International Journal of Advanced Research in Biological Sciences

ISSN: 2348-8069 www.ijarbs.com

DOI: 10.22192/ijarbs Coden: IJARQG(USA) Volume 6, Issue 3 - 2019

Research Article



DOI: http://dx.doi.org/10.22192/ijarbs.2019.06.03.006

Annonated checklist of plant species of Loita Forest (Entim e Naimina Enkiyio Forest or the forest of the lost child), Narok County, Kenya

Musingo Tito E. Mbuvi^{1*}, James B. Kungu², Francis N. Gachathi³, Chemuku Wekesa¹ Nereoh Leley ⁴ and Joseph M. Muthini¹

¹Kenya Forestry Research Institute, Coast Eco- Region Research Programme Gede, P. O Box 1078 - 80200. Malindi, Kenya

²Kenyatta University, Department of Environmental Sciences, School of Environmental Sciences, Nairobi, Kenya

³Kenya Forestry Research Institute, Central Highland Eco- Region Research Programme Muguga, P O Box 20412 - 00200. Nairobi Kenya

⁴Kenya Forestry Research Institute, Rift Valley Eco- Region Research Programme Londiani, P. O Box 382 - 20203. Londiani, Kenya

*Corresponding author E-mail: mtembuvi@gmail.com; mtembuvi@hotmail.com

Abstract

An ethnobotanical survey was undertaken in Loita forest from 2012 to 2015 to document species richness and compile the first comphrensive plant species checklist of Loita forest. The forest is located in Narok County, Loita Sub County, an area occupied by the Loita Maasai community. Purposive sampling using established plots and transects walks was carried out for complete documentation of all plant species existing in the forest. Focused group discussions and key informant interviews were undertaken to confirm the local names of the species. The plants were identified and confirmed at the East Africa Herbarium; National Museusm of Kenya. The checklist outlines the plant species in botanical and Maasai names and their corresponding families. The plant species have been arranged alphabetically using their scientific names. The checklist developed shall be crucial for future ecological studies and management of Loita forest. The checklist can be updated through future botanical surveys.

Keywords: Plant checklist; ethnobotanical survey; species richness and conservation

Introduction

Good understaning of floristic composition and structure is a foundation for a well conserved forest. While foresters need to know a narrow range of plants, communities have considerable knowledge on identification, growth habits, use and value of plants (Gachathi et al 1994). These sets of knowledge need to be fused so as to assist create awareness on forest value with a view to trigger interest to conserve and protect the forests. Loita Community Forest (LCF) lacks information on species richness. Documentation of the species richness and compilation of a checklist provides key source of information on the plant species composition in the forest.

Given that the forest has been least studied, the development of a plant checklist was important because the forest is very isolated, linked by very poor road network and is under exclusive community management with community living inside the forest and with no defined boundary. The forest is facing emerging social and ecological changes including: increased encroachment and settlement in the forest; permanent livestock herding in the forest supported by construction of water pans and permanent settlement; expanding crop farming area in the forest; fencing individual enclosures a deviation from communal use and increased trade in timber through use of power saws. The area has been declared an adjudication area, posing the greatest threat to the forest. The challenges are increasingly contributing to deforestation and degradation.

The plant checklist provides a baseline that is crucial reference material for future ecological studies and a guide to rehabilitation of degradaded sites within the forest. It will arouse interest to managers, researchers and partners of the need to conserve the forest. Further, the species checklist will enhance management and conservation of the forest especially for the threatened plants species of socio-economic and ecological importance.

Location and governance of study site

Loita forest also known Naimina Enkiyio Forest (meaning "the forest of the lost child") is located in Narok County, Loita Sub County. The geographical position of Loita is within 01°3000 S, along the Kenyan Tanzanian Border and 035°30 00 E - 36° East (Figure 1). The elevation of the forest ranges between 2,000 – 2,600 m above sea level. The highland side receives higher rainfall amounts with a mean annual rainfall of 1,200 mm with the lowland side getting 600 mm (Obare 2003) with peaks in the months of April and December. The mean annual temperature of the area is 17°C; temperatures are lowest in June to August and highest in February, March and September. The forest forest lies between the Nguruman-Magadi escarpment and the Maasai Mara National Game Reserve estimated to cover an area of 33,000 ha (Zaal & Siloma, 2006; Karanja, Tessema, & Barrow, 2002; Musyoka, 1999) and is among the few un-gazetted Community (Trust land) indigenous forests in Kenya managed expected to be managed by the local people.

The adjacent community to the forest is the Loita Maasai (Loitans) who are mainly pastoralists but are fast changing to sedentary lifestyle and taking up crop farming targeting maize and beans (Mbuvi et al. 2015). In 1999, human impacts were limited in Loita forest and confined to settled zones (Kiyiapi 1999), but by 2016, the entire forest showed signs of degradation through athropogenic activities (Mbuvi et al. 2013; Garcia 2015; Mbuvi et al. 2015). Forest encroachment, tourist camp sites, extensive tree harvesting for timber, continous grazing and motorable roads crisscrossing in the forest exercebates degradation (Mbuvi et al. 2013, 2015).

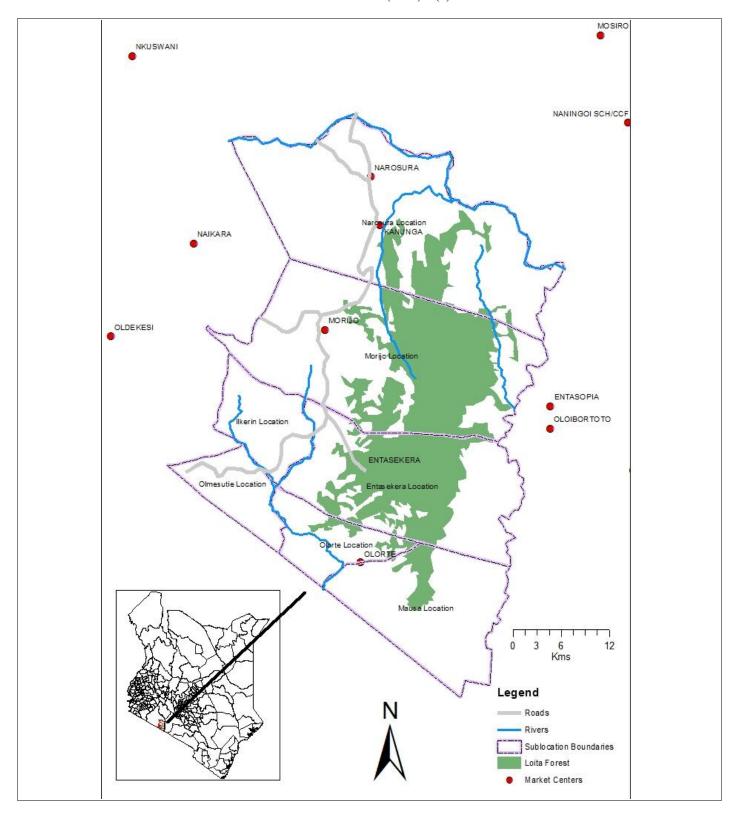


Figure 1: A map showing the location of Loita Forest in Kenya, the study site

The Loita Maasai have communally used the Naimina Enkiyio forest since time immemorial for grazing, firewood, building poles and water, medicinal plants and ceremonial sites (Maundu et al. 2001 quoted in Obare 2003). Loita community forest was under community "ownership" and the government through Kenya Forest Service (KFS) has no role whatsoever as the community exercises the full expanded bundle of rights (RRI 2012). Under the IUCN category of protected area, LCF would be a protected area category VI as it was a protected area with sustainable use of natural resources (Borrini-Feyerabend 2013). The forest was managed under governance type D where the management authority and responsibility rest with indigenous peoples and or local community through various forms of customary or legal, formal or informal, institutions and rules (Borrini-Feyerabend 2013). The forest management was by the Oloibon institution (council of elders), being a representative of a whole population ostensibly makes decision (community judiciary) creating a process more likely to achieve equitable and effective implementation (Riamit 2010). The system provides for broad-based citizen inclusion in decision making which increases efficiency and equity as well as natural resource management outcome as opined by Ribot (2010 quoted in German et al. eds. 2010).

Cultural and spiritual value of Loita forest

Loita Naimina Enkiyio Forest has great cultural and spiritual value to the Loita Maasai and has been associated with various traditional ceremonies and sacrifices. The Loita Maasai are cattle owners and much of their culture is cattle inspired. The natural vegetation is therefore important as the foundation of their natural resource endowment. The Loita Naimina Enkiyio forest has a long history of use by the Maasai community who see it as alive and responsive in many ways to their physical, spiritual and cultural needs. Sacred trees and plants required by the Maasai during performance of their spiritual ceremonies are found in the forest and include: Olea europaea ssp. cuspidata, used in all ceremonies as it is believed to bring good luck, Ficus thonningii and Ficus cordata, Olea capensis ssp. hochstetteri and Cordia monoica. The shrub, Lantana trifolia is used in many rituals involving livestock. The Maasai have designated at the centre of the forest a place of worship enclosed with seven trees, a sacred place where offerings are made to Enkai, the Maasai God.

Floral composition of Loita forest

The forest can be floristically classified as "dry upland forest" of the Juniperus-Nuxia-Podocarpus type (Beentje 1990). The dominant tree species include: Juniperus procera, Nuxia congesta, Podocarpus falcatus, Podocarpus latifolius, Olea europaea ssp. cuspidata, **Apodytes** dimidiata, Cassipourea malosana, Acokanthera schimperi, Ekebergia capensis, Olinia rochetiana, Pistacia aethiopica, Schrebera alata, Vepris nobilis, Vepris simplicifolia, Croton megalocarpus and Calodendrum capense. Common shrubs include: Clausena anisata, Rhus natalensis, Myrsine africana, Psydrax schimperiana, Rhamnus prinoides, Zanthoxylum usambarense, Scutia myrtina and Maytenus heterophylla. Within the extensive thick forest, are bushes, glades and wetland areas, and at higher elevation are clumps of bamboo (Yushania alpina) (Loita Forest Integrated Conservation and Management Project 1999; Maundu et al 2001).

Plant checklist play a very important role in biodiversity conservation, resource management and research as they provide: a common platform, facilitating dissemination and exchange of information about trees and the environment; allows all interested groups to refer to the same plant by the same name in all places minimizing confusion and misinterpretation; facilitates communication between visitors and the local people on forestry activities and create an avenue for non botanists to scientifically identify local trees. Further, checklist builds the efforts, which the local communities have put in conservation and protection of their forests and preserves traditional indigenous knowledge and wisdom that has been transmitted by word of mouth from generation to generation so that it will continue to be available to future generations.

Materials and Methods

Field data collection was carried out within the Loita *Naimina Enkiyio* forest with selected members of the Loita Maasai community from 2012 to 2015. The forest was stratified into near uniform blocks in a participatory process that involved key informants from the local community and plots measuring 10.0×10.0 m were established systematically after 100 m interval along line transects that followed walking paths within the forest for vegetation assessment. Sub plots measuring 3.0×3.0 m and 1.0×1.0 m were nested inside the large plots of 10.0×10.0 m for

assessing saplings and seedlings respectively. In each plot and subplot all woody trees, shrubs, creepers and lianas were identified by species name in local language by the local guides with vast knowledge on plants of the forest. This was followed by identification of the species by the plant taxonomists from the Kenya Forestry Research Institute (KEFRI) who provided the botanical names. To confirm the species names, herbarium specimens were collected and taken to the Herbarium of the National Museums of Kenya, East African Herbarium, by direct comparison with preserved specimens and with the help of Flora of Tropical East Africa; Polhill et al eds. (several dates); Agnew and Agnew 1994, Beentje

1994. Specimens were also kept at KEFRI herbarium. Focus group discussions were also held to support information gathered during key informant interview to confirm the local names for the diverse plant species.

Results

A total of 277 plant species were identified in both botanical names and Maasai local names. The identified species belonged to 203 genera representing 76 families. The species are annoted below alphabetically and summarized in Table 1.

Table1: Plant species of Loita forest with local (Loita-Maasai) and botanical names listed alphabetically

Maasai Name	Botanical Name	Family Name
-	Gerbera viridifolia	Compositae
-	Helichrysum odoratissimum	Compositae
-	Rhynchosia hirta	Papilionaceae
-	Thunbergia alata	Acanthaceae
-	Trifolium usambarense	Papilionaceae
Eikom	Desmodium repandum	Papilionaceae
Eimiyim	Oncocalyx fischeri	Loranthaceae
Eiyimiyim	Indigofera arrecta	Papilionaceae
Ekopirnyiny	Clutia abyssinia	Euphorbiaceae
Elaroba	Echinocloa sp	Gramineae
Elemuran	Ocimum kilimandscharicum	Labiatae
Eluai	Acacia drepanolobium	Mimosaceae
Emasiligi	Cotyledon barbeyi	Crassulaceae
Emasiligi	Crassula alsinoides	Crassulaceae
Emasiligi	Kalanchoe densifllora	Crassulaceae
Emasiligi	Kalanchoe glaucescens	Crassulaceae
Emasiligi	Notonia abyssinica	Compositae
Emasiligi	Notonia petraea	Compositae
Ematasia	Clausena anisata	Rutaceae
Emperre-epapa	Asparagus africanus	Asparagaceae
Enchani embaye	Erythrococca bongensis	Euphorbiaceae
Enchani-embae	Allophylus rubifolius	Sapindaceae
Enchani-enkashe	Turraea abyssinica	Meliaceae
Endalati ekutuk	Ehretia cymosa	Boraginaceae
Endaletoi	Viscum tuberculatum	Viscaceae
Engoloshoo	Satureia biflora	Labiatae
Enkaikuinyoi	Eriosema shirense	Papilionaceae
Enkaimalasiai	Hyposix angustifolia	Hypoxidaceae
Enkaiserariai	Momordica foetida	Cucurbitaceae
Enkaiserariai	Momordica trifoliolata	Cucurbitaceae
Enkaisujoi	Rumex usambarensis	Polygonaceae
Enkaiteteyiai	Commelina africana	Commelinaceae
Enkaiteteyiai	Commelina benghalensis	Commelinaceae
Enkamoloki	Maerua triphylla	Capparaceae

Enkarani	Hibiscus fuscus	Malvaceae
Enkarashi	Calodendrum capense	Rutaceae
Enkayakuji	Lantana rhodesiensis	Verbenaceae
Enkayakuji-ekoko	Pollichia campestris	Caryophyllaceae
Enkinya-sirkon	Cadaba farinosa	Capparaceae
Enkodo kiok	Maytenus senegalensis	Celastraceae
Enkoiyapasei	Aspilia mossambicensis	Compositae
Enkoiyiapasei	Melanthera scandens	Compositae
Enkonini-enkop	Sida rhombifolia	Malvaceae
Enkoriampiti	Dregea abyssinica	Aselepiadaceae
Enkoriampiti	Dregea schimperi	Aselepiadaceae
Enkoroi	Indigofera swaziensis	Papilionaceae
Enkoroi enkop	Indigofera volkensii	Papilionaceae
Enkunyita	Blepharis stuhlmannii	Acanthaceae
Entamejoi	Tragia brevipes	Euphorbiaceae
Entamejoi	Urtica massaica	Urticaceae
Entaretoi	Englerina woodfordioides	Loranthaceae
Entaretoi	Tridactyle bicaudata	Orchidaceae
Entasim-ekule	Secamone punctulata	Ascepiadaceae
Entemelua	Solanum incanum	Solanaceae
Enterepenyi	Cyathula polcephala	Amaranthaceae
Enterepenyi	Pupalia lappacea	Amaranthaceae
Entiakuleti	Gomphocarpus integer	Asclepiadaceae
Entiakuleti, Olekulele	Gomphocarpus stenophyllus	Asclepiadaceae
Entiakuleti-orok	Gomphocarpus physocarpus	Asclepiadaceae
Entiangaras	Casaeria battiscombei	Flacourtiaceae
Entiangingish	Landolphia buchananii	Apocynaceae
Entirkata	Dichrostachys cinerea	Mimosaceae
Entoish	Bidens biternata	Compositae
Entoish	Bidens pilosa	Compositae
Entulelei	Solanum incanum	Solanaceae
Entulelei entim	Solanum indicum	Solanaceae
Erisa	Landolphia buchananii	Apocynaceae
Erisa	Loeseneriella africana	Celastraceae
Erisa	Uvaria scheffleri	Annonaceae
Eseketeti	Myrsine africana	Myrsinaceae
Eseki	Cordia monoica	Boraginaceae
Eseki, Oseki	Cordia monoica	Boraginaceae
Esiteti	Grewia bicolor	Tiliaceae
Esonkoyo	Justicia striata	Acanthaceae
Esupukiai-oibor	Pavonia patens	Malvaceae
Esupukioi-narok	Hibiscus calyphyllus	Malvaceae
Inkuyek	Amaranthus hybridus	Amaranthaceae
Lekiku-uni	Berberis holstii	Berberidaceae
Lekiku-uni	Oncoba routledgei	Flacourtiaceae
Lekiku-uni	Scolopia zeyheri	Flacourtiaceae
Naingong'u-ndeyo	Hirpicium diffusum	Compositae
Naingongu ndeyo	Gutenbergia cordifolia	Compositae
Nareruk	Selaginella abyssinica	Fern
Nkaisuisho	Centella asiatica	Umbelliferae
Nokoreti	Obetia radula	Urticaceae

