

ASSESSMENT OF INDIGENOUS PLANTS USED IN SOUP PREPARATION AND THEIR MEDICINAL POTENTIALS IN IBARAPA NORTH LOCAL GOVERNMENT AREA OF OYO STATE NIGERIA.

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Received 4th April, 2018 Accepted 26th November, 2018

ABSTRACT

Inventory of medicinal soup plants was conducted in 2017 at Ibarapa North area of Oyo State, Nigeria. A total of 15 villages around three main towns were randomly selected for the study. Fifty-three plant species belonging to thirty-three families were identified. Descriptive statistics frequencies and percentages were used to analyse the data generated. On the basis of habits, the 53 plants species include; 22 tree species, 9 belonged to shrubs, 7 were classified as herbs, 4 were grouped as climbers and 2 were grass species. The tree species constituted 41.5 % of the total plant species documented. The parts of identified plants used for soup preparation were sourced from both forest and farm lands. Various ailments and diseases are cured through medicinal soups from the indigenous knowledge received from the respondents. They are also prescribed for pregnancy management and proper child delivery in the study area. It was concluded that forests and farmlands offer plant resources which could support human health in the study area.

Keywords: Indigenous knowledge, plants, soup, medicinal uses.

INTRODUCTION

Plants are extremely important in the lives of people throughout the world. People depend upon plant, to satisfy such basic human needs as food, clothing, shelter and health care (Larson, 2001). The need to study forest plants according to WHO 1978 cannot be overemphasized for a number of reasons: widespread use of plant in folk medicine, rescuing traditional medicinal plants and knowledge about them from imminent loss as well as the need for health for all. It is evident that forest plants contain sufficiently high percentage of carbohydrates, protein, fats and oil together with vitamins and essential mineral (Okwu, 2004). In the developing world, forest provides a basis for the daily living of the people (Malaisse, 1985).

According to the United Nations Food and Agriculture Organization, the estimated export value of forest products traded on world market for 1998 was (\$123 billion). Leafy vegetables play an important role in human nutrition. Most are low in fat and calories but are bulky and filling (Cencic and Chingwaru, 2010). They supply dietary fibre and are important

sources of essential vitamins, minerals and trace elements. Particularly important are the antioxidant vitamins A, C and E. When vegetables are included in the diet, there is a reduction in the incidence of cancer, stroke, cardiovascular disease and other chronic ailments (Liu, 2004). Wild leaves, either fresh or dried, are one of most widely eaten forest foods. Typically, they are used as a base in the soups, stews and relishes which traditionally accompany a carbohydrates staples (FAO, 1989).

Recently, food manufacturers have embarked on a health criterion in the development of "Functional foods", the food products that have an added positive health benefit (IFCSP, 2010). While some functional ingredient benefits may be perceived to enhance short-term well-being or performance ability, many such benefits concern the long-term mitigation of certain diseases. Long term health benefits are generally invisible to the average consumer. Traditional foods are increasingly considered healthy and wholesome, and as a result, public interest in their nutritional and health impact has increased, as well as their demand (IFCSP, 2010). Functional foods; the

former being consumed as part of normal diet. In contrast to conventional foods, functional foods however, have demonstrated physiological benefits and can reduce the risk of chronic disease beyond basic nutritional functions including maintenance of gut health (FAO, 2007).

Leaves are an important part of traditional diets in many part of Africa. In upper Shaba, Zaire, for example, it was found that leaves from 50 different tree species were eaten (Malaisse, 1985). Wild leaf vegetables are the most frequently consumed wild plant in Swaziland. According to another study, with 48 different species being commonly used. More than half the adults interview reported they ate wild leaves at least twice weekly when they were in season (Ogle and Grivetti, 1985) while another study found that in Lushoto, Tanzania, wild leaves are eaten at nearly a third of all needs (Fleuret, 1979).

