Gir)

The stem is a popular tying material.

## LAMIACEAE

***Hoslundia opposita*** Vahl  
*Mjongolo* (Dur); *Mutsereza-moyo* (Gir); *Mtserere* (Dig)

The fruits are edible.

***Ocimum gratissimum*** L. var. ***macrophyllum*** Briq. Syn. *O. viride* Willd.

*Luvumbani/Muvumba-manga* (Gir); *Vumbamanga* (Dig)

The Giriama use leaves as bait to attract bees into a hive.

## MALVACEAE

***Abutilon zanzibaricum*** Mast.  
*Muhangusa-mavi/Muvandoha* (Dur); *Mugalagala/Muhangusa-mavi* (Gir); *Mtsutsatsaru/Mbangula-mavi* (Dig)

The leaves of the species are used for toiletry.

***Thespesia danis*** Oliv.  
*Muhowe* (Dur/Gir/Dig); *Muhohe* (Gir)

The fruits are edible and the stem is used for building, for making bows and cooking sticks. The Duruma use the sticks in burial rites.

## MELASTOMATACEAE

***Memecylon amaniense*** (Gilg) A. & R. Fernandes  
*Chitambu* (Dur)

No use was identified for this species.

***Memecylon fragrans*** A. & R. Fernandes  
*Chaloe* (Dur)

The Duruma use the stem for building poles.

## MORACEAE

***Ficus bussei*** Mildbr. & Burret  
*Mugandi* (Dur); *Mgandi* (Dig)

The leaves are used as sandpaper.

***Ficus stuhlmannii*** Warb.  
*Chigandi-ulimbo* (Dur); *Uzi-kaha* (Dig)

The species is used as a source of fire sticks. The inner bark is used as a tying material and for making ropes.

***Ficus sycomorus*** L.  
*Muriro/Mudigizo* (Dur); *Muriro/Mugandi* (Dig).

The Duruma and Digo use the inner bark for making ropes and for basketry.

***Ficus tremula*** Warb.  
*Mtanga-muho* (Dur)

To the Duruma it is taboo to use the species for firewood.

***Milicia excelsa*** (Welw.) C.C. Berg  
*Muvure* (Dur); *Mwamba* (Gir); *Mvure* (Dig)

The stem is popular for making mortars, traditional plates and three-legged stools. The timber is of very good quality. The phenological changes of the species are used as meteorological signals to explain seasonal changes; when the species loses its

leaves, it is land preparation time; and when the species flowers, it is time to sow the seeds.

#### OCHNACEAE

##### *Ochna mossambicensis* Klotzsch

*Mucherere* (Gir); *Mtsometsome* (Dig)

The fruits are edible.

##### *Ochna thomasiana* Engl. & Gilg

*Mwarika/Charika* (Dur); *Mukwalino/Mudhababu* (Gir); *Mtsongamahana* (Dig)

The Duruma and Giriama use the stem for building poles. The Digo use the sticks to make fish-traps.

#### OLACACEAE

##### *Ximenia americana* L.

*Mutundukula* (Dur/Gir); *Mdhoto* (Gir); *Mtundukula* (Dig)

The fruits are edible.

#### PASSIFLORACEAE

##### *Schlechterina mitostemmatoides* Harms

*Mufunga-nyama* (Dur); *Mwanangira* (Gir)

The stem is used as a tying material.

#### POACEAE

##### *Cenchrus ciliaris* L.

*Nyasi* (Gir)

No use was identified for this species.

##### *Dactyloctenium geminatum* Hack.

*Nyasi* (Gir)

No use was identified for this species.

##### *Enteropogon sechellensis* (Baker) Th. Dur. & Schinz.

*Nyasi* (Gir)

No use was identified for this species.

##### *Heteropogon contortus* (L.) Roem. & Schult.

*Katsuchi* (Dur); *Todza/Nguji* (Dig)

The species is used for thatching traditional grass houses.

##### *Hyperthelia dissoluta* (Steud.) W.D. Clayton

*Mutsuchi* (Dur)

The species is used for thatching traditional grass houses.

##### *Megastachya aucronata* (Poir.) P. Beauv.

*Nyasi* (Dur)

No use was identified for this species.

##### *Panicum maximum* Jacq.

*Bondo* (Dur); *Mondo* (Gir); *M'bondo* (Dig)

The Duruma and Giriama use this species for thatching traditional grass houses and for making brooms.

##### *Panicum* sp.

*Kamondo-katite* (Gir)

The species is used as *Panicum maximum* above.

##### *Setaria* sp.

*Mujowe* (Dur)

No use was identified for this species.

##### *Sporobolus fimbriatus* (Trin.) Nees.

*Nyasi* (Gir)

No use was identified for this species.

#### POLYGONACEAE

##### *Oxygonum* sp.

*Chindiri* (Dur); *Kimbiri* (Gir)

This species is used as a vegetable.

