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A Review of Some Medicinal Plants Used by Indigenous Yoruba in Nigeria

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ABSTRACT

Ewe (plant), as it is normally being called among the indigenous Yoruba people, is critical and crucial to the Yoruba healing practice and culture. The indigenous Ytoruba people have developed certain ideas about plants as a result of which plants are regarded very indispensable not only for their survival but also for healing. Besides, the essence of plants and the knowledge of their usage as medicinal plants in Yoruba therapeutic system can only be unfolded if profoundly explored. This paper, using ethnography, brings to the fore specific medicinal plants for the management and prevention of specific illnesses used among practitioners of traditional medicine among the Yoruba of Nigeria. The study reveals that the concept of plants among the Yoruba is unique and that it is this concept that determines how plants are being used for specific medicinal purposes. The study brings into the limelight the prophylactic and therapeutic vitality of plants in the sustenance of human health. Because of the values inherent in plants among the Yoruba of Nigeria, practitioners advocate for preservation and conservation of plants.

Keywords: Plant, Indigenous Knowledge, Health, Diseases.

INTRODUCTION

There is no gainsaying that several laboratory research and screening have been done across the world to determine the chemical composition and biological usefulness of plants. However, this effort was only based on the industrial processing of some specific plant ingredients to a chemicalized form for pharmaceutical purpose [1]. While there is a constant neglect of the fact that, every single part of plant, from the flowers, leaves, roots, berries, stems, seeds, gums, needles, bark, or resins of the numerous medicinal plants in the world have inherent values and therefore useful for solving all forms of problems including prevention and treatment of illnesses. Indubitably, all plants are filled with active energy that have remained largely unexplored, and as a consequence, unknown. As aptly observes by Anselm Adodo, "over 90% of plants energy exists as potential energy, because human beings are yet to discover their uses" [2].

Despite peoples' inadequate knowledge of medicinal plants, there is an increasing renewed interest in herbs. In 2002, the World Health Organization estimates that 80 percent of the earth's population today depends on plants to treat common ailments [1]. Thus, herbalism that is plant based healing systems is integral to traditional healing practices all over the world. More importantly, considering the overabundant nature of medicinal plants, adequate and thorough understanding of plants in one's environment can help in balancing one's mental, spiritual and physical health. In this wise, Adepoju argues that there is no society without its own art of healing, however, the type and method of healing in every society is determined by the ecological and socio-cultural environments as well as historical antecedents of the people [3]. In other words, all societies have notions of health and its variants though explanation for health condition differs from society to society. Corroborating this view, Olagunju explores the strong belief of the Yoruba people of southwestern Nigeria in the potency of medicinal plants through profound understanding of the beingness of plants [4]. This definitely implies that in Yoruba healing culture, every plants, trees or herbs have life in them. Consequently, the herbalists often refer to the esoteric names of plants during healing process. Similarly, Jegede observes that plants have spiritual properties, which considerably determine their therapeutic relevance and the ontological harmony between man and nature [5].

Thus, this study advocates for the veneration of medicinal plants through proper conservation for the purpose of peaceful coexistence and sustainable health. It therefore adopts clinic-oriented approach which goes beyond the socio-cultural use of plants by placing more emphasis on the scientific identification, conservation and use of medicinal plants, especially from Yoruba

indigenous perspective. Thus, in this paper, there would be much focus on the general properties, use and application, morphology, physiological formation and basic compounds of commonly used indigenous medicinal plants in the curative, preventive and other specialised health care in traditional African medicine.

The Concept of Plants in Yoruba Cosmology

According to Lucas, the employment of herbal remedies as healing agents has been practised by the forebears of every race and land upon the earth [6]. These remedies were handed down from one generation to the next, in which the Yoruba were no exception. Although Orunmila is said to be the founding father of African-Yoruba medicine, the title 'father of Yoruba medicine' is accorded to Osanyin. This was basically due to his exceptional gift of communicating with plants. Besides, he has attuned himself to the energy field of plants, to the extent that, through his perception of the vibration of these plants, he profoundly gained knowledge of their uses. As a young man, whenever he was sent to the farm, he would refuse to cut any grass because he was physically sensitive to nature, and was aware of the usefulness of each plant. Osanyin did not just have knowledge of herbs. He also knew how to use the energy of plants to effect changes in human bodily conditions. This he did through the chanting of sacred chants or potent speech. Osanyin taught that one way to be attuned to the energy waves of plants is to learn their names and pronounce them audibly. In Okanran-Oloba, an Odu Ifa, Osanyin uses ewé and egbò to heal series of illnesses [5].

