



An Ethnobotanical Study of Medicinal Plants used in the Management of Dermatological Disorders in Buyende and Kayunga Districts, Uganda

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Authors' contributions

This work was carried out in collaboration among all authors. Authors JN, AL and SA wrote the protocol, designed the study, participated in the field survey. Authors JN and SA analysed the data and drafted the manuscript under the supervision of Author BR. All authors read and approved the final manuscript.

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ABSTRACT

This study was done to document medicinal plants used in the management of dermatological disorders. Documentation of plants is important for conservation especially of rare and endangered plant species. The study was done in Buyende and Kayunga districts in Uganda, between April and July 2017. Data was obtained using semi-structured questionnaires and group discussions, performed on 63 respondents (33 females; 30 males) who were purposively selected because of their expertise in plant use. The study recorded 111 plant species that belong to 46 plant families for treatment of 30 skin disorders. The dominant life form was herb (41%), while leaves were the most used parts (59 %). Majority of plants (72%) were harvested from their natural habitats. Family Fabaceae contributed the highest number of species (20). *Milicia excelsa* was recorded to be threatened with extinction. The most cited diseases were skin rash (14%), wounds (12%), syphilis

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(9%), allergy (9%) and ring worm (7%). The plant species with high percent respondent knowledge were *Hoslundia opposita*, cited by 83% of the people; *Bidens pilosa* (76%) and *Jatropha carcus* (56%) all for treating wounds. Topical application (90%) was the common mode of administering herbal remedies, while decoction was least used to prepare remedies. Plants are important in the management of dermatological disorders by local communities in the study areas. The diversity of medicinal plant species used in these areas is based on the rich traditional knowledge of the local communities. There is need to domesticate the rare and threatened medicinal plant species to avoid extinction. Plant species with high percent respondent knowledge can be considered for further studies to identify key active compounds important to develop natural based skin care products.

Keywords: *Ethnobotanical; Medicinal plants; dermatological disorders; conservation; Uganda.*

1. INTRODUCTION

The human skin is the largest organ of the body and is constantly exposed to the air, Ultra Violet (UV) radiation, environmental pollutants, mechanical and chemical stress [1]. The skin protects the body from entry of microbes and UV radiation and its damage can increase the penetration of various microbes and free radical causing agents into our bodies. For instance, UV radiation can cause sun burns, wrinkles, lower immunity against infections, premature aging, and cancer [2]. Skin conditions are the abnormal or unusual appearances on the skins of adults and children in form of blisters, ulcers or rashes [3]. Little attention has been given to skin infections because they are rare and are assumed not to be life-threatening [4]. A study by [4] reported a high prevalence of 21-87 % in developing countries especially in children than in adults. In Uganda, skin conditions are one of the common problems in local communities [5].

In many developing countries, community members depend on their local flora for treating diverse ailments including skin disorders. Skin disorders account for approximately 34% of all occupational diseases [6], and occur in people of all ages [7], causing harm in a number of ways. Sometimes people may develop diseases that affect the skin including herpes, cancer (cancerous wounds), measles or syphilis. Non-communicable diseases, including skin diseases, contribute to about 32.9% of total deaths in Uganda [8]. Skin infections such as allergy, boils, ringworm, scabies, leprosy among others are caused various microorganisms [9]. Traditional herbal medicines have been found to play a major role in management of various skin disorders [8]. According to research done across the world, it is evident that medicinal plants contribute significantly to primary health care and in managing skin diseases effectively [6,9,10,7]

In some parts of the world, skin diseases have been associated with HIV/AIDS [6,9].

Plants have been used in medicines and cosmetics for centuries because they have great potential to cure and manage different kinds of skin conditions [11,3]. Their potential to treat different skin diseases, to adorn and improve skin appearance is well known and well documented [12,13,14]. Much effort has been devoted to identifying plants that are used traditionally to treat different kinds of dermatological disorders and as cosmetics. This is because the demand for herbal medicines has increased as a result of perceived lack of side effects and thought to enrich the body with nutrients and other minerals [11].

This study therefore, reports the use of medicinal plants in the management of dermatological disorders and other related conditions by residents in some villages of Kayunga and Buyende districts. These areas have been found to have the highest number of albinos who are mostly affected by ultraviolet radiations due to their skin condition [15]. This work may serve as a platform of information for scientific research that can lead to formulations of effective drugs, skin care products, or standardized extracts for improved traditional herbal medicine. This study is the first of its kind in the two study areas to document medicinal plants for skin disorders. The authors were encouraged to study plants for skin disorders due to a documentary that featured a household of normal parents with six albino children.

2. MATERIALS AND METHODS

2.1 Study Area

The study was conducted from April to July 2017 in Buyende district in eastern Uganda and Kayunga district in central Uganda respectively

(Fig. 1). Buyende district (1°09'60.00" N 33°09'60.00" E) is located approximately 100 kilometres (62 mi) from Jinja City, and about 170 kilometres (105 mi) from the Capital, Kampala. In Buyende district, the study was done in Nabuuku and Kagulu parishes in Kagulu Sub County (Budiope East). Buyende district lies on an average altitude of about 1050 m above sea level. The climate is tropical savannah, with annual rainfall ranges between 35 and 145 mm. Temperatures are moderate and do not fluctuate much over the year. The mean maximum temperature is 26°C and the mean minimum temperature is 18°C. The human population living in the area was approximately 323,067 [16]. The local people are mainly of the Bantu ethnic group of the Basoga, Bagwere and Baganda tribes [16]. Kayunga district (0°42'9.00" N 32°53'19.00" E) is approximately 74 kilometers (46 mi) northeast of Kampala. In Kayunga, the study was done in four sub-counties of Busana, Kayonza, Nazigo, and Kayunga Town council. Kayunga district lies on an average altitude of 1000-1200m above sea level. The climate is tropical savannah with two rainy seasons and two dry seasons. The two rainfall peak months are April and October. The annual rainfall ranges between 35 and 150 mm. Temperatures are moderate and do not fluctuate much over the year. The mean minimum and maximum temperature ranges between 18°C and 24°C. With a population of 368,062 people, the Bantu ethnic groups inhabit with majorly the Baganda, Bagisu, Basoga and Bakene tribes [16].

2.2 Data Collection Methods

The research team first reported to the local council administrators who helped in identifying key informants. These informants were purposively selected [17] based on skills, knowledge and experience in medicinal plants usage. Informants who agreed to be interviewed were also involved in group discussions for detailed information as well as collection of plant voucher specimens. Data on medicinal plants were obtained from traditional medical practitioners and other knowledgeable men and women. Semi structured questionnaires were used to undertake interviews in addition to group discussions, which were conducted in the local languages of Luganda and Lusoga mainly spoken in the study areas. A questionnaire was designed to obtain such as information as locality, socio-demographic information (age, gender, education background, and religious affiliation), plant names, parts used, preparation

and administration methods. Some plants were identified in the field and voucher specimens collected and taken to the national herbarium at Makerere University for authentication. The international plant name index (www.ipni.org) and the Royal Botanic Garden Kew (www.theplantlist.org) were used to validate plant scientific names, families and authorities.

3. RESULTS AND DISCUSSION

3.1 Factors that Influence Traditional Medicinal Plant Knowledge and Use

The study explains how medicinal plant knowledge varies with socio-economic as well as demographic factors. The research team worked with 63 respondents; 22 in Kayunga and 41 in Buyende respectively. Buyende had more respondents because they were willing to participate in the study, given the fact that most traditional healers generally are very secretive with their knowledge due to intellectual property rights issues. Of the 63 respondents, 33 were females (52%) and 30 were males (48%). In many communities across the world, traditional healing is a gender-based practice where both men and women participate in traditional healing practices. Similarly, in this study, traditional knowledge on medicinal plant use was found to be common among both females and males, cutting across all ages (Fig. 2). However, women are commonly known to be more knowledgeable than men considering their role as domestic health care givers. About 76% were subsistence farmers, while the rest were herbalists (7%) and business people (motor cycle riders, musicians, tailors and vehicle mechanics). All the respondents acquired indigenous knowledge of medicinal plants orally through experience and observation from mothers, fathers, grand fathers, fellow traditional medicine practitioners and spiritual insight as well as workshop / seminar trainings.