African indigenous and traditional leafy vegetables (ALVs) thus have a pivotal role in the success within Sub-Saharan Africa (SSA) of the world Health Organization's (WHO) global initiative on increased consumption of fruits and vegetables. The joint FAO/WHO 2003 consultation on diet nutrition and prevention of chronic disease recommended a minimum daily in take of 400 g of fruits and vegetables (WHO, 2003). WHO in 2004 again drew attention to this recommendation through its Global Strategy on Diet, Physical Activity and Health. At the joint Kobe workshop on fruit and vegetable for health, WHO and FAO developed a frame work that proposes ways to promote increased production, availability and access and greater consumption of fruits and vegetables (FAO/WHO, 2005).

Tropical forests contain not less than 60 % of all higher plant species known on earth and they provide all that is needed for human survival, including remedies against disease (Arvigado and Balick, 1994). Of the 265,000

plant species of the world, 182,000 of these are being used in various forms by man around the world for medicine (Lewington, 1993). There has been a resurgence of interest in African leafy vegetables during the past decade with several studies reporting on the regional availability and use (Chweya and Eyzaguirre, 1999; Okeno *et al.*, 2003 and Odhav *et al.*, 2005). In the April 2005 issue of Spore, the contributor observed that ALVs are everywhere and nowhere in the books and the Internet with a great deal of information on tropical green vegetables but it is often scattered like leaves in the wind (Spore, 2005). Therefore, this study was aimed at documenting information on some plant genetic resources employed in the ethnodietic practice of the people of Ibarapa North of Oyo State, Nigeria.

Materials and Methods

Biophysical Feature of the Study Area

Ibarapa North Area was carved out from defunct Ifelaju Local Government Area, Igbo-ora on first October, 1996 by the Head of State and Commander in-chief of the Armed Forces of Nigeria-The Late General Sanni Abatcha.

The Local Government lies between longitude 3°E longitude 3° 20'E and Latitude 7° 35'N and Latitude 7° 50' N. Hill and mountain are some of the physical feature in the studied area. Vegetation is typical of highly disturbed derived savanna. Ibarapa North is bounded in the North by Iwajowa Local Government area, in the East by Iseyin and Ibarapa East Local Government Areas, in the West by Ogun State and in the South by Ibarapa Central Local Government Area (Oyo State REGD Town planners and Mappers: Field work, 2002).

The total population of Ibarapa North Local Government according to year 2006 Nigeria National Population Commission (NNPC) was 107,665 people.