Thus, the concept of ewe (plant) among the Yoruba people considerably accentuates the morphological, physiological, phytochemical composition and descriptive essence of plants. Thus, there is a general belief that, "nkan ti a fi pamo ti a we, la n pe ni ewe", meaning, plants constitute embedded indigenous knowledge that have not been unfolded or discovered; even the depth of what is folded in every plant cannot be adequately unraveled. However, some of the hidden facts, especially concerning the prophylactic and therapeutical value of plants, can only be unraveled through more empirical research into herbalism and its adoption as an essential part of Traditional African Medicine (TAM) just as it being done in Ayurvedic (Indian), traditional Asian, Native American, Oriental herbs, naturopathic medicines and other homeopathic remedies across the world.

In Yoruba land, the taxonomy of plants considerably expresses their morphological and therapeutic essence. Thus, numerous plants in this region has distinct structures that greatly accentuate their curative relevance in addressing series of illnesses, prominent among which include: Ewe Oju-Eyebright (*Euphrasia officinalis*); it has shape like that of human eye and can be used in curing all form of eye diseases; Ewe Oronbo (*Citrus aurantum*) has shape like a heart, and therefore, it is useful in the treatment of heart problems; ewe awogba arun (*Petireria alliancea*) is used for the healing of more than 200 diseases as the name indicates; ewe gbomoyo (an esoteric name for ewu-*Corchorus olitorius*). By its morphology, it gbomoyo is capable of facilitating prompt delivery during labour pains of a woman; ewe ajeofole, ajeobale which means the witch cannot perch on this (*Croton Zambesicus*) and Epo obo (*Erythrophleum suaveolens*) are used in driving away witches and evil spirits. These and many more, as would be insightfully explored in this paper, are commonly found medicinal plants among Yoruba of Nigeria in particular and the world at large. These plants also consist of well-combined nutrient values and phytochemicals compounds, which are highly inestimable and vital to human's health [7].

Sources of Commonly Used Medicinal Plants in Nigeria

Eekanna ekun

Cat's Claw, also called uña de gato (*Uncaria tomentosa*). The word eekanna Ekun according to it morphology, it can be translated to mean the nail of the leopard.

- General properties: Phytochemical; Alloisopteropodine, allopteropodine, isomitraphylline, isopteropodine, mitraphylline, oleanolic acid, pteropodine, rhynchophylline, ursolic acid.
- Morphology: A woody plant with grappling and spiderlike structure.
- Physiological formation: A wood plant commonly found in the tropical and regions such as Nigeria.
- Uses and application: According to USDA research, cat's claw seeds contain an enzyme instrumental in converting saturated fats to unsaturated fats. Its inner bark and roots acts as an antioxidant and anti-inflammatory stimulate the immune system, cleanses the intestinal tract and enhances the action of white blood cells. It is good for intestinal problem and viral infections. Also, it may help people with AIDS, arthritis, cancer, tumors, or ulcers. *Ucaria tomentosa* was used traditionally treat asthma, abscesses, fever, urinary tract infections, viral infections, and wounds and found to be effective as an immune system rejuvenator, antioxidant, antimicrobial, and anti-inflammatory agent and that it has immunostimulatory effects [8].
- Basic compounds: Calcium, iron, magnesium, manganese, phosphorus, potassium, selenium, zinc, vitamins B1, B2, B3 and C [9].

Imi-esu

A plant with many names although there are other plants with many names, Imi esu which means the feaces of locust is the most popular name but it is also called Rerinkomi, Apaasa and others. The English name is Goat weed (*Ageratum conyzoides*). It

is called Imi esu because it has an offense smell compared to that of the male goat or rotten human feaces [10].