Int. J. Adv. Res. Biol. Sci. (2019). 6(3): 54-110

Obibi naibor	Leucas martinicensis	Labiatae
Olabaai	Psiadia punctulata	Compositae
Olaimurunyai	Maytenus heterophylla	Celastraceae
Olairagai	Syzygium cordatum	Myrtaceae
Olairagai	Syzygium guineense	Myrtaceae
Olairamirami	Senecio hadiensis	Compositae
Olairamirami-pus	Solanecio angulatus	Compositae
Olairangai	Sapium ellipticum	Euphorbiaceae
Olaisikirai	Heliotropium longiflorum	Boraginaceae
Olaiturdiai	Capparis fascicularis	Capparaceae
Olaiturdiai	Capparis tomentosa	Capparaceae
Olamai	Ximenia americana	Olacaceae
Olampirion	Lannea schweinfurthii	Anacardiaceae
Olamuriaki	Carissa spinarum	Apocynaceae
Olarashi	Calodendrum capense	Rutaceae
Olarioi Olaturdiai	Cassipourea malosana Phytologogy de desgradas	Rhizophoraceae
	Phytolacca dodecandra	Phytolaccaceae
Olawo	Dombeya kirkii	Sterculiaceae
Olayakuji	Rubus apetalus	Rosaceae
Olbanki	Tagetes minuta	Compositae
Olbibi	Leonotis nepetifolia	Labiatae
Olbibi	Leucas grandis	Labiatae
Olbukoi	Malva verticillata	Malvaceae
Olchaki	Vigna membranacea	Papilionaceae
Olchartuyian orok	Diospyros abyssinica ssp. abyssinica	Ebenaceae
Olchoki	Euphorbia bussei var. kibwezensis	Euphorbiaceae
Oldupai	Sansevieria suffruticosa	Dracaenaceae
Oldurdien	Drypetes gerrardii	Euphorbiaceae
Oledat	Trimeria grandifolia	Flacourtiaceae
Olekidongo	Achyranthes aspera	Amaranthaceae
Olekiushin	Pseudognaphalium luteo-album	Compositae
Oleleshwa	Tarchonanthus camphoratus	Compositae
Olemenenga	Cynoglossum coeruleum	Boraginaceae
Olemudongo	Rauvolfia caffra	Apocynaceae
Olemuran	Ocimum gratissimum	Labiatae
Olenkuyaini	Heteromorpha trifoliata	Umbelliferae
Olenyawaitie	Craterostigma pumilum	Scrophulariaceae
Oleparmunyo	Toddalia asiatica	Rutaceae
Olerai oibor	Acacia seyal var. seyal	Mimosaceae
Olerai oibor	Acacia xanthophloea	Mimosaceae
Olerai orok	Acacia kirkii ssp. kirkii	Mimosaceae
Olesayiet	Withania somnifera	Solanaceae
Olesupeni	Helinus mystacinus	Rhamnaceae
Oleturot	Conyza newii	Compositae
Oleturot	Polygonum salicifolium	Polygonaceae
Oleturot	Sphaeranthus confertifolius	Compositae
Oleturot	Sphaeranthus suaveolens	Compositae
Olgilai	Vepris nobilis	Rutaceae
Olgilai	Vepris simplicifolia	Rutaceae
Olgirgirri orok	Acacia brevispica ssp. brevispica	Mimosaceae
Olgumi	Vangueria apiculata	Rubiaceae

Int. J. Adv. Res. Biol. Sci. (2019). 6(3): 54-110

Olgumi	Vangueria volkensii	Rubiaceae
Oliala	Schrebera alata	Oleaceae
Oljarbolani	Acacia hockii	Mimosaceae
Olkerosha	Maytenus undata	Celastraceae
Olkilenyai	Rhoicissus tridentata	Vitaceae
Olkiloilo	Indigofera spinosa	Papilionaceae
Olkiloriti	Acacia nilotica	Mimosaceae
Olkinewa	Caesalpinia decapetala	Caesalpiniaceae
Olkinyei	Euclea divinorum	Ebenaceae
•	Olinia rochetiana	Oliniaceae
Olkirenyi Olkojuk		
Olkokola	Cordia africana Rhamnus staddo	Boraginaceae Rhamnaceae
Olkonyil	Rhamnus prinoides	Rhamnaceae
Olkorbobit	Synadenium grantii	Euphorbiaceae
Olkujuk	Prunus africana	Rosaceae
Olmagutian	Pennisetum catabasis	Gramineae
Olmagwai	Sclerocarya birrea	Anacardiaceae
Olmakirikiriani	Lantana trifolia	Verbenaceae
Olmakutukut	Clerodendrum myricoides	Verbenaceae
Olmaroroi	Combretum molle	Combretaceae
Olmasei	Psydrax schimpriana ssp. schimperiana	Rubiaceae
Olmasei	Tarenna graveolens	Rubiaceae
Olmasitet	Albizia gummifera	Mimosaceae
Olmatasia	Clausena anisata	Rutaceae
Olmeigaro-keon	Phragmanthera usuiensis	Loranthaceae
Olmeigaro-keon	Plicosepalus curviflorus	Loranthaceae
Olmeigaro-keon	Viscum tuberculatum	Viscaceae
Olmisigiyioi	Rhus natalensis	Anacardiaceae
Olmisigiyioi	Rhus quartiniana	Anacardiaceae
Olmokorionko	Ekebergia capensis	Meliaceae
Olmomoi	Solanum nigrum	Solanaceae
Olmorijoi	Acokanthera oppositifolia	Apocynaceae
Olmorijoi	Acokanthera schimperi	Apocynaceae
Olmorogi	Dovyalis abyssinica	Flacourtiaceae
Olmorogi	Dovyalis macrocalyx	Flacourtiaceae
Olmoso	Albizia gummifera	Mimosaceae
Olmotoo	Dombeya rotundifolia	Sterculiaceae
Olmungushi	Rhus vulgaris	Anacardiaceae
Olmusaakua	Vernonia auriculifera	Compositae
Olmusaakua	Vernonia lasiopus	Compositae
Olmusakwa etim	Solanecio mannii	Compositae
Olnaasi	Physalis peruviana	Solanaceae
Olnakulankulei	Caesalpinia volkensii	Caesalpiniaceae
Olng'aboli	Ficus sycomorus	Moraceae
Olngeriantus	Galium simense	Rubiaceae
Olngeriantus	Plumbago zeylanica	Plumbaginaceae
Olngeriantus-loonchashuri	Rubia cordifolia	Rubiaceae
	· ·	Mimosaceae
Olnyolugwai	Acacia gerrardii Grewia similis	Tiliaceae
Olohavia tiang'ata		
Olobayie-tiang'ata	Bersama abyssinica ssp. abyssinica	Melianthaceae
Olobobo	Sporobolus sp.	Gramineae

Int. J. Adv. Res. Biol. Sci. (2019). 6(3): 54-110

Olodonganayioi	Mystroxylon aethiopicum	Celastraceae
Oloeniyeni	Jasminum floribundum	Oleaceae
Ologumati	Microglossa pyrifolia	Compositae
Ologumati	Vernonia brachycalyx	Compositae
Oloilei	Euphorbia gossypina	Euphorbiaceae
Oloilei-oibor	Sarcostemma viminale	Ascepiadaceae
Oloilupai	Commiphora habessinica	Burseraceae
Oloipiru salan	Piliostigma thonningii	Caesalpiniaceae
Oloireroi	Boscia angustifolia	Caesarpiniaceae
Oloirien	Olea europaea ssp. cuspidata	Oleaceae
Oloisuki	Zanthoxylum usambarense	Rutaceae
Oloitodor-aik	Fuerstia africana	Labiatae
Oloiurrur	Cussonia holstii var.holstii	Araliaceae
Oloiurrur	Cussonia spicata Sesbania sesban	Araliaceae
Oloiyankalani		Papilionaceae
Oloiyapiapi	Croton macrostachyus	Euphorbiaceae
Olokildia	Tinnea aethiopica	Labiatae
Olokirisiai	Gnidia subcordata	Thymeleaceae
Olokoromua	Tetradenia riparia	Labiatae
Ololiondoi	Olea capensis ssp. hochstetteri	Oleaceae
Olomei	Asparagus falcatus	Asparagaceae
Olomei	Asparagus racemosus	Asparagaceae
Olonini	Sida schimperiana	Malvaceae
Olonini	Sida tenuicarpa	Malvaceae
Oloontualan	Crotalaria agatiflora	Papilionaceae
Oloontualan	Crotalaria axillaris	Papilionaceae
Olopito	Cynanchum altiscandens	Asclepiadaceae
Olopito	Ipomoea wightii	Convolvulaceae
Olopito	Jasminum abyssinicum	Oleaceae
Oloponi	Erythrina abyssinica ssp. abyssinica	Papilionaceae
Olorrondo	Cyphostemma bambuseti	Vitaceae
Olorrondo	Cyphostemma cyphopetalum	Vitaceae
Olorrondo	Cyphostemma serpens	Vitaceae
Olorte	Faurea saligna	Proteaceae
Olosang'atuny	Chaetacme aristata	Ulmaceae
Olosarng'atuny	Pterolobium stellatum	Caesalpiniaceae
Olosesiai	Osyris lanceolata	Santalaceae
Olosida	Barleria micrantha	Acanthaceae
Olosida	Barleria ventricosa	Acanthaceae
Olosida	Hypoestes aristata	Acanthaceae
Olosida	Hypoestes forskahlii	Acanthaceae
Olosida	Justicia nyassana	Acanthaceae
Olosiki	Fagaropisis angolensis	Rutaceae
Olosuashi	Lannea schweinfurthii	Anacardiaceae
Olpalagilagi	Trichocladus ellipticus	Hamamelidaceae
Olpaleki	Ricinus communis	Euphorbiaceae
Olparuai	Encephalartos bubalinus	Zamiaceae
•	•	
Olpiripiri	Podocarpus falcatus	Podocarpaceae
Olpiron	Buddleia polystachya	Loganiaceae
Olpiron	Nuxia congesta	Loganiaceae
Olpopongi	Euphorbia candelabrum	Euphorbiaceae

Int. J. Adv. Res. Biol. Sci. (2019). 6(3): 54-110

Oltakuru-kuriet	Gardenia volkensii ssp. volkensii	Rubiaceae
Oltangururua	Flacourtia indica	Flacourtiaceae
Oltankotua	Pistacia aethiopica	Anacardiaceae
Oltarakuai	Juniperus procera	Cupressaceae
Oltarara	Acacia sieberiana	Mimosaceae
Oltiameleteti	Ipomoea hildebrandtii	Convolvulaceae
Oltiasimbol	Ilex mitis	Aquifoliaceae
Oltiasimpol	Apodytes dimidiata	Icacinaceae
Oltimigomi	Pappea capensis	Sapindaceae
Oltiyani	Yushania alpina	Gramineae
Oltukai	Phoenix reclinata	Palmae
Oltulet	Lagenaria siceraria	Cucurbitaceae
Oltulet-lolowuaru	Peponium vogelii	Cucurbitaceae
Oltulet-loosirkon	Cucumis aculeatus	Cucurbitaceae
Oluai	Acacia drepanolobium	Mimosaceae
Orchartuyian	Ochna holstii	Ochnaceae
Orchartuyian	Ochna ovata	Ochnaceae
Orchartuyian orok	Ochna insculpta	Ochnaceae
Oreteti	Ficus thonningii	Moraceae
Orgimasarge	Jasminum schimperi	Oleaceae
Orgumi	Rytigynia uhligii	Rubiaceae
Ormoliloi	Canthium lactescens	Rubiaceae
Ormusaduku	Podocarpus latifolius	Podocarpaceae
Orngalayioi	Cucumis ficifolius	Cucurbitaceae
Orpandi	Lannea schweinfurthii	Anacardiaceae
Osanankururi	Scutia myrtina	Rhamnaceae
Oseki	Cordia monoica	Boraginaceae
Osenetoi	Senna didymobotrya	Caesalpiniaceae
Osentu	Tarchonanthus camphoratus	Compositae
Osiaitiado	Acalypha fruticosa	Euphorbiaceae
Osikawoi	Solanum aculeastrum	Solanaceae
Osilalei	Commiphora africana	Burseraceae
Osinantei	Periploca linearifolia	Asclepiadaceae
Osinoni	Lippia javanica	Verbenaceae
Ositeti-lorkeju	Celtis africana	Ulmaceae
Osoket	Elaeodendron buchananii	Celastraceae
Osokonoi	Warburgia ugandensis	Canellaceae
Osuguroi	Aloe lateritia	Aloaceae
Osuguroi	Aloe secundiflora	Aloaceae
Osuguroi lombokishi	Aloe kedongensis	Aloaceae
Osuguroi lombokishi	Aloe volkensii	Aloaceae
Osukunua	Ficus cordata	Moraceae
Osukunua	Ficus cordata ssp. salicifolia	Moraceae
Osupukiai oibor	Abutilon longicuspe	Malvaceae
Osupukiai oibor	Abutilon mauritianum	Malvaceae
Osupukiai-orok	Dombeya burgessiae	Sterculiaceae
Osupukiai-orok	Pavonia urens	Malvaceae

The species profile

Abutilon longicuspe A. Rich.

Malvaceae

Osupukiai oibor

Shrub up to 4 m high with densely hairy stems and rounded soft leaves. Flowers bluish with dark centre. Inforest edges and riverine. Used for bark fibre.

Abutilon mauritianum (Jacq.) Medic.

Malvaceae

Osupukiai oibor

Shrub with almost circular leaves, deeply notched at base and long spreading hairs especiallyon the flower stalks. Flowers are yellow. A common shrub along the forest edges. It is used for bark fiber. The very soft leaves are valued as tissue paper.

Acacia brevispica Harms ssp. brevispica Mimosaceae

Orgirgirri orok

Thorny scrambling shrub or small tree. Stems with scattered hooked prickles. Leaves twice-divided into tiny leaflets. Flowers are cream-white, in roundheads. Pods are thin, usually straight, purple-brown, dotted with reddish glands, to 15 cm long (Figure 2). Common alongforest edges, openings and other disturbed areas. The pods are important fodder particularly for goats.



Figure 2: Acacia brevispica Harms ssp. brevispica

Acacia drepanolobium Sjostedt

Mimosaceae

Oluai (mature), Eluai (young)

Thorny shrub or small tree to 6 m tall, thorns forming black galls. In open wooded grassland. Used as medicine, fodder and firewood.

Acacia gerrardii Benth.

Mimosaceae

Olngonguenyi

Thorn tree about 10 m high with blackish bark andirregular crown. In wooded grassland, usually in areas of seasonal flooding and also riparian. Used for fodder, firewood and building.

Acacia hockii De Wild.

Mimosaceae

Oljarbolani

Shrub or small tree with yellowish peeling bark. Spines in pairs, straight. Flowers in heads, yellow. Pods curved, reddish. The innerbark is chewedto quench thirst.

Acacia kirkii Oliv. ssp. kirkii

Mimosaceae

Olerai orok

Thorn tree to 10 m high with ascending branches, orange yellow peeling bark and flat crown. Pods constricted between the seed. Inriverine and wooded

grasslands of seasonal flooding. Used for medicine, firewood and goat fodder.

Acacia nilotica (L.) Del.