3.1.1 Age and plant knowledge

Majority of respondents (62%) in this study were in the age range of 20 to 40 years (Fig. 2). For a long time, research has shown that old people are the greatest custodians of traditional knowledge of medicinal plant use than the young [18,19,20,21,22,23,24,25,26,27]. The present study however was found to be inconsistent with other studies by showing that the youth are now engaging in utilization and commercialization of medicinal plants. It has been reported that

knowledge increases with age, given the fact that knowledge transfer from generation to another is a gradual process [28]. However, in another study, age had no influence on traditional knowledge unlike gender and education level [29].

3.1.2 Education and plant knowledge

In this study, none of the respondents obtained medicinal plants knowledge through formal training, despite the majority (78%) having attained primary / elementary level of education. Traditional knowledge of medicinal plants is usually transferred by word of mouth, hence, documentation of this knowledge (IK) is important for building data bases and controlling its loss. Over the years, research has shown that most custodians of traditional medicinal knowledge are less educated or illiterate. This could also be the reason why the youth are now engaging in this practice because of large numbers having failed to attain high levels of education due to lack of tuition, and other reasons leading to many school dropouts. However, research shows that literacy levels of people determined the mode of treatment [30]; the less educated preferred traditional methods of treatment where as the well educated preferred modern methods of health care. Research over the years has shown low literacy levels among research respondents: [31,32,33,26].

3.1.3 Ethnicity and plant knowledge

In this study, we encountered different ethnic groups of which Basoga (62 %) and Baganda (16 %) were the most dominant (Fig. 3). The use of herbal medicines has increased over the years; an indication of the need to understand how different social /ethnic groups use and define these medicines [34].

This is because the use and definition of herbal medicine differs by ethnicity. In this study, most similar plant species were used by more than one ethnic group, though some plants are known by different names but treating either similar or different ailments. Research shows that a lot has been done to document the uses of herbal medicines but not much has been done to determine peoples' perceptions toward herbal medicine [34]. Traditional medicine is a form of holistic health care system where health care services are based on culture /ethnicity, religious background, knowledge, attitudes and beliefs

that are common in many communities. Traditional medicine was always known to be primitive because of cultural attachments and practices by western professionals. However, through scientific investigations it has proved to be cheap, easily available, effective and to possess potential therapeutic activities such that many pharmaceuticals have been modeled on phytochemicals derived from plants [35]. Traditional medicine is also able to manage such ailments as measles, skin rashes, ringworm, cuts and wounds better than western medicine.

3.1.4 Religion and plant knowledge

Christians formed the largest percentage (83%) of the respondents (Fig. 4). For a long time, African traditional medicine (ATM) was condemned as evil because it is commonly associated with witchcraft, hence, pertaining to the devil [36]. African traditional medicine (ATM) had been grossly misinterpreted by the western missionaries, who did not recognize African traditional religion as of equal status with Christianity. However, this has changed over time, due to changes in lifestyles such as variations in living standards where majority of people, for instance, live below the poverty line, hence, cannot afford the high cost of western medicine and opt for herbal remedies. In addition to this, research shows that it's not only herbal medicine that heals, but also prayers in a Christian sense that plays an important role in people's beliefs regarding treatment of ailments [18]. However, this Christian healing does not involve doctors or administration of drugs. True Christianity is a medicine of prayer, fasting, anointing and laying on of hands; a common practice in the Catholic and Pentecostal (Born-again) domains [37]. For example, it was reported that patients who are Christians preferred seeking medical services from Faith healers than from African Traditional religion [38]. Despite the demonization of traditional medicine by some Christians, World Health Organisation, Scientists and indigenous societies appreciate the value of traditional medicine and the role of traditional healers in not only healing physical illnesses but also as being custodians of traditional knowledge, as well as educators about traditional culture and spirituality [39]. In a similar way, other researchers have reported Christians participating more in ethnobotanical surveys: [22,33].