- General properties: Allicin, beta-carotene, beta-sitosterol, caffeic acid, chlorogenic acid, diallyl-disulfide, ferulic acid, geraniol, kaempferol, linalool, oleanolic acid, p-coumaric acid, phloroglucinol, phytic acid, quercetin, rutin, s-allyl cysteine, saponin, sinapic acid, and stigmasterol [11].
- Morphology: It has an erect structure of herbaceous annual with white flowers. The stems are covered with fine white hairs, commonly called Imi- Esu, apaasa and Rerinkomi among the Yorubas, and Akwukwo in Igbolanguage.
- Physiological formation: Is an erect herbaceous annual with white flowers commonly eaten by goats in rural areas. The plant is common in the Savannah regions of Nigeria. It is also found in North and Central America as well as several countries in tropical regions including Brazil.
- Uses and application: *Ageratum conyzoides* has been used as a medicinal plant in several parts of the world. It is used for the treatment of fever. The leaves are useful in the treatment of boils, leprosy, skin diseases as well as eye inflammation. The leaves are also used in wound healing. There are lots of empirical research on the uses and application of Ageratum conyzoides in Nigeria. Tolu Odugbemi reported that *Ageratum conyzoides* (Imi-Esu) is used for the treatment of wounds, ulcers, craw-craw, digestive disturbance, diarrhoea, emertic, skin diseases, antipyretic, gonorrhoea, sleeping sickness and eye wash [12]. Igoli observed its used among the Igede speaking Communities of Benue State (Nigeria) for the treatment of HIV/AIDS Disease [13]. Nicholas reported that the methanolic extract of *Ageratum Conyzoides* (Imi-Esu) demonstrated inhibitory action in the growth of staphylococcus aureus and Escherichia coli [14]. The root is more active against microorganisms compared to the stems. Focho reported that leaves *Ageratum Conyzoides* can be chewed to remedy dysmenorrhoea and decoction or infusion to cure stroke. Crushed leaves of *Ageratum Conyzoides* can be inserted into vagina for antenatal conditions [15]. Egunyomi and Oladunjoye confirmed the efficacy of *Ageratum Conyzoides* seeds as worm expeller when it is processed by charring (burning inside pot) [16]. Okoli et al reported that *Ageratum Conyzoides* leaves can be used for dressing wound, rheumatism and skin rashes [17]. In India, a decoction or infusion of the herb is used to treat stomach ailments such as diarrhea, dysentery and intestinal colic with flatulence. In Brazil, a decoction of the leaves *Ageratum conyzoides* has been found useful in the treatment of ovarian inflammation, amenorrhea, dysmennorrhoea, rheumatism, ulcer and diarrhea. An infusion of the entire plant has been found to give relief from intestinal pains, anorexia and arthritis. In Southwestern Nigeria, the plant is used to treat hazy vision and eye pains. The leaves are squeezed and the juice is applied as eye drops.
- Basic compounds: Calcium, folate, iron, magnesium, manganese, phosphorus, potassium, selenium, zinc, vitamins B1, B2, B3 and C.

Ewe oju: Eyebright (*Euphrasia officinalis*)

- General properties: Beta-carotene, caffeic acid, ferullic acid, tannins.
- Morphology: It has a structure that is very similar to human eye and can be used in curing all forms of eye diseases.
- Physiological formation: It is a woody plant that could be commonly found in North and Central America as well as several countries in tropical regions including Brazil and Nigeria.
- Uses and application: The entire plant (except the root) is useful in the prevention of fluids and relieves discomfort from eyestrain or minor irritation. Used as an eyewash. Good for allergies, itchy and/or watery eyes, and runny nose. Also, it can be used in combating hay fever. When the eye is stressed, it can serve as eye drops.
- Basic compounds: Calcium, chromium, iron, magnesium, manganese, phosphorus, potassium, selenium, zinc, vitamins B1, B2, B3 and C.

Eyin-olobe (*Phyllantus amarus schum*)

- General pproperties: Phytochemical studies hace shown the presence of many value able compounds. Glycosides, flavonoids, alkaloids, ellagitannins, phenylpropanoids, sterols, lipids, astragalin, brevifolin, carboxylic acids, corilagin, cymene, ellagic acid, niranthin, nirurin, rutin, saponins, triacontanal, tricontanol, quercetol, niruriside, lignans, fatty acids, vitamin C, tannins, geranin, Limonine, Ascorbic acid, Hypophyllatin, Linoleic acid, phyttetralin, phyllanthin, Estradiol, Gallic acid, Linnanthin, Nururine, Phyllanthenol, Lupeol, Astragalin, Trans-phytol and many others [18].
- Morphology: The word eyin olobe n sowo etymologically means the back of Olobe is sprouting money. It is also called gale of the wind or stone breaker. It is a plant with small leaves and it grows at most three feet high. In each of the leaves are tiny substances which, symbolically means money in Yoruba lexicon.
- Physiological formation: *Phyllantus amarus* is a Bhoomyamalkai plant belonging to the family of Euphorbiaceae. It is a small tropical shrub, commonly found in the South-western part ofNigeria.
- Uses and application: The whole plant is used for treatment in traditional medicine because the leaves, roots, seeds and

