**ASIAN JOURNAL OF ETHNOBIOLOGY**
Volume 6, Number 2, November 2023
Pages: 138-144

E-ISSN: 2580-4510
DOI: 10.13057/asianjethnobiol/y060204

# Ethnobotanical study of medicinal plants in Ogotun-Ekiti, Ekiti State, Nigeria

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[1]Department of Social and Environmental Forestry, University of Ibadan. Ibadan, Nigeria. Tel.: +2348034032684, ♥email: kilashodavid@gmail.com
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Manuscript received: 10 July 2023. Revision accepted: 6 October 2023.

**Abstract**. *Kilasho A, Kolade MA, Oluborode J, Jackson V, Afolabi S. 2023. Ethnobotanical study of medicinal plants in Ogotun-Ekiti, Ekiti State, Nigeria. Asian J Ethnobiol 6: 138-144.* The essential role of medicinal plants in maintaining human health demonstrates the necessity for appropriate knowledge and documentation of their significance and application. The aim of this study is to thoroughly and methodically record the ethnobotanical knowledge of medicinal plants by local community in Ogotun-Ekiti, Nigeria. The data was collected using both interview method and a structured questionnaire. Respondents were chosen based on their experience, related job and deep understanding of the usage of herbal medicines. According to the findings of the research, 81 medicinal plant species from 40 families and 78 genera were identified and documented. The study also revealed that trees make up 58% of all plants, shrubs make up 27%, herbs make up to 10%. Furthermore, leaves (57%) were the most plant parts used in treating several ailments followed by bark (21%), root (10%) and the seeds (8%) as the least used plant parts. Plants from the Malvaceae family (9 species) were recorded to be the most available in the study area, followed by the Fabaceae family (7 species), Moraceae and Asteraceae (each with 5 species) and three species each from Anarcadiaceae, Combreteaceae, Poaceae, Sapotaceae, Curcurbiataceae, Rutaceae, Solanaceae and Lamiaceae. Some of the frequent illnesses treated with medicinal plants in the study region include: malaria, urinary tract infection, diarrhoea, diabetes amongst others. This study concluded that ethnobotanical survey is crucial for assessing current knowledge and serving as a baseline for future analyses of changes in knowledge and usage. These will thereby give the use of medicinal plants more national and global recognition.

**Keywords:** Herbal medicine, human health, indigenous knowledge, medicinal plants

## INTRODUCTION

Nature provides humans with diverse important and highly valued plant species (Oluborode et al. 2022). As raw materials for various products, plants play a great role in contributing to sustainable livelihood and maintaining social stability of communities. Not only essential to delivering various ecological functions, many plant species are also important for daily uses of societies, including as a source of food-building materials as well as for medicinal purposes since many traditional medications are mostly used plant resources (Ma et al. 2021).

The medicinal plant is any plant with therapeutic, symptomatic, or health-promoting qualities. The word "medicinal plants" also describes several plant species used in herbalism, some of which have medicinal qualities. The development of human cultures around the world has been significantly influenced by medicinal plants (Hassan 2012). The history of using medicinal plants to treat illnesses dates back to the beginning of human civilisation. In many societies around the world, traditional medication that uses medicinal plants has been practiced for thousands of years, making them the oldest type of therapy.

Traditional medicine is becoming increasingly popular worldwide (Kumar et al. 2013). This is due to its use to be the superior, safer and more cost-effective method of treating several ailments. Poverty, a lack of healthcare services and the exorbitant cost of conventional pharmaceuticals all contribute to a strong reliance on medicinal plants (Agbor and Nidoo 2015). A study by Vandana et al. (2021) affirmed the use of medicinal plants as the as the primary source for treating and curing a wide range of significant illnesses. This rate is higher in developing countries, where up to 90% of the total population relies on medicinal plants to help their primary healthcare needs (Adewale and Oduyemi 2014). However, the recent rapid depletion of medicinal plants and other natural resources due to urbanization, population growth, modern agriculture and medical technology amongst others has led to significant loss of traditional knowledge connected to local medicine and ethnic medicine (Chen 2021; Jia et al. 2022). Many of these ancient practices of medicinal plants have either been mostly forgotten or are no longer practiced as a result of inadequate recording (Gruyal et al. 2014). This is due to the fact that most traditional healers keep scant records and their knowledge is passed down, primarily verbally, from generation to generation. Therefore, increased efforts are needed to document ethno-medical data on medicinal plants because of the revival of interest in the use and importance of medicinal plants by many developing countries.