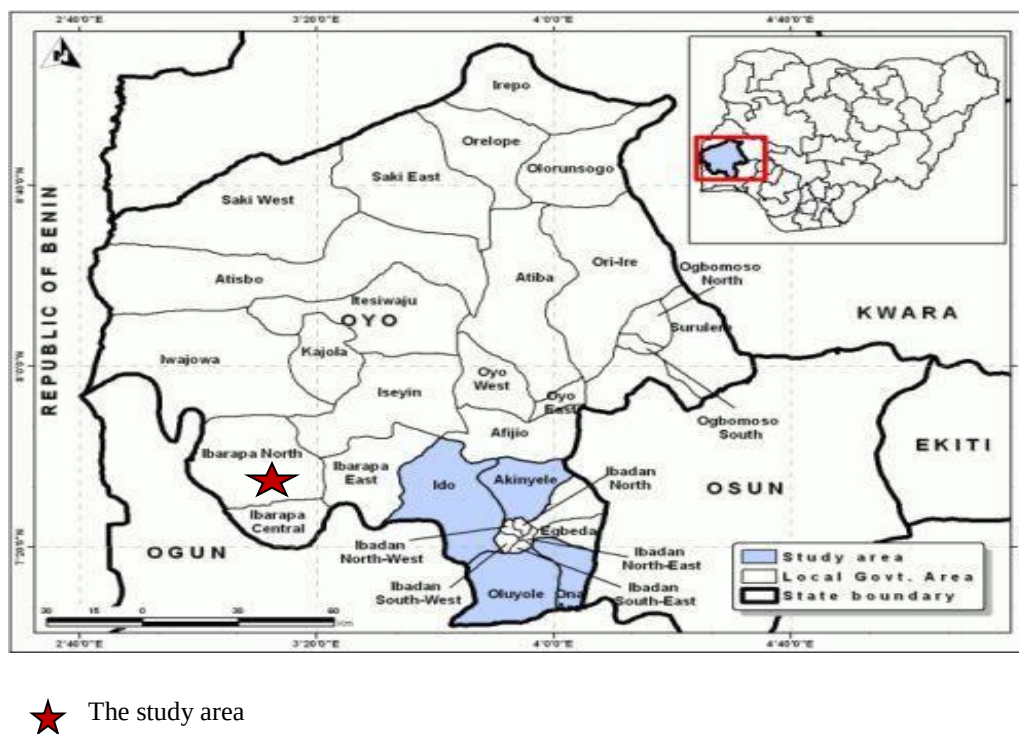


Figure 1: Map of the study area showing the study areas in Oyo state Nigeria

Field observation and data collection

Data collection for this study was through personal interaction and communication (interview). Three towns that made up Ibarapa North include: Igangan, Ayete and Itapa. From each town, five villages were randomly selected and the total villages used for the study were 15. For Igangan town, the village selected include; Asunnara, Ominigbo, Idiyan, Akoya and Egbe-omo village. The selected village for Ayete include: Alabi, Alagbaa, Sangodare, Kajola and Magbeje village. In Itapa town, the selected villages were Agoiyofin, Gboleiki, Ala-asia, Temidire and Gblekale village. Our focus was on elderly people and traditional healers in those villages. Because elderly people and traditional healers are the people that can offer better information about medicinal use of plants. Some of these people felt reluctant to come out with information about their Knowledge but they were motivated with little amount of money. Information on local names, part used and medicinal purposes were obtained. Some of the plants were showed to us in their forests, farmland and compounds. We made effort to

collect some samples of those plants for proper nomenclature at FRIN herbarium in Ibadan.

Results

The data collected are presented in Table 1. The Table gives botanical, common and vernacular names of the plants used for soup and condiment production with their medicinal purposes. Plant forms or habits (grass, herb, shrub and tree) family, part used are also presented. Out of 53 plant species documented, 22 were tree species, 9 shrubs, 7 herbs, 4 climbers and 2 different species of grass. The tree species constitute 41.5 % of the species documented, shrubs 16.4 %, herbs 32.1 %, climber 7.0 % and grasses 3.0 %. The 22 tree species fall into 16 different families, 9 plant species that made up shrubs fall into 7 different families and the 2 species of grass documented are from 2 different families. The herbs and climbers were traced to 13 and 4 different families respectively.

The nutraceutical and medicinal roles of the documented plant species (Table 1) include: bone calcification in child, remedy for stomach running, remedy for snake bite, gonorrhea, body pain, irregular menstruation, anemia, pile,

hemorrhoid, for eye proper function, impotent and low sperm count, cough, fibroid, headache, malaria, high blood pressure, stomach pain, diabetes, dizziness, hiccups, tooth diseases, cholera, pneumonia, women infertility, respiratory problem, ulcer, kidney and bladder disease. Some of the soup prepared from forest and farm land/home garden plant species are used for the purpose of proper child delivery, pregnancy management, anti-sickness, and body strength.

Discussion

Plants have remained an integral source of food and nutrients for both humans and animals. We simply cannot survive without them. Interestingly, they are so close to us for our usage but unfortunately, we sometimes fail to acknowledge and utilize these plants properly as we ought to do. These plants contain several chemical compounds essential for the metabolic functioning of our body systems. Some of these plants provide us food, nutritional values and health benefit while some provide us with no nutrients and could even be toxic to human health (Achinewh and Ogbonna, 1995).