aerial contain nutrients and healing properties. The plant according to research findings is not toxic to either kidney or liver though in taste, it is highly concentrated. A number of my respondents are of the opinion that *Phillantus amarus* can be used to heal not less than 200 diseases. It has healing effects on hypertensive patients. The hypertensive effects were attributed to a specific phytochemical in the plant called geranin. The plant chemical can inhibit several neurotransmitter processes that relay and receive pain signals in the brain. Geranin consists of anti-ulcerous properties. According to Ranjit Roy Chaudhury, *Phyllantus amarus* is good for treating liver diseases such as hepatitis and can rapidly restore full functioning of a damaged liver [19]. *Phyllantus amarus* was equally found efficacious for treating malaria, diabetes, kidney stones and jaundice. Tolu Odugbemi reported that *Phyllantus amarus* is effective for treating gonorrhoea, genito-urinary diseases, asthma, diabetes, typhoid fever, jaundice, stomach-ache, dysentery, ringworm, hypertension [12]. In some Indian and Chinese herbal literature, it was reported that *Phyllantus amarus* has anti-viral effects, good for blood cleansing, tuberculosis and can be applied for the treatment of skin diseases. The extract from the plant when taken can increase the appetite. Fresh leaf juice of phyllantus Amarus can be applied externally for the treatment of cuts and bruises. S. M. Akojenu noted that *Phyllantus amarus* has anti-oxidant, hypolidemic, anti-diabetic, anti-diarrheal and gastro-intestinal properties [20]. The Indian Journal of Medical Sciences (2009) reports that *Phyllantus Amarus* has HIV replication inhibition activity. A report by pharmainfo.net states that Aqueous extract of *Phyllantus amarus* has inhibitory effects on HIV. The leaves of the plant can be grounded and applied externally on bone fracture, treating of bleeding disorders and it has anti-cancer property. The potency of *Phyllantus amarus* was confirmed in English Journal of Phytochemistry where it was stated that the plant is used for treating ailments such as asthma and bronchial infections. The plant is also considered a good diuretic, astringent, analgesics, detoxifier, liver protectant, anti-dysentry and anti-jaundice. According to Adebisi *Phyllantus amarus* is good for treating Arthritis and Asthma. It can also be taken for weight loss (slimming down) [21]. A. W. Obianime and F. I. Uche affirmed that *Phyllantus amarus* leaves help to increase male fertility; Alkaloids and tannins contain in it contribute to the plants effects as anti-malaria, anti-diarrhea and analgesic agents [22]. Adeneye reported that *Phyllantus amarus* is used in traditional medicine for its hepatoprotective, anti-diabetic, anti-hypertensive, analgesic, anti-inflammatory and antimicrobial properties [23]. J. O. Kokwaro states that the plant is used in the treatment of stomach disorders, skin diseases and cold [24]. Meixa et al. confirm the anti-viral activity of *Phyllantus amarus* against hepatitis B virus [25]. K. L. Joy and R. Kuttan reported that *Phyllantus amarus* has anti-mutagenic activities [26]. It also has anti-nociceptive, anti-lipidemic, anti-diabetic, anti-inflammatory, anti-lithic and anti-bacterial properties. *Phyllantus amarus* has widely been reported to offer good treatment for leprosy, hiccup, peptic ulcer, asthma; it is anti-spasmodic, good laxative, blood tonic, treatment of Itch, flu, fever, dyspepsia, blennorrhagia, tenesmus, gonorrhea, malaria, uterus complaints, constipation, anorexia, carminative, tumor, colic; it has HIV inhibitory activity, good anti-inflammation of appendix, bladder disorder etc. The report of a study which was reported online via www.rain-tree.com and www.findarticles.com reveal that *Phyllantus amarus* is a good cure for kidney stone, prostate problems and it was found to have hypoglacemic property. *Phyllantus amarus* can be processed and used through aqueous extraction of the plant phytochemical nutrients and properties; or by methanolic extraction of the plant chemicals,

- Basic Compounds: Calcium, folate, iron, magnesium, manganese, phosphorus, potassium, selenium, sulfur, zinc, vitamins A, B1, B2, B3, B5, C, and E.

