
Cultural and social uses of plants from and around Kibale National Park, Western Uganda

E. K. Kakudidi

Botany Department, Makerere University, Kampala, Uganda

Abstract

This investigation records 89 species are used for 26 cultural and social purposes. The highest numbers of plants are used in wedding ceremonies (25 species), followed by those used against witchcraft (18), religious ceremonies (15), while the others range between 1–9 species. Whole plants contributed 24.8%, followed by leaves (24%), stems (22%), seeds (12.8%) flowers and bark (5.5% each), rhizomes (1.8%) and leaf sheath, root and fruit with 0.9% each. Some plants have multiple uses such as *Cymbopogon nardus* with seven uses. *Ficus natalensis*, *F. ovata*, *Hibiscus fuscus* and *Phoenix reclinata* with four uses each. A total of nine species have three uses each, 19 species with two uses each, and 56 species with one use each.

Key words: cultural, Kibale National Park, plants, Uganda, use, social

Introduction

Culture consists of ideas, beliefs and customs that are shared and accepted by people in a society. Plants feature in many aspects of culture, e.g. language, history, art, religion, medicine, politics and social structure. Information on cultural significance of plants and forests can be gleaned from anthropological, ethnobotanical, geographical, ethnomedicine and linguistic studies (Falconer and Koppell, 1990). Such studies generally focus on particular community or ethnic groups. In Uganda, some studies were on the importance of the banana plant and *Ficus natalensis* Hochst. for backcloth in Baganda culture and finger millet in aspects of Iteso (Musoke, 1975; Nyanzi-Makumbi, 1976; L'Obwol, 1980; Oryem-Origa, Kakudidi & Katende *et al.*, 1995). The

cultural values and symbolic functions ascribed to forests are as diverse as the communities and cultures of the regions (Falconer & Koppell, 1990). The cultural and symbolic functions range from the tree's significance as a link to culture and beliefs, location for socio-cultural and religious activities, symbolic, sacred significance of particular resources, and judicial function of trees, to the use of various parts in healing ceremonies (Falconer & Koppell, 1990). Accessing the numerous symbolic and cultural values is one way to find out the values that people place on Kibale National Park (KNP).

Study area

The study was undertaken in three parishes adjacent to KNP, namely Bigodi, Kahangi and Kabirizi (Fig. 1), from August 1996–August 1998.

Materials and methods

The ethnobotanical methods used involved informal conversations, field excursions, semistructured questionnaires, ranking and scoring. The respondents were selected randomly as recommended by Martin (1995) and comprised of 172 respondents of mainly Batoro (64.5%) and Bakiga (33.7%) with small numbers of other ethnic groups. They included males, females and children ranging between 8 and 96 years.

Cultural and symbolic use of plants by communities

The community had a rich culture and used 83 plant species (Table 1) for various purposes such as wedding ceremonies (25 species), ceremonies against witchcraft (18), religion (15), and other uses that used between one and nine species. Eight different mushrooms were recorded and are also used in various ceremonies/rituals (Kakudidi, 1999). Whole plants contributed 24.8%, leaves 24%, stems 22%, seeds 12.8%, flowers and bark 5.5% each,

Correspondence: Esezah Kyomugisha Kakudidi, Botany Department, Makerere University, PO Box 7062, Kampala, Uganda.
E-mail: ekakudidi@sci.mak.ac.ug

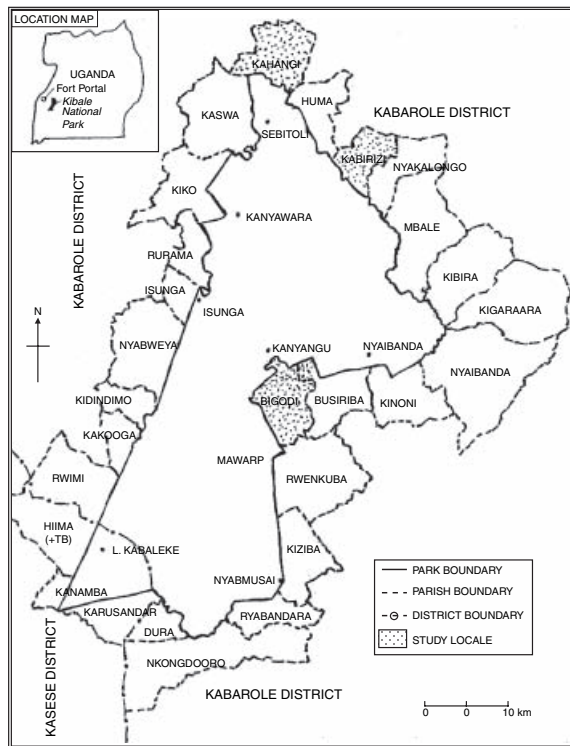


Fig 1 Location of Kibale National Park and study locale showing the three parishes [shaded; adopted from Howard (1991) and Uganda Wildlife Authority (1997)].