Man first began to classify plants as edible and inedible, obviously based on their chemical differences (Gurcharan, 2004). Plant resources play vital roles in the welfare of human beings. Although various animals and mineral products contribute to his welfare, it is the plant kingdom that is most essential to man's well-being. Quite a large number of African indigenous vegetables have long been known and reported to have health protecting properties and uses (Okeno *et al.*, 2003). Reporting on the moringa plant (*Moringa oleifera*) in 1937, the British botanist, Dalziel observed that the roots, leaves, and twigs as well as the bark of the tree are used in traditional medicine. Several of these indigenous leafy vegetables continue to be used for prophylactic and therapeutics purposes by rural communities (Ayodele, 2005). This indigenous knowledge of the health promoting and protecting attributes of African leafy vegetables is clearly linked to their nutritional non-nutrient bioactive properties. ALVs have long been and continue to be reported to significantly contribute to the dietary vitamin and mineral intakes of local population

(Nordeile *et al.*, 1996). The 53 different species of plant that were identified and documented for soup production in Ibarapa North Area of Oyo State Nigeria are typically used as a base in the preparation of medicinal soup and this indicates that people in the area take plant resources as major source of their well-being. The plant habit or life-form (tree, shrub, herb and climber) identified shows that no plant is useless in human health. In other words, all plants have medicinal uses (Gbile, 1987). The plant parts used in soup preparation include foliage and mature leaves, barks, flowers and young fruits of some plants. The flower of local hibiscus (*Hibiscus sabdariffa*) is singly used in preparation of soup for the treatment of snake bite. The fermented seed of locust bean (*Parkia biglobosa*) is prepared with pepper and palm oil which used for the treatment of high-blood pressure. The dry bark and fresh leaves of African sausage (*Kigelia africana*) are mixed together to produce soup used for the treatment of gonorrhea. The foliage and mature leaves of some herbaceous plant. Beniseed (*Sesamum indicum*) as an example is used by the people in the study area for the production of soup prescribed for pregnant women for the purpose of proper child delivery. It is estimated that about 60 % of the world population and 80 % of the population of developing countries rely on traditional medicine for their primary health care needs (Shrestha and Dhillon, 2003). The traditional uses of medicinal plants in health care practices are providing clues to new area of research; hence its importance is now well recognized. However, information on the uses of indigenous plants for medicinal soup is not well documented from many rural areas of Nigeria including Ibarapa North Local Government Area. Medicinal plants satisfy the millions of the ethnic and indigenous people living in tribal and rural sector (Kumar, 2016).

Based on the source of the plants used for the medicinal and health soup production, we observed that forest and farmland, are the major sources of those plants. Although more plant resources were sourced from forest than farm land, because forest has many diversity of plant species. Kumar (2016) reported that villagers are taking several resources from the forest including medicinal plant for their basic need,

which are used for treating number of disease. The implication in sustainability is that the people in the study area may lose some important plant species through forest fire, farming and urbanization (Iment and Adebola, 2001; Badoni and Badoni, 2000). A total of 28 (14.84 %) different species of plant leaves are directly sourced from forest which include *Azalia africana*, *Kigelia africana*, *Piliostigma thonningii*, *Vitex doniana* etc. Some of them are domesticated already. Seventeen 17 (9.01 %) different species of plant used for soup making are directly sourced from farmland, examples are; *Telfaria occidentalis*, *Capsicum annum*, *Colocasia esculenta* and 8 (4.24 %) different plant species sourced from both forest and farmland. Examples are *Lactuca capensis*, *Solanum nigrum* and *Ocimum gratissimum*. This implies that forest is plant bank for edible leaves. Tropical forests contain no less than 60 % of all higher plant species known on earth and they provide all that is needed for human survival. Bellow (2016) mentioned that mode of use plant in solving men's sexual problem is by decoction, concoction, chewing and eating. From our findings men sexual problems can also be addressed by using plant inform of medicinal soup. Also women infertility and irregular menstruation can be addressed through regular

taking of water-leaf (*Talinum triangulare*) soup. The person of Ibarapa North area of Nigeria has indigenous knowledge on how to use plant resources to produce medicinal soup for their primary health care. It is generally believed that the introduction of exotic vegetable varieties contributed to the decline in the production and consumption of indigenous vegetables. However, literature reports of a steady decline in dietary intakes of these vegetables with the emergence of simplified diets are based on the assumption of declining use as a result of declining availability (Okeno *et al.*, 2003; Adedoyin and Taylor, 2000). Contrary to this view, Maziya-Dixon *et al.* (2004) reported that in Nigeria, leafy vegetable are relatively available and affordable particularly during the rainy seasons but were found to be among the least consumed food. A significant number of recorded plants are not consumed particularly by the younger generation because of their unfamiliar tastes and ignorance on how to prepare them. It is important to note that the rural communities have been using medicinal plant resource. These plants have been helping particularly poor villagers especially having crises to pay for medicines and travel cost (Kumar, 2016).