One effort to document the uses of plants for medication is through the study of ethnobotany. Ethnobotany mostly used a linguistics approach to identify

the language when writing down plant names with accurate phonetics and etymology (Mohanty et al. 2018). The recording of knowledge or information about conventional herbal treatments is an important step toward ensuring sustainable management of medicinal plants. Additionally, it will provide enough details on the value of various plant species, how to use them effectively, and how to aid in the search for novel therapeutics. Herbal medicines are now recognized as a feasible and affordable source of alternative medicine with lower side effects. With the emergence of new ailments and the demand for affordable pharmaceuticals, the documentation of therapeutic plants claimed by local communities is critical since it will open up a plethora of chances for the discovery and enhancement of novel and affordable plant-based therapies (Orillaneda and Acero 2023).

This study intends to catalogue medicinal plants specifically used by local population in Ogotun-Ekiti, Ekiti State, Nigeria to treat several ailments. The study offers crucial details on the ethnobotanical resources and local customs relating to the use of medicinal plants in the study area, information that may be helpful for the sustainable management, use, and utilization of these priceless resources. To the best of our knowledge, no formal ethnobotanical research has been conducted in these regions. Additionally, some of these local people depend on this traditional medical knowledge as a source of income. The research area, Ogotun-Ekiti, is a rural area with little healthcare services, which forces the locals to only use traditional medicines.

## MATERIALS AND METHODS

### Study area

The study was carried out in Ogotun-Ekiti, Ekiti State, Nigeria (Figure 1). Geographically, it is located at 7030'0''N and 500'0''E. Ogotun has a tropical climate with an annual rainfall of 1613 mm and average temperature of 24.60C. One of the three major towns that make up Ekiti State's South West Local Government Area is Ogotun-Ekiti. Its southern and eastern borders, both in Osun, are Ikeji Ile and Ikeji, respectively. This community lies on the border between the states of Ekiti and Osun.

### Data collection procedure

Data collection of medicinal plant inventory was done between March 2022 and November 2022. A participatory research approach, which is mostly used for ethnobotanical research, was adopted for this research. Interview and questionnaire methods were used to collect ethnobotanical data from a small group of people in the study area. Verbal prior informed consent was acquired and the goals of the study were briefly explained to respondents who agreed to interviews in order to ensure reliability and reproducibility. Respondents were selected and asked several questions, including information about the informant's profile (age and gender); occupation and source of income; respondent's knowledge of plants and their uses; and information on the use of medicinal plants for disease treatment.