rhizomes 1.8% and leaf sheath, root and fruit with 0.9% each. Some plants have multiple uses, e.g. *Cymbopogon nardus* (L) Rendle with seven and *Ficus* spp., *Hibiscus fuscus* Garcke and *Phoenix reclinata* Jacq. with four uses each. Nine species have three uses each, 19 have two each, and 56 species have one each. *Dracaena fragrans* (L) Ker-Gawl and *Erythrina abyssinica* DC are accepted boundary markers by the community.

Ceremonies

Wedding. Plants associated with cultural ceremonies include millet and mushrooms that are commonly served at weddings, naming children, cleansing after the birth of twins [okusitura abarongo (T)], and worship in addition to other food stuffs and banana beer.

Religion. The sacred trees and the sticks (Table 2) on which money offered to the gods is tied are associated with clans. *Entada abyssinica* A. Rich. [Muyooro (T)] is used by

Abagahe clan priests, with some incantations in cases of lightning striking a person or near a home, to cleanse the family from evils that caused the incident.

Blood-brotherhood. Boiled and dried coffee beans are used in this ceremony. A razor is used to make small cuts on the navel of each participant to cause some bleeding. Two seeds from one fruit are used, one for each person. A seed is then rubbed into the blood of one person and offered to the other for swallowing and the reverse happens. They then swear to each other that none would harm the other or refuse to share any worldly thing except wives.

Beliefs and taboos

Beliefs and taboos are parts of the culture or social customs that are abided by so as not to bring bad luck or offend the gods. For instance, it is believed that *Kigelia africana* (Lam.) Benth. fruits if applied on girls' nipples, will make the breasts grow long, make her ugly and make sure she will not be married. But if the girl had difficulty learning mat or basket-making, she could burn a crude item and leak the ash, and would master the art very quickly on her next attempt. *Ficus exasperata* Vahl should never be used as a walking stick or a pole as it drains away riches, as implied by the name Musomoro (T). *Sapium ellipticum* (Hochst.ex Krauss) Pax should not be used as poles for the main house because the owner would be hated or become mad, as implied in the name Musasa (T). Dogs should not eat the leaves of *Stephania abyssinica* (Dill. A. Rich.) Wapl. [Kibura-muhanda (T) means 'no way in or out'] because they would never go hunting. If the plant is touched, a hunter would not find his way back.

Fishing and hunting

The traditional hunting gear/equipment still relied on includes snares, traps, arrows, bows, spears and nets (Table 3).

Discussion

Forests provide venues for ritual/cultural needs in social events, and individual plants are afforded total protection as totems (Gadgil, 1993). In Africa, certain forests and trees are protected and valued as cultural and historic symbols (Falconer & Koppell, 1990; Lebbie & Guries, 1995). An example in Uganda is the 'Nakayima tree' [*Pterygota mildbraedii* Engl. (Mukoko (T))] in the Mubende District (Katende,