#### PORTULACACEAE

##### *Talinum caffrum* (Thunb.) Eckl. & Zeyh.

*Komba* (Dur/Gir)

This species is used as a vegetable.

##### *Talinum portulacifolium* (Forssk.) Aschers. ex Schweinf.

*Komba* (Dur/Gir)

This species is used as a vegetable.

##### *Talinum* sp.

*Mwerere* (Dur)

This species as vegetable.

#### RHAMNACEAE

##### *Ziziphus pubescens* Oliv.

*Mugogodera* (Dur)

The fruits are edible and the stem is used for building.

#### RUBIACEAE

##### *Canthium kilifiensis* Bridson

*Mkoropha/Mtsamula-ndolwa* (Dur)

It is taboo to use this species for firewood and building.

##### *Canthium mombazense* Baill.

*Mkoropha* (Dur)

The Duruma use the stem for building poles.

##### *Gardenia volkensii* K. Schum ssp. *volkensii*

*Muchimwemwe* (Dur); *Chimwemwe* (Gir/Dig)

The pronged twigs are used for making cooking stirring rods.

##### *Heinsia crinita* (Afzel.) G. Tayl. ssp. *parvifolia* (K. Schum & Krause) Verdc.

*Mfyefye* (Dur); *Mulanza* (Gir); *Mfyofyo* (Dig)

The fruits are edible. The stem is used for making arrow shafts.

##### *Hymenodictyon parvifolium* Oliv. ssp. *parvifolium*

*Mulindi* (Dur); *Mukirindi* (Gir)

The Duruma and Giriama use the species for fire sticks, and for making symbolic fires.

##### *Lamprothamnus zanguebaricus* Hiern

*Mutsome* (Dur); *Munyukufu* (Gir); *Mtsome* (Dig)

The fruits are edible. The Duruma and Giriama use the stem for building poles. When the fruits are ripe it is maize harvesting time.

##### *Meyna tetraphylla* (Hiern) Robyns ssp. *commorensis* (Robyns) Verdc.

*Mutsamula-ndolwa* (Dur)

It is taboo to use this species for building and for fuel.

##### *Polyosphaeria parvifolia* Hiern

*Mmangitovu/Mmangomango* (Dur); *Mumangwi* (Gir); *Mtsonganyomba* (Dig)

The fruits are edible and the stem is used for building poles.

##### *Psydrax recurvifolia* (Bullock) Bridson

*Mufidzifidzo* (Dur)

The Duruma use the pronged twigs to make stirring rods for cooking.

##### *Pyrostria bibracteata* (Bak.) Cavaco.

*Mufumula-ndolwa* (Gir)

It is taboo to use this species for firewood.

##### *Pyrostria phyllanthoidea* (Baill.) Bridson

*Mufumula-ndolwa* (Gir)

It is taboo to use this species for firewood.

##### *Vangueria infausta* Burch. ssp. *acuminata* Verdc.

*Muviru* (Dur/Dig)

The fruits are edible. It is taboo to use this species for building and for firewood.

#### RUTACEAE

##### *Zanthoxylum chalybeum* Engl. var. *chalybeum*

*Mudungu* (Dur/Gir); *Mdungu/Mjafari* (Dig)

The leaves are used for making tea.

##### *Zanthoxylum holtzianum* (Engl.) Waterm.

*Mjafari* (Gir)

The Giriama burn the fruits for their fragrance and as air freshener.

**SALVADORACEAE*****Dobera loranthifolia*** (Warb.) Harms

*Mukupha/Muswaki* (Dur); *Mukuha/Muswaki* (Gir); *Mswaki* (Dig).  
The sticks are used as toothbrushes. The Duruma and Giriama use the stem to make domestic tools.

***Salvadora persica*** L. var. ***persica***

*Mrungurungu* (Dur); *Mujungumoto* (Dur/Gir)  
The sticks are used as toothbrushes and the wood is preferred for fuel.

**SAPINDACEAE*****Deinbollia borbonica*** Scheff.

*Mupalamwaka* (Dur); *Mdala-mwaka/Musukari*; *Mwenda-kuzimu* (Gir); *Mpwakapwaka* (Dig)  
The fruits are edible. The phenology of the species (flowering and fruiting) is used as a meteorological signal to explain seasonal changes.

***Haplocoelum foliolosum*** (Hiern) Bullock ssp. ***mombasense*** (Bullock) Verdc.

*Mufungasanzu* (Gir)  
The Giriama use the stem for building and for firewood.

***Haplocoelum inoploeum*** Radlk.

*Mufungatsandzu* (Dur); *Mufungasanzu* (Gir); *Mfunga-sandzu* (Dig)  
The species is commonly used for building.

***Lecaniodiscus fraxinifolius*** Bak.

*Munyanyakanda* (Dur); *Mkwalino/Mbelenga* (Gir); *Mremero* (Dig).  
The fruits are edible and the stem is commonly used for building.