Mimosaceae

Olkiloriti

Small thorn tree generally about 5 m high with rough black bark and umbrella shaped crown at maturity. Thorns are in pairs, whitish, often pointing downwards. Flowers are bright yellow, in round heads. The pods are straight or slightly curved, constricted between the seeds, to 12 cm long (Figure 3).A very common tree in wooded grasslands. It is a popular medicine, firewood, fodder and fencing material.



Figure 3: Acacia nilotica (L.) Del.

Acacia seval Del. var. seval

Mimosaceae

Olerai oibor

Thorn tree about 10 m high with yellow or orange red bark and open flat-topped crown at maturity. Flowers bright yellow. Pods curved. In bushed grasslands and seasonally flooded areas with black cotton soil. Used for medicine, fodder, firewood and fencing.

Acacia sieberiana DC.

Mimosaceae

Oltarara

Thorn tree about 12 m tall with rough bark and flattopped crown. Flowers in heads, yellow or cream. In bushed grasslands. Used to prepare medicine, fencing and firewood.

Acacia xanthophloea Benth.

Mimosaceae

Olerai oibor

Tall thorn tree about 20 m high with flat crown and smooth and powdery yellow-green bark. The thorns are white and in pairs. Flowers are in heads, whitish or pinkish. The pods are yellowish-brown, flat and slightly constricted between seeds, breaking into segments. A common along river valleys and in places with high ground water. Used for medicine, fodder and firewood.

Acalypha fruticosa Forssk.

Euphorbiaceae

Osiaitiado

Shrub about 2 m high with yellow resinous glands under the leaves. Leaves ovate, grey green below. Flowers in spikes, clustered along hanging spikes. In forest edges, riverine vegetation and bushland. Goat fodder.

Achyranthes aspera L.

Amaranthaceae

Olekidongo

Weak shrub with reddish flowers on a long inflorescence with spiny sepals. In forest edges and disturbed areas. Fodder for livestock, Medicine.

Acokanthera oppositifolia (Lam.) Codd

Apocynaceae

Olmorijoi

A much branched shrub or small tree to 4 m tall with purplish branchlets. All parts with white latex. Leaves hard, shiny with sharp tip. Flowers pink. Fruit oval, reddish to purple when ripe. Poisonous. In forest, mostly riverine. Wood for spear shafts.

Acokanthera schimperi (A.DC.) Schweinf.

Apocynaceae

Olmorijoi

A much branched shrub or small tree to 7 m tall. All parts with white latex. Leaves leathery, shiny with sharp tip. Flowers pink-white. Fruit oval, reddish to purple when ripe. In forest, mostly riverine. Wood for

spear shafts. Poisonous, arrow poison. Ripe fruits edible. Nectar from this tree makes honey bitter and not sticky.

Albizia gummifera (J.F. Gmel.) C.A. Sm.

Mimosaceae

Olmoso, Olmasitet

Large deciduous tree to about 18 m high with a flattopped spreading crown. Leaves compound (bipinnate) with numerous leaflets. Flowers whitishpink. Pods in clusters, flat and with raised edges. Riverine forest. Used to makestools. Bees make nests in old hollow trunks. Goat fodder.

Allophylus rubifolius (A. Rich.) Engl.

Sapindaceae

Enchani-embae

Shrub or small tree about 4 m tall, sometimes a climber. Leaves toothed along margin. In forest edges and bushland. The stems are used to make arrow shafts (embae).

Aloe lateritia Engl.

Aloaceae

Osuguroi

A stemless rosette-forming aloe with succulent whitespotted and streaked shiny leaves toothed along the margin (Figure 4).Flowers orange, appearing in terminal heads.It is common in rocky grassland and on sites with shallow soils. The flowers attract sunbirds and bees in search of nectar.



Figure 4: Aloe lateritia Engl.

Int. J. Adv. Res. Biol. Sci. (2019). 6(3): 54-110

Aloe kedongensis Reynolds

Aloaceae

Osuguroi lombokishi

An aloe with noded stemsover 2 m high and toothed succulent leaves. Flowers red. Found on rocky sites in bushland, often forming thickets. Used for medicine. The flowers attract sunbirds and bees in search of nectar.

A stout stemless Aloe with large succulent shiny leaves toothed along the margin (Figure 5). Flowers red, on branched inflorescence, all turned to one side. It is common in wooded grassland on alluvial, shallow sandy soils. The flowers attract sunbirds and bees in search of nectar. The rhizomes are used in preparation of local beer.

Aloe secundiflora Engl.

Aloaceae

Osuguroi



Figure 5: Aloe secundiflora Engl.

Aloe volkensii Engl.

Aloaceae

Osuguroi lombokishi

Tree-like aloe to 6 m tall, branching from the base. Stems with nodes and covered with dead leaves. Flowers red. Common in rocky bushland with *Tarchonanthus camphoratus*. Used to make life-fence.

Amaranthus hybridus L.

Amaranthaceae

Inkuyek

Erect annual herb, sometimes with reddish tinge. Inflorescencespike-like raceme with small flowers, compact. Very common weed. Used as vegetable.

Apodytes dimidiata Arn.

Icacinaceae

Oltiasimpol

Tree about 10 m tall with smooth ridged trunk. Leaves are shiny dark green above, with reddish midrib, drying black. Flowers are star-like, white with black anthers (Figure 6). It is a common forest tree. Wood is used to make earplugs. The flowers attract swarms of bees in search of nectar. It has medicinal uses. A very nice goat fodder.

Int. J. Adv. Res. Biol. Sci. (2019). 6(3): 54-110



Figure 6: Apodytes dimidiata Arn.

Asparagus africanus Lam.

Asparagaceae

Emperre-enpapa

A scrambling woody shrub from a fibrous rootstock with grey-brown smooth stems and brownish spines. "Leaves" needle-like, clustered. Flowers white. Fruit a 1-seeded red berry. Frequent in forest edges and wooded grassland, often in rocky sites. Used as a sieve for soup. Medicinal.

Asparagus falcatus L.

Asparagaceae

Olomei

A climbing spiny herb from tuberous rootstock with zigzag grey-brown stems. "Leaves" flat, dark green, clustered. Flowers cream, in branched racemes. Fruit a 1-seeded red berry. Frequent in forest edges and wooded bushland, often in rocky sites. It is used to kill fleas in goats kids.

Asparagus racemosus Willd.

Asparagaceae

Olomei

Woody spiny climber with brownish-yellow stems with zigzag branches. "Leaves" needle-like, clustered. Flowers white, in racemes. Fruit a 1-2-seeded red berry. Frequent in forest edges and wooded grassland, often in rocky sites. Used as a sieve for soup. Medicinal.

Aspilia mossambicensis (Oliv.)Wild

Compositae

Enkoiyapasei

Much branched woody herb or shrub with very roughhairy leaves and yellow flower heads. In bushland especially in areas with black cotton soils. Valued goat fodder. Used for medicine.

Barleria micrantha C.B.Cl.

Acanthaceae

Olosida

Herb with short-stalked leaves, elliptic sepals with toothed margins and bluish flowers. In woodlands and thickets. Goat fodder.

Barleria ventricosa Nees

Acanthaceae

Olosida

A scrambling herb or shrub with elliptic sharp-pointed leaves which are silky below. Flowers blue. Capsule ellipsoid, 2-seeded. Forest undergrowth and bushland. Goat fodder.

Berberis holstii Engl.

Berberidaceae

Lekiku-uni

Spiny shrub with leaves in bunches. Terminal leaflet with spines on margins. Flowers yellow. Fruit ellipsoid, blue-black with remains of the style at the top. In forest margins, often associated with giant heath. Fodder, firewood.

Bersama abyssinica Fres.ssp.abyssinica Verdc.

Melianthaceae

Olobayie-tiang'ata

A shrub or slender tree to 15 m tall with smooth bark. Leaves are compound with slightly winged rachis, with 5-10 pairs of leaflets. Flowers on thick upright spikes, greenish-cream with pink. Fruits thick woody capsules, about 2 cm across, opening into 3-5 sections, each with bright orange seed with yellow aril (Figure 7). Common in forest edges and glades, usually riparian. The soft wood is used to make stools.



Figure 7: Bersama abyssinica Fres. ssp. abyssinica Verdc.

Bidens biternata (Lour.) Merr. & Sherff

Compositae

Entoish

Erect much-branched annual herb with pinnate, mostly trifoliolate leaves. Flower heads yellow with yellow rays. Flowering of this plant signals the end of rainy season.

Bidens pilosa L.

Compositae

Entoish

Erect much-branched annual herb with pinnate, mostly trifoliolate leaves. Flower heads yellow with white rays. Very common weed of cultivation. Browsed by livestock.

Blepharis stuhlmannii Lindau

Acanthaceae

Enkunyita

A much branched hairy plant with stalkless unequal leaves. Flowers on a dense inflorescence, white with spine-tipped bracts. Fruit a capsule, 2-seeded. In grasslands. Medicinal with cultural significance.

Boscia angustifolia A. Rich.

Capparaceae

Oloireroi

Evergreen shrub or tree to 5 m high with massive often leaning trunk with silver-grey smooth bark. Leaves spaced on new shoots, in fascicles on short shoots on older wood, sharply pointed. Flowers yellowish cream. Fruit round, 8-15 mm across purplish when ripe. (Figure 8). In wooded grasslands and bushland. Wood is used to make traditional stools, highly valued as they don't crack. It is a useful shade tree and fodder for livestock.



Figure 8: Boscia angustifolia A. Rich.

Buddleia polystachya Fres.

Loganiaceae

Olpiron

Straggling shrub about 5 m high with pale brown bark. Leaves narrowly elliptic with serrated margin, whitish or yellowish beneath. Flowers reddish orange with a paler tube. Used to make traditional fire.

Cadaba farinosa Forssk

Capparaceae

Enkinya-sirkon

A densely branched shrub or rarely a tree, occasionally climbing. Flowers yellow-green. Fruit cylindrical,

orange inside. In bushland. Fodder particularly for donkeys (sirkon). Medicinal.

Caesalpinia volkensii Harms

Caesalpiniaceae

Olnakulankulei

A climber with curved sharp prickles on stems and leaves. Leaves are twice compound (bipinnate). Pinnae in 3-6 pairs, leaflets in 3-6 pairs. Flowers yellow, in dense terminal inflorescences. Fruits flattened densely prickly pods with a beak (figure 9). Often occurring along the rivers.



Figure 9: Caesalpinia volkensii Harms

Caesalpinia decapetala (Roth) Alston

Caesalpiniaceae

Olkinewa

A straggling shrub with reddish-purple stems with scattered prickles. It has compound leaves. Flowers are yellowish. Pods reddish brown, containing dark-brown hard seeds. A hedge plant.

Calodendrum capense (L.f.) Thumb.

Rutaceae

Olarashi (mature), Enkarashi (young)

Tree about 15 m high with smooth grey bark and spreading crown. Leaves opposite, often bunched together. Flowers pink white with crimson dots. Fruit spiny, splitting into a star-like shape showing black angular seeds. In dry forest. Cattle troughs, stools and firewood. Leafy branches are used as beddings by the morans because of their nice fragrance.

Canthium lactescens Hiern

Rubiaceae

Ormoliloi

A shrub or small tree about 8 m high with rough bark. Leaves opposite, ovate. Flowers greenish yellow. Fruits ellipsoid, about 1 cm long. Occasional in the forest but common in bushland. The shrub is cherished by elephants.

Capparis fascicularis DC.

Capparaceae

Olaiturdiai

Thorny climbing shrub with white flowers in severalflowered fascicles. Fruit round, greenish red. In bushed grassland and thickets. Medicinal, with significance. The reddish seeds are used by the Laibon for some rituals.

Capparis tomentosa Lam.

Capparaceae

Olaiturdiai

Thorny climbing shrub with white to yellow-green flowers in several-flowered fascicles. Fruit round, greenish red. In bushed grassland and thickets. Poisonous, used in various rituals by the Laibon.

Carduus chamaecephalus (Vatke) Oliv. & Hiern Compositae

A spiny rosette plant tightly pressed to the ground. The leaves are pinnately lobed, spiny. Flower heads purple, without stalk, 1-2 in the centre of the rosette (Figure 10). It is common in grassland. Monkeys readily eat the flowers.



Figure 10: Carduus chamaecephalus (Vatke) Oliv. & Hiern

Carissa spinarum L.

Apocynaceae

Olamuriaki

Spiny evergreen shrub or scrambler to 5 m, all parts with milky latex. Spines are in pairs, straight, up to 5 cm. Leaves are opposite, dark green shiny above, with

pointed tip. Flowers pink-white, in terminal clusters, very fragrant. Fruits are round to oval, purple black when ripe, with 2-4 seeds (Figure 11). It is common in forest margins, riverine, often at rocky sites. Fruits are edible. It has medicinal uses. Fodder for goats.



Figure 11: Carissa spinarum L.

Casaeria battiscombei R.E. Fries

Flacourtiaceae

Entiangaras

Tree over 20 m high with horizontal or drooping branches arranged in tiers. Leaves dark green, arranged in 2 alternate rows. Flowers yellow-green, in clusters in leaf axils. Fruit a capsule with a sharp tip, yellow to orange. In forest. Used for construction.

Cassipourea malosana (Bak.) Alston

Rhizophoraceae

Olarioi

Evergreen tree to 20 m high with straight cylindrical trunk. Bark smooth with horizontal lines. Leaves opposite, oval with slightly toothed edge. Flowers yellow-green with persistent calyx. Fruit small, eggshaped. In dry forest. Medicinal. Holes in trunk popular home for bees.

Celtis africana Burm.f.

Ulmaceae

Ositeti-lorkeju

A deciduous tree about 12 m tall with smooth grey bark marked with horixontal rings. Leaves 3-veined

from the base, with toothed margin and unequal base. Flowers greenish yellow, in clusters beside leaves. Fruits round, yellow to orange, slightly hairy. Auseful timber tree. Stem produces fibre for tying. It is used to make walking sticks.

Centella asiatica (L.) Urb.

Umbelliferae

Nkaisuisho

A stoloniferous creepingperennial herb. Leaves kidney-shaped, almost circular, toothed along the margin. Flowers with no stalk, greenish yellow. Fruits flattened. In riverine grasslands.

Chaetacme aristata Planch.

Ulmaceae

Olosang'atuny

A much-branched spiny shrub with drooping branches. Leaves are unequal-sided and sharply pointed, shiny on the upper side. Flowers yellowish green. Fruits are oval, with 2 long persistent styles, yellowish red when ripe. Wood used to make walking sticks and clubs.

Clausena anisata (Willd.) Benth.

Rutaceae

Olmatasia, Ematasia

A shrub or small tree about 4 m tall. Leaves compound with 11-37 alternate leaflets dotted with oil glands, crushed leaves with lemon smell. Flowers are white or

cream. Fruits are round or in two sections, shiny reddish purple, purple black when ripe (Figure 12). It is common along forest edges, It is used as mattress by morans, also as hand kerchief to wipe off sweat. It has medicinal uses.



Figure 12: Clausena anisata (Willd.) Benth.

Clerodendrum myricoides (Hochst.) Vatke

Verbenaceae

Olmakutukut

Much branched shrub to 3 m high. Leaves opposite or in whorls of 3, usually with toothed margin. Flowers ble-purple, 2 petals shaped like butterfly. Fruit round, black when ripe. In forest edges and bushland especially on rocky sites. Used for medicine, very popular.

Clutia abyssinia Jaub. & Spach

Euphorbiaceae

Ekopirnyiny

A shrub to 2 m tall with variable leaves turning orange with age. The flowers are greenish yellow. Common shrub of forest margin and openings. It is said to be an excellent fodder for goats. Roots are used for medicinal purposes.

Combretum molle G. Don

Combretaceae

Olmaroroi

Short deciduous tree usually 5 m tall with dark brownblack bark which is deeply grooved in squares. Branchlets peeling in fibrous strips. Leaves large, soft and hairy on both sides. Flowers greenish yellow. Fruits 4-winged, yellow-green at first, drying bright brown. In rocky hillsides. Has medicinal uses and often used in soup. The bark is used as tea.

Commelina africana L.

Commelinaceae

Enkaiteteyiai

Creeping herb with soft fleshy stems and thickened fibrous roots. Leaves shortly stalked, with purple or white hairs on sheath margins. Flowers yellow. In bushland, cultivation and disturbed habitats. Used for medicine, good fodder for livestock.

Commelina benghalensis L.

Commelinaceae

Enkaiteteyiai

Creeping herb with soft fleshy stems. Leaves shortly stalked, with purple or white hairs on sheath margins. Flowers blue. In bushland, cultivation and disturbed habitats. Used for medicine, good fodder for livestock.