Table 1 Plant species used in cultural ceremonies

Species	Part used	Various uses
<i>Abrus precatorius</i> L.	Sd	Love, Wedding
<i>Acanthus pubescens</i> Engl.	Lv	Wedding
<i>Ageratum conyzoides</i> L.	Lv	Wedding
<i>Asparagus</i> spp.	Tb	Diseases
<i>Brillantasia nitens</i> Lindau.	Wp	Shrines construction, cleansing twins
<i>Celtis gamphophylla</i> Bak. (<i>C. durandii</i> Engl.)	Wp	Against witchcraft (protection)
<i>Cleome gynandra</i> L.	Wp	Child birth
<i>Clerodendrum myricoides</i> (Hochst) Vatke	Lv	Child birth
<i>Coffea canephora</i> Froehner (<i>C. rubusta</i> Linden.)	Sd	Kinship ('blood brotherhood')
<i>Conyza sumatrensis</i> (Retz.) E. H. Walker	Lv	Wedding (bride's perfume)
<i>Cordia millenii</i> Bak.	Wp	Religious ceremonies
<i>Crassocephalum vitellinum</i> (Benth.) S. Moore	Fl/Wp	Marketing (good luck), rain-making
<i>Craterinum schwenfuthii</i> Hiern.	Lv/B	Lighting (cleansing), marketing
<i>Croton macrostachyus</i> Del.	Wp	Against witchcraft (protection)
<i>Cymbopogon nardus</i> (L) Rendle	Lv	Rain-stopping, shrine floors, religion, twins, weddings, for/against witchcraft
<i>Cyperus alba</i> L.	Fl	Teething
<i>C. articulata</i> L.	Rz	Wedding (bride's perfume)
<i>C. papyrus</i> L.	St, Rz	Religion, Wedding (bride's perfume)
<i>Diospyros abyssinica</i> (Hiern.) F. White	St	Hunting
<i>Dracaena fragrans</i> (L) Ker-Gawl	Wp/St,Lv	Wedding, against witchcraft
<i>Eleusine corocana</i> (L) Gaertn.	Sd/St	Wedding
<i>E. indica</i> (L) Gaertn	St	Wedding
<i>Ensete ventricosum</i> (Welw.) Cheesman	LvSh	Lactation
<i>Entada abyssinica</i> A. Rich.	Lv	Lightning & twins (cleansing), religion
<i>Erythrina abyssinica</i> Lam.	Sd/Wp	Planted on graves, twins, weddings
<i>Euphorbia tirucalli</i> L.	Wp	Religion, shrines construction, twins
<i>Ficus exasperata</i> Vahl	Wp	For witchcraft
<i>F. natalensis</i> Hochst.	StB/Wp	Bedding, death rituals, religion, wedding
<i>F. ovata</i> Vahl	StB	Bedding, death rituals, religion, wedding
<i>Platostoma rotundifolium</i> (Briq.) A. Paton (<i>Geniosporum padulosum</i> Bak.)	Fl	Religion, twins (cleansing)
<i>Guizotia scabra</i> (Vis) Chiov.	Wp	To cause lighting/for witchcraft
<i>Helichrysum cymosum</i> (L) Less	Wp	Farming, rain-making
<i>Hibiscus fuscus</i> Garcke	St/Wp	Childbirth, win court cases, religion/shrines
<i>Imperata cylindrica</i> (L) P. Beauv.	Lv, Fl	Bedding
<i>Indigofera arrecta</i> . Rich.	Wp	Childbirth, hunting
<i>Indigofera hirsuta</i> L.	Wp	Farming
* <i>Irsine</i> sp.	Wp	Planted on graves
<i>Justicia betonica</i> (Forsk.) Vahl	Lv/St	Against witchcraft
<i>Kigeria africana</i> (Lam.) Benth.	Wp	Charms, farming, religion
<i>Dalbergia lactea</i> Vatke	Lv	Manhood ceremonies
* <i>Lablab purpureus</i> (L) Sweet	Wp	Charms, farming, against witchcraft
<i>Lactuca inermis</i> Forssk. (<i>L. capensis</i> Thurnb.)	Rt	Increase sexual potency in men
<i>Lageneria siceraria</i> (Molina) Standley	Fr	Wedding
<i>L. sphaerica</i> (Sond) Naud.	Lv	Against witchcraft
<i>Lantana trifolia</i> L.	St	Good luck
<i>Microglossa angolensis</i> Oliv. & Hiern.	St/Lv	Good journey/good luck charm
<i>M. pyrifolia</i> (Lam.) Kutz	St	Hunting
<i>Miscanthus violaceus</i> (K. Schum.) Pilg.	Fl	Bedding
<i>Mormodica foetida</i> Schumach	St/Lv	Religious ceremonies
<i>Monechma subsessile</i> C. B. Cl.	Lv	Bride's perfume
* <i>Musa</i> spp.	Lv	Charms, dance