Table1: The indigenous edible plant of Ibarapa north area for soup preparation

	Botanical name	Common name	Vernacular name	Family	plant form	Part use	Medicinal/health uses
1.	<i>Afzelia africana</i> Linn	Afzelia	Apa (FR)	Caesalpiniaceae	Tree	Folige leaf	The soup makes pregnant women to be active
2.	<i>Lactuca capensis</i> (Wild) Schum	Lettuce	yanrin-oko FL and FR	Asteraceae	Herb	Leaf	The soup is eaten to treat body pain. The soup is also prescribed for people that has pneumonia
3.	<i>Sacrocephalus latifolius</i> (Sm.) Bruce	Guinea peach	Egbesi FR	Rubiaceae	Shrub	Foliage leaf	The soup from this plant serves as remedy for female infertility
4.	<i>Solanum nigrium</i> Linn	Black nightshade	Ogunmo (EL and FR)	Solanaceae	Herb	Leaf	It is prescribed for people with ulcer problem
5.	<i>Kigelia africana</i> Beth.	African sausage tree	Pandoro, (FR)	Bignoniaceae	Tree	Leaf and bark	The soup prepared from the leaf and bark of the tree, is prescribed for people who has Gonorrhea
6.	<i>Vigna sinensis</i> (Linn.) Saviex Hassk.	Cowpea	Ewa-eree	Papilionaceae	Herb	Leaf	The soup serves as worm expeller
7.	<i>Piliostigma thonningii</i> (Schumarch) milne-redhead	Cow's foot tree	abafa (FR)	Caesalpiniaceae	Tree	Foliage leaf	The soup from dry foliage leaf of this plant is used to treat stomach pain
8.	<i>Piper nigrum</i> schum & Thonn.		Iyere (FR)	Piperaceae	Climber	Fruit	The condiment from the fruit stabilizes the womb after delivery
9.	<i>Ocimum gratissimum</i>	Fever plant	efinrin-nla (FL & FR)	Lamiaceae	Shrub	Leaf	The soup prepared with this plant serves as a remedy for pile and high blood pressure
10.	<i>Gongronema latifolium</i> Benth		Iteji (FR)	Asclepidiaceae	Climber	Leaf	(a) The soup cleanses womb after delivery (b) It treats cough (c) It is also prescribed for people with running stomach
11.	<i>Theobroma cacao</i> Linn.	Cacao	igi koko (FL)	Steruliaceae	Tree	Immature fruit	The soup enhances body strength
12.	<i>Vitex doniana</i> sweet	Vitex	Akumalapa FR	Sterculiaceae	Tree	Foliage leaf	It helps in normalizing blood pressure