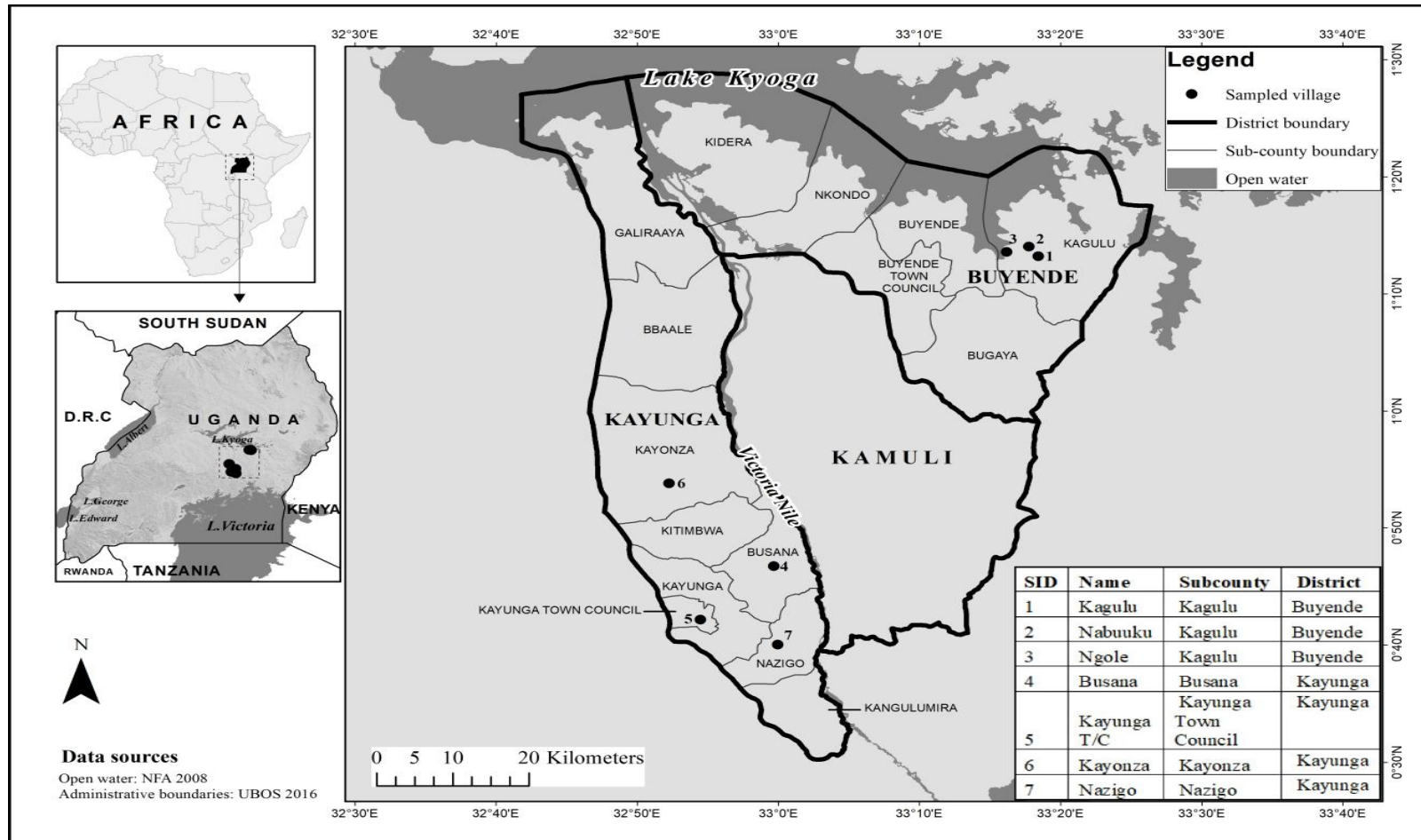


Fig. 1. Geographical location of Study areas

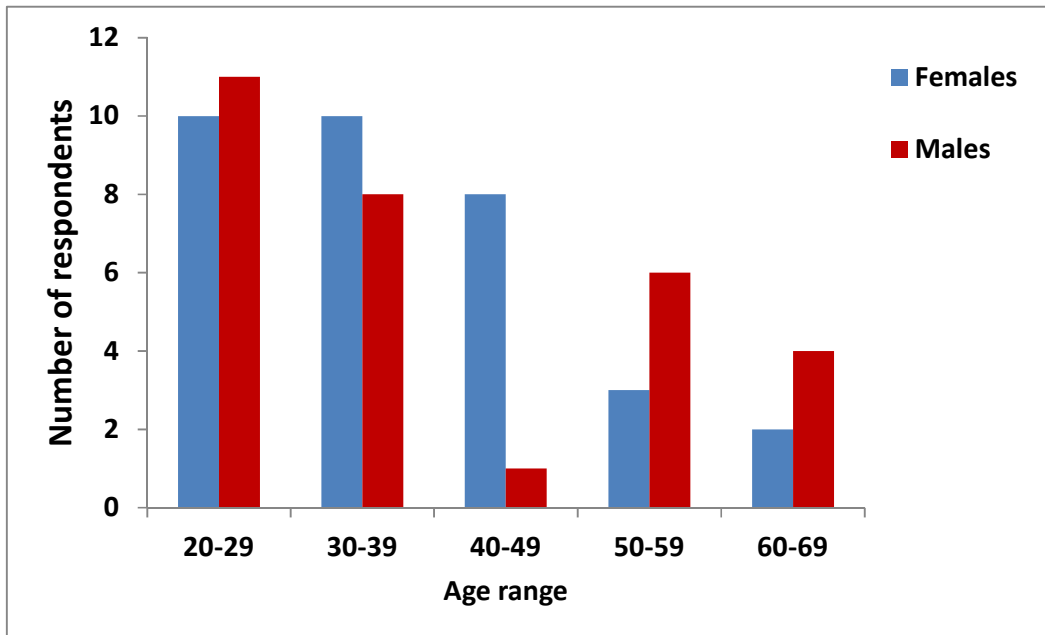


Fig. 2. Age distribution of the respondents in Kayunga & Buyende

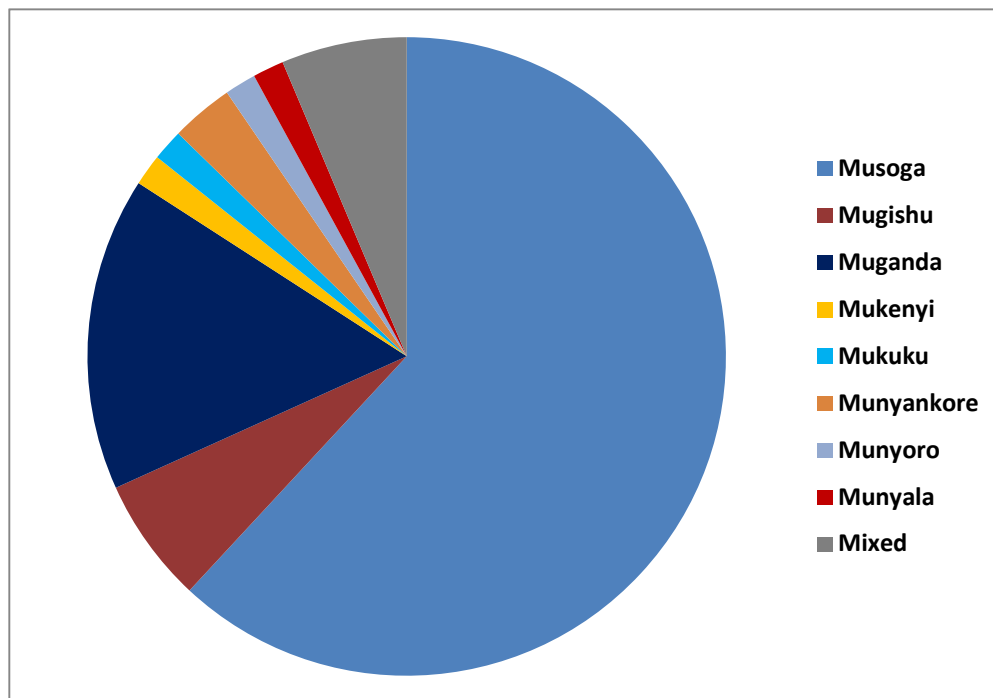


Fig. 3. Ethnic groups of the respondents in Kayunga & Buyende

Christianity and traditional beliefs are some of the systems that have shaped traditional medicine to what it has become today [40,41]. While Christianity revolves around the aspect of God, the Son, Jesus, and the Holy Spirit;

traditional beliefs include things such as the existence of spirits of ancestors ('*ba jaja*' among the Buganda and Basoga cultures), taboos, charms, and fate. Rituals performed have come to include aspects of Christianity while keeping

grounded in the roots of traditional beliefs. For example, in Antananarivo, a woman named Mama Zafy is given an opportunity to pray for patients after a church service [41]. In Uganda, some healers say God gives them the gifts to heal through dreams by showing them the plant species for healing certain ailments. Others say they use the bible, and also ancestral spirits (the 'jajas') give them powers and knowledge to heal. The invocation of God in herbal medicine use is a way of dealing with not only the physical but also the spiritual aspect: which is a holistic approach to traditional health care.

Similarly, in Islam, healing and wellness is promoted physically by use of drugs and spiritually by soul healing through prayer [40,42]. It is mentioned that the Quran (Holy Moslem scripture), illustrates the importance of plants for medicinal benefits [42]. Therefore, prayer is an essential ingredient in traditional healing practices among many societies [31] in addition to use of herbal remedies.

3.2 Medicinal Plant Species Used to Treat Dermatological Disorders

In this study, 111 plant species belonging to 46 families were recorded for the management of 30 different dermatological disorders. People with albinism tend to have skin burns due to ultraviolet rays or too much heat. Family Fabaceae contributed the highest number of plant species (20 species), followed by Asteraceae (13), Euphorbiaceae (9), Lamiaceae and Solanaceae with 6 plant species each (Table 1). The high numbers of plants in Fabaceae, Asteraceae and Euphorbiaceae in treating several diseases may be due to the bioactivities of the phytochemicals that have been reported to exist in plants from these families [43]. In Kenya, a study [44] reported a number of plants used for skin ailments some of which included *Vernonia lasiopus* and *Senna didymobotrya* that were reported in this research. *Albizia coriaria* has also been reported for the treatment of skin infections [45]. Similarity the use of these plants in different countries indicates that these plants are traditionally important and could be potential sources of pharmacological leads that can be used in the treatment of dermatological disorders. With the rampant clearing of bushes and forests for economic purposes, there is fear that even the common plants may be threatened. The results of this information are very important in the campaigns towards conservation of medicinal plants.