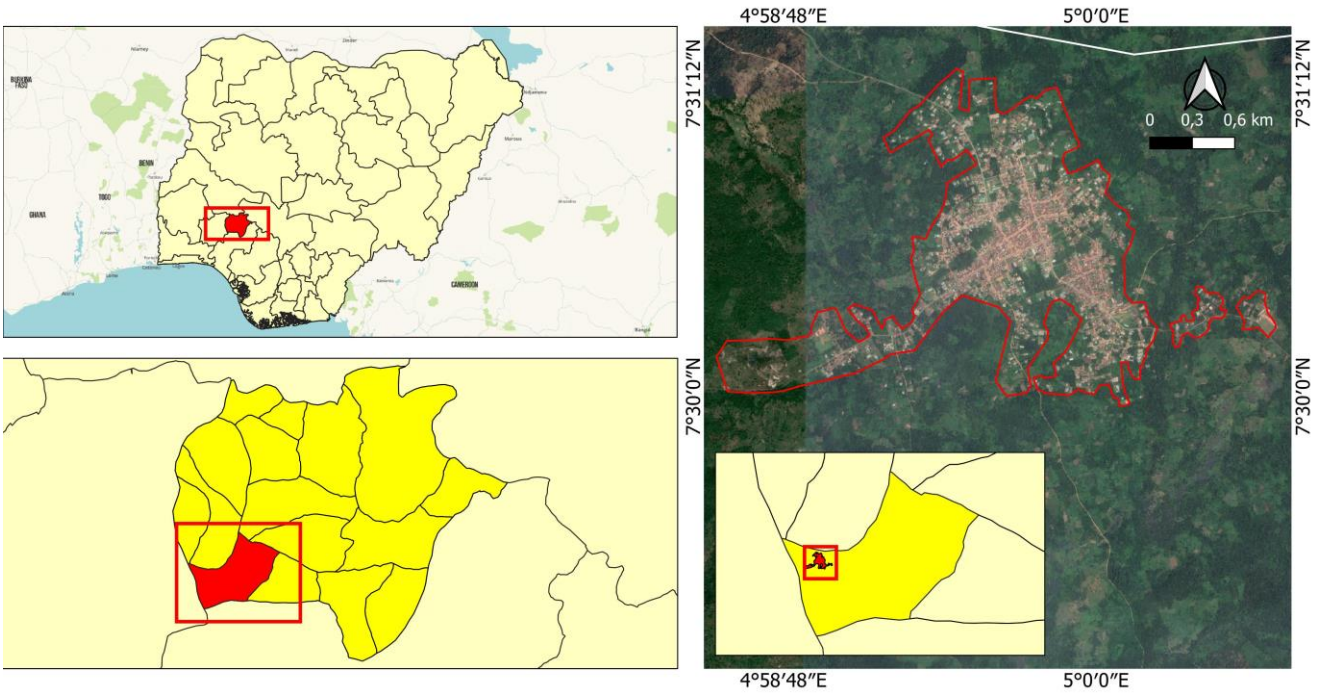


**Figure 1.** Map of the study area in Ogotun-Ekiti, Ekiti Southwest District, Ekiti State, Nigeria

A total number of 74 respondents were selected for this study. The selection was based on their profession and understanding of the usage of herbal treatments. The interviews were all conducted in the local language, i.e., Yoruba. Some of the plants near the neighbourhood were cultivated and shown to the respondents to identify while some respondents volunteered to go into the field with the scientists to identify the plant species that weren't close to neighbourhood or accessible to them. The informants' ages ranged from 40 to 80 years.

The data and information gathered during the interview were compared and confirmed using reviews of readily available records from the existing diverse floras, literature and available plant databases like www.theplantist.org,www.sciencedirect.org and www.tropicos.com. Comparisons were also made with the herbarium specimens on hand at the Forestry Research Institute of Nigeria, Ibadan, Nigeria. The results obtained were arranged in alphabetical order using their scientific names followed by their local names, family, usage of the plant parts and classification.

**Data analysis**

To analyse and summarize data on medicinal plants, their uses, and other related information, descriptive statistical approaches such as percentages were employed. The frequency of citation was determined using the formula below:

$$Frequency\ of\ citation = \frac{Number\ of\ citations\ x\ 100}{Total\ number\ of\ citation)}$$

## RESULTS AND DISCUSSIONS

**Respondents' characteristics**

There were 74 respondents, of which 65% were male while 35% were female. Respondents from the age group 60 years and above were the most dominant (62%), followed by respondents between the ages of 50-60 (27%). For occupation, 41% of the respondents were herbalists, 35% were herbs sellers, 20% were farmers, while the least percentage were artisans (4%).

**Diversity of medicinal plants identified**

The study identified and documented 81 plant species from 40 families and 78 genera, with the most widely used plants in the study area were obtained from tree species (58%), followed by herbaceous species (27%), shrubs (13%) and others (2%) (Figure 2). Furthermore, plants from the Malvaceae family have the highest number of species with 9 species, followed by the Fabaceae family (7 species), Moraceae and Asteraceae (each with 5 species) and three species each from Anarcadiaceae, Combreteaceae, Poaceae, Sapotaceae, Curcurbiataceae, Rutaceae, Solanaceae and Lamiaceae.