***Pancovia golungensis*** (Hiern) Exell & Mendonca

*Mpalamwaka-wa-msuhuni/Mpalamwaka-msuhu* (Dur)  
The Duruma use the stem for building.

**SAPOTACEAE*****Manilkara mochisia*** (Bak.) Dubard

*Munago* (Dur/Gir); *Mnago* (Dig)  
The fruits are edible and the stem is used for making traditional beehives and domestic tools.

***Manilkara sansibarensis*** (Engl.) Dubard

*Mung'ambo* (Dur); *Mung'ambo-kapehe* (Gir)  
The stem is used for building poles.

***Manilkara sulcata*** (Engl.) Dubard

*Mwarika/Charika* (Dur); *Mutsedzi* (Dur/Gir); *Mbate-tsaka/Mutsami* (Gir); *Mtsedzi* (Dig)  
The fruits are edible and the stem is used for building poles, for making traditional furniture and domestic tools (e.g. cooking sticks).

***Mimusops obtusifolia*** Lam.

*Mugama-muho* (Dur)  
The fruits are edible. The Duruma use the stem to make pestles.

***Mimusops somaliensis*** Chiov.

*Mugama* (Dur); *Mgama* (Dig)  
The fruits are edible. The Duruma use the stem for making pestles and coconut-graters.

***Vitellariopsis kirkii*** (Bak.) Dubard

*Chitengwa* (Dur); *Chilishangwe* (Dur/Dig); *Mkilishangwe* (Dig)  
The Duruma use the stem for building poles and for firewood.

**SELAGINELLACEAE*****Selaginella eublepharis*** A. Br.

*Nyaa* (Dur)  
No use was identified for this species.

**SOLANACEAE*****Solanum nigrum*** L. s.l.

*Munavu* (Dur/ Dig)  
This species is a popular vegetable.

**STERCULIACEAE*****Cola minor*** Brenan

*Muhosa-kitsoka* (Gir); *Chitsapu* (Dig)  
The stem is used for building poles, for making pestles and for fuel.

***Dombeya taylori*** Bak. f.

*Mugwale/ Muchira-ng'ombe* (Gir)  
The stem is used for building poles.

***Sterculia appendiculata*** K. Schum.

*Mufune* (Dur/Gir); *Mfune* (Dig)  
The stem is source of sawn timber planks.

***Sterculia rynchocarpa*** K. Schum.

*Mugoza* (Dur); *Muoria* (Gir); *Mgoza* (Dig)  
The inner bark is a popular tying material.

**URTICACEAE*****Laportea lanceolata*** (Engl.) Chew

*Lwavi-lubomu* (Gir)  
No use was identified for this species.

**VERBENACEAE*****Avicennia marina*** (Forssk.) Vierh.

*Mutsu/Mkoko* (Dur)  
This species is used for building poles and for fuel wood.

***Clerodendrum incisum*** Klotzsch

*Mukamasi* (Dur); *Chinuka/Mtsasa* (Dig)  
The Digo use the stem to make arrow shafts.

***Clerodendrum sansibarensis*** Gürke ssp. ***sansibarensis***

*Mukulasiku* (Gir)  
No use was identified for this species.

***Lantana camara*** L.

*Mushomoro* (Dur/Gir); *Mshomoro/Mjasasa* (Dig)  
The fruits are edible. The sticks are woven into bird traps.

***Vitex mombassae*** Vatke

*Mufudu-madzi* (Dur/Gir); *Mfudu-madzi* (Dig)  
The fruits are edible. The Duruma and Giriama use the stem for building poles.

***Vitex payos*** (Lour.) Merr. var. ***payos***.

*Mufudu* (Dur); *Mufudu-unga* (Dur/Gir); *Mfudu/Mfudu-unga* (Dig)  
The fruits are edible.

**VITACEAE*****Cissus phymatocarpa*** Masinde & L.E. Newton

*Mudokadoka* (Dur); *Mtsuma-pengo/Mtsuma-pengo-utite* (Gir)  
The stem is used as a tying material.

***Cissus quinquangularis*** Chiov.

*Mudokadoka* (Dur); *Mtsuma-pengo* (Gir); *Dokadoka/Mbugubugu* (Dig)  
The stem is used as a tying material.

***Cissus rotundifolia*** (Forssk.) Vahl var. ***rotundifolia***

*Bugubugu* (Dur); *Ribugu/Mtsuma-pengo ubomu* (Gir); *Dokadoka/Mbugubugu* (Dig)  
The stem is used as a tying material.

***Cissus sylvicola*** Masinde & L.E. Newton

*Bugubugu* (Dur); *Mtsuma-pengo* (Gir); *Dokadoka* (Dig)  
The stem is used as a tying material.

**ZAMIACEAE*****Encephalartos hildebrandtii*** A. Br. & Bouche var. ***hildebrandtii***

*Chitsapu/Mudazi-weru/Mtikiti* (Dur); *Kitsapu/Kirori* (Gir)  
The Duruma and Giriama use the leaf rachis for basketry.