Hoslundia opposita and *Bidens pilosa* were mentioned by 82% and 76% of respondents for treating wounds respectively, while *Carica papaya* was reported by 56 % of respondents for treating skin rash (Table 1). The potential of *Hoslundia opposita* to treat various skin conditions and infections particularly wounds, has been supported by in vivo studies where methanol extracts showed significant antibacterial activity with MIC ranging between 64-256 µg/ml, in addition to possession of potent antioxidant activity [46]. A study on the bioactivity and phytochemical activities of *Carica papaya* showed antibacterial, anti-inflammatory and antifungal properties, and the leaf extracts contained saponins, glycosides, alkaloids and vitamins [47]. This supports the use of *C. papaya* in the management of ringworm and scabies. In this study, about 55 % of respondents used *Jatropha curcas* to treat wounds. Pharmacological studies on *J. curcas* supported its uses for inflammation and wound healing. Crude extracts and isolated compounds from *J. curcas* showed a wide range of pharmacological activities, such as anti-inflammatory, antioxidant, antimicrobial, antiviral, anticancer, antidiabetic, anticoagulant, hepatoprotective, analgesic and abortifacient effects [48,49]. *Bidens pilosa* has also been found to have anti-inflammatory, antimicrobial properties, and compounds that help in the wound healing process [50,51,52]. Several isolated constituents of *Bidens pilosa* which have anti-inflammatory, antimicrobial and antifungal properties have been studied [53]. *Aloe vera* gel has been used for thousands of years to treat wounds, burns, and other skin conditions because studies have shown potent antimicrobial, anti-inflammatory and antioxidant activities, all of which are essential for keeping a healthy skin [54,55]. Wound healing effects are accelerated by anti-inflammatory, antioxidant and antibacterial activities of phytochemical contents of a medicinal plant [56,57]. This is reflected in the treatment of burns and wounds using 16.7% of the total medicinal plants in the study area. The other conditions brought about by syphilis, allergies, scabies, burns, tumours, warts and albino skin indicates their prevalence in these areas. Ten plant species were implicated for use on the Albino skin burns including *Albizia coriaria* and *Azadirachta indica* all of which have been found to possess significant antioxidant activities [48,58,59,60,61,62]. The use of these plants to treat skin disorders may be attributed to the existence of phytochemicals such as vitamins (vitamin C, vitamin E), flavonoids, and phenolic acids which compounds counteract the effect of

free radical species capable of causing numerous skin changes [12,63,64,65].

Results of this survey also indicated similarity in the use of *Hoslundia opposita*, *Carica papaya*, *Bidens pilosa*, *Erythrina abyssinica*, and *Albizia coriaria* obtained from the two regions for the same ailments. This could be due to the similar ethnic groups inhabiting these areas but also due to intermarriages. This is evidenced by the same local names used in the two areas. For instance “Akabombo akatono” (*Cyphostemma adenocaula*), and Enniimu (*Citrus limon*). Such plants are more likely to be pharmacologically active [66].

3.3 Morphological Parts and Growth Forms Used in Preparation and Administration of Herbal Remedies

Herbal medicines were mainly prepared from leaves (59%), roots (12%), stem bark (10%), Sap (5%), whole plant (4%) and flowers (4%). The high usage of leaves compared to other plant parts may be an indication of their potency and because of their ability to regenerate [67]. In addition, it is a non-destructive method which ensures conservation and sustainable use of the medicinal plant resources. Of the 111 plant species described in the study, 40% are Herbs, 28% Trees, 16% Shrubs, 14% climbers and 2% grass species. The use of herbaceous plants has been reported by many authors and this

could be related to their availability throughout the year and their pharmacologically active components [68,25]. Herbal remedies were prepared from plant parts of single or multiple plants. The use of two or more plant parts was seen in some herbal preparations like *Cissampelos mucronata*, *Acacia Senegal* and many others. This combination implies increased effectiveness due to synergistic effects of plant compounds. Plants such as *Aloe vera* were used to treat more than one skin infection using one or more different plant parts. Except drinking a decoction, the modes of administration of the herbal medicine in the treatment of skin infections in the study area were similar. They involved directly applying the prepared remedy onto the affected skin area, using a given medium (Table 1). The majority of plants (79%) recorded in this study grow in their natural habitats/wild (Table 1). More than 50% of plants growing in the wild (natural habitats such as forests, bushes, etc), means that activities mainly farming are a potential threat to these species. *Milicia excelsa* was mentioned to be threatened with extinction (not easily available). This plant has also been reported to be threatened in other parts of Uganda [69]. This calls for domestication of such key plant species that are threatened with extinction. The habitat, disease treated, parts used, frequency of mention, mode of preparation and administration of each plant are described in the Table 1.

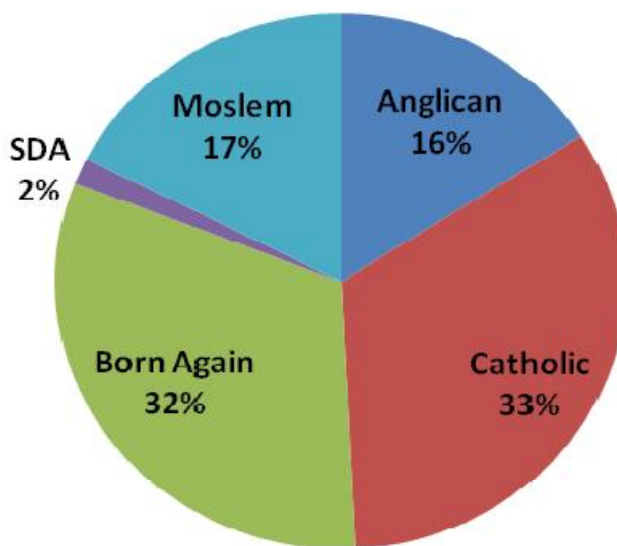


Fig. 4. Religious affiliations of the respondents

Table 1. Medicinal plants used for dermatological disorders

Plant Family	Plant Scientific name; Voucher number	Plant Local name	Habit	Status	Part used	Disease (s)	Preparation and administration	Frequency of mention	PRK (N=63)
Acanthaceae.	<i>Asystasia mysorensis</i> (Roth) T. Andersson JN01	^{K,B} Makaayi (Lug) Einante (Lus)	Herb	WA	L/R	Burns, scabies	Mix powder with jelly and smear	3	4.8
					L	Tumors	Apply fresh leaf extract	2	3.2
		L	Cancerous wounds	Mix with leaves of <i>Bidens pilosa</i> and <i>Hoslundia opposita</i> , pound and apply	1	1.6			
	<i>Thunbergia alata</i> Bojer ex Sims JN02	^B Matamivu (Lus)	Climber	WA	L	Tumors	Mix ash with jelly and smear	1	1.6
Amaranthaceae	<i>Aerva lanata</i> L. Juss JN03	^K Olweza (Lug)	Herb	WA	Wp	Body odour	Infusion bathed	8	12.7
					L	Ringworm	Mix powder with jelly and smear	3	4.8
	<i>Gomphrena celosioides</i> Mart. JN04	^B Olweto olutono (Lus)	Herb	WR	L	Ringworm	Mix powder with jelly and smear	3	4.8
					^K Beetroot	Shrub	CA	L	Skin rash, wounds
	<i>Beta vulgaris</i> L. JN36	^K Beetroot	Shrub	CA	L	Skin rash, wounds	Apply powder with jelly / fresh extract	1	3.2
	<i>Chenopodium opulifolium</i> Schrad. Ex W.D.J. Koch & Ziz. JN37	^B Namuvu (Lus)	Herb	CR	L	Skin rash	Mix with leaves of <i>Solanum qilo</i> , add salt and apply	2	3.2
Anacardiaceae	<i>Lannea schweinfurthii</i> Engl. JN05	^B Omusingabakari (Lus)	Tree	WA	L	Measles	Boil & drink or bathe	2	3.2
					L	Skin allergy	Mix powder with jelly and smear	1	1.6
Annonaceae	<i>Annona muricata</i> L. JN06	^K Ekitoferi (Lug)	Tree	CR	L/R	Measles, syphilis	Decoction drunk or bathed	1	3.2
					Sd	Cancerous wounds	Powder applied	1	1.6
Apiaceae	<i>Centella asiatica</i> L.Urb.	^K Kutukumu (Lug)	Herb	WA	L	Wounds	Apply fresh leaf extract	3	4.8