**Plants parts used**

According to the data obtained in the study area, leaves (57%) were the most used plant parts in treating several ailments, followed by bark (21%), and roots (10%), while seeds/fruits were the least used plant parts (8%). In some cases, the whole plants are used (1%) (Figure 3).

**Discussion**

The study identified and documented 81 medicinal plant species from 40 families and 78 genera with the most widely used plants in the study area were obtained from tree species (58%) followed by herbaceous species (27%), shrubs (13%) and others (2%). The findings, however, contradict with the report of Hong et al. (2015), who indicated that most medicinal plants are sourced from herbaceous plants, in part because forests have been degraded and it takes less time and effort to extract plant material from medicinal herbs.

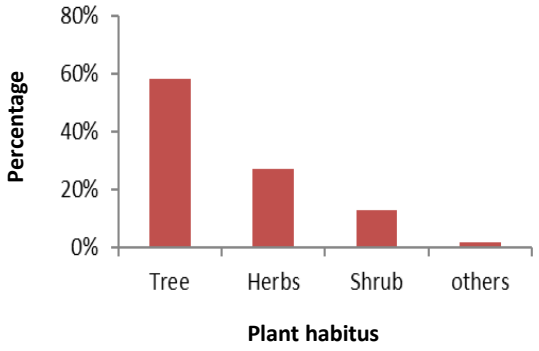


**Figure 2.** Percentage of plants habitus for medicinal uses the study area in Ogotun-Ekiti, Ekiti State, Nigeria

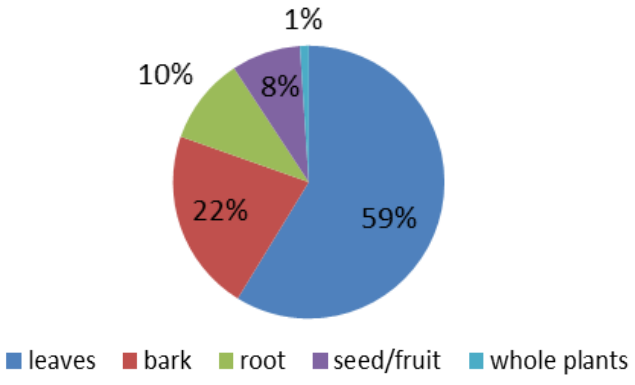


**Figure 3.** Percentage of plant parts used for medicinal uses the study area in Ogotun-Ekiti, Ekiti State, Nigeria

**Table 1.** List of medicinal plants found in Ogotun-Ekiti, Ekiti state, Nigeria

| Scientific name | Common name | Family | Uses | Plant Parts Used | Habitus | Frequency of Citation |
|---|---|---|---|---|---|---|
| *Abrus precatarious* | Roasary pea, Oju ologbo (Yor) | Fabaceae | Jaundice, tumors | leaves | Herbs | 5 |
| *Acanthospermum hispidum* | Dagunro (yor), star burr | Asteraceae | Fever, skin ailments | Leaves | Herbs | 12 |
| *Adasonia digitata* | Baobab | Malvaceae | Gastro-intestine disorder | Leaves, bark, flower | Tree | 8 |
| *Afromomum melegueta* | Atare (yor) | Zingiberaceae | Sore throat, congestion | Fruits | Herb | 10 |
| *Ageratum conyzoides* | Imi-esu (yor), goat weed | Asteraceae | Ear defects, fever | Leaves | Herb | 5 |
| *Albizia lebbeck* | Frywood, sisris | Fabaceae | Eye injury, lung problems | leaves, bark | Tree | 18 |
| *Aloe vera* | Aloe, Ahon-Erin (yor) | Asphodelaceae | Wound, oral, skin infection | Leaves | Herbs | 15 |
| *Anacardium occidentale* | Cashew | Anacardiaceae | Diabetes,malaria | Leaves, bark, fruit | Tree | 4 |
| *Anogeissus schimperi* | Ayin (yor) | Combretaceae | Hypertension, leprosy | Leaves, bark | Tree | 5 |
| *Annona muricata* | Soursop | Annonaceae | Inflammation, anti-oxidants | Leaves, bark, fruits | Tree | 6 |
| *Artocarpus altilis* | Bread fruit | Moraceae | Toothache, diabetes | Fruits, leaves, bark | Tree | 5 |
| *Azadirachta indica* | Neem, Dongayaro (yor) | Meliaceae | Malaria, contraceptive, typhoid | Leaves, bark, seed | Tree | 4 |
| *Blighia sapida* | Isin (yor) | Sapindaceae | Epilepsy, headache | Fruit, leaves, bark | Tree | 8 |