13.	<i>Aningeria robusta</i> (A. chev.) Aubrev. & Pellegr	Etutup FR		Sapotaceae	Tree	Leaf	The soup cubs pile
14.	<i>Telfaria occidentalis</i> Hook. F.	Fluted pumpkin	Irooko FL	Cucurbitaceae	Climber	Leaf	The soup from <i>Telfera occidentalis</i> builds or enhances blood production in the body. It also checks dizziness
15.	<i>Venonia colorata</i> (Wild) Drake	Bitter leaf	Ewuro-oko (FR & FC)	Asteraceae	Shrub	Leaf	(a) Constant taking of the plant in soup form addresses chest pain (b) It is also used to address stomach running
16.	<i>Tridax procumbex</i>	Goat button	Epo Ibadan	Asteraceae	Herb	Leaf	It builds blood in children
17.	<i>Ipomea batata</i> (Linn.) Lam	Sweet potato	Odunkun (FL)	Convolvulaceae	Herb	Leaf	This plant is used to prepare soup for people with diabetes
18.	<i>Zanthoxylum zanthoxyloides</i> (Lam.) zepermick and tim ler	African satin wood	Atea (FR)	Rutaceae	Tree	Leaf	With some other plant part, condiment is produced from the leaf. The soup from the leaf cures malaria.
19.	<i>Adansonia digitata</i> Linn.	Baobab tree	Ose (FR)	Bombacaceae	Tree	Leaf	(a) It addresses kidney and bladder diseases (b) The soup from the tree also normalizes blood pressure.
20.	<i>Chenopodium ambrosioides</i> Linn.	Worm weed	Ewe-imi (FL)	Chenopodiaceae	Herb	Leaf and fruit	(a) It expels worm from the stomach (b) It is used to address hiccups
21.	<i>Solanum macrocarpon</i> Linn.	Egg plant	igbagba (FL)	Solanaceae	Herb	Leaf	(c) Its soup is prescribed for laxating of bowel
22.	<i>Senna alata</i> (Linn.) Roxb.	Candle bush	Asunwon (FL)	Caesalpinaceae	Shrub	Foliage leaf	The soup from this plant is used for treating pile.
23.	<i>Ficus repens</i> Thumb.	Climbing fig	opoto (FR)	Moraceae	Tree	Foliage leaf	The soup builds blood
24.	<i>Ceiba pentandra</i> Linn.	Silk cotton tree	Araja (FR)	Bombacaceae	Tree	Foliage leaf	(a) The soup is known for correcting irregular menstruation (b) The soup also heals stomach ulcer
25.	<i>Corchorus olitorius</i> Linn	Jew's mallow	Ooyo/Ewedu FL & FR	Tiliaceae	Herb	Leaf	It corrects or normalizes irregular menstruation

26.	<i>Manihot esculenta</i> Crantz	Cassava	Ewe ege FL	Euphorbiaceae	Shrub	Leaf	(a) It is prepared as treatment for gonorrhea (b) It also corrects eye problem
27.	<i>Capsicum annum</i> Linn	Sweet green pepper	Ata-gbasejo FL	Solanaceae	Herb	Leaf	The leaf used to de-toxify snake poison in the body by eating it together with <i>Hibiscus esculentum</i> flower
28.	<i>Cucurbita pepo</i>	Summer squash	Elegede (FL)	Cucurbitaceae	Herb (trail)	Foliage parts and fruit	It helps in treating anaemia
29.	<i>Ocimum basilicum</i> Linn	Basil	Efinrin-oso (FL & FR)	Lamiaceae	Herb	Leaf	The leaf is used to prepare condiment which cures pile.
30.	<i>Milicia excels</i> (Wel/w.) C.C berg.	African oak	Iroko FR	Moraceae	Tree	Foliage leaf	The soup from african oak leaf helps in bone calcification in children
31.	<i>Pseudocedrela kotschy</i> (Schweinf) Harms		Emi-gbegiri FR	Meliaceae	Tree	Foliage leaf	Haemorrhoid and pile are cured from soup of <i>Pseudocedrela kotschy</i>
32.	<i>Vernonia amygdalina</i> Del.	Bitter leaf	Ewuro-jije FL	Asteraceae	Shrub	Leaf	Taking the soup of bitter leaf constantly, serves as anti-cholera
33.	<i>Cochlospermum planchon</i>		feru (FR)	Cochlospermaceae	Herb	Oil from the root	Any soup prepared from the oil extracted from the root of <i>Cochlospermum planchon</i> functions as anti-sickness
34.	<i>Citrus aurantifolia</i> (Christm.) swingle	Lime orange	Orombo-wewe FL	Rutaceae	Tree	Foliage leaf	The leaf used in production of soup condiment which cures malaria
35.	<i>Anacardium occidentale</i> Linn.	Cashew	kaju FL	Anacardiaceae	Tree	Foliage leaf	The soup produced from the foliage leaf of cashew helps in curing tooth diseases
36.	<i>Cyperus rotundus</i> Linn.	Nut grass	Alubosa-igbo	Cyperaceae	Grass	Leaf	The soup cures chest pain
37.	<i>Triplochiton scleroxylon</i> K. & Schum.	Obeche	Arere FR	Sterculiaceae	Tree	Leaf	The soup from obeche leaf reduce high blood pressure
38.	<i>Cissus pulpunera</i> Linn.	Square-stemmed climber	Aaja (FR)	Ampelidaceae	Climber	Whole stem	The soup produced from this plant enhances body fluid and sperm production
39.	<i>Sterculia tragacantha</i> Lindl.		Ilaka-ile FR	Sterculiaceae	Tree	Leaf	The soup of <i>Sterculia tragacantha</i> serves as anti-sickness
40.	<i>Colocasia esculenta</i> (Linn.) scholt.	Cocoyam	Ewekooko (FL)	Araceae	Herb	Foliage leaf	The soup serves as stomach pain reliever. It also reduces high blood pressure
41.	<i>Bambusa vulgaris</i> Linn.	Bamboo	Ewe oparun (FR)	Poaceae	Grass	Leaf from young sucker	The soup is prescribed for malaria patient
42.	<i>Senna siamea</i> Linn.	Kassoff tree	igi kasia (FL & FR)	Caesalpiniaaceae	Tree	Foliage leaf	The soup cures malaria
43.	<i>Cyanthula achyranthoides</i> (H.B. & K.) Moq.		opapara (FR)	Amaranthaceae	Herb	Leaf	They prescribe the soup for impotent men. It makes penis to be more active
44.	<i>Terminalia schimperiana</i> Hochst.		Igi idi FR	Combretaceae	Tree	Foliage leaf	The soup curbs cough
45.	<i>Vitellaria paradoxa</i> Goerth. F.	Shea butter tree	Igi-Emi (FR)	Sapotaceae	Tree	Foliage leaf	The soup prepared from this tree species gives strength to the body. It also acts as