Plant Family	Plant Scientific name; Voucher number	Plant Local name	Habit	Status	Part used	Disease (s)	Preparation and administration	Frequency of mention	PRK (N=63)
	JN07								
Apocynaceae	<i>Plumeria rubra</i> L JN08	^K Musikamooli (Lug)	Tree	CA	L/FI	Albino skin burns	Add powder to jelly and smear	1	1.6
	<i>Secamone africana</i> (Oliv.) Bullock JN09	^K Akatakula (Lug)	Herb	WA	L/FI L	Wounds Skin rash	Apply fresh leaf extract Bathe decoction	1 5	1.6 8.0
Asparagaceae.	<i>Asparagus africanus</i> L. JN10	^B Kakirakango (Lus)	Herb	WA	L	Vertigo	Mix powder with leaves of <i>Bridelia micrantha</i> , add to jelly and smear	1	1.6
					L L	Burns Skin rash	Add powder alone or mix with jelly Apply fresh leaf extract	6 1	9.5 1.6
Araceae	<i>Caladium bicolor</i> (Aiton.) Vent JN11	^B Akayuni akatono (Lus)	Herb	CA	Tu / Sp	Tumors, allergy	Apply leaf extract /sap	3	4.8
Asteraceae					Tu	Chicken pox	Add powder in jelly and smear	4	6.3
	<i>Acanthospermum hispidum</i> DC. JN13	^B Enkenge ennene (Lus)	Herb	WA	Tu/L	Tumors	Pound, add kerosene and apply	3	4.8
	<i>Ageratum conyzoides</i> (L.) L. JN14	^K Namirembe (Lug)	Herb	WA	L	Skin rash	Squeeze in water, bathe	3	4.8
	<i>Bidens pilosa</i> L. JN15	^{B,K} Ssere (Lug), Bukaala(Lus)	Herb	WA	L L	Skin allergy Wounds	Squeeze in water, bathe Squeeze, tie on the wound/cut	1 48	1.6 76.2
	<i>Conyza sumatrensis</i> (S. F. Blake) Pruski & G. Sancho JN16	^K Kafumbe (Lug)	Herb	WA	L	Tumors, herpes Ringworm	Squeeze and apply extract Squeeze, add kerosene and smear	2 7	3.2 11.1
	<i>Conyza floribunda</i> Kunth. K. JN17	^B Katikati (Lus)	Herb	WA	L	Ringworm	Squeeze, add kerosene, smear	6	9.5

Plant Family	Plant Scientific name; Voucher number	Plant Local name	Habit	Status	Part used	Disease (s)	Preparation and administration	Frequency of mention	PRK (N=63)
	<i>Microglossa densiflora</i> Hook. f JN18	^K Kafugankande (Lug)	Shrub	WA	L	Skin allergy	Squeeze in water and bathe	5	8.0
	<i>Senecio discifolius</i> Oliv. JN19	^K Mukasa (Lug)	Herb	WA	L	Skin rash	Decoction bathed	2	3.2
	<i>Sigesbeckia orientalis</i> L. JN20	^K Sseziwundu (Lug)	Herb	WR	FI	Wounds	Crush & tie on the cut	14	22.2
	<i>Solanecio angulatus</i> (Vahl) C. Jeffery. JN21	^B Kizimyamuliro (Lus)	Herb	WA	L	Burns	Apply powder on wound	1	1.6
	<i>Sonchus oleraceus</i> (L) L. JN22	^K Kakovu (Lug)	Herb	WA	FI/L	Plague	Crush and apply on affected part of the skin	8	12.7
	<i>Tridax procumbens</i> (L.) L JN23	^K Kimaka (Lug)	Herb	WA	L	Syphilis	Boil and drink decoction	1	1.6
Cancerous wounds						Squeeze and apply	1	1.6	
	<i>Vernonia amygdalina</i> Del. JN24	^K Omululuza (Lug), Lubirizi (Lus)	Shrub	WA	L	Burns	Squeeze and apply the liquid	29	46.0
Wounds						Apply squeezed liquid on affected area	1	1.6	
	<i>Vernonia lasiopus</i> O. Hoffm. JN25	^B Akabirizi akatono (Lus)	Herb	WR	L	Measles	Boil and drink	2	3.2
Skin allergy						Squeeze in water and bathe, add to jelly and smear	1	1.6	
Skin rash						Decoction bathed	1	1.6	
Chicken pox						Put powder in jelly and smear	1	1.6	
Warts						Add leaves of <i>Momordica foetida</i> , boil and bathe	1	1.6	
	Asparagaceae	^K Kajolyenjovu (Lug)	Tree	WA	SB / FI	Wounds	Apply powder	1	1.6
Skin rash;						Decoction bathed, drunk	2	3.2	
syphilis									

Plant Family	Plant Scientific name; Voucher number	Plant Local name	Habit	Status	Part used	Disease (s)	Preparation and administration	Frequency of mention	PRK (N=63)
	<i>Sansevieria dawei</i> Stapf. JN51	^B Lugogwa (Lus)	Herb	WR	Sh	Burns	Pound the fresh shoot and use it to cover the affected area	1	1.6
	Bignoniaceae <i>Spathodea nilotica</i> Seem. JN26	^K Kifabakazi (Lug)	Tree	CA	R	Wounds	Decoction bathed	10	16
	<i>Kigelia africana</i> (Lam.) Benth JN27	^B Naizungwe (Lus)	Tree	WR	L	Scabies	Add powder to jelly and smear	1	1.6
					SB	Syphilis	Boil and drink	2	3.2
					R	Warts	Add powder to jelly and smear	1	1.6
Brassicaceae Rich.	<i>Cardamine trichocarpa</i> Hochst. ex. A. JN28	^K Mageregankonko (Lug)	Herb	WR	L	Ringworm	Squeeze fresh leaves, add kerosene, apply	16	25.4
Caricaceae	<i>Carica papaya</i> L. JN29	^{K,B} Epapaali (Lug)	Tree	CA	SB/L/R	Skin rash	Decoction bathed	35	56
					Fr	Scabies	Apply sap on affected area	2	3.2
					Sd	Chicken pox	Grind, mix with <i>Ricinus communis</i> leaves and bathe	1	1.6
Celastraceae	<i>Maytenus senegalensis</i> (Lam.) Exell. JN35	^B Muwaiswa (Lus)	Tree	WR	R	Syphilis	Fresh or powder, add to water, drink and bathe	1	1.6
Cleomaceae	<i>Cleome gynandra</i> L. JN30	^K Ejobyoy (Lug), Eiyobyoy (Lus)	Herb	WCA	Fl	Scabies	Squeeze, add kerosene to jelly and apply	23	36.5
Combretaceae	<i>Terminalia schimperiana</i> Hosch. ex Delile JN39	^B Omusasa (Lus)	Tree	WR	R	Syphilis	grind, boil and drink	2	3.2
	<i>Combretum Collinum</i> Fresen JN40	^B Omukolakola (Lus)	Tree	WR	R	Ringworm	Mix roots of <i>Lantana camara</i> , pound smear	1	1.6
					R	Syphilis	Decoction drunk	1	1.6