| *Bryophyllum pinnatum* | Abamoda (yor) | Crassulaceae | Cough, asthma | Leaves | Herb | 7 |
| *Calotropis procera* | Bomubomu (yor) | Apocynaceae | Hallucination, insomnia | Leaves, fruit | Shrub | 2 |
| *Camellia sinensis* | Yerepe (yor), bush tea | Theaceae | Heart diseases, dementia | Leaves | Shrub | 15 |
| *Carica papaya* | pawpaw | Caricaceae | Male infertility | Fruit, leaves, root | Tree | 6 |
| *Cassia fistula* | Igi kasia (yor) | Fabaceae | Purgatives | Leaves, bark | Tree | 4 |
| *Ceiba pentandra* | Araba (yor), silk cotton tree | Bombacaceae | Leprosy, diabetes, constipation | Leaves, bark | Tree | 6 |
| *Chromolaena odorata* | Akintola (yor) | Asteraceae | Skin infection, burn, wound | Leaves | Shrub | 8 |
| *Chrysophyllum albidum* | Agbalumo (yor), African star apple | Sapotaceae | Malaria, yellow fever, diarrhoea | Fruits, seed, leaves and bark | Tree | 11 |
| *Cissus populnea* | Epa ikun (yor) | Amplidaceae | Sore breast, indigestion | Leaves, bark | Tree | 5 |
| *Citrullus colocynthis* | Egusi (yor) | Cucurbitaceae | Tumors, ulcer, sexual transmitted infection | Fruit, seed | Herbs | 6 |
| *Citrus aurantiifolia* | Lime | Rutaceae | Hypertension, diabetes | Fruits, leaves, bark | Tree | 9 |
| *Citrus paradise* | Grape | Rutaceace | Detoxification, heart diseases | Fruit, leaves, bark | Tree | 4 |
| *Citrus sinensis* | Orange | Rutaceace | Malaria, appetizer | Fruit, leaves, bark | Tree | 11 |
| *Cocos nucifera* | Coconut | Arecaceae | Sexual transmitted infection, urinary tract infection | Fruits, leaves | Tree | 18 |
| *Cola millenii* | Obi edun (yor) | Sterculiaceae | Ringworm, scabies | Fruit, leaves, bark | Tree | 21 |
| *Cola nitida* | Kolanut, Obi (yor) | Malvaceae | Depression, male sexual enhancer | Fruit, leaves, bark | Tree | 5 |
| *Corchorus olitorius* | Jute leaf, ewedu (yor) | Malvaceae | Female fertility, ulcer | Leaves, seeds | Herb | 5 |
| *Costus afer* | Ginger lily | Costaceae | Asthma, cough | Leaves | Shrub | 7 |
| *Datura metel* | Devil's trumpet, gegemu (yor) | Solanaceae | Oral infection, insomnia | Leaves, fruits, | Shrub | 5 |
| *Elaeis guineensis* | Oil palm tree | Arecaceae | Headache, pain, rheumatism | Fruit, leaves | Tree | 8 |
| *Eleusine indica* | Paragis | Poaceae | Malaria, diabetes | Leaves | Herb | 6 |
| *Euphorbia Hirta* | Emile (yor), Asthma herb | Euphorbiaceae | Dysentery, jaundice, tumors | Leaves | Herb | 8 |
| *Ficus exasperate* | Ewe Ipin (yor) | Moraceae | Leprosy, eye sore, ring worm | Bark, leaves | Tree | 4 |
| *Ficus thoningii* | Igi odan (yor) | Moraceae | Diarrhoea, utis, diabetes, malaria | Leaves, bark | Tree | 11 |
| *Garcinia Kola* | Bitter kola, Orogbo (yor) | Clusiaceae | Cough, throat infections | Fruit, leaves, bark | Tree | 8 |
| *Gmelina arborea* | Melina (yor), Malay beechwood | Lamiaceae | Pile, ulcer, fever | Oil, leaves, bark | Tree | 4 |