46.	<i>Albizia zygia</i> (DC.) J.F. Machr		Ayunre (FR)	Mimosaceae	Tree	Foliage leaf	anti-sickness The soup acts as anti-sickness
47.	<i>Abelmoschus esculentus</i> (Linn.) Moench.	Okra	ila agbonjuba (FL)	Malvaceae	Herb	Leaf	They use the soup to treat fibroid and headache
48.	<i>Sesamum indicum</i> Linn.	Beniseed	Ekuku agbonjuba	Pedaliaceae Herb Leaf	Herb	Leaf	The soup of Beniseed enhances sperm production. It also helps in proper child delivery
49.	<i>Hymenocardia acida</i> Tul.		Orupa FR	Hymenocardiaceae	Tree	Foliage leaf	It is used as condiment.
50.	<i>Lawsonia inermis</i> Linn.	Camphire	laari H/FL	Lythraceae	Shrub	Leaf	It cures headache. It also serves as condiment
51.	<i>Ipomea asarifolia</i> (Desr.) Reoem. & Schult	Moon flower	Gbooro ayaba (FR)	Convolvulaceae	Herb	Foliage part	The soup reduce body pain.
52.	<i>Alchornea cordifolia</i> (Schum and Thonn.) Miil. Arg.	Christmas bush	Ewe-ife (FR)	Euphorbiaceae	Shrub	Foliage leaf	The soup rectifies eye problem
53.	<i>Sida acuta</i> Burm. F.	Broomweed	Olosonputu (FR)	Malvaceae	Herb	Leaf	The soup of <i>sida acuta</i> is prescribed for the people with respiratory problem.

Field survey (2017)

Key: FR = Forest

FL = Farm land

Table2: Frequency distribution of plant families used in medicinal/heath management in Ibarapa North Local Government Area.