Commiphora africana (A.Rich.) Engl.

Burseraceae

Osilalei

Spiny deciduous shrub or tree to 8 m tall. Branchlets thorn-tipped (Figure 13). Bark grey-green, peeling to show green under bark, producing yellowish gum

resin when injured. Leaves trifoliolate, central leaflet much bigger. Fruit is round, pinkish red when ripe, with one stony seed inside. It is common in wooded grassland and bushland. Gum resin chewed as chewing gum. It is fodder for animals. It is important life fence.



Figure 13: Commiphora africana (A.Rich.) Engl.

Commiphora habessinica (O. Berg). Engl.

Burseraceae

Olailupai

Spiny deciduous shrub or tree to 4 m tall. Branchlets thorn-tipped. Bark yellowish, peeling to show green under bark, producing yellowish gum resin when injured. Leaves trifoliolate.Fruit oblong-ellipsoid with stony seed inside. In wooded grassland and bushland. It is a fodder and life fence.

Conyza newii Oliv. & Hiern

Compositae

Oleturot

A much branched short-lived herb from a rosette to about 1.5 m with dark green leaves toothed along the margin. Flower heads cream in terminal pyramidal panicle. Common in disturbed soils.

Cordia africana Lam.(C. abyssinica R. Br.)

Boraginaceae

Olkujuk

Deciduous tree about 10 m tall with rounded crown and often with crooked trunk. Bark brownish, finely grooved. Leaves oval with round base and with prominent veins below, upper surface sandpapery. Flowers white, funnel shaped, calyx cup brownish, strongly ribbed. Fruit yellow when ripe, with sticky pulp. Used for timber, beehives.

Cordia monoica Roxb.

Boraginaceae

Oseki, Eseki

A multi-stemmed shrub with blueish grey peeling bark, resembling eucalyptus. Leaves are almost round, upper surface like sandpaper. Flowers are yellow, in dense terminal clusters. Fruit is oval, pointed, yellow-orange when ripe, held in a cup-like calyx, single-seeded (Figure 14). It is found in bushland and riverine vegetation. Fruit is edible. This shrub has various ritual and ceremonial uses.



Figure 14: Cordia monoica Roxb.

Cotyledon barbeyi Schweinf.

Crassulaceae

Emasiligi

Succulent multi-stemmed shrub to 1.5 m high. Leaves obovate, fleshy. Flowers red, in terminal corymbs. In dry bushland on rocky sloppy sites. Medicinal.

Crassula alsinoides (Hook.f.)Engl.

Crassulaceae

Emasiligi

A prostrate succulent herb with solitary pinkish or white flowers. In montane forest especially on wet rocky sites. Dry season fodder for goats.

Craterostigma pumilum Hochst.

Scrophulariaceae

Olenyawaitie

Arosette-forming herb with orange-red roots. Leaves dark green, toothed along the edge. Flowers blue, on long erect stalks. In montane forest especially on wet rocky sites and rock pools in bushlad. Livestock medicine.

Crotalaria agatiflora Schweinf.

Papilionaceae

Oloontualan

A shrub about 3 m high. Leaves digitately 3-foliolate. Flowers are yellow, in many-floweredracemes. Pods brownish, smooth. Occasional shrub of the forest margin. Used for medicinal purpuses.

Crotalaria axillaris Ait.

Papilionaceae

Oloontualan

A shrub about 3 m high. Leaves digitately 3-foliolate. Flowers yellow at first, fading to reddish later, in many-flowered short racemes. Pods brownish, slightly hairy. Occasional shrub of the forest margin.

Croton macrostachyus Del.

Euphorbiaceae

Oloiyapiap

Deciduous tree with rounded open spreading crown. Bark smooth. Leaves heart-shaped, smooth, crowded at the end of branches. Flowers cream yellow, in erect spikes. Fruits, pea-sized capsules, divided into 3 sections. In dry forest and bushland. Wood used to make sword sheaths.

Cucumis aculeatus Cogn.

Cucurbitaceae

Oltulet-loosirkon

Perennial herb with spiny yellow-hooked hairs on stem ridges and on major leaf veins. Leaves 3-lobed. Flowers yellow-green. Fruit green to yellow with scattered bristle —tipped projections. Found in grassland and bushland. It is cherished by donkeys.

Cucumis ficifolius A. Rich.

Cucurbitaceae

Orngalayioi

Perennial herb with spiny and soft spreading hairs. Leaves round, 3-lobed. Flowers yellow. Fruit greenish yellow, covered with low conical projections. In grassland and bushland, common along the pathssides. Fruits are edible. It has medicinal uses.

Cussonia holstii Engl.var.holstii

Araliaceae

Oloiurrur

Tree to 15 m high with large rounded open crown. Bark rough, thick and corky. Leaves compound, with 5 leaflets, crowded at the ends of branches in clusters. Flowers greenish yellow, on erect spikes. Fruits small, whitish yellow, crowded along the spikes. In forest edges, bushland especially on rocky slopes. Used to make tool handles, water and salt troughs, mortar and beehives. Used to make traditional fire.

Cussonia spicata Thunb

Araliaceae

Oloiurrur

A slender tree about 10 m tall branched near the top. The leaves are digitately compound, leaflets with toothed margin. Flowers are in spikes. Used to make tool handles, water and salt troughs, mortar and beehives. Used to make traditional fire.

Cyathula polcephala Bak.

Amaranthaceae

Enterepenyi

Scrambling woolly perennial herb, rooting at nodes. Leaves heart-shaped. Inflorescence terminal, of silvery spherical masses, turning brownish later, very adhesive to clothing and animal hair. In grassland. Fodder

Cynanchum altiscandens K. Schum.

Asclepiadaceae

Olopito

A climbing sweet scented shrub with ovate leaves pointed at apex. Flowers in shortly stalked umbels.

Fruit 3-ridged. In forest edges. Used as ornament by girls. Used for tying.

Cynoglossum coeruleum A.DC.

Boraginaceae

Olemenenga

Stiff hairy herb with linear pointed leaves. Flowers bright blue, on raceme-like scorpioid cymes. Fruit of 4 nutlets, each with barbed spines. In forest clearings, pathsides and weed in cultivated lands. Medicinal.

Cyphostemma bambuseti (Gilg & Brandt) Wild. & Drum. Vitaceae

Olorrondo

A climber with short hairs on all parts. Leaves palmate, leaflets 3-5, with a layer of hairs below, shallowly toothed. Fruit with short glands. At the forest edges. Medicinal.

Cyphostemma cyphopetalum (Fresen.) Wild.&Drum Vitaceae

Olorrondo

Fleshy climber with palmately divided leaves. Leaflets 3-5, almost circular in outline. Flowers greenish-yellow. Fruits red, hairy berries. In forest edges and bushland.

Cyphostemma serpens (A.Rich) Descoigns

Vitaceae

Olorrondo

Climbing or trailing herb from a swollen red rootstock. Leaves palmate, leaflets 3-9, hairy below. Flowers greenish-yellow. Fruits red or black berries. In bushed grassland. Medicinal.

Desmodium repandum (Vahl) DC.

Papilionaceae

Eikom

Much branched herb with spreading hairs. Leaves with 3 leaflets. Flowers orange, in clusters of 2-5. Pods glandular sticky in 4 segments. In shaded areas in forest, along streams and pathways.

Dichrostachys cinerea (L.) Wight & Arn.

Mimosaceae

Entirkata

Shrub with leafy woody spines terminating the lateral twigs. Leaves like those of Acacia. Flowers in a hanging dense inflorescence, pink and yellow. Pods are spirally coiled. Found in grassland.

Diospyros abyssinica (Hiern) F.White ssp.abyssinica Ebenaceae

Olchartuyian orok

Evergreen tree with straight slender trunk about 20 m high. Bark dark grey-brown, later black, cracking into small rectangles. Leaves shiny dark green with wavy margin, drying black. Flowers small, white. Fruit round, held in a cup-shaped calyx, red-yellow then black when ripe. In dry forest. Walking sticks. Construction.

Dombeya burgessiae Gerrard

Sterculiaceae

Osupukiai-orok

Shrub with heart-shaped hairy leaves. Flowers white or pink, in long-stalked umbels. Fruit round, hairy. In rivrine vegetation and wooded grassland. Bark fibre used to make rope for construction.

Dombeya kirkii Mast.

Sterculiaceae

Olawuo

A small tree 2-7 m tall. Leaves are broadly ovate, sandpapery above and toothed along the margin. Flowers are white in large panicles (Figure 15), very valuable honey bee forage. Stems are used to make bows. It has bark fibre used for tying and construction.



Figure 15: Dombeya kirkii Mast.

Dombeya rotundifolia (Hochst.) Planch.

Sterculiaceae

Olmotoo

Deciduous shrub or small tree about 6 m high, flowering when leafless. Young twigs reddish. Leaves almost circular, sandpapery above, hairy below, edge toothed. Flowers white-pink in many flowered heads. Fruit small round hairy capsule. In wooded grassland, bushland especially on rocky sites. Useful bee forage.

Dovyalis abyssinica (A.Rich.)Warb.

Flacourtiaceae

Olmorogi

Thorny evergreen much-branched shrub or small tree to 5 m tall. Branchlets dotted with lenticels. Leaves shiny dark green, stalks and veins reddish. Flowers greenish-yellow-white. Fruit is a round berry about 2 cm across, with persistent calyx, orange-yellow when ripe (Figure 16). It is found along the forest edges and in riverine vegetation. Fruit is edible. It has various medicinal uses.



Figure 16: Dovyalis abyssinica (A.Rich.) Warb.

Dovyalis macrocalyx (Oliv.) Warb.

Flacortiaceae

Olmorogi

Thorny evergreen much-branched shrub or small tree to 5 m tall. Branchlets dotted with lenticels. Leaves shiny dark green, stalks and veins reddish. Flowers greenish-yellow-white. Fruit round, plum-like berry about 2 cm long, surrounded by enlarged hairy calyx, orange-yellow when ripe. Forest edges and riverine vegetation. Fruit edible. Used for medicine.

Dregea abyssinica (Hochst.)K.Schum.

Aselepiadaceae

Entiakuleti

A hairy climber with milk latex in all parts. Leaves circular. Flowers yellow, in loose stalked cymose inflorescence. Fruit a pod with numerous wavy ridges, to 10 cm long. In bushland and forest edges especially on rocky sites. Stems are used to make the handle for the metal used for branding animals.

Dregea schimperi (Decne.) Bullock

Asclepiadaceae

Enkoriampiti

A hairy climber with milk latex in all parts. Leaves circular. Flowers yellow, in loose stalked cymose inflorescence. Fruit a pod with numerous wrinkles, to 7 cm long. In bushland and forest edges especially on rocky sites. Stems used for branding animals.

Drypetes gerrardii Hutch.

Euphorbiaceae

Oldurdien

Tree about 10 m tall with dark grey smooth bark and dense drooping foliage. Leaves alternate, arranged in one plane on zigzag branchlets, margin wavy, slightly toothed. Flowers yellow in small clusters. Fruits round, softly hairy, yellow to orange-red. Used for construction and tool handles.

Echinocloa sp.

Gramineae

Elaroba

A perennial grass. In wooded grassland and bushland. Fodder for livestock.

Ehretia cymosa Thonn.

Boraginaceae

Endalati ekutuk

Deciduous tree with crooked trunk, often branching from near the base. Leaves are oval, often attacked by insects. Flowers are white-yellow-pink, in large loose heads. Fruits are round, orange-red, later black (Figure 17). A common tree of forest edges and bushland. It is used for tool handles.



Figure 17: Ehretia cymosa Thonn.

Ekebergia capensis Sparrm.

Meliaceae

Olmokorionko

Tree to 15 m or more with large spreading crown. Old trees buttressed. Leaves are compound, with 3-6 pairs

of leaflets plus terminal one, leaflet blade unequalsided. Flowers are small, white. Fruits are round, 1-2 cm across, orange when ripe (Figure 18). The trunk is used to make stools, cattle troughs and beehives.



Figure 18: *Ekebergia capensis* Sparrm.

Elaeodendron buchananii (Loes.)Loes.

Celastraceae

Osoket

Tree to 20 m tall with dense rounded crown. Leaves leatherly, dark green, toothed along the margin, often attacked by caterpillars. Flowers cream-yellow. Fruit yellow, woody and pointed, 1-2 cm. In forest, wooded grassland.Leaves are poisonous to livestock.

Encephalartos bubalinus Melville

Zamiaceae

Olparua

A palm-like shrub with a rosette of very many leaves. Stem short and stout, covered with leaf scars. Leaves compound, dark green and shiny, with sharp spines on the margin. Fruit a cone, appearing at the apex of the stem.

Englerina woodfordioides (Schweinf.) Balle

Loranthaceae

Entaretoi

A parasitic shrub growing on tree branches. Leaves are opposite, leathery. Flowers are blue-grey with reddish lobes, in stalked umbels (Figure 19). Fruit is an obovoid sticky berry. It is common in the forest and bushland. It has medicinal uses.



Figure 19: Englerina woodfordioides (Schweinf.) Balle

Eriosema shirense Bak.f.

Papilionaceae

Enkaikuinyoi

Annual herb to 30 cm high with hairy leaves. Flowers yellow with dark purple lines. Fruit a dark brown hairy pod about 1.5 cm long, shriveling after dehiscing. In hillside grassland especially on rocky sites. Goat fodder.

Erythrina abyssinica DC ssp. abyssinica

Papilionaceae

Oloponi

Deciduous tree with short trunk, thick spreading branches and rouned crown, about 6-12 m high. Bark deeply grooved, thick and corky, usually with woody

spines. Leaves trifoliolate, leaflets round, covered with brownish hairs. Flowers orange red, in terminal heads. Fruit woody pods constricted between the scarlet black seeds. Wooded grasslands and rocky slopes. Used to make stools and beehives. Seeds for necklaces.

Erythrococca bongensis Pax

Euphorbiaceae

Enchani embave

Shrub or small tree about 4 m high pale brown bark flaking in sections. Leaves toothed along margin. Flowers yellow-green, smelling of boiling potatoes. Fruit yellowish red,3-lobed. Along forest margin and bushland. Used to make walking sticks and arrow shafts.

Euclea divinorum Hiern

Ebenaceae

Olkinyei

Shrub or tree usually to 9 m high with dark grey fissured bark. Leaves shiny above, margin often undulate. Fruit round, purple green when ripe. In dry forest, bushed wooded grassland. Popular medicinal plant.

Euphorbia bussei Pax var. kibwezensis (N.E. Br.) S. Carter Euphorbiaceae

Olchoki

Tree about 9 m tall with succulent 2-4-winged segmented branches. All parts with milky latex. Leaves deciduous. Flowers yellow-green in short

cymes. Fruit 3-lobed, yellow-green. In bushland or thickets, also in forest especially on rocky hillsides. Latex used for wounds.

Euphorbia candelabrum Kotchy

Euphorbiaceae

Olpopong'i

Tree with short thick trunk with large round candelabra crown of massive ascending branches. (Figure 20). All parts oozing sticky white latex when injured. Branches with 3-5 spiny ribs. Flowers small, greenish-yellow. Fruits are green-red, pea-sized capsules. It is common in evergreen woodland and bushland, grassland and in forest on rocky slopes. Stems are used to make beehives.



Figure 20: Euphorbia candelabrum Kotchy

Euphorbia gossypina Pax

Euphorbiaceae

Oloilei

A succulent scrambler with cylindrical branches. All parts with milky latex. Leaves, on young shoots only. Flowers yellow-green, in terminal cymes. Fruit 3-lobed. In bushland or thickets especially on rocky hillsides, Poisonous, Latex used for wounds.

Fagaropsis angolensis (Engl.) Dale

Rutaceae

Olosiki

Deciduous tree with pinkish grey bark and compound leaves with 5-11 leaflets. Flowers yellowish, in erect

panicles. Fruits round, purplish. In forest. Trunk holes used by honey bees. Source of useful timber.

Faurea saligna Harv.

Proteaceae

Olorte

A shrub or small tree with black rough bark and a dense crown. It has slightly curved leathery leaves with reddish stalks. Flowers are cream-prple, in dense silky terminal spikes. Fruits are tiny nutlets with silky white hairs.

Ficus cordata Thunb.ssp. salicifolia (Vahl) C.C. Berg Moraceae

Osukunua

Tree to about 10 m or more with grey smooth bark. All parts with milky latex. Leaves ovate, smooth. Figs greenish red, round. On rocks and cliffs. Figs edible. Twigs used to make ceremonial fires.