Table 1 Continued

Species	Part used	Various uses
<i>Myrica salicifolia</i> A. Rich.	B	Good journey
<i>Neoboutonia macrocalyx</i> Pax	B	Against witchcraft
<i>Newtonia buchananii</i> (Baker) Gilb.	St	Religion, wedding
* <i>Nicotiana tabacum</i> L.	Lv	Wedding present to elderly
<i>Omuturabusa</i> (T)	Wp	Against witchcraft
* <i>Passiflora edulis</i> Sims	St/Lv	Wedding decorations
<i>Paulinia pinnata</i> L.	St	Hunting
<i>Pennisetum purpureum</i> Schumach	St	Charms
<i>Phoenix reclinata</i> Jacq.	Lv	Bedding, dance costumes, farming, religion, wedding
<i>Phyllanthus fischeri</i> Pax	Lv	Childbirth, teething
<i>Phytolacca dedocandra</i> L'Hérit	Wp	Against witchcraft
<i>Polyscias fulva</i> (Hiern.) Harms	Wp	Against witchcraft, dance instrument
<i>Pseudospondias microcarpa</i> (A. Rich.) Engl.	Sd/Lv	Charms against witchcraft
* <i>Psidium guajava</i> L.	St	Hunting
<i>Rhynchosia hirta</i> (Andr.) Meikle & Verdc.	Sd	Wedding
* <i>Ricinus communis</i> L.	Sd	Wedding
<i>Saccharum officinarum</i> L.	St	Rain stopping
<i>Secamone africana</i> (Oliv.) Bullock	St	Hunting
<i>Senna didymobotrya</i> (Frasen.) Irwin & Barneby	St	Good journey, weeding, against witchcraft
<i>Sida rhombifolia</i> L.	Wp	Win court cases
<i>Solanecio cydonifolius</i> (O. Hoffm.) C. Jeffrey	Lv	Win court cases, against witchcraft
<i>Sporobolus pyramidalis</i> P. Beauv.	Lv	Charm for witchcraft
<i>Teclea nobilis</i> Del.	St	Hunting
<i>Tephrosia linearis</i> (Willd.) Pers	St/Fl	Marketing produce (good luck)
<i>Tephrosia</i> sp.	Lv	Love (for girl to accept proposal)
<i>Termitomycetes microcarpus</i> (Berk. & Br.) Heim	Wm	Wedding
<i>Tragia brivepes</i> Pax	St/Lv	Wedding (try to prevent the bride to be taken)
<i>Triumfetta brachyceras</i> K. Schum	StB	Dance, wedding
<i>T. rhomboidea</i> Jacq.	Sd/Wp	Win court cases, hunting, rain rituals
<i>Vernonia amygdalina</i> Delile	Wp	Twins
<i>Vigna unguiculata</i> (L) Walp.	Wp	Against witchcraft (protection)
<i>Vernonia lasiopus</i> O. Hoffm.	Lv	Charms
<i>Zanthoxylum mildbreadii</i> (Engl.) Weterm	Wp	Religion, shrines construction, against witchcraft
<i>Zanthoxylum rubescens</i> Hook. f.	Wp	Rain rituals, against witchcraft (protection)

B, bark; Fl, flowers/inflorescence; Fr, fruit; Lv, leaves; Sd, seeds; Sh, sheath; St, stem; Rz, rhizomes; Tb, tubers; Wp, whole plant; Wm, whole mushroom. Species marked with an asterisk (*) are introduced.

Table 2 Plants species used by various clans in religious ceremonies

Species	God	Clan
<i>Cordia millenii</i> Baker		Abagabo, Abasaigi
<i>Cyperus papyrus</i> L.	Kaikara	
<i>Entada abyssinica</i> A. Rich.		Abagahe
<i>Ficus natalensis</i> Hochst.	Rubanga	Abagweri, Ababito, Abanekera
<i>Kigelia africana</i> (Lam) Benth.	Maani	
<i>Newtonia buchananii</i> (Baker) Gilb.		Abacwezi, Abanyakoozi
<i>Phoenix reclinata</i> Jacq.	Kaikara, Rubanga	

Birnie & Tangäs, 1995). Forests also provide a range of products for traditional ceremonies from food to costumes and musical instruments. Although the use of traditional instruments has given way to electronic instruments,

Uganda has a rich musical tradition. Musical instruments (drums and herps) are mainly carved from *Polyscias fulva* (Hiern) Harms., *Erythrina abyssinica* DC., and *Ficus* spp. Drums are used for dance, rituals, worship and healing at the