Plant Family	Plant Scientific name; Voucher number	Plant Local name	Habit	Status	Part used	Disease (s)	Preparation and administration	Frequency of mention	PRK (N=63)
Commelinaceae	<i>Commelina benghalensis</i> L. JN41	. ^B Enanda (Lus)	Herb	WA	L	Herpes	Add powder to jelly and smear	2	3.2
					L	Skin allergy	Apply fresh leaf extract	1	1.6
Convolvulaceae	<i>Evolvulus alsinoides</i> (L.) L. JN42 <i>Ipomoea cordofana</i> Choisy. JN43	^B Kaluluma (Lus)	Herb	WR	L	Skin allergy	Powder applied	1	1.6
					L	Skin allergy	Powder applied	1	1.6
Crassulaceae	<i>Kalanchoe glaucescens</i> Britten JN44	. ^K Kiyondo ekyeru (Lug)	Shrub	WR	L	Wounds	Roast, squeeze and apply	22	35.0
Cucurbitaceae	<i>Diplocyclos palmatus</i> (L.) C. Jeffrey JN45 <i>Cucurbita pepo</i> L. JN46 <i>Momordica foetida</i> Schumach. JN47 <i>Zehneria scabra</i> Sond. JN48 <i>Luffa acutangula</i> (L.) Roxb JN49	^K Kanawolovu (Lug)	Climber	WA	Wp	Skin rash	Boil and bathe	9	14.3
					L	Ringworm	Squeeze, add kerosene and apply	1	1.6
					L	Body odor	Squeeze and use as sponge	10	16
					Wp	Ringworm	Squeeze with kerosene, apply	1	1.6
					Wp	Skin rash	Infusion bathed	3	4.8
					L	Tumors	Roast, squeeze and wrap around the affected area	1	1.6
					L	Measles	Apply fresh leaf extract	5	8.0
Ebenaceae.	<i>Euclea divinorum</i> Hiern JN52	^B Omudha (Lus)	Shrub	WR	L/R	Ringworm	Add powder to jelly and smear	4	6.3
					L	Skin rash	Infusion bathed	1	1.6

Plant Family	Plant Scientific name; Voucher number	Plant Local name	Habit	Status	Part used	Disease (s)	Preparation and administration	Frequency of mention	PRK (N=63)
					R	Skin rash	Add powder to jelly and smear	1	1.6
					R	Chicken pox	Add powder to jelly and smear	1	1.6
Euphorbiaceae	<i>Euphorbia heterophylla</i> L. JN53	^B Kafadanga (Lus)	Herb	WA	Sp	Warts, wounds	Drop sap on the affected area	4	6.4
	<i>Euphorbia tirucalli</i> L. JN55	^{B,K} Lukone (Lus,Lug)	Shrub	WA	L Sp	Chicken pox Scabies	Infusion bathed Drop sap on the affected area	1 1	1.6 1.6
	<i>Jatropha curcas</i> L. JN56	^{B,K} Ekirowa (Lus)	Shrub	WCA	Sp Sp	Warts Wounds, warts	Drop sap on the affected area Apply sap	17 36	27 57.2
	<i>Manihot esculenta</i> Crantz. JN57	^K Muwogo (Lug)	Shrub	CA	L L	Skin rash Scabies	Infusion bathed Add powder to jelly and smear	1 4	1.6 6.3
	<i>Phyllanthus guineensis</i> Pax JN58	^K Mutulika (Lug)	Herb	WA	SB	Measles	Decoction bathed	5	8.0
	<i>Ricinus communis</i> L. JN59	^{B,K} Nsogasoga (Lug) Mukukulu (Lus)	Tree	WCA	L	Warts	Apply sap	2	3.2
	<i>Sapium ellipticum</i> (Hochst.) Pax JN60	^B Musasa (Lus)	Tree	WA	SB	Tumors	Mix with bark of <i>Tylosema fassoglensis</i> , <i>Erythrina abyssinica</i> , pound and apply powder	1	1.6
	<i>Tragia brevipes</i> Pax JN61	^K Kamyu (Lug)	Climber	WA	L	Boils	Boil with leaves <i>Vernonia amygdalina</i> , apply	1	1.6
Fabaceae	<i>Abrus canescens</i> Baker JN75	^B Olusitisiti (Lus)	Climber	WR	R	Syphilis	Add to <i>Tylosema fassoglensis</i> flowers, <i>Erythrina abyssinica</i> stem bark, Boil and drink and/or bath	1	1.6
	<i>Acacia hockii</i>	^K Akasaana	Tree	WA	L	Herpes	Apply powder mixed with jelly	3	4.8

Plant Family	Plant Scientific name; Voucher number	Plant Local name	Habit	Status	Part used	Disease (s)	Preparation and administration	Frequency of mention	PRK (N=63)
	De Wild. JN84	(Lug), Kasone (Lus)			L /Tu	Burns, warts	Apply powder on affected area	4	6.4
	<i>Acacia Senegal</i> (L.) Willd. JN85	^B Katasubwa (Lus)	Tree	WA	R/L	Skin rash	Apply powder mixed with jelly	1	1.6
	<i>Acacia sieberiana</i> DC. JN86	^B Mufuwanduzi (Lus)	Shrub	WA	Th	Warts	Prick the wart	1	1.6
	<i>Albizia coriaria</i> Oliv JN70	^{K, B} . Mugavu (Lug), Musita (Lus)	Tree	WA	L	Skin rash	Apply powder, mixed with jelly	19	30.2
					SB	Wounds, syphilis	decoction bathed	10	17.6
					SB	Albino skin burns	Mix with bark powders of <i>Albizia grandibracteata</i> , leaves of <i>Solanum nigrum</i> , add to jelly and smear	1	1.6
	<i>Albizia grandibracteata</i> Taub JN71	^B Akalongorongongo. (Lus)	Tree	WA	L	Albino skin burns	Mix bark powders of <i>Albizia coriaria</i> , <i>Solanum nigrum</i> , with jelly & smear	1	1.6
					R	Syphilis	Mix bark of <i>Erythrina abyssinica</i> , boil and drink	3	4.8
					R	Chicken pox	Add powder to oil and smear	1	1.6
					L	Skin allergy	Infusion bathed	1	1.6
	<i>Crotalaria spinosa</i> Benth. JN79	^B Kasambandege (Lus)	Herb	WA	L	Syphilis	Pound and smear on affected area	1	1.6
	<i>Entada abyssinica</i> A. Rich. JN80	^K Mwolola (Lug)	Tree	WA	SB	Skin rash	Powder decoction bathed	15	23.8
	<i>Erythrina abyssinica</i> DC. JN72	^{K, B} Ejirikiti (Lug) Ekiyirikiti (Lus)	Tree	WA	SB	Wounds	Grind ,boil and apply	9	14.3
					L	Burns	Powder mixed with jelly applied	1	1.6
					R	Herpes	Decoction drunk	1	1.6
					Fl	Albino skin burns	Powder mixed with jelly applied	1	1.6
					SB	Acne	Add <i>Tylosema fassoglentis</i> , <i>Sapium ellipticum</i> crush separately, add water, bathe	1	1.6
					SB	Skin rash/allergy	Powder mixed with jelly applied	2	3.2