Ficus sycomorus L.

Moraceae

Olng'aboli

Large spreading tree to 20 m high withyellowish bark. All parts with milky latex. Leaves almost circular, upper surface rough. Figs in leaf axils, in pairs or in clusters on the main trunk and branches, round and usually about 3 cm across, yellow-red when ripe. In riverine vegetation or places with high groundwater table. Used for water troughs, Figs edible.

Ficus thonningii BI.

Moraceae

Oreteti

Evergreen large tree to 18 m, often starting as epiphyte, aerial roots often present. All parts with milky latex. Leaves oval, very variable in size. Figs in clusters from leaf axils, round, yellow or purple-red when ripe. In wooded grassland, riverine especially on rocky sites. This is a ceremonial tree with cultural significance.

Flacourtia indica (Burm. f.) Merrill.

Flacourtiaceae

Oltankururi

Tree or shrub with straight thorns. Leaves shiny above, with crenate margin. Flowers yellow-green. Fruit yellow or red, round and about 2.5 cm across, with persistent styles. In forest edges, wooded bushland and riverine vegetation. Fruits edible.

Fuerstia africana T.C.E.Fr.

Labiatae

Oloitodor-aik

Annual herb. Leaves opposite, toothed, staining fingers orange when crushed. Flowers white. In wooded grassland especially on shallow soils and rock sites. Used for dye. Also a medicinal plant.

Galium simense Fres.

Rubiaceae

Olngeriantus

A sticky climber with linear leaves. Flowers greensh yellow, in axillary inflorescences. Fruits of 2 dry, 1-seeded mericarps, black and fleshy. The very sandpapery leaves are used to decorate ladies faces. It is common in bushland.

Girardinia diversifolia (Link) Friis

Urticaceae

Entiamejoi olaroi

A terribly stinging herb with deeply lobed leaves, tothed along the margin. Very common in disturbed sites and pathsides in the forest.

Gardenia volkensii K.Schum.ssp.volkensii

Rubiaceae

Oltakuru-kuriet

Much branched tree about 7 m high with dense crown. Branches are in whorls of 3, hard and stiff. Leaves are spoon-shaped, widest at the tip. Flowers are large, white, tubular, borne singly. Fruit is large and almost woody, round or oval with prominent longitudinal ribs (Figure 21). It is found in wooded bushland. It is used for closing the cow gates by women. Branches are used to make a twiler.

Int. J. Adv. Res. Biol. Sci. (2019). 6(3): 54-110



Figure 21: Gardenia volkensii K.Schum.ssp. volkensii

Gerbera viridifolia (DC.) Sch. Bip. Compositae

-

A rosette herb with long-stalked hairy leaves. Flowers solitary, pinkish heads. Common in wooded grassland areas.

Gnidia subcordata Meisn.

Thymeleaceae

Olokirisiai

Shrub with opposite ovate leaves. Flowers white to cream, in terminal bunches. In forest edges and bushland. Bark used to make very strong rope.

Gomphocarpus integer (N.E.Br.) Bullock

Asclepiadaceae

Entiakuleti

Perennial sparsely branched herb with white woolly hairs on young branches. All parts with milky latex. Leaved needle-shaped. Flowers yellow green. Fruit ovate in outline, smooth or with bristles along one side. In grassland. Fruits used in wedding ceremonies.

Gomphocarpus physocarpus E. May.

Asclepiadaceae

Entiakuleti-orok

Sparsely branched shrub with milky latex in all parts. Leaves lanceolate, often whorled. Flowers green and white tinged with purple. Fruit oval in outline, with a short hooked beak, covered with scattered hairy bristles. In grasslands. Fruits used in wedding ceremonies.

Gomphocarpus stenophyllus Oliv.

Asclepiadaceae

Entiakuleti, Olekule

Perennial sparsely branched herb with white woolly hairs on young branches. All parts with milky latex. Leaved needle-shaped. Flowers yellow or reddish. Fruit ovate in outline, smooth. In grassland. Fruits used in wedding ceremonies.

Grewia bicolor Juss.

Tiliaceae

Esiteti

Shrub with darkish purple peeling bark. Leaves elliptic, whitish beneath, base unequal, margin toothed. Flowers yellow. Fruit round or 2-lobed, redbrown to orange. In wooded bushland. Used for construction, make bows and arrows, walking and herding sticks.

Grewia similis K. Schum

Tiliaceae

Olnyalugwai

Shrub, sometimes climbing, with woody knobs on the stem. Leaves are slightly obovate, with serrated margin. Flowers are mauve or purple, in several-flowered cymes (Figure 22). Fruit is 1-4-lobed, orangered when ripe. It is commom in forest edges and openings, bushland or bushed grassland. One of the best goat fodder in the Loita. Leaves are a traditional soap for the local communities.



Figure 22: Grewia similis K. Schum

ripe fruits

Gutenbergia cordifolia Oliv.

Compositae

Naingongu-ndeyo

Much-branched annual herb about 1 m high. Leaves almost stalkless, whitish hairy underneath. Flower heads purple, in terminal corymbs. In grasslands especially in rocky sites, also weed of disturbed places.

Helichrysum odoratissimum (L.) Less.

Compositae

-

A weak straggling shrub with silvery hairy stems. Leaves linear-lanceolate. Flower-heads yellow. In forest openings and bushland.

Helinus mystacinus (Ait.) Steud.

Rhamnaceae

Orkuyaini

Thicket-forming climber with ovate leaves. Flowers yellow-green, in axillary umbels, densely hairy. Fruit a hairy capsule, separating into 3 mericarps. Riverine vegetation and bushland. Used for medicine.

Heliotropium longiflorum(A.DC.)Jaub.& Spach. Boraginaceae

Olaisikirai

Perennial herb with wavy linear leaves and white to cream flowers on short cymes. Fruit splitting into 4 dry hairy nutlets. In grasslands.

Heteromorpha trifoliata (Wendl.)Eckl.&Zeyh.

Umbelliferae

Orkuyaini

Shrub about 5 m high with flaking grey or dark brown bark. Leaves aromatic, simple, trifoliolate or pinnate

usually with 1-2 pairs of leaflets. Flowers greenish-yellow in dense umbels. Fruit brownish, 3-angled. In forest edges, wooded grassland and bushland especially in rocky sites and in riverine vegetation. Used in various cultural rites.

Hibiscus calyphyllus Cav.

Malvaceae

Esupukiai-narok

Woody herb or shrub to 2.5 m with broadly ovate leaves or clearly 3-5-lobed with serrate margin, often somewhat sandpapery. Flowers yellowwith red or purple centre. In forest margins, riverine vegetation, bushland and bushed grassland. Bark source of string to make rope.

Hibiscus fuscus Garcke

Malvaceae

Enkarani

Sparsely-branched woody herb with brownish black star-shaped hairs on stem. Leaves ovate, usually simple or rarely 3-lobed. Flowers white or pale purple. Fruit a capsule. In grassland. Used in various cultural rites and ceremonies.

Hirpicium diffusum (O.Hoffm.)Roess.

Compositae

Naingongu ndeyo

Spreading annual herb with entire or pinnately lobed leaves. Flower heads yellow. In disturbed grasslands. Dry pappus could be very disturbing to the eyes.

Hypoestes aristata (Vahl) Roem.&Schultes Acanthaceae

Olosida

Perennial herb to 1 m with ovate lanceolate leaves. Flowers with 2-lipped petals, pale mauve, pink or white an axillary whorls. Fruit a 4-seeded capsule. In forest floor and thickets. Dry season fodder and useful bee forage.

Hypoestes forskaolii (Vahl)R.Br.

Acanthaceae

Olosida

Perennial herb to 1 m with elliptic leaves. Flowers are white or mauve, streaked with pink or purple, in axillary spike-like inflorescence (Figure 23). Fruit a 4-seeded capsule. It is common in grassland, bushland and forest edges. It is dry season fodder and useful bee forage.



Figure 23: Hypoestes forskaolii (Vahl) R. Br.

Hypoxis angustifolia Lam.

Hypoxidaceae

Enkaimalasiai

Herb from a perennial corm with a rosette of linear hairy recurved leaves. Flowers yellow with whitish hairs, in umbel-like cymes. Fruit a capsule. Common in upland burnt grasslands. The corm is used by children as toy gourd.

Ilex mitis (L.) Radlk.

Aquifoliaceae

Oltiasimbol

Tree about 10 m high with smooth light grey bark. Leaves elliptic, smooth. Flwers white. Fruits round, yellow to red, with persistent stigma. In forest. Used for construction. Useful bee forage.

Indigofera arrecta A. Rich.

Papilionaceae

Eivimivim

Shrub to 3 m high with compound leaves with 7-17 leaflets. Flowers pink to bright red. Fruit a straight pod, deflexed. In forest margin, bushed grassland, thickets and wooded grassland. Fodder.

Indigofera spinosa Forsk.

Papilionaceae

Olkiloilo

A dwarf spiny shrub with trifoliolate leaves. Flowers pinkish. Fruit a straight pod. A useful livestock fodder.

Indigofera swaziensis Bolus

Papilionaceae

Enkoroi

Shrub to 2.5 m high with blackish hairs on the stem and compound leaves with 9-15 leaflets. Flowers pink to bright red. Fruit a pod, deflexed. In forest margin, bushed grassland, thickets and wooded grassland. Fodder.

Indigofera volkensii Taub.

Papilionaceae

Enkoroi enkop

Creeping spreading white-hairy herb. Flowers pink, in racemes. Fruit straight, somewhat 4-angled. A useful livestock fodder.

Ipomoea hildebrandtii Vatke

Convolvulaceae

Oltiameleteti

A shrub with almost round leaves which are very finely hairy beneath. Flowers are funnel-shaped, white with purple centre or completely light purple.

Ipomoea wightii (Wall.)Choisy

Convolvulaceae

Olopito

Twining perennial herb with dense soft yellowish hairs on stems and leaf stalks. Leaves heart-shaped, often 3-lobed, whitish soft beneath. Flowers long-stalked, mauve, in dense heads. In upland grassland and higher forest edges. Goat fodder

Jasminum abyssinicum DC.

Oleaceae

Olopito

Climbing shrub with opposite leaves. Leaves trifoliolate with ovate-elliptic, pointed leaflets. Flowers white, tubular, fragrant. Fruit a berry with 2 joined lobe, each 1-seeded. In riverine vegetation. Used as rope for tying.

Jasminum floribundum Fres.

Oleaceae

Oloeniyeni

Climbing shrub with opposite leaves. Leaves opposite, 5-foliolate with ovate leaflets. Flowers white, often streaked pink, in open 3-7-flowered cymes. Fruit a berry with 2 joined lobe, each 1-seeded. In riverine vegetation. Used as rope for tying. Also for medicine.

Jasminum schimperi Vatke.

Oleaceae

Orgimasarge

Climbing shrub with opposite leaves. Leaves opposite, simple. Flowers white, pink outside, in dense terminal inflorescence. In riverine vegetation. Used as rope for tying. Also for medicine.

Juniperus procera Endl.

Cupressaceae

Oltarakuai

Tall evergreen tree to about 35 m or more with a straight trunk, brownish bark cracking and peeling in long narrow strips. Fruits waxy blue-grey, berry-like globose cones with 1-4 seeds. In drier upland forest in association with Podocarpus and Olea. Important ceremonial tree. Used for house construction, fencing, making beehives, firewood. This is one of the most utilized tree species within the forest.

Justicia nyassana Lindau

Acanthaceae

Olosida

Trailing perennial herb with ascending branches. Leaves opposite, ovate to broad elliptic. Flowers mauve or purple, in dense terminal spikes. Fruit a capsule, 4-seeded. In damp cool places in dry forest floor. Dry season fodder. Useful bee forage.

Justicia striata (KI.) Bullock

Acanthaceae

Esonkoyo

Short-lived perennial herb with ascenging stems often rooting at the nodes. Leaves opposite, ovate-elliptic, often paler below. Flowers white, in terminal spikes. Fruit a 4-seeded capsule. In woodland and bushed grassland. Dry season fodder. Useful bee forage. It is used as perfume by girls and the Morans.

Kalanchoe densifllora Rolfe

Crassulaceae

Emasiligi

Fleshy herb with opposite succulent smooth round leaves. Flowers yellow, in dense terminal corymbs. Usually in disturbed places and rocky sites. Leaves used for massage.

Kalanchoe glaucescens Britten

Crassulaceae

Emasiligi

Fleshy perennial herb with obovate smooth succulent leaves. Flowers yellow or to orange, in terminal corymbs. In rocky bushland. Leaves used for massage.

Lagenaria siceraria (Molina) Standley

Cucurbitaceae

Oltulet, Lonkukurok

Large climber with divided tendrils and kidney-shaped leaves. Flowers white, tubular. Fruit large, of various shapes, often with a long and narrow end, greenish and smooth, hard-shelled. In bushland and grassland, usually hanging on fences for cattle enclosures and manyattas. The long narrow fruits are used as containers for milking, large round ones for beer.

Landolphia buchananii (Hall.f.) Stapf.

Apocynaceae

Erisa, Entiangingish

Woody climber to 20 m with milk latex in all parts. Bark dark brown. Leaves opposite, smooth. Flowers white to yellow. Fruit round, greenish with white spots. In riverine vegetation. Stems used for tying as rope.

Lannea schweinfurthii (Engl.) Engl.

Anacardiaceae

Orpandi, Olampirion, Olosuashi

A deciduous tree about 8 m tall with drooping branches. The stem has greyish brown bark, flaking in older trees. Leaves are compound and usually crowded at the ends of branches; leaflets are 3-5. Flowers are in spikes. Fruits are reddish-brown, about 2 cm long. Ripe fruits are edible.

Lantana rhodesiensis Moldenke

Verbenaceae

Enkayakuji

A coarse shrub to 3 m high. Stems ridged, densely covered with dark brownish hairs. Leaves opposite or arranged in 3s round the stem. Flowers pink, in dense heads. Fruits round, shiny purple, very many in one head. The whole plant is pleasantly scented and attracts swarms of bees when in flower. This is a common shrub of the forest edges and openings. Fruits edible.

Lantana trifolia L.

Verbenaceae

Olmakirikiriani

Shrub about 2 m high with sandpapery aromatic leaves which are toothed along the margin. Flowers purple to pink in axillary spikes. Fruit red or purple, very many in one head. In forest edges and bushland. Plant associated with various traditional ceremonies and used as medicine. Fruits edible

Leonotis nepetifolia(L.) R.Br.

Labiatae

Olbibi

Woody annual herb about 2 m high with long-stalked ovate leaves which are toothed along the margin. Flowers are bright orange, in dense globular clusters at upper nodes of the stem (Figure 24). It is a common weed of cultivated areas. Children are fond of sucking nectar from the tubular flowers.



Figure 24: Leonotis nepetifolia (L.) R.Br.

Leucas grandis Vatke

Labiatae

Olbibi

Woody herb about 1 m high with ovate hairy leaves. Flowers white, in dense globose clusters in upper axils. In disturbed grounds especially grasslands. Used for medicine.

Leucas martinicensis (Jacq.) Ait.f.

Labiatae

Obibi naibor

Woody annual herb about 1 m high with ovate loosely hairy ovate leaves. Flowers white, in dense globose axillary clusters in upper axils. In disturbed grounds especially farmlands. Source of nectar for bees. Used for medicine.

Lippia javanica (Burn.f.) Spreng

Verbenaceae

Osinoni

A shrub to 3 m high. Stems rough with stiff hairs. Leaves are sand-papery above and with toothed margin, very fragrant. Flowers are small, whitish, in round flat heads (Figure 25). It regenerates vigorously after cutting or burning. A plant of the forest margin, common also in the grasslands. It has medicinal uses. It removes bad smell. Nectar from this shrub makes bees increase the number of larvae in the hives.



Figure 25: Lippia javanica (Burn.f.) Spreng

Loeseneriella africana (Willd) Halle

Celastraceae

Erisa

Woody climber to 15 m rough yellowish bark. Leaves smooth and shiny. Flowers yellow green. Fruit of 3 mericarps, brownish green, with winged seeds. In riverine vegetation and forest especially in rocky sites. Bark and stems used to make rope.

Maerua triphylla A. Rich.