Ewe eti erin: Aloe vera

- General properties: Acemannan, beta-carotene, beta-sitosterol, campesterol, cinnamic acid, coumarin, lignins, p-cournaric acid, coumarin, lignins, p-coumaric acids, and saponins.
- Morphology: Aloes are mostly stemless succulent plants with a whorl of elongated, pointed leaves, with saw-like teeth along their margins. By virtue of its name, ewe eti erin means a plant like the ears of and elevant.
- Physiological formation: Aloe vera is commonly found in Nigeria. In young plants the leaves appear at ground level, but the stem can grow up to 25 cm long in older plants. There may be 15-30 leaves per plant. Leaves are up to 50 cm long and 8 cm-10 cm across at the base. The leaves are bright green colour with irregular whitish spots on both sides; but the successive leaves have fewer spots and the fully mature leaves are spotless glaucous grey-green colour. A bitter yellow sap exudes when the leaves are cut, that hardens on exposure to air. It is this dried exudate that is mostly used medicinally and is known as aloe.
- Uses and application: It acts as an astringent, emollient, anti-fungal, antibacterial, and antiviral. if applied topically, it heals burns and wounds; and stimulates cell regeneration. When ingested, it helps to lower cholesterol, reduces inflammation resulting from radiation therapy, increases blood-vessel generation in lower extremities of people with poor circulation, soothes stomach irritation, aids healing, and acts as a laxative. Good for AIDs and for skin and digestive disorders [1].
- Basic compounds: Amino acids, calcium, folate, iron, magnesium, phosphorus, potassium, zinc, vitamins A, B1, B2, B3, C, and E.

Garlic: Allium sativum

- General properties: Its healing properties include Allicin, beta-carotene, beta-sitosterol, caffeic acid, chlorogenic acid,

diallyl-disulfide, ferulic acid, geraniol, kaempferol, linalool, oleanolic acid, p-coumaric acid, phloroglucinol, phytic acid, quercetin, rutin, s-allyl cysteine, saponin, sinapic acid, and stigmasterol.

- Uses and application: Garlic helps in detoxifying the body and protects against infection by enhancing immune function. Lowers blood pressure and improves circulation. Lowers blood lipid levels. It also helps in stabilizing blood sugar levels. It aids in the treatment of arteriosclerosis, arthritis, asthma, cancer, circulatory problems, colds and flu, digestive problems, heart disorders, insomnia, liver disease, sinusitis, ulcers, and yeast infections. It may prevent ulcers by inhibiting growth of Helicobacter pylori, the ulcer-causing bacterium. It is good for virtually any disease or infection.
- Morphology: Its structure is in form of a string of bulbs.
- Physiological formation: Garlic bulbs vary in size from a walnut to large orange; color varies according to the variety, white, yellow and red. On cutting the bulbs, it volatilizes causing irritation of eyes and tearing. It is commonly found in Nigeria.
- Basic compounds: Calcium, folate, iron, magnesium, manganese, phosphorus, potassium, selenium, zinc, vitamins B1, B2, B3 and C.

Ila: Musk Seeds (Abelmoschus maschatus)