Family	Frequency	Relative frequency (%)
Malvaceae	2	1.06
Euphorbiaceae	2	1.06
Convolvulaceae	2	1.06
Lythraceae	1	0.53
Hymenocardiaceae	1	0.53
Sapotaceae	2	1.06
Combretaceae	1	0.53
Amaranthaceae	1	0.53
Caesalpiniaceae	4	2.12
Araceae	1	0.53
Poaceae	1	0.53
Sterculiaceae	4	2.12
Ampelidaceae	1	0.53
Cyperraceae	1	0.53
Anarcardiaceae	2	1.06
Rutaceae	2	1.06
Cochlospermaceae	1	0.53
Meliaceae	1	0.53
Lamiaceae	2	1.06
Cucurbitaceae	2	1.06
Solanaceae	3	1.59
Tiliaceae	1	0.53
Bombacaceae	2	1.06
Moraceae	1	0.53
Chenopodiaceae	1	0.53
Asteraceae	3	1.59
Asclepidiaceae	1	0.53
Piperaceae	1	0.53
Papilionaceae	2	0.53
Bignonaceae	1	0.53
Rubiaceae	1	0.53
Apelidaceae	1	0.53
Mimisoideae	1	0.53

Table 3: Plant parts used in medicinal/health management in Ibarapa North Local Government Area

Plants part	Frequency	Relative frequency (%)
Foliage leaf	19	10.07
Leaf	26	13.73
Fruit	2	1.06
Root	1	0.53
Stem	1	0.53
Leaf and fruit	1	0.53
Leaf and bark	1	0.53
Foliage leaf and fruit	1	0.53
Flower	1	0.53

Table 4: Major ailment (diseases) and number of available plant remedies in Ibarapa North Local Area.

Disease	Number of plant Remedies	Rank
High blood pressure	5	1 st
Pile	4	2 nd
Malaria	4	2 nd
Stomach pain	3	3 rd
Ulcer	2	4 th
Body pain	2	4 th
Cough	2	4 th
Running stomach	2	4 th
Chest pain	2	4 th
Irregular menstruation	2	4 th
Gonorrhea	2	4 th
Eye problem	2	4 th
Hemorrhoid	2	4 th
Worm problem	1	5 th
Diabetes	1	5 th
Kidney disease	1	5 th
Snake bite	1	5 th
Pneumonia	1	5 th
Cholera	1	5 th
Tooth disease	1	5 th
Low sperm count	1	5 th
Impotency	1	5 th
Headache	1	5 th
Dizziness	1	5 th
Respiratory problem	1	5 th
Infertility	1	5 th
Hiccups	1	5 th
Pregnancy management	1	5 th
Anemia	1	5 th
Bone management	1	5 th
Body weakness	1	5 th
Fibroid	1	5 th



Anchomanes difformis



Ipomea batatas



Ocimum basilium



Ocimum gratissimum



Vernonia amygdalina



Gongronema latifolium



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Adansonia digitata



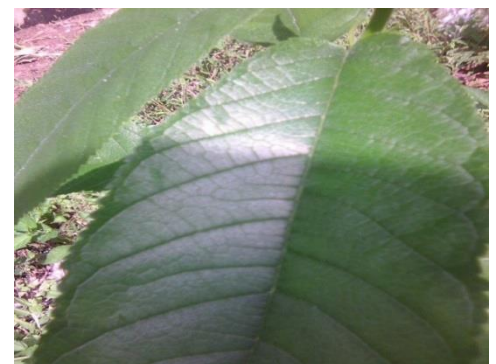
Afzelia Africana



Capsicum annum



Cyperus rotundus



Milicia excelsa

Some of documented plant species in the study area

CONCLUSION AND RECOMMENDATION

The indigenous knowledge of the health promoting and protecting attributes of plant have been mainly accessing from the plant through decoction, infusion and concoction. But some rural people still have knowledge on how to promote the health of the household through soup (functional soup) from edible leaves. Forest and farmland offer plant resources which support human health. Conscious efforts should therefore be made to conserve and domesticate those forest plant species that are identified in making medicinal soups. The indigenous knowledge of the health promoting and protecting attributes of African Leafy Vegetables (ALVs) is clearly linked to their nutritional and non-nutrient bioactive properties. Effort should therefore put in place to identify bioactive properties of the recorded plant species in this study and conservation of these valuable plant resources especially for curing human disease needs to be done thus the resources could be saved for present and future generation requirement. Using the existing knowledge is needed for the eventual ideal of "health for all" vision.

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