Capparaceae

Enkamoloki

Evergreen shrub or tree, sometimes a climber with simple or 3-foliolate leaves. Flowers greenish white to yellow in axillary racemes. Fruit cylindrical, often constricted between the seeds. In wooded bushland, forest margins and riverine vegetation. Useful fodder for livestock, especially goats.

Malva verticillata L.

Malvaceae

Olbukoi

Annual herb about 1 m high with 5-7-shallowly lobed leaves which are circular in outline. Flowers pinkish white, in axillary clusters. Weed of waste places particularly around homestads. Used for medicine.

Maytenus heterophylla(Exkl. &Zeyh.)Robson

Celastraceae

Olaimurunyai

Spiny shrub usually with obovate fasciculate leaves on short shoots. Leaves toothed along the margin. Flowers white, cream or yellow, in cymes. Fruit yellow or red, obovoid and usually 3-lobed. In dry forest, wooded bushland and riverine vegetation. Used for various traditional ceremonies and as medicine. Useful bee forage.

Maytenus senegalensis (Lam.) Exell

Celastraceae

Enkodo kiok

Shrub or small tree to 7 m high with drooping branches and numerous sucker shoots. Branches usually with spines, sometimes absent. Leaves usually in clusters, very variable in size and shape, smooth and fleshy, margin toothed, stalk and midrib pinkish. Flowers cream to almost greenish. Fruit a 3-celled round capsule, red when ripe. Used for medicine.

Maytenus undata (Thunb.) Blakelock

Celastraceae

Olkerosha

Evergreen Shrub or tree about 8 m high with smooth grayish bark and elliptic leaves which are shiny above and toothed along the margin. Flowers greenish-white, in axillary fascicles. Fruit yellow to red, obovoid or 3-angled. In dry forest associated with Olea europaea and Juniperus procera. Used for tool handles, walking sticks and for construction.

Melanthera scandens (Schumach.&Thonn.)Roberty Compositae

Enkoiyiapasei

A trailing shrub about 3 m with ovate-lanceolate or triangular sandpapery leaves. Flower heads yellow. In riverine vegetation within dryland forest. Leaves are used to smoothen tool handles.

Microglossa pyrifolia (Lam.) O. Kuntze

Compositae

Ologumati

A scrambling shrub often forming thick bushes with softlyhairy leaves. Flowers cream to yellow, in drooping crowded corymbs. In forest edges and riverine vegetation. Used to make medicine.

Momordica foetida Schumach

Cucurbitaceae

Enkaiserariai

Hairy tendrillate perennial climber from woody rootstock with spotted stems. Leaves heart-shaped. Flowers yellow with with black centres. Fruits eggshaped, covered with soft orange bristles. Fruits cherished by monkeys.

Momordica trifoliolata Hook.f.

Cucurbitaceae

Enkaiserariai

Perennial climber from a woody tuber with tendrils. Leaves with 3 or more leaflets. Flowers yellow with dark green to black centre. Fruit egg-shaped, red, dehiscing into 3 valves. In dry forest usually along riverine vegetation. Fruits are edible

Myrsine africana L.

Myrsinaceae

Eseketeti

Much-branched shrub about 2 m high with grey-brown-purple branches. Leaves small, rather crowded on branchlets, margin with tiny sharp teeth. Flowers in axillary clusters, green-white to pink with purple anthers. Fruit round berries, about 5 mm in diameter, pink-purple when ripe. In upland dry forest . Fruit used to expel intestinal worms. Used to clean blood and for general health.

Mystroxylon aethiopicum (Thumb.) Loes.

Celastraceae

Olodonganayioi

Evergreen shrub or tree to 10 m tall with smooth grey bark. Leaves dark green, glossy above. Flowers are yellow-green. Fruits are round, orange red when ripe (Figure 26). It is common in forest, usually riverine. Wood is used for tool handles, walking sticks and for construction.



Figure 26: Mystroxylon aethiopicum (Thumb.) Loes.

Notonia abyssinica A. Rich.

Compositae

Emasiligi

Succulent herb with ascending stems rooting at the nodes. Leaves obovate, fleshy. Flower-heads bright red. In bushland especially along the dry watercourses.

Notonia petraea R.E.Fries

Compositae

Emasiligi

A trailing succulent herb with ascending stems rooting at the nodes. Leaves are obovate, fleshy (Figure 27). Flower-heads 1-4, orange, on erect stalks. It is common in bushed grassland. Leaves are used for cleaning infants.

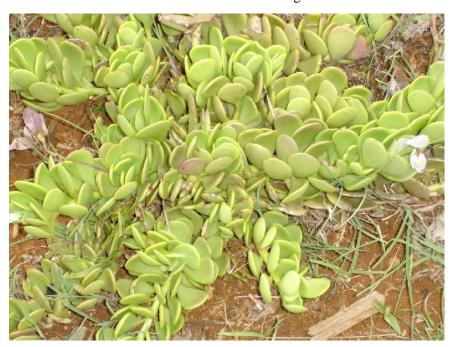


Figure 27: Notonia petraea R.E.Fries

Nuxia congesta Fres.

Loganiaceae

Olpiron

Much-branched or multi-stemmed tree about 20 m high with short twisted bole and low drooping branches. Bark rough, shedding long fibrous strips. Branchlets 3-6 sided with thick nodes. Leaves in threes, crowded at the ends of branches. Flowers white, in dense crowded heads at the ends of branches. Fruit a small hairy capsule, many seeded. Excellent source of nectar for honey bees. Good firewood. This is among the dominant trees in the forest. A major host of the parasitic shrub, *Viscum tuberculatum* (Olmeigaro-keon).

Obetia radula (Bak.) Jackson

Urticaceae

Nokoreti

A robust shrub growing into tree size, with terribly stinging hairs on stems and leaves. Leaves deeply lobed, margin toothed. Flowers yellowish green.

Ochna holstii Engl.

Ochnaceae

Orchartuyian

Deciduous tree about 20 m tall. Bark grey, smooth. Leaves on short twigs, smooth, shiny and sharply toothed along the margin. Flowers bright yellow appearing when the tree is almost leafless. Fruits black drupelets, in groups of up to 4, with red sepals. In forest.

Wood, which is very hard is used for tool handles and walking sticks. Flowers attract swarms of bees.

Ochna insculpta Sleumer

Ochnaceae

Orchartuyan orok

A deciduos tree with brownish dark bark. Leaves reddish when young, toothed along the margin. Flowers yellow. Fruit with blck druplets. Found in forest.

Ochna ovata F. Hoffm.

Ochnaceae

Orchartuyian

Much-branched shrub or small tree to 5 m high with dark brown bark. Leaves on short shoots, reddish when young, toothed along the margin. Flowers yellow. Fruit of purple-black drupelets and with red sepals. In dry forest and bushland. Used for construction and walking sticks.

Ocimum gratissimum L.(O.suave Willd.)

Labiatae

Olemuran

Aromatic shrub 2 m high. Leaves are ovate with toothed margin. Flowers are whitish to pale purple (Figure 28). It is common in forest margin, bushland, riverine vegetation and disturbed areas. It is used to make medicine.



Figure 28: Ocimum gratissimum L.

Int. J. Adv. Res. Biol. Sci. (2019), 6(3): 54-110

Ocimum kilimandscharicum Guerke

Labiatae

Elemuran

Small much-branched shrub about 1 m high.Leaves elliptic, whitish hairy. Flowers white to pink, arranged in whorls in terminal inflorescence. In bushland, often on rocky and shallow soil sites. Medicine and bee forage.

Olea capensis L. ssp. hochstetteri (Baker) Friis & P.S. Green Oleaceae

Ololiondoi

A tree to 20 m tall with a straight bole. Bark smooth, grey to almost whitish. Leaves opposite, shiny above, with 1-1.5 cm long petiole. Flowers small and white, very many in cymes. Fruit oval, purple. In dry upland forest. A ceremonial tree with various cultural uses.

Olea europaea L. ssp.cuspidata (Mill.) P. Green Oleaceae

Oloirien

Evergreen tree to 15 m high with crooked trunk, roundedcrown and grey-green foliage. Branchlets whitish, dotted with lenticels. Leaves opposite, oval and sharply pointed, dark green above, white or silvery below. Flowers small, white to yellow. Fruit oval with a pointed tip, purple when ripe. This is the most important tree among the Loita Maasai. It is used in most traditional ceremonies, make tool handles, clubs, walking sticks, firewood, construction, medicines etc.It is an important fodder for livestock during drought.

Olinia rochetiana A. Juss.

Oliniaceae

Olkirenyi

Shrub or tree to 12 m high. Young branches squire. Leaves elliptic, leaf-stalk of young ones reddish. Flowers cream, fading to pink, in pyramidal cymes. Fruit round, pinkish. In upland dry forest. Medicine. Firewood.

Oncoba routledgei Sprague

Flacourtiaceae

Lekiku-uni

Thorny much-branched tree to 9 m high. Leaves oval, toothed along the margin. Flowers white to pink. Fruit round, yellow, about 5 cm across. In riverine vegetation.

Oncocalyx fischeri (Engl.) M. Gilbert

Loranthaceae

Eimiyim

A parasitic shrub. Leaves grey-green, hairy. Flowers yellow, fading orange with age, petals and stamens contorted, twisting and recoiling. Fruit an oval berry, warty, red when ripe. A common shrub in forest usually on *Grewia similis* and *Maytenus spp*.

Osyris lanceolata Hochst.& Steudel

Santalaceae

Olosesiai

Evergreen shrub or small tree about 5 m high with drooping branches. Leaves are opposite, slightly fleshy, bluish green or yellow-green. Flowers are small, yellow-green in axillary cymes. Fruits are round, orange or red, 5-8 mm across (Figure 29). It is found in evergreen bushland and forest edges. Bark used in tea as well as soup.



Figure 29: Osyris lanceolata Hochst. & Steudel

Ozoroa insignis Del. ssp. reticulata (Bak. f.) Gillett Anacardiaceae

Olokunonoi

A much-branched shrub often with a twisted stem. Bark corky, grooved and exuding creamy resinous latex when cut. Leaves leatherly with prominent parallel veins, very variable in size, green above, silvery hairy below. Flowers are small, cream, in small clusters. Fruits are flat and bean-shaped, reddish at first, ripening shiny black.

Pappea capensis Exkl. & Zeyh. Sapindaceae

Oltimigomi

Semi-deciduous tree about 6 m high with short trunk branching low to form a spreading rounded crown. Bark smooth, with horizontal markings. Leaves stiff and wavy, edge spine-toothed, usually in terminal clusters. Flowers are green-yellow, in spikes. Fruit round, splitting to reveal orange-red aril covering black seed (Figure 30). It is common in the wooded grassland and bushland. It has medicinal uses. Fruits are edible.



Figure 30: Pappea capensis Exkl. & Zeyh. Flowers and fruits

Pavonia patens (Andr.) Chiov.

Malvaceae

Esupukiai-oibor

A trailing shrub with broad ovate leaves, notched at the base, irregularly lobed. Flowers yellow with a darker centre. In upland forest edges. Used to make medicine. Fodder.

Pavonia urens Cav.

Malvaceae

Osupukiai-orok

A hairy shrub with almost circular, 5-7-triangular-lobed leaves. Flowers pink, or white, usually clustered on short stalks. In forest edges and riverine vegetation. Leaves used as toilet paper for infants. Used to make medicine.

Pennisetum catabasis

Gramineae

Olmagutian

Perennial tufted grass to 2 m high. In bushed and wooded grassland. Used to thatch traditional houses.

Peponium vogelii (Hook.f.)Engl.

Cucurbitaceae

Oltulet-lolowuaru

A climber with kidney-shaped, shallowly deeply 5-7-lobed with pointed teeth. Flowers bright yellow. Fruit ellipsoid, orange with green streaks, to 15 cm long. In rocky places and forest edges. Fruits edible, popular particularly by children and women.

Periploca linearifolia Dill.&A.Rich.

Asclepiadaceae

Osinantei

A climber with smooth linear leaves. All parts with milky latex. Flowers white with purple sepals, in terminal cymes. Fruit of diverging pods, to 10 cm long. In forest edges. Commonly taken in soup.

Phoenix reclinata jacq.

Palmae

Oltukai

Palm tree to 15 m high, mature palm with slender trunk, often bent over, covered with very rough leaf scars. Leaves 2.7 m long, leaflets bright shiny green, stiff and pointed. Flowers cream, in much-branched panicles. Fruit red to orange. In riverine vegetation and wet areas in upland forest. The fronds areused to clean gourds.

Phragmanthera usuiensis(Oliv.)M.Gilbert

Loranthaceae

Olmeigaro-keon

A parasitic shrub with ovate-elliptic leaves. Flowers yellow to orange, covered with rusty hairs (Figure 31). Fruit a blue-green berry with bright orange-red seed. It I found in forest and bushland. It is used to prepare medicine.



Figure 31: Phragmanthera usuiensis (Oliv.) M.Gilbert

Phyllanthus sepialis Muell. Arg

Euphorbiaceae

Entile

Many-stemmed shrub with small, almost round smooth leaves. Flowers yellowish green, in axillary groups, long-stalked. Fruit about 2.5 mm across, wrinkled. Useful goat fodder.

Physalis peruviana L.

Solanaceae

Olnaasi

Trailing hairy herb with ovate leaves, shallowly toothed. Flowers yellow with brown centres. Fruit yellow to orange, in inflated papery calyx. In disturbed places. Fruits eaten.

Phytolacca dodecandra L'Herit.

Phytolaccaceae

Olaturdiai

Somewhat succulent shrub with ovate smooth leaves. Flowers greenish white, very many in 30 cm long

racemes. Fruits orange. In forest edges. Poisonous plant.

Piliostigma thonningii (Schumach.) Milne-Redh. Caesalpiniaceae

Oloipirus alan

A small tree about 4 m tall with rounded crown. Leaves are leathery with prominent raised veins, bilobed, often folded along the midrib, lower surface brownish hairy. Flowers white to pink. Pods woody, flat, brown in colour, 15-20 cm long. Found on the wooded grasslands.

Pistacia aethiopica Kokwaro

Anacardiaceae

Oltankotua

Evergreen shrub or tree to 10 m high with resinous rough bark. Leaves compound with 6-10 opposite leaflets, reddish when young, rachis winged. Flowers yellowish with red tinge. Fruits red, round. In dry forest in association with Juniperus and Olea. Used for tooth brush, firewood andmedicine.

Pittosporum lanatum Hutch. & Bruce

Pittosporaceae

Oltiangararian

Tree with ash-grey scaly bark. The leaves are shiny above, crowded at the ends of branches. Flowers are

cream, strongly scented. Fruits are round with persistent style, 6-8 mm across, yellowish, splitting in two when mature (Figure 32). A common tree in the forest.



Figure 32: Pittosporum lanatum Hutch. & Bruce

Plicosepalus curviflorus(Oliv.)Van Tiegh

Loranthaceae

Olmeigaro-keon

Parasitic shrub with stems arising from surface runners. Leaves strap-like. Flowers curved, mostly red or yellow. Fruit red berry. In bushland and wooded grassland, usually on *Acacia* spp.

Plumbago zeylanica L.

Plumbaginaceae

Olngeriantus

A trailing smooth shrub. Leaves ovate with wedge-shaped base, leaf stalk winged and clasping the stem at base. Flowers white in terminal spikes. In dry bushland. For medicine.

Podocarpus falcatus Mirb.

Podocarpaceae

Olpiripiri

Evergreen tree to 25 m high with straight bole. Bark cracking and scaling into irregular rectangles. Leaves

narrow, 2-5 cm long. Cones round, to 2 cm, green with dull purple bloom. In dry forest with Olea and Juniperus. Used for timber.

Podocarpus latifolius (Thumb.)Mirb.

Podocarpaceae

Ormusaduku

Evergreen tree to 20 m high with straight bole. Bark cracking and scaling into irregular rectangles. Leaves narrow, 2-5 cm long. Cones round, to 2 cm, green with dull purple bloom. In humid upland forest and bamboo zone, may be locally dominant. Used for timber.

Pollichia campestris Ait.

Caryophyllaceae

Enkayakuji-ekoko

Straggling woody herb with apparently whorled leaves. Flowers greenish, in dense axillary clusters. Fruit red. In forest edges, bushed grassland and disturbed areas, often in shaded areas.

Polygonum salicifolium Willd.

Polygonaceae

Oleturot

Perennia herb with linear-oblong sheathed leaves. Flowers pink or white, in groups, in terminal racemes. In waterside grassland.