Species	Common name	Article
<i>Cyperus papyrus</i> L.	Bijuza (T) Bifunjo (K)	Fish traps
<i>Diospyros abyssinica</i> (Hiern.) F. White	Muhoko (T)	Spear javelin, walking sticks
* <i>Eryobotrya japonica</i> Lindle	Ensari (T)	Catapult
<i>Indigofera arrecta</i> Hochst.ex A. Rich.	Ensororo (T)	Snare/hunters' net, bow,
	Musorooza (K)	catapult
<i>Microglossa vulubilis</i> DC.	Rutonzi (T)	Snare/hunters' net
<i>Paullinia pinnata</i> L.	Muziga-mbogo (T)	Trap, bow string
<i>Phragmites karka</i> (Retz.) Steud.	Engoro (T)	Bird traps
<i>P. guajava</i> L.	Mupeera (T, K)	Catapult
<i>Secamone africana</i> (Oliv.) Bullock.	Katega-nende (T)	Trap, bow string
<i>Teclea nobilis</i> Del.	Muzo (T, K)	Spear javelin, walking sticks
<i>Triumfetta brachyceras</i> K. Schum.	Ngoyegoye (T)	Snare/hunters' net,
	Munaaba (K)	bow string

K, Rukiga; T, Rutoro; species marked with an asterisk (*) are introduced.

Table 3 Plant species used in fishing hunting

birth of twins ceremonies, communication for hunting, war, etc. (Mukasa, undated; Nzita & Niwampa, 1995).

Communities around KNP have evolved alongside it and learned the use of plant resources for cultural and social purposes. Some trees are becoming rare in KNP, and therefore for easy access and conservation purposes they are planted in home gardens (Kakudidi, 1999). With the changing socio-cultural values, however, the implications on forest resource use and conservation will undoubtedly lead to loss of information on KNP's long-established cultural and symbolic functions.

Acknowledgements

I extend thanks to Norwegian Universities Committee for Development Research and Education (NUFU) for providing the bulk of the fund for the research through the Faculty of Science and in particular to the Botany Department. I am grateful to Makerere University for part of the research grant, and to Makerere University Biological Field Station (MUBFS) and the Botany Department for the facilities availed to me during the research. I am also grateful to Professor R. Bukenya-Ziraba and Associate Professor J.M. Kasenene for guidance during the research and write-up. Special thanks to the communities of Bigodi, Kahangi and Kabirizi for their participation in the research.

References

FALCONER, J. & KOPELL, C.R.S., eds. (1990) The major significance of 'minor' forest products. In: *The Local Use and Value of Forests in the East African Humid Forest Zone*. FAO, Rome, Italy.

- GADGIL, M. (1993) Indigenous knowledge for biodiversity conservation. *Ambio*, **22** (2–3), 151–156.
- HOWARD, P.C. (1991) *Nature Conservation in Uganda's Tropical Forest Reserves*. IUCN, Gland, Switzerland & Cambridge, UK.
- KAKUDIDI, E.K. (1999) Ethnobotanical studies in and around Kibale National Park, western Uganda. PhD Thesis. Makerere University, Makerere, Uganda.
- KATENDE, A.B., BIRNIE, A. & TANGÄS, B. (1995) *Useful Trees and Shrubs of Uganda*. Technical Handbook Series 10, Regional Soil Conservation Unit, RSCU/SIDA, Nairobi, Kenya.
- L'OBWOL, A.J. (1980) Millet and some culture in Teso. B.A. Dissertation, Makerere University, Makerere, Uganda.
- LEBBIE, A.R. & GURIES, R.P. (1995) Ethnobotanical value and conservation of sacred groves of the Kpaa Mende in Sierra Leone. *Economic Bot.* **49** (3), 287–308.
- MARTIN, G.J. (1995) *Ethnobotany. A Methods Manual*. WWF for Nature International. Chapman & Hall, London, UK.
- MUKASA, G.E., (Undated). *Brief Ethnology of Uganda Musical Instruments*. Ministry of Culture Community Development, Uganda.
- MUSOKE, F.G. (1975) The Importance of the banana to the Buganda culture. B.A. Dissertation, Makerere University, Makerere, Uganda.
- NYANZI-MAKUMBI, V.C. (1976) The story of the back cloth in Buganda. B.A Dissertation, Makerere University, Makerere, Uganda.
- NZITA, R. & NIWAMPA, M. (1995) *Peoples and Cultures of Uganda*. Fountain Publishers, Kampala, Uganda.
- ORYEM-ORIGA, H., KAKUDIDI, E.K.Z., KATENDE, A.B. & BUKENYA-ZIRABA, R. (1995) Preliminary ethnobotanical studies of the Rwenzori Mountain Forest area in Bundibugyo District, Uganda. *Bothalia* **25**, 111–119.
- UGANDA WILDLIFE AUTHORITY (UWA) (1997) *Kibale National Park Management Plan*. 1997–2001. UWA, Uganda.