Plant Family	Plant Scientific name; Voucher number	Plant Local name	Habit	Status	Part used	Disease (s)	Preparation and administration	Frequency of mention	PRK (N=63)
	<i>Indigofera fulvopilosa</i> Brenan. JN73	^B Lweto olusadha (Lus)	Herb	WA	SB + R Wp	Syphilis Skin allergy	Boil and drink Powder mixed with jelly applied	11 1	17.5 1.6
	<i>Piliostigma thonningii</i> (Schum.) Milne-Redh JN31	^K Kilama (Lus)	Tree	WR	L	Chicken-pox	Powder mixed with jelly applied	1	1.6
	<i>Senna didymobotrya</i> Fresen. H.S. Irwin & Barneby JN32	^K Omuvuvumira (Lus)	Tree	WCA	L R/SB	Wounds Ringworm	Powder applied Powder mixed with jelly applied	1 1	1.6 1.6
	<i>Senna occidentalis</i> (L.) Link JN33	^B Kasasisasi/ mwitanjoka (Lus)	Herb	CA	L/R	Ringworm	Powder mixed with jelly applied	2	3.2
	<i>Senna siamea</i> (Lam.) H. S. Irwin & Barneby JN34	^B Lukooge (Lus)	Tree	WR	L	Wrinkles	Powder mixed with jelly applied	1	1.6
	<i>Sesbania pachycarpa</i> DC. JN76	^B Entonanto (Lus)	Shrub	WA	Sp	Warts, acne	Sap applied	2	3.2
	<i>Tephrosia linearis</i> (Willd.) Pers. JN77	^{B,K} Lweyo yeyo (Lus)	Herb	WA	L	Burns, ringworms	Powder mixed with jelly applied	3	4.8
	<i>Tephrosia nana</i> Schweinf. JN81	^B Kawuliza akanene (Lus)	Tree	WA	R	Syphilis	Decoction drunk	1	1.6
	<i>Tylosema fassoglensis</i> (Schweinf)	^B Ekiyugeyuge (Lus)	Climber	WA	L R	Wounds Acne	Powder mixed with jelly applied Mix with barks of <i>E. abyssinica</i> & <i>S. ellipticum</i> and apply	1 1	1.6 1.6

Plant Family	Plant Scientific name; Voucher number	Plant Local name	Habit	Status	Part used	Disease (s)	Preparation and administration	Frequency of mention	PRK (N=63)
	Torre & Hillc JN74				R	Syphilis	Crush, add to water an bathe	1	1.6
	<i>Vigna vexillata</i> (L.) A. Rich JN62	^K Kibowabowa (Lug)	Herb	WA	R Wp	Leprosy Skin rash	Pound and drink decoction bathed	1 2	1.6 1.6
	<i>Zornia glochidiata</i> DC. JN78	^B Kasatira (Lus)	Herb	WA	L L	Plague Ringworms, Acne	Powder mixed with jelly applied Powder mixed with jelly applied	1 2	1.6 3.2
					L	Skin allergy	Add powder to oil and smear	11	17.5
Hypericaceae	<i>Psorospermum febrifugum</i> Spach.	^{K,B} Kanzironziro (Lug) JN38	Shrub	WA	L	Wounds	Pound, apply on affected area	17	27
					L	Skin rash/allergy	Squeeze in water, bathe/apply	5	7.9
					R	Syphilis	Fresh or powder, drink and bathe	1	1.6
					L	Wrinkles	Powder mixed with jelly applied	1	1.6
Lamiaceae.	<i>Clerodendrum umbellatum</i> Poir JN63	^B Matembegalubale (Lus)	Shrub	WA	R	Syphilis	Crush the roots, boil and drink	1	1.6
					L	Herpes	squeeze in water, bathe	1	1.6
					L	Skin rash	Powder mixed with jelly applied	3	1.6
	<i>Hoslundia opposita</i> Vahl. JN64	^{K,B} Kamunye (Lug), Enfodo (Lus)	Shrub	WCA	L	Chicken pox Albino skin burns	Powder mixed with jelly applied Powder mixed with jelly applied	1 1	1.6 1.6
					L	Wounds	Squeeze and apply	52	82.5
					L	Chicken Pox	Powder mixed with jelly applied	1	1.6
					Wp / L	Skin rash / itchy skin	Powder mixed with jelly applied; or decoction drunk	23	36.5
	<i>Leonotis nepetifolia</i> (L.) R. Br. JN65	^{K,B} Kifumufumu (Lus, Lug)	Herb	WA	L	Pimples	Add powder to petroleum jelly and smear	4	6.3
					L	Skin rash	Pound, add kerosene, smear	1	1.6

Plant Family	Plant Scientific name; Voucher number	Plant Local name	Habit	Status	Part used	Disease (s)	Preparation and administration	Frequency of mention	PRK (N=63)
	<i>Ocimum basilicum</i> L. JN66	^B Kawunawuna (Lus)	Herb	WA	L	Skin allergy Measles	Squeeze and smear fluid Boil, drink or bathe	1 1	1.6 1.6
	<i>Tetradenia riparia</i> (Hochst.) Codd. JN67	^K Kyewamala (Lug)	Shrub	WCR	L	Ringworm	Squeeze, add kerosene, apply	3	4.8
	<i>Plectranthus barbatus</i> Andrews JN68	^K Kibwankulata (Lug)	Herb	CA	L L	Itchy skin Wounds	Decoction drunk Apply leaf extract	8 5	12.7 8
Lauraceae	<i>Persea americana</i> Mill. var. <i>americana</i> JN69	^K Ovacado (Lug, Eng)	Tree	CA	L	Cracked soles of feet	Peel ripe fruit, smear	10	16
					Fr	Pimples, skin rash	Peel ripe fruit, smear	2	3.2
					L	Albino skin burns	Mix leaf extract with vaseline, smear	1	1.6
					L	Cancer	Crush leaves and apply	1	1.6
Malvaceae	<i>Grewia trichocarpa</i> Hochst. ex A. Rich. JN108	^B Omukomakoma (Lus)	Shrub	WA	R	Burns	Crush and smear on the wound	1	1.6
					R	Wounds	Crush and smear on the wound	1	1.6
Meliaceae.	<i>Azadirachta indica</i> A. Juss JN82	^K Neem tree Leera (Lug), (Eng)	Tree	CR	L	Albino skin burns	Crush dried leaves, add to vaseline, smear	10	16
					L	Skin allergy	Crush, add kerosene, apply	1	1.6
					L	Acne	Squeeze and smear	1	1.6
					L	Scabies	Grind and smear	1	1.6
Menispermaceae	<i>Cissampelos mucronata</i> A. Rich. JN83	^B Akavamagombe (Lus)	Climber	WA	F/L	Herpes	Squeeze/Pound with <i>Clerodendrum mucronata</i> , apply	3	4.8
Moraceae	<i>Milicia excelsa</i> (Welw.) C. C.	^K Muvule (Lug)	Tree	WT	Sp	Boils	Apply on affected area	14	22.2

Plant Family	Plant Scientific name; Voucher number	Plant Local name	Habit	Status	Part used	Disease (s)	Preparation and administration	Frequency of mention	PRK (N=63)
	Berg. JN87				SB	Burns	Mix with rabbit hair, apply	11	17.5
					Sp	Scabies	Drop sap on the affected area	2	3.2
					Sp	Chicken pox	Drop sap on the affected area	1	1.6
					SB	Skin rash	Decoction bathed	1	1.6
	<i>Ficus natalensis</i> Hochst. JN88	^K Mutuba (Lug)	Tree	WCA	SB	Herpes	Decoction drunk	1	1.6
	<i>Ficus mucoso</i> Welw. Ex.Ficalho. JN89	^B Omusenoseno (Lus)	Tree	WA	L	Scabies	Apply leaf extract	1	1.6
	<i>Ficus ovata</i> Vahl JN90	^K Mukoko (Lus)	Tree	WA	L	Skin allergy	Squeeze and smear	1	1.6
Moringaceae	<i>Moringa oleifera</i> Lam JN91	^K Moringa (Eng)	Tree	CA	L/FI	Wounds	Apply powder	1	1.6
Musaceae	<i>Musa paradisiaca</i> L. JN92.	^B Ekigogo (Lus)	Herb	CA	FI	Scabies /allergy	Apply sap	2	3.2
Myrtaceae	<i>Psidium guajava</i> L. JN93	^K Mapera (Lug)	Tree	CA	L	Skin rash	Boil and bathe	7	11.1
Orobanchaceae	<i>Cycnium herzfeldianum</i> (Vatke.) Engl. JN101	^B Tusangala (Lus)	Herb	WA	Wp	Skin allergy	Pound into dry fine powder, add to oil and smear	1	1.6
Poaceae	<i>Pennisetum glaucum</i> (L.) R. Br. JN94	^B Obulo (Lus)	Grass	WA	Sd	Burns	Roast, grind and apply the powder	2	3.2
	<i>Digitaria abyssinica</i> (A. Rich.) Stapf. JN96	^K Olumbugu (Lug)	Grass	WA	L	Wounds	Squeeze and apply	5	8.0
Passifloraceae	<i>Adenia cissampeloide</i>	^B Lugerogero (Lus)	Climber	WA	SB	Skin allergy	Boil & bathe	1	1.6