- General properties: Alpha-pinene, benzaldehyde, beta-carotene, beta-pinene, borneol, camphor, caryophyl-lene, cinnamaldehyde, coumarin, cuminaldehyde, coumarin, cuminaldehyde, eugenol, farnesol, geraniol, limonene, linalool, mannitol, mucilage, 1,8-cineole, phellandrene, tannin, terpinolene, vanilin.
- Uses and application: In Unani medicine, seeds are regarded as stimulant, stomachic, carminative, astringent, analgesic and antispasmodic, and tonic for eyes. Leaves and stems are useful for gonorrhea and semen fluidity. Leaves and roots steeped in water, squeezed, filtered, are used with sugar in the treatment of gonorrhea and spermatorrhea. In Arabia, seeds were regarded stimulant, carminative, stomachic, cooling and demulcent, given in gonorrhea, catarrh of the bladder and as inhalation for hoarseness of voice, and dryness of mouth. Seeds, mixed with coffee, are used in fevers, and powdered seeds steeped in alcohol are used as an application for serpents' bites. Seeds are also described as cardiac tonic, aphrodisiac, and diuretic, and powdered seeds in lukewarm milk are recommended for the treatment of constipation, dyspepsia and gonorrhea [27]. Leaf decoction is also effective against intestinal complaints and for vomiting. In Ayurveda system of medicine, seeds are cooling, tonic and carminative and used in hysteria, nervous debility and other nervous disorders and the mucilage from the roots and leaves is used for the treatment of gonorrhea [28]. In Hawaiian islands, leaves and flower buds are largely used for softening the contents of stomach and bowel in cases of constipation [29]. In the Philippines, seeds decoction was used as tonic, anti-hysteric, diuretic and carminative, and the mucilaginous decoction of roots and leaves was used for the treatment of gonorrhea [30]. In Trinidad and Tobago, it is used for the treatment of menstrual pain and unspecified female complaints, childbirth and infertility [27].
- Morphology: It has long-tin stem and distinct leaves usually broad or heart-shaped at the base, pointed at the tip, and toothed in the margins.
- Physiological formation: It is an annual, erect, branched herb, up to one meter high, covered with very long hairs with yellow petals that are purple at the base inside. The seed capsules are oblong-ovoid, and it is usually found in tropical countries like Nigeria.
- Basic compounds: Calcium, chromium, copper, iodine, iron, manganese, phosphorus, potassium, zinc, vitamins A1, B1, B2, B3 and C.

Oju-ologbo: Bead vine, Buck bead (Abrus precatorius)

- General properties: Beta-sitosterol, caffeic acid, alpha-pinene, benzaldehyde, beta-carotene, beta-pinene, borneol, cryptoxanthin, lutein, mannitol, p-coumaric acid, saponin, stigmasterol, camphor, caryophyl-lene, cinnamaldehyde, coumarin, cuminaldehyde, coumarin, cuminaldehyde, eugenol, farnesol, geraniol, limonene, linalool, mannitol, mucilage, 1,8-cineole, phellandrene, tannin, terpinolene, vanilin.
- Uses and application: : Fresh leaves of the white seeded variety have a sweet taste and are chewed to relieve hoarseness of voice and with cubeb and sugar as a cure for aphthous ulcers of mouth. In spermatorrhoea with bloody discharge, equal parts of the juice of white abrus leaves and henna leaves (*Lawsonia inermis*) are rubbed with the root of Holostemma rheedii, cumin and sugar and administered orally. Seeds are purgative, emetic, tonic, antiphlogistic, aphrodisiac and ophthalmic [27]. Fresh leaves juice mixed with some bland oil is applied to painful swellings. The temperament of seeds being resolvent, seeds' paste is mainly used externally for the treatment of leucoderma, eczema and freckles. Leaves paste is also applied in skin diseases such as leucoderma and eczema, and to painful swellings by mixing it with bland oils, and is recommended as a cure for baldness. In Ayurveda, detoxified or purified seeds are used for the treatment of alopecia, edema, helminthes, skin diseases, itching, urinary disorders etc. Ghani mentions that, according to Ayurvedic practitioners, it is bitter, hot, emetic, and increases semen production. The root and leaves are reported to possess diuretic, emetic, and tonic properties, and are used for the treatment of gonorrhea, jaundice and hemoglobinuric bile. Zulus use