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|---|---|---|---|---|---|---|
| *Gliricidia sepium* | Agunmaniye (yor) | Fabaceae | Antimicrobial, antibacterial | Leaves, bark | Tree | 6 |
| *Gossypium arboretum* | Cotton plant, ewe owu (yor) | Malvaceae | Oral infection, headache, ear ache | Seed, root leaves | Tree | 5 |
| *Irvingia gabonensis* | Oro (yor), African mango | Irvingiaceae | Diabetes, weight loss | Fruit, leaves, bark | Tree | 7 |
| *Jatropha curcas* | Physic nut, Barbados nut, | Euphorbiaceae | Malaria, oral infection | Oil, bark, leaves | Shrub | 6 |
| *Justicia carnea* | Ewe eye (yor) | Acanthaceae | Anaemia, diabetes | Leaves, stem | Herb | 7 |
| *Lannea taraxalifolia* | Yanrin (yor) | Asteraceae | Antioxidant, anticancer | Leaves | Herb | 6 |
| *Lagenaria breviflora* | Tagiri (yor) | Cucurbitaceae | Chickenpox, measles | Fruit, seed, leaves | Climber | 6 |
| *Mangifera indica* | Mango | Anarcadiaceae | Malaria, diabetes, obesity | Fruit, leaves, bark | Tree | 4 |
| *Mansonia altisima* | African walnut, Asala (yor) | Malvaceae | Leprosy, tuberculosis | Fruit, leaves, bark | Tree | 5 |
| *Mentha piperita* | Mint leaf | Lamiaceae | Stomach ache, fever, nasal congestion | Leaves | Herb | 6 |
| *Mimosa pudica* | Patanmo (yor) | Mimosaceae | Fevers, piles, jaundice, leprosy | Leaves | Shrub | 5 |
| *Milicia excelsa* | Iroko (yor) | Moraceae | Cough, fever, backache | Leaves, bark | Tree | 4 |
| *Momordica charantia* | Ejirin (yor), Bitter gourd leaf | Cucurbitaceae | Pile, back pain, skin and hair care | Leaves, fruits | Herb | 11 |
| *Morinda lucida* | Brimstone tree, Oruwo (yor) | Rubiaceae | Diabetes, jaundice, typhoid, | Leaves, bark | Tree | 7 |
| *Moringa olifera* | Moringa, drum stick | Moringaceae | Detoxification, constipation | Seed, fruit bark | Tree | 4 |
| *Nauclea diddericchii* | Opepe | Rubiaceae | Gonorrhoea, dental care | Leaves, bark | Tree | 3 |
| *Newbouldia leavis* | Akoko (yor) | Bignoniaceae | Epilepsy, wound | Leaves, bark | Tree | 4 |
| *Nicotiana tabacum* | Taba (yor) | Solanaceae | Swelling, skin problem | Leaves, seed | Herbs | 7 |
| *Ocimum gratissimum* | Scent leaf | Lamiaceae | Diarrhoea, dysentery, pile | Leaves, stem | Shrub | 3 |
| *Parkia biglobosa* | African locust beans, Iru (yor) | Fabaceae | Malaria, diabetes | Fruit, leaves, bark | Tree | 11 |