Plant Family	Plant Scientific name; Voucher number	Plant Local name	Habit	Status	Part used	Disease (s)	Preparation and administration	Frequency of mention	PRK (N=63)
	s (Planch. ex Hook.) Harms JN95								
	<i>Triliceras pilosum</i> (Willd.) R. Fern. Fernandes JN109	^k Ibeere (Lus)	Herb	WR	Sp	Wrinkles	Apply on the affected area	1	1.6
L					Syphilis	Boil, drink	1	1.6	
L					Albino skin burns	Crush leaves, squeeze and apply	1	1.6	
L					Burns	Powder mixed with jelly applied	2	3.2	
SB					Herpes	Boil & bathe	1	1.6	
L					Tumors	Grind, add kerosene and apply	1	1.6	
					SB	Syphilis	Boil and drink	2	3.2
Phyllanthaceae	<i>Flueggea virosa</i> (Roxb.ex Willd.) Royle. JN54	^b Lukandwa (Lus)	Shrub	WA	SB	Syphilis	Boil and drink fluid thrice a day	5	8.0
Polygonaceae.	<i>Oxygonum sinuatum</i> (Hochst. & Steud ex Meisn.) Dammer JN97	^b Kafumitabagenge (Lus)	Herb	WR	L	Tumors	Tie in banana leaves together with <i>Asystasia mysorensis</i> roast and apply.	1	1.6
					L	Small pox	Squeeze, add water, bathe	1	1.6
					Wp	Measles	Add Powder to oil and smear	1	1.6
Rubiaceae.	<i>Spermacoce princeae</i> (K. Schum.) Verdc JN99	^b Musanvuma or Enkokoma enkazi (Lug)	Tree	WA	L	Ringworm	Pound, add oil, smear	2	3.2
Rutaceae.	<i>Citrus limon</i> L. Osbeck JN100	^{b,k} Enniimu (Lug,Lus)	Tree	CA	Fr	Wrinkles	Squeeze and apply	2	3.2
					L	Albino skin burns	Boil and bathe	10	16

Plant Family	Plant Scientific name; Voucher number	Plant Local name	Habit	Status	Part used	Disease (s)	Preparation and administration	Frequency of mention	PRK (N=63)
Solanaceae	<i>Nicotiana tabacum</i> L.	^B Endaaye (Lus) JN102	Herb	CR	L	Tumors	Wrap in banana leaves, roast and apply	1	1.6
	<i>Solanum anguivi</i> Lam.	^K Entula(Lug), Endagi (Lus)	Herb	CA	L	Skin rash	Add leaves of <i>Solanum lycopersicum</i> , crush and smear on affected area	14	22.2
	<i>Solanum incanum</i> L.	^B Ntengotengo (Lus)	Herb	CA	Fr	Tumors	Squeeze to release fluid and apply once daily	1	1.6
	<i>Solanum lycopersicum</i> L.	^K Nyanya. (Lug)	Herb	CA	Fr	Pimples	Crush, apply on face	4	6.3
	<i>Solanum nigrum</i> L.	^{K,B} Ensuga (Lug), Bitulatula (Lus)	Herb	WCA	L/Fr	Warts, tumors	Squeeze and apply	6	2.4
	<i>Solanum dasyphyllum</i> Schumach. & Thonn.	^B Entulatula (Lus) JN107	Herb	WA	L	Albino skin burns	Crush separately <i>Albizia grandibracteata</i> , <i>Albizia coriaria</i> , to fine powders, mix, add to jelly, smear	1	1.6
	Talinaceae	<i>Talinum portulacifolium</i> (Forssk.) Aschex. Schweinf. JN98	^B Empozza (Lus)	Herb	WR	L	Skin allergy / rash	Pound in water, sprinkle on patient /bathe	2
Verbenaceae	<i>Lantana camara</i> L.	^{B,K} Kapanga (Lus), Kayukiyuki (Lug)	Shrub	WA	R/L	Ringworm	Crush, mix in kerosene, apply until it clears	3	4.8
					L	Scabies	Squeeze, add sheep dung, apply	8	12.7
Vitaceae					L	Wounds	Crush and apply	1	1.6
	<i>Cissus Oliveri</i> (Engl.) Gilg ex. Engl. JN111	^B Kinya kikazi (Lus)	Climber	WA	L	Wounds	Plant extract applied	1	1.6
	<i>Cyphostemma adenocaula</i> (Steud.ex A.	Akabombo akatono ^{K,B} (Lus, Lug)	Climber	CA	Wp	Skin rash	Decoction bathed	17	27

Plant Family	Plant Scientific name; Voucher number	Plant Local name	Habit	Status	Part used	Disease (s)	Preparation and administration	Frequency of mention	PRK (N=63)
	Rich.) Desc.ex.Wild & R.B.Drumm. JN112				L	Syphilis	Infusion bathed	1	1.6
					L	Vertigo, warts	Powder mixed with vaseline applied	4	6.4
Xanthorrhoeacea	<i>Aloe Vera</i> (L.) Burm.f JN12	^{K, B} Kigaji (Lug), Kikaka (Lus)	Shrub	CA	L	Scabies	Apply fresh leaf extract	1	1.6
					L	Dandruff/ flaky scalp	Apply fresh leaf extract	2	3.2
					L	Warts, wounds	Apply fresh leaf extract	16	25.4
					L	Cracked soles	Roast, crush and apply	20	31.7
					L	Skin rash	Add powder in oil and smear	6	9.5

Key: Column 3: ^K(Kayunga) ; ^B(Buyende); Column 3: Lug (Luganda dialect); Lus (Lusoga dialect); Column 5: W-wild; C-Cultivated; R- Rare; T-Threatened ;
 Colum 6: L-Leaf; R- root; Wp-whole plant; Sd-seed; Fl- Flower; Tu- Tuber; Sp-sap; Sh-shoot; SB- stem bark; Fr –fruit; Th – Thorn; Column 10:
 PRK - Percent respondent Knowledge

4. CONCLUSIONS

There is diverse knowledge of medicinal plants recorded in this study used by local communities in Buyende and Kayunga districts, for the treatment of dermatological disorders. *Hoslundia opposita* and *Bidens pilosa* were ranked highest in effectiveness to treat wounds. Fabaceae contributed a large number of plant species used for medicine. This study creates a basis for more research to evaluate the pharmacological activities of the commonly used plants that have not been evaluated. These medicinal plants are very useful especially to people who cannot afford modern medical care products. With more than 50% of plant species useful for treating skin diseases growing in the wild (natural habitats such as forests, bushes, etc), is not sustainable and it means that activities like farming may pose a serious threat to these species. There is need for conservation (outside their natural habitats) and preservation of the plant species with the help of local participation and extensive research in this respect to broaden the prospects of herbal drugs in skin disease treatment.

CONSENT AND ETHICAL APPROVAL

In accordance with the ethical standards of Makerere University, all participants were allowed to consent before commencement of field study interviews, and they also gave consent for publication. The objective of the study was clearly stated to be for academic purposes not commercial. Confidentiality was assured, their knowledge to be protected and research findings shared with them as custodians of the knowledge.

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COMPETING INTERESTS

Authors have declared that no competing interests exist.

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