leaves decoction as a remedy for pain in the chest and in Sri Lanka, the juice is taken as a blood purifier. Water root extract is used to relieve obstinate cough, and in Java, the root is considered demulcent and anti diarrhetic. A paste made of powdered seeds is used to poison darts and arrows to kill animals. Wounds afflicted by such arrows are generally fatal within 24 hours. Seeds, seed hulls, and decorticated seeds have been used for epitheliomas of the face, hand, mucosa, vagina and vulva and for warts on the eyelids. Chinese use seeds for dropsy, fever, headache, malaria, and worms. Indo-Chinese use the plant for conjunctivitis, diarrhea, dysentery and malaria. Malayans chew or drink leaves or roots decoctions for colics, and colds or cough. Indonesians use leaves for hoarseness and sore throat and sprue. East Africans use seed for gonorrhea, and other venereal diseases; they also use the root as an aphrodisiac, and for snakebite. West Africans use leaves as CNS sedative, for conjunctivitis, constipation, cough, cancer, convulsions, enteritis, hoarseness of voice, freckles, leucoderma, stomatitis, spermatorrhea and syphilis; the root for chest complaints, gonorrhea, hookworm, jaundice, pleurisy, rheumatism, sore throat and snakebite. West Indians use leaves in teas for chest cold, cough, fever and flu, and the seeds for conjunctivitis and worms. Tanzanian traditional healers use the plant to successfully treat cases of epilepsy. In Zimbabwe, the traditional healers use the plant to treat urinary schistosomiasis, and a government research laboratory found the plant lethal to adult schistosomes. Leaves are also used as a substitute for licorice for throat ailments in Dutch East Indies (Indonesia) and seeds are used for eye ailments. In East Africa, whole plant except the seeds which are considered somewhat toxic is used; leaves and roots decoction are used as a remedy for gonorrhea; a piece of uncooked root is chewed and at the same time the decoction swallowed. Leaves relieve stomach troubles including dysentery, and the roots are chewed as a remedy for snake-bite and as an aphrodisiac. In Livingstone, a southern Province of Zambia, the plant was utilized to treat HIV/AIDS-related infections [27].

- Morphology: Leaves are 5 cm to 7.5 cm long, abruptly pinnated; leaflets 8-20 pairs, linear oval, obtuse at both ends, glabrous or slightly hairy, membranous, deciduous 1 cm to 1.6 cm long and 0.4 cm to 0.5 cm broad. Seeds are bright scarlet with a black spot at one end; the white variety of seeds is polished, smaller than a pea in size but larger than the red variety; average weight of scarlet variety 114 mg, black variety 115 mg and white variety 128 mg. Roots long, woody, hard and much branched, seldom more than 0.6 cm in diameter. It also has very thin cortical layer that is reddish brown and wood yellowish white.
- Physiological formation: It is a beautiful woody climber, found throughout the plains of India, Sri Lanka, and other hot countries, and also along the Himalayas. It flowers in August and September and the pods ripen by the end of the cold season [31].
- Basic compounds: Calcium, magnesium, chromium, copper, iodine, iron, manganese, phosphorus, selenium, potassium, zinc, vitamins A1, B1, B2, B3 and C.

Conservation and Veneration of Medicinal Plants

In traditional African medicine bioethics, the need to venerate medicinal plants and nature in general is highly intertwined with the need for conservation. This is due to the shared belief that extraction or exploration must be coupled with conservation and propagation for the purpose of sustaining the ontological harmony between man and his environment. Thus, despite the fact that every traditional practitioner or herbalist makes use of medicinal plants in the curing and prevention of illnesses, there is a special place for the beingness of medicinal plants as a natural phenomenon.

Accordingly, there are natural laws guiding the extraction or exploitation of plants, which must be adequately observed by every traditional practitioner as failure to do so can render such plants inefficacious or even bring about the wrath of gods or ancestors. Of relevance is the general belief among the Yoruba concerning the use of plant roots (egbo igi), which made it mandatory for every traditional practitioner exploiting egbo igi to cover the land where the egbo igi was gotten from with sand in order to prevent the extinction of such herbs or enable its accessibility for potential patients.

Moreover, the extraction of plants is considerably guided by certain phenomenon such as cultural practice. As a result, there are some forests in Yoruba land that is forbidden for every traditional practitioner to do exploitation. Also, it is dangerous for practitioners to exploit them. These forests include Igbo oro, Igbo Eluku, Igbo ogun, Igbo oya, Igbo Agemo, Igbo Egungun, Igbo igunnu among many others. This further implies that it is forbidden to procure medicinal plants from these forests for healing and disease prevention as it could further endanger both the life of the patient and the practitioner.

CONCLUSION

From the foregoing, it is much apparent that the above mentioned plants are very useful and the people from time immemorial have discovered the inherent values in this plant. Plants therefore are very critical in the practice of traditional medicine among the Yoruba of South-western Nigeria. A close look at the nature or the structure of the plants helps to determine their uses. This assertion is a reflection of the fact that man is blessed with more than enough natural resources in terms of medicinal plants and herbs that can be found everywhere around us. It is therefore not amazing that the antidote of treating both the malignant and benign forms of diseases is highly within our reach. Hence, man needs to start embracing the good nature of their natural environment through proper but regulated extraction, conservation, commodification in terms packaging and branding of medicinal plants within their reach for the sustainability of their health.

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