| *Parquentina nigrescens* | Ewe ogbo (yor) | Periplocaceae | Blood pressure | Leaves | Herb | 8 |
| *Pennisetum purpureum* | Elephant grass | Poaceae | Pain reliever, sexual transmitted infection | Leaves | Herb | 3 |
| *Psidium guajava* | Guava | Myrtaceae | Malaria, diabetes | Fruit, leaves, bark | Tree | 4 |
| *Rauvolfia vomitoria* | Asofeyeje (yor), swizzle stick | Apocynaceae | Diabetes, arthritis leprosy | leaves | Shrub | 4 |
| *Senna alata* | Asunwo | Fabaceae | Typhoid, diabetes | Leaves | Shrub | 5 |
| *Sida acuta* | Oshopotu (yor) | Malvaceae | Stomache, diaphoretic and antipyretic | Leaves, roots | Shrub | 3 |
| *Solanum melongena* | Egg plant | Solanaceae | Kidney infection, liver disorder | Leaves, fruit | Shrub | 7 |
| *Spondias mombin* | Iyeye (yor), hog plum | Anarcadiaceae | Rashes, diabetes | Leaves, fruit, bark | Tree | 20 |
| *Synsepalum dulcificum* | Miracle tree | Sapotaceae | Cancer, sexual transmitted infection | Leaves, bark | Tree | 15 |
| *Talinum triangulare* | Water leaf, Gure (yor) | Talinaceae | Constipation, pile | Leaves | Herb | 23 |
| *Tectona grandis* | Teak | Lamiaceae | Constipation, leprosy, pile | Leaves, bark | Tree | 20 |
| *Terminalia catappa* | Tropical almond tree | Combretaceae | Sickle cell disorder, eye problem | Fruit, leaves, bark | Tree | 5 |
| *Terminalia ivoriensis* | Afara | Combreteceae | Voice loss, sexual transmitted infection | Leaves, bark | Tree | 7 |
| *Terminalia superba* | African limba wood | Combreteceae | Female infertility, diabetes | Leaves, bark | Tree | 8 |
| *Tetrapleura tetraptera* | Aidan (yor) | Fabaceae | Stis, reproductive disorders | Fruit, leaves, bark | Tree | 11 |
| *Theobroma cacao* | Cocoa | Malvaceae | Skin care, constipation | Fruits, bark, leaves | Tree | 16 |
| *Tithonia diversifolia* | Sunflower, sepeleba (yor) | Asteraceae | Malaria, typhoid | Leaves, stem | Shrub | 13 |
| *Treculia africana* | African bread fruit | Moraceae | Cough, rashes | Leaves, fruit bark | Tree | 9 |
| *Triplochyton scleroxylon* | Obeche, African whitewood | Malvaceae | Edemas, painkiller | Leaves bark | Tree | 12 |
| *Vernonia amygdalina* | Bitter leaf, ewuro (yor) | Malvaceae | Malaria, pile | Leaves bark | Shrub | 18 |
| *Vitellaria paradoxa* | Shea butter | Sapotaceae | Skin care, pain reliever | Fruit, leaves | Tree | 8 |
| *Zingiber officinale* | Ginger | Zingiberaceae | Pain reliever, lung disease | Roots, rhizome | Herb | 13 |