Prunus africana (Hook.f.) Kalkm

Rosaceae

Olkujuk

Evergreen tree to 25 m high with rough bark scaling irregularly. Leaves leathery, margin with shallow teeth, leaf-stalk pink to reddish brown. Flowers greenish white. Fruit round, dark red to purple-black, bilobed. In moist forest, Used to make medicine.

Pseudognaphalium luteo-album(L.) Hillard & Burtt Compositae

Olekiushin

Erect woolly herb. Leaves spoon-shaped. Flowers in globose straw-coloured heads. In grasslands and disturbed places including areas of cultivation. Used to bathe newborn babies.

Psiadia punctulata (DC.) Vatke

Compositae

Olabaai

Shrub about 2 m high. Leaves shiny and sticky, with gummy secretion. Flowers yellow, in many-flowered heads. Open areas in dry forest, disturbed grassland and woodland. Used as insecticidefor fleas in sheep, goat kids and calves. Roots are used in soup.

Psydraxschimpriana(A.Rich.)Bridsonssp.schimperianaRubiaceae

Olmasei

Evergreen shrub or tree to 10 m high, young branches square, somewhat winged. Leaves glossy above, smooth. Flowers white in dense cymes. Fruit black, 1-2-seeded. In dry forest and bushland, often in rocky sites. Used for firewood.

Pterolobium stellatum(Forssk.) Brenan

Caesalpiniaceae

Olosarng'atuny

Scrambler or climbing shrub to 15 m with prickles on the stem and leaves. Leaves compound, leaflets in 7-15 pairs. Flowers cream-yellow, in spikes. Fruits purple-red, winged. In riverine vegetation, forest edges and wooded bushland. Used for medicine.

Pupalia lappacea (L.) A. Juss.

Amaranthaceae

Enterepenyi

Perennial sprawling hairy herb with ovate leaves and terminal inflorescence with flower clusters with stiff hooked bristles, very annoying sticky plant. In bushland, Goat fodder.

Rauvolfia caffra Sond.

Apocynaceae

Olemudongo

Much-branched shrub or tree up to 35 m high, branches whorled, all parts with milky latex. Leaves shiny dark green above, arranged in whorls of 3-5 towards the ends of branchlets. Flowers white, tubular, in dense clusters. Fruit round and smooth, black purple and wrinkled when ripe. In riverine forest. Used to make beehives and stools. See also *Tabernaemontana venricosa*.

Rhamnus prinoides L'Herit

Rhamnaceae

Olkonyil

Much-branched shrub, occasionally scrambling. Leaves shiny above. Flowers yellow-green. Fruit 3-lobed, red first, later turning purple-black. In forest edges and openings up to the bamboo zone. Popular medicinal plant.

Rhamnus staddo A. Rich.

Rhamnaceae

Olkokola

Shrub or tree, twigs occasionally thorn-tipped. Leaves obovate, margin slightly serrated. Flowers greenish yellow. Fruit red, turning black. In dry upland forest edges and evergreen bushland. Popular medicinal plant.

Rhoicissus tridentata (L.f.) Wild & Drum.

Vitaceae

Olkilenyai

Shrub 1.5 m or climber to 9 m from tuberous rootstock. Leaves are trifoliolate, hairy (Figure 33). Flowers are reddish brown. Fruit is black, about 1 cm across. It is common in wooded grassland, forest margins and evergreen bushland. Fruits are edible. It is useful animal fodder in drought periods. It has medicinal uses. Its flowering signifys higher honey production. Resulting honey is sticky, thick and sweet.



Figure 33: *Rhoicissus tridentata* (L.f.) Wild & Drum.

Rhus natalensis Krauss

Anacardiaceae

Olmisigiyioi

Much-branched shrub with cream bark dotted with lenticels and angular branches. Leaves 3-foliolate, the middle one largest. Flowers yellow-green, in loose heads. Fruits bean-shaped, smooth, purplish red when ripe. In dry forest margins, bushland and wooded grassland. Fruit edible. Used to make medicine. Firewood. Toothbrush.

Rhus quartiniana A. Rich.

Anacardiaceae

Olmisigiyioi

Much-branched shrub or tree about 7 m high. Leaves 3-foliolate, the middle one largest, densely hairy. Flowers yellow-green, in hairy loose heads. Fruits bean-shaped, reddish. In riverine vegetation and wooded bushland. Fruit edible. Used to make medicine.

Rhus vulgaris Meikle

Anacardiaceae

Olmungushi

Much-branched shrub or small tree about 5 m high with brownish hairy bark. Leaves 3-foliolate, the middle one largest, densely hairy beneath. Flowers yellow-green, in hairy loose heads. Fruits bean-shaped, reddish brown, slightly flattened. In dry forest margins, bushland and wooded grassland. Fruit edible. Used to make medicine, Firewood.

Rhynchosia hirta (Andrews) Meikle & Verdc.

Papilionaceae

A vigorous twinner with trifoliolate leaves. Flowers greenish white. Pods twisted, velvet. Seeds blue, persistent in the open pod. In riverine vegetation and wooded bushland. Fodder.

Ricinus communis L.

Euphorbiaceae

Olpaleki

Evergreen shrub or tree to 5 m tall with purplish hollow stems. Leaves large, palmately lobed with toothed edge, young ones dark red-green. Flowers reddish to purplish green, crowded on upright spikes. Fruit round spiny capsules, splitting to release 3 seeds. Usuall escape from cultivation, common in riverine vegetation.

Rubia cordifolia L.

Rubiaceae

Olngeriandus-loonchashuri

Prickly climber with recurved prickles and longstalked heart-shaped leaves. Flowers greenish-yellow, in short axillary cymes at the tips of the branches. Fruits black. In dry forest edges and riverine vegetation. Roots produce red dye for sword sheaths. A medicine for babies

Rubus apetalus Poir.

Rosaceae

Olayakuji

A Scrambling shrub with scattered hooked spines on the stems.Leaves with 3-7 leaflets. Flowers with small pink petals, in branched heads. Fruits of many small parts purple-black when ripe. In forest edges and riverine vegetation. Fruits edible. Roots for medicine.

Rumex usambarensis (Dammer) Dammer

Polygonaceae

Enkaisujoi

A scrambling shrub with pinkish-green hollow stems. Leaves sheathed, arrow-shaped at the base. Flowers are reddish, in terminal clusters. Stems and leaves have acidic taste, chewed to slake thirst.

Rytigynia uhligii (K. Schum. & K. Krause) Verdc. Rubiaceae

Orgumi

Shrub or tree to 8 m high with smooth bark. Leaves opposite, elliptic, smooth. Flowers greenish-yellow, in 1-2 flowered cymes. Fruit round, blue-black. In forest. Used for firewood and tool handles.

Sansevieria suffruticosa N.E.Br.

Dracaenaceae

Oldupai

Perennial herb from a woody rhizome. Leaves straight, cylindrical, ribbed and usually variegated. Flowers white or pale red, in clusters o terminal raceme. Fruit a round berry. In dry rocky bushland. Used to make medicine. It is used to make rope.

Sarcostemma viminale (L.) R.Br.

Ascepiadaceae

Oloilei-oibor

A twining shrub with greenish fleshy stems. Flowers greenish, in stalkless umbels. In rocky and disturbed

sites in bushed grasslands. Taken in soup. Has various medicinal uses.

Sapium ellipticum (Krauss) Pax

Euphorbiaceae

Olairangai

Tree with drooping branches and with milky latex in all parts when cut. Leaves with toothed margin, turning red before falling. Flowers tiny, yellowish green, in terminal spikes. Fruits 3-lobed, purplish black when ripe. The tree often found near rivers.

Satureia biflora (D.Don)Benth.

Labiatae

Engoloshoo

Erect woody herb to 50 cm high. Leaves almost round. Flowers pink, in dense axillary clusters. In grasslands. Leaves used in tea.

Schrebera alata (Hochst.) Welw.

Oleaceae

Oliala

A deciduous tree over 15 m high with yellow-brown bark, flaking in patches. Leaves compound with 2 pairs lateral leaflets plus larger terminal leaflet, leaf stalk winged. Flowers cream white with purple. Fruit pear-shaped, woody capsule, splitting open when ripe, seeds winged. Dry forest remnants and bushland. Firewood. Twigs for cleaning teeth and mouth. Considered good medicine for teeth.

Sclerocarya birrea (A. Rich.) Hochst.

Anacardiaceae

Olmagwai

A much branched tree with greyish cracked bark. Leaves are compound, with 7-21 leaflets. Flowers whitish-purple. Fruits are oval, 2.5-7.5 long, yellow when ripe (Figure 34). The fruits are edible.



Figure 34: Sclerocarya birrea (A. Rich.) Hochst.

Scolopia zeyheri (Nees) Harv.

Flacourtiaceae

Lekiku-uni

Shrub or small tree about 8 m tall. Stem and branches with many straight spines to about 10 cm long. Flowers white with yellowish anthers. Fruit round, reddish black. The very spiny stems are used to make temporary cattle enclosures.

Scutia myrtina (Burm.f.)Kurz

Rhamnaceae

Osanankururi

Scrambling spiny shrub forming bushes, branches with recurved thorns. Leaves opposite, broadly oval with a tiny sharp protrusion at tip. Flowers greenish white. Fruit round, purple black when ripe. In forest edges and bushland. Fruit edible. Bark used in soup. Branches used to make a twiler.

Secamone punctulata Decne.

Ascepiadaceae

Entasim-ekule

Woody climber with narrowly elliptic leaves. Flowers orange in axillary and terminal cymes. Fruits diverging pods. In evergreen bushland and woodland. Used in various traditional rites.

Selaginella abyssinica Spring

Fern

Nareruk

A carpet-forming herb on moist forest and bushland floor

Senecio hadiensis Forssk.

Compositae

Olairamirami

A semi-succulent climber with soft, slightly toothed leaves. Flowers yellow in terminal corymbs (Figure 35). It is common in forest edges. It is useful fodder in dry season.



Figure 35: Senecio hadiensis Forssk.

Senna didymobotrya (Fresen.)Irwin & Barneby Caesalpiniaceae

Osenetoi

Much-branched shrub to 4 m high with compound leaves with 8-18 pairs of leaflets (Figure 36). Flowers

are yellow. Fruits are flattened pods, up to 10 cm long. It is common in riverine vegetation. It is used to make traditional medicine.



Figure 36: Senna didymobotrya (Fresen.)Irwin & Barneby

Sesbania sesban (L.) Merrill

Papilionaceae

Oloyiankalani

A deciduous short-lived shrub with reddish brown bark. Leaves compound, with 10-25 pairs leaflets. Flowers yellow with maroon specks. Pods in bunches, constricted between the seeds. In riverine vegetation and seasonally flooded areas. Goat fodder.

Sida rhombifolia L.

Malvaceae

Enkonini-enkop

Short-lived perennial herb to 1.5 m high. Leaves ovate elliptic. Flowers yellow, in axillary racemes. In disturbed sites. Used in traditional ceremonies. It is used to make sweeping blooms.

Sida schimperiana A. Rich.

Malvaceae

Olonini

Much-branched shrub to 0.5 m high. Leaves linearoblanceolate, greyish. Flowers yellow, borne singly or in groups of 4. In grassland and bushland. Used in various traditional ceremonies.

Sida tenuicarpa Vollesen

Malvaceae

Olonini

Spreading dwarf shrub with oblanceolate leaves with apical tooth. Flowers yellow, solitary or in heads. In grasslands and degraded pastures. Used in various ceremonies.

Solanecio angulatus (Vahl) C. Jeffrey

Compositae

Olairamirami-pus

A succulent climber with deeply pinnately lobed leaves. Flower heads yellow, in crowded umbels. Forest edges and woodlands. Fodder for goats.

Solanecio mannii (Hook.f.) C. Jeffrey

Compositae

Olmusakwa etim

A shrub or small tree to about 6 m high with greenish purple stems which have prominent leaf scars. Leaves are sword-like and toothed along the margin. Flowers in terminal inflorescences, yellow.

Solanum aculeastrum Dunal

Solanaceae

Osikawoi

Much-branched shrub to 5 m high with scattered thorns on branches. Leaves pinnately lobed, often spiny beneath. Flowers white, in axillary cymes. Fruit yellow, lemon-shaped, with pointed apex, often warty. In forest margins, clearings and riverine. Live fence around manyatta.

Solanum incanum L.

Solanaceae

Entemelua, Entulelei

Thorny shrub with ovate, slightly lobed leaves. Flowers mauve or purple. Fruit round, yellow. In waste ground and grassland. Used to treat various diseases.

Solanum indicum L.

Solanaceae

Entulelei entim

A shrub to 3 m high with straight or curved prickles on stem and leaves. Leaves often lobed and hairy. Flowers blue purple with yellow stamens. Fruits round, about 8 mm across, orange or red but later changing to black, appearing in small groups. In forest edges and openings. It has various medicinal uses.

Solanum nigrum L.

Solanaceae

Olmomoi

Annual herb with elliptic entire or toothed leaves. Flowers white, in drooping umbels. Fruits black or orange. Common weed of cultivated land, also common in forest. Used as vegetable.

Sphaeranthus confertifolius Robyns

Compositae

Oleturot

Loose shrub with winged stem and narrow-elliptic toothed leaves. Flower heads purple. In disturbed ground in forest and grassland areas. Used to make traditional medicine for babies.

Sphaeranthus suaveolens (Forssk.) DC.

Compositae

Oleturot

Trailing herb with ascending winged stems. Flower heads purple. In riverine and dry riverbeds. Used to make traditional medicine for babies.

Sporobolus sp.

Gramimeae

Olobobo

A tufted grass to 1.5 m high with round slender flowering stalks. In grassland. Cattle fodder.

Synadenium grantii Hook.f.

Euphorbiaceae

Olkorbobit

Shrub or tree to 6 m high with milky latex in all parts. Leaves fleshy, with purple tinge. Flowers reddish in dichotomous cymes. Fruit red, slightly hairy. In bushland, usually at rocky sites. Planted to mark graves.

Syzygium cordatum Krauss

Myrtaceae

Olairagai

Evergreen tree about 8 m high with short trunk and compact rounded crown. Leaves are blue-green,

clasping the stem in opposite pairs, oblong to circular, to 8 cm long (Figure 37). Flowers are pink-white with conspicuous stamens, in clusters. Fruits are fleshy, oval, purple when ripe.It is found in riverine. Fruits are edible.



Figure 37: Syzygium cordatum Krauss

Syzygium guineense (Willd.) DC.

Mytaceae

Olairagai

Evergreen tree to 15 m high with rough flaking bark and drooping branchlets. Young leaves purple red, mature ones dark green. Flowers white with conspicuous stamens, in dense heads. Fruits oval, purple-black when ripe. In riverine forest. Fruits edible.

Tabernaemontana ventricosa A.DC.

Apocynaceae

Olemudongo

Tree with large shinny leaves, all parts exuding copious white latex when cut. Flowers white to yellow, tubular, in dense clusters. Fruit 2-lobed. Found along the rivers. Used to make beehives and stools. See also *Rauvolfia caffra*.

Tagetes minuta L.

Compositae

Olbanki

Strong-smelling annual herb with pinnate opposite leaves. Leaflets toothed along the margin. Flowers yellow, in terminal heads. Weed in cultivated land.

Tarchonanthus camphoratus L.

Compositae

Oleleshwa, Osentu

Shrub or tree to 6 m high with silvery-white (Figure 38) camphor-scented leaves. Flowers white, in terminal inflorescence. Fruits are woolly. A very common tree especially on rocky sloppy sites. It is used to treat various diseases. Used for firewood and construction. Leaves are used as handcarchief as well as beddings.



Figure 38: Tarchonanthus camphoratus L.

Tarenna graveolens (S. Moore)Brem.

Rubiaceae

Olmasei

Shrub or tree to 7 m high with opposite narrowly elliptic leaves. Flowers are whitish yellow, in compact

terminal heads(Figure 39). Fruits are round, 4-7 mm, turning black when ripe. Commmon in forest edges, bushland on rocky sites and riverine vegetation. It is used to make traditional medicines. It is used for firewood and construction.



Figure 39: Tarenna graveolens (S. Moore) Brem.

Tetradenia riparia (Hochst.) Codd.

Labiatae

Olokoromua

A sub-succulent shrub about 3 m high with knobbly stems with leaf scars. Leaves are ovate with toothed

margin, 3-20 by 2-15 cm. Flowers are white or pale blue, in terminal panicles (Figure 40). It is found in dry rocky evergreen bushland. It is used to prepare traditional medine. It is used to start traditional fire.