Note: (Yor) indicated the language spoken by the respondents (Yoruba language)

Furthermore, the study also showed that leaves (57%) were the most used plant parts in treating several ailments, followed by stem bark (21%) roots (10%), while seed/fruits were the least used plant parts (8%). In some cases, the whole plants are used. Because of their high availability, medicinal potency, and presence of active components, leaves are widely used in the treatment of a variety of diseases. According to Ghorbani (2005), the reason for the widespread use of leaves is that they are active in photosynthesis, which results in the production of secondary metabolites in higher concentrations than other parts of the plant, and these metabolites are actively implicated in remedial activity. This contradicts with the findings of Mesfin et al. (2009) and Kefalew et al. (2015), who found that roots were extensively used plant parts. The widespread use of roots in herbal medicine is discouraged due to the negative effects on plant growth, development, and availability. Respondents also supported the use of bark due to its strong regeneration potential and active phytochemical components.

The local/indigenous names of the plants helped the responders recognize them. Due to variations in environmental conditions, site quality, socioeconomic status, and traditional knowledge systems, medicinal plant species diversity and availability vary from one area to another (Pradhan et al. 2020).

These plants are mostly used to treat a variety of common illnesses, including typhoid, malaria, gastric ulcers, fever, infections, sexually transmitted diseases, cough, bronchitis, asthma, birth control, sleeplessness, toothaches, wounds, and skin conditions (Table 1). The following plants are frequently used by local traditional healers to cure a variety of illnesses: *Anacardium occidentale*, *Azadirachta indica*, *Calotropis procera*, *Bambusa vulgaris*, *Chromolaena odorata*, *Corchorus olitorius*, *Carica papaya*, *Mangifera indica* and *Citrus sinensis*. Informants reported a lack of regularity in the amount and dosage of medications they took. Among the informants, there was no clear standard of measurement or unit of measurement.

The study also discovered that single medicinal plants can be utilized to treat a variety of disorders, which may be related to the existence of many phytochemical ingredients. For instance, *Ficus thonnqii* is utilized in the treatment of many diseases, such as malaria, urinary tract infections, diarrhea and diabetes (Table1). Furthermore, it was also discovered during the study that a single illness could be cured by more than one medicinal plant. More than 15 medicinal plants were recorded to be potent in the treatment of diabetes mellitus. In most cases, the use of single medicinal plant is used to treat an ailment. However, it is believed by the respondents that combination of various plants with might contain different or same phytochemical constituents have proven to be more effective and efficient. For instance, the utilization of *C. sinensis* leaves in combination with the bark of *M. indica* and the leaves of *Psidium guajava* is said to be more effective in the treatment of malaria when compared to using either plant singly.

It is claimed that a multi-herbal treatment has greater therapeutic ability than a single plant (Teklehaymanot and Giday 2007; Shanmugam et al. 2020). The frequent usage of several plant products and other materials among traditional healers could be due to synergistic interactions (Giday et al. 2010). Rivera et al. (2013) also reported that the use of mixture therapies based on various plants and components of single and mixed species was shown to increase the effectiveness of the therapy due to additive or synergistic effects of the combination.

The respondents also said that the majority of medicines were prepared using fresh plant ingredients. They believe that fresh plant portions contain more active chemical components than dried plant parts. The usage of fresh materials may be an attempt to avoid the loss of volatile oils, the concentration of which may decrease after drying. This is consistent with the findings of Kassa et al. (2020), who indicated that preference for fresh plant parts is related to the efficacy of medicinal plants in treating ailments when compared to dried portions. However, Moa et al. (2013) observed that the drawback of using fresh plant parts is that frequent collecting, notably during dry seasons, may endanger the plants because local people made little effort in keeping dried plant material for later use.

The study urges immediate attention to and sustainable use of the medicinal plants found in the study region. The responders confirmed the worrisome rate of biodiversity loss in the region. Numerous reasons, including ever-rising population, urbanization, habitat loss, overuse, deforestation, inadequate conservation strategies, and unsustainable management, may contribute to the falling rate of medicinal plant biodiversity.

In conclusion, this study described and clarified various medicinal plants along with their therapeutic purposes used by local community in Ogotun-Ekiti, Ekiti State, Nigeria. This is crucial for assessing current knowledge and serving as a baseline for future analyses of changes in knowledge and usage. This record may contribute to greater acceptance of the use and preservation of indigenous traditional knowledge. The traditional method of transferring ethnobotanical knowledge through word of mouth has failed since the knowledge of how to use therapeutic plants is in danger of disappearing. Ethnobotanical understanding of medicinal plants and how indigenous cultures use them is beneficial for the preservation of traditional knowledge and biodiversity, as well as for advancing community healthcare and maybe aiding in the creation of new drugs.

Ethnobotanical research is essential to understand the social, cultural, and economic factors influencing attitudes and behaviours towards health and illness as well as to learn about the types of diseases and health issues that are prevalent among locals of a particular location. Therefore, it is essential to preserve the taxa as well as document the significant ethnobotanical knowledge. This survey can provide as a springboard for further academic investigation towards developing new plant-based medicines for the market. The study recommended that more research should be done in order to examine a wider variety of herbal plants

with various therapeutic characteristics. A more concentrated effort is also seen to be required for prospecting and studying the medicinal plants that are so crucial to developing countries healthcare systems.

## ACKNOWLEDGEMENTS

The author wishes to thank all the respondents, local leaders and the government institutions who shared the information. There is no competing interest. Before the interviews, the study participants provided verbal agreement, and all data were acquired using their verbal approvals. This study was not supported by any funding agencies.

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