Figure 40: Tetradenia riparia (Hochst.) Codd.

Thunbergia alata Sims

Acanthaceae

-

A twining perennial herb with winged leaf-stalk. Leaves triangular, with heart-shaped base and arrow-shaped lobes. Flowers orange, tubular with dark throat. Fruit a woody capsule with beak. Used for medicine.

Tinnea aethiopica Hook.f.

Labiatae

Olokildia

Weak shrub to 3 m high with ovate leaves. Flowers in pairs at upper nodes, blackish purple, papery in fruit. In wooded bushland and grassland. Used to make eye medicine.

Toddalia asiatica (L.) Lam.

Rutaceae

Oleparmunyo

Much-branched prickly climbing shrub. Branches and underside of leaves with hooked prickles. Leaves 3-foliolate. Flowers greenish-yellow. Fruit round, orange when ripe. In forest margins, riverine and grassland thickets. Used to prepare traditional medicines, very popular.

Tragia brevipes Pax

Euphorbiaceae

Entamejoi

Climbing herb with stinging hairs especially on the fruit. Leaves ovate toothed along the margin and narrowed into a point at apex. Fruit a densely hairy ball. In forest edges and bushland.

Trichocladus ellipticus Eckl. & Zeyh.

Hamamelidaceae

Olpalagilagi

Shrub or tree, usually scandent. Leaves silvery or yellowish brown beneath, obovate or elliptic. Flowers yellow, in heads. In forest, as understorey. Used for construction. This is a valuable fodder during drought.

Tridactyle bicaudata (Lindley) Schltr.

Orchidaceae

Entaretoi

An epiphytic orchid with long straggling woody stems forming clumps on trees. Leaves linear to sterp-shaped. Flowers yellowish green.

Trifolium usambarense Taub.

Papilionaceae

Annual herb with ascending stems often rooting at the nodes. Leaves digitately trifoliolate, leaflets wedge-

nodes. Leaves digitately trifoliolate, leaflets wedgeshaped, toothed along the margin. Flowers purple. In forest, usually in marshy areas. Goat fodder.

Trimeria grandifolia (Hochst.) Warb.

Flacourtiaceae

Oledat

Much-branched shrub or tree with pale grey smooth bark. Leaves ovate with toothed margin and prominent nerves below, densely hairy. Flowers yellow-green. Fruit reddish-orange, angular. In forest. Used to treat various ailments.

Turraea abyssinica A. Rich.

Meliaceae

Enchani-enkashe

A shrub or tree to 8 m high with smooth bark.Leaves with rounded tip. Flowers are white, with a long flament tube, petals 12-16 mm long (figure 41). Fruit 3-lobed, seeds with orange-red aril. It is common inbushland especially riverine. It is used to treat various ailments. It is used as toothbrush.



Figure 41: Turraea abyssinica A. Rich.

Urtica massaica Mildbr.

Urticaceae

Entamejoi

Herb from a rhizome with opposite leaves covered with stinging hairs. Leaves toothed along the margin. Flowers greenish, in spike-like inflorescences. In forest margins and paths, around manyattas.

Uvaria scheffleri Diels

Annonaceae

Erisa

Woody climber with brownish stems. Leaves oval, smooth and aromatic. Flowers solitary, yellow. Fruits many together, cylindrical, yellow or orange when ripe. In riverine forest and bushland, often on stony sites. Fruits are edible.

Vangueria apiculata K. Schum

Rubiaceae

Olgumi

Shrub or tree to 7 m high with grayish brown bark. Leaves opposite. Flowers greenish yellow in dense cymes. In forest and bushland. Fruits edible. Firewood.

Vangueria volkensii K. Schum

Rubiaceae

Olgumi

Shrub or tree to 7 m high with grayish brown bark. Leaves opposite. Flowers greenish yellow in dense cymes.In forest and bushland. Fruits edible. Firewood.

Vepris nobilis Del. (Teclea nobilis Del.)

Rutaceae

Olgilai

Tree to 15 m or more with finely grooved bark. Leaves usually 3-foliolate, leaflets elliptic, smooth. Flowers yellow-green, in terminal or axillary heads. Fruits round or ellipsoid, yellow, orange or red. In forest especially riverine. Used to make walking sticks, clubs and tool handles Used to make medicines. Fruits edible. A useful fodder for cows during drought. Nectar from this tree makes honey bitter and not sticky.

Vepris simplicifolia (Engl.) Verdoorn (*T. simplicifolia* (Engl.) Verd.) Rutaceae

Olgilai

Tree to 15 m or more with finely grooved bark. Leaves elliptic, smooth. Flowers yellow-green, in terminal or axillary heads. Fruits round or ellipsoid, yellow, orange or red. In forest especially riverine. Used to make walking sticks, clubs and tool handles. Used to treat various ailments. Fruits edible. Toothbrush. Nectar from this tree makes honey bitter and not sticky.

Vernonia auriculifera (Welw.) Hiern

Compositae

Olmusaakua

Spreading shrub with elliptic leaves densely hairy beneath. Flower heads purple or white, in dense inflorescences. In forest edges, grasslands and riverine vegetation. Used to treat ailments. Used in traditional ceremonies.

Vernonia brachycalyx O. Hoffm.

Compositae

Ologumati

A scrambler with ovate or elliptic leaves densely hairy beneath. Flower heads purple, in dense inflorescences (Figure 42). In forest edges, grasslands and riverine vegetation. Used to treat ailments. Used in traditional ceremonies.



Figure 42: Vernonia brachycalyx O. Hoffm.

Vernonia lasiopus O. Hoffm.

Compositae

Olmusaakua

A shrub, about 3 m high. Leaves are ovate or elliptic, 4-18 by 2-8 cm, toothed along the margin. Flowers are

pale purple (Figure 43). This is a plant of forest edges and clearings. Roots and leaves have medicinal uses.

Int. J. Adv. Res. Biol. Sci. (2019). 6(3): 54-110



Figure 43: Vernonia lasiopus O. Hoffm.

Vigna membranacea A. Rich.

Papilionaceae

Olchaki

Twining herb from woody rootstock with 3-foliolate leaves. Leaflets ovate-triangular. Flowers pink, blue or mauve. Pods covered with hairs. In bushed grasslands and forest margins. Fodder for goats. Used as cord in construction.

Viscum tuberculatum A. Rich.

Viscaceae

Endaletoi, Olmeigaro-keon

Parasitic shrub on tree branches. Stems forming dense globose masses. Leaves fleshy, obovate, yellow green. Flowers in groups of 1-3, yellow to orange. Fruit ovoid berry, orange or red. In forest and wooded bushland, very common on Nuxia congesta. Used in traditional ceremonies. Taken in tea.

Warburgia ugandensis Sprague

Canellaceae

Osokonoi

Evergreen tree over 20 m high with a rounded crown. Leaves glossy dark green above. Flowers yellow-green. Fruit egg-shaped, purplish when ripe. In riverine forest, often associated with *Acacia xanthophloea*.

Withania somnifera (L.) Dunal

Solanaceae

Olesayiet

Woody herb or shrub about 1.5 m high. Leaves ovate, densely hairy when young, later smooth. Flowers are yellow-green. Fruits orange or red, enclosed in a papery calyx (Figure 44). It is fond along rivers, disturbed sites and seasonally flooding areas. It is used to treat various ailments.

Int. J. Adv. Res. Biol. Sci. (2019). 6(3): 54-110



Figure 44: Withania somnifera (L.) Dunal

Ximenia americana L.

Olacaceae

Olamai

Spiny tree or shrub about 5 m high with alternate leaves clustered on spur shoots or on spines. Leaves often folded along the midrib. Flowers cream. Fruits oval, orange-red. Used to treat various diseases in young children.

Yushania alpina K. Schum.

Gramineae

Oltiyani

Bamboo. Culms (stems) over 6 m high. In dense stands in higher montane forest. Used in cultural ceremonies. Culms made into various household items and snuff containers.

Zanthoxylum usambarense (Engl.)Kokwaro

Rutaceae

Oloisuki

Thorny much-branched shrub or tree about 5-8 m high with brownish, deeply fissures bark. Branchlets with dark-red curved prickles. Leaves compound with 5-17 leaflets, with translucent gland dots, margin toothed,

stalk and midrib dark red and thorny, strongly aromatic. Flowers cream, in terminal heads. Fruits paired, reddish, with shiny blue-black seeds. In bushland and forest edges. A popular medicinal plant.

Discussion

The checklist provides a basic tool for supporting ecological research, facilitating dissemination and exchange of information about the species richness in LCF. Like most folk taxonomies, the Loita Maasai gave such names to plants for which they had a use or value so that they could be distinguished from one another. Important (based mainly on utility) plants are therefore better and more widely known than others. Oloirien (*Olea europaea*), for example, used in most traditional ceremonies, make tool handles, clubs, walking sticks, firewood, construction, medicines and fodder for livestock during drought is extremely well known unmistakably in all places. Several distinctly different plants of similar appearance which may or may not be related are often included together under one name.

For example the local name Olerai oibor (white Olerai) is applied for the yellow-barked thorn trees; *Acacia seyal* and *Acacia xanthophloea*. Olpiron is applied for *Buddleia polystachya* and *Nuxia congesta* while Olemudongo stands for both *Tabernaemontana ventricosa* and *Rauvolfia caffra*. Such occurrences are many.

Plant checklist allows all interested groups to refer to the same plant by the same name in all places and hence avoid confusion and misinterpretation. It also aids communication between visitors/tourists and the local people on diversity of the forest and creates an avenue for non-botanists to scientifically identify local trees. It is becoming increasingly clear that sustained management of forests without the involvement and consent of the local communities is extremely difficult. By combining local plant identification with taxonomic expertise, various forest and vegetation-related projects could be conducted more cost-efficiently and comprehensively.

The checklist builds the efforts, which the local communities have put in conservation and protection of their forests and preserves traditional indigenous knowledge and wisdom that has been transmitted by word of mouth from generation to generation so that it will continue to be available to future generations. It shall act as a constant reminder to the community, foresters, researchers and managers of what they shall lose if the forest is not well managed and gets degraded.

The checklist was not conclusive and needs for continual updating. It is advisable not to rely entirely on vernacular or local names alone when exchanging information about trees rather, it is important to always counter-check vernacular names alongside their corresponding botanical names. There are also minor dialects within the community and a plant with wide distribution may be known by different names in different areas. For example, the local names Oleleshwa and Osentu stand for the tree species Tarchonanthus camphoratus. Similarly, names that are used over a wide area may be applied to different plants in different places. There are also many species that have no local name. One cannot therefore rely entirely on vernacular or local names alone when exchanging information about trees. It is important to counter-check vernacular names alongside their corresponding botanical names.

The list is by no means exhaustive and there is need for more studies to continue updating it and also make it holistic by includingthe fauna of the forest for understanding of the interrelationships and how they impact on the forest conditions.

Acknowledgments

The authors are very indebted to the following community members for their support in plant collection, local identification and guidance in the forest: Daniel Kavioni Koyie, (pastoralist/farmer), Duncan Sonkoi (Social worker), Moijoi Lemoi (Moi University Second Year Student, School of Environmental Science), Samuel Samunka (pastoralist/farmer), James Masek (pastoralist/farmer), Alfred TobikoSulul (pastoralist/farmer), MayonKashu (pastoralist/farmer), Annastacia Sonkoi (Nursing student) Saitoti Melonyie (Para veterinary technician) and Nelly Nakunyiet Shuma. We appreciate the efforts of Alfred Eshitera of Technical University of Kenya for drawing the map of Loita.

Conflict of interest statement

This is to confirm that we have no conflict of interest

References

Agnew, A.D.Q. and Agnew, S. 1994. Upland Kenya Wild Flowers, Second Edition. East African Natural History Society. Nairobi.

Beentje, H.J. 1990.The Forests of Kenya. Proceedings of the Twelfth Plenary Meeting of aetfat, Mitt.Inst.Allg.Bot. Hamburg Band 23a S. 265 – 286. Hamburg. Germany

Beentje, H.J. 1994. Kenya Trees, Shrubs and Lianas.National Museums of Kenya.

Borrini-Feyerabend, G., N. Dudley, T. Jaeger, B. Lassen, N. Pathak Broome, A. Philips and Sandwith, T. 2013. Governance of Protected Areas: From Understanding to Action. Best Practice Protected Area Guidelines Series No. 20. IUCN Gland Switzerland. http://cmsdata.iucn.org/downloads/governance_of_ protected_areas___from_understanding_to_action. pdf.

Gachathi, F. N., Johansson, S. G., Alakoski_Johansson, G. M. 1994. Acheck-list of indigenous trees and shrubs of Bura, Tana River District, Kenya with Malakote, Orma and Somali names. Journal of East African natural History 83: 117-141.

http://www.bioone.org/doi/pdf/10.2982/0012-8317%281994%2983%5B117%3AACOITA%5D2.0.CO%3B2

- García, A. K. 2015. Contesting control Land and forest in the struggle for Loita Maasai self-government in Kenya. African Studies Collection, vol. 58 African Studies Centre, Leiden. The Netherlands. doi https://openaccess.leidenuniv.nl/bitstream/handle/1 887/32747/ASC-075287668-3665-01.pdf?sequence=2
- Karanja, F., Tessema, Y., & Barrow, E. (2002). Equity in the Loita/Purko Naimina Enkiyio forest in Kenya: Securing Maasai rights to and responsibilities for the forest. Nairobi, Kenya: IUCN.
 - https://portals.iucn.org/library/sites/library/files/doc uments/2000-019-11.pdf
- Maundu, P., Berger, D., Ole Saitabau, C., Nasieku, J., Kipelian, M., Mathenge, S., Morimoto, Y., and Hoft, R. 2001. Ethnobotany of the Loita Maasai. People and Plants Working Paper No. 8. UNESCO, Paris, France. http://unesdoc.unesco.org/images/0012/001266/126 660e.pdf
- Mbuvi M. T. E., Musyoki, J. K. and Ongugo P. O. 2014. PFM Impacts on Forest and Poverty Status of the Loita Maasai Kenya. LAP LAMBERT Academic Publishing. Germany.
- Mbuvi M. T. E., Musyoki, J. K. and Ongugo P. O. 2015. Equity Mechanisms in Traditional Forest Management Systems: A case study of Loita forest in Kenya. Journal of Sustainable Forestry, 34:4, 380-405. DOI:10.1080/10549811.2015.1010092
- Musyoka, J. (1999). Socio economic study of the use and management of Loita forest: Loita forest

- integrated conservation and management project— Preparatory phase. Nairobi, Kenya: ETC, EA Consultants.
- Obare, L. 2003. Forest User Needs, Gender and Geographic Information Systems: An Integrative Approach to Managing the Forest of the Lost Child. MSc Thesis, McGill University Unpublished.
 - http://digitool.library.mcgill.ca/webclient/StreamGate?folder_id=0&dvs=1532787208201~218 [accessed on 23th November 2012].
- Polhill, R.M. et al, (eds.), several dates. Flora of Tropical East Africa (several parts). A.A. Balkema, Rotterdam. https://www.nhbs.com/series/flora-oftropical-east-africa
- Riamit, S. K. 2011. Indigenous Women in Forest Management: The Maasai Women of Naimina Enkiyio Forest, Southern Kenya pp 201-243 in Alangui, W. V., G. Subido & Tinda, R. (eds.), (2011) *Indigenous Women, Climate Change and Forests*. Tebtebba Foundation. file:///C:/Users/kefri1/Downloads/indigenous%20women%20climate%20change%20and%20forests-1203.pdf
- Zaal M., & M., Siloma M. (2006, June). Contextualising conflict: Introduced institutions and political networks combating pastoral poverty. Paper presented at the World bank/ILRI/SAGA Conference. June 27–28, 2006. http://www.saga.cornell.edu/saga/ilri0606/37zaal.pdf



How to cite this article:

Musingo Tito E. Mbuvi, James B. Kungu, Francis N. Gachathi, Chemuku Wekesa, Nereoh Leley and Joseph M. Muthini. (2019). Annonated checklist of plant species of Loita Forest (*Entim e Naimina Enkiyio Forest* or *the forest of the lost child*), Narok County, Kenya. Int. J. Adv. Res. Biol. Sci. 6(3): 54-110. DOI: http://dx.doi.org/10.22192/ijarbs.2019.06.03.006