Full Length Research Paper

Ethno medicinal information on collation and identification of some medicinal plants in Research Institutes of South-west Nigeria

I. O. Lawal¹*, N. E. Uzokwe¹, A. B. I. Igboanugo¹, A. F. Adio¹, E. A. Awosan¹, J. O. Nwogwugwu¹, B. Faloye², B. P. Olatunji³ and A. A. Adesoga¹

¹Forestry Research Institute of Nigeria (FRIN), Nigeria. ²International Institute of Tropical Agriculture (IITA), Nigeria. ³Department of Pharmacognosy University of Ibadan, Ibadan, Nigeria.

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An arboretum is a collection of trees. Related collections include a fruticetum (from the Latin *frutex*, meaning shrub), and a viticetum, a collection of vines. More commonly today, an arboretum is a botanical garden containing living collections of woody plants intended at least partly for scientific study. Distribution of medicinal plants information were investigated in International Institute of Tropical Agriculture (IITA) arboretum and Forestry Research Institute of Nigeria (FRIN) arboretum to collate and identify different medicinal plants used in the traditional pharmacopoeia for the treatment of diseases affecting human body. The indigenous knowledge of local traditional healers and the native plants used for medicinal purposes were collected through questionnaire and personal interviews during field trips. A total of 120 informants aged 35 and above comprising 64% males and 36% females were interviewed. The investigation revealed that a total of 129 species of medicinal plants (Trees (78%), Shrubs (18%), Herbs (3%) and Climbers (1%)) belonging to 39 families 94 genera were identified and documented. Much of the plant families have been endangered as they were not easily found during the field work. Plants are documented for further research on their secondary metabolites, biological attributes in the various plant parts.

Key words: Ethnomedicinal, identification, collation, research institutes, arboretum.

INTRODUCTION

The revival of interest in the use and importance of African medicinal plants by many developing countries has led to intensified efforts on the documentation of ethno- medicinal data of medicinal plants, since most traditional healers keep scanty records and their information is passed on, mainly verbally, from generation to generation (Hatil Hashim EL-Kamali, 2009).

Research has been geared towards finding scientific evidence for the claims as to the therapeutic efficacy of African herbs by traditional healers. Most of the published and unpublished written ethno medicinal data with valuable and complementary information are scattered in many documents, some of which are not easily available. An interdisciplinary systematization, which certainly helps to predict the most promising candidates for further laboratory or clinical investigations, appears as useful work (Hatil Hashim EL-Kamali, 2009).

Many infectious diseases are known to be treated with herbal remedies throughout the history of mankind. The maximum therapeutic and minimum side effects of herbal remedies have been verified in numerous scientific investigations. Even today, plant materials continue to play a major role in primary health care as therapeutic remedies in many developing countries (Czygan, 1993). It has been reported that natural products (their derivatives and analogs) represent over 50% of all drugs in clinical use, in which natural products derived from higher plants represent about 25% of the total. The World Health Organization estimated that over 80% of the people in

^{*}Corresponding author. E-mail: ibroodula@yahoo.com. Tel: +2348035059095

developing countries rely on traditional remedies such as herbs for their daily needs and about 855 traditional medicines include crude plant extracts (Tripathi et al., 2003). This means that about 3.5 to 4 billion of the global population rely on plants resources for drugs (Farnsworth, 1988).

The objective of this study was to interact with local traditional healers and document their knowledge on medicinal plants, their usage and the types of diseases treated and also to bring up to date West African, especially Nigeria ethno medicine data. The present paper reports on medicinal plants together with some traditional beliefs about them among the people of some communities in the South-West Nigeria.

MATERIALS AND METHODS

Study area

Distributions of medicinal plants information were investigated in IITA and FRIN's arboretum using the guides of the existing plants in the garden (Table 1). Method described by Jovel et al. (1996) was adopted to gather the ethno medicinal information from different herb sellers using questionnaires and oral interview. The respondents were selected from three major herb markets in Ibadan, Oyostate, namely: Bode market, Oje-market and Oranyan herb market. Selection of the informants was based on the distribution of the local people having folk knowledge. A total of 120 informants aged 35 and above comprising 64% males and 36% females were interviewed. Of the 120 informants, (70%) were traditional medical practitioners who have practical knowledge of medicinal plants used as herbal remedies. Respondents were asked to collect plant specimens they knew and used in the treatment of diseases in the area. Some of them accompanied the researchers to the field to identify the various plant species that were not available or cultivated near their homes. Sixty questionnaires were administered after collation and identification of selected medicinal plants.

Reviews of available records from the plant database of medicinal plants in Nigeria, for the ethnomedicinal values of these plants were also used to compare and ascertain the folkloric information gathered during the interview. Major local Nigerian medicinal plants existing in these two Institutes' arboretum were then listed with their vernacular name, scientific name and their uses where available. Seven commonly used plant species that have numerous medicinal uses in the South-West region of Nigeria with detailed information were recorded. However, it was a bit difficult to extract the information from them but with persuasion much information was gathered.

RESULTS AND DISCUSSION

In the following enumeration, plants are arranged alphabetically, followed by the local names, family name, habit and their uses. A total of 129 species of medicinal plants belonging to 39 families 94 genera obtained from 120 respondents were identified and documented. Among these plants, 78% tree, 18% shrub, 3% herbs and only one climber was recorded. Observation from the ethnomedicinal survey showed that most of the plants are used for different ailments in different localities.

Traditional healers uses these plants as anti-fungal,

anti-bacteria, anti-malaria skin problems, cold, fever, cough, headache, diarrhea, fertility problems, toothache, stomach ache, wounds, diabetes and viral infection. Trees (78%) were found to be the most used plants followed by shrubs (18%), herbs (3%) and climbers (1%) in descending order. The most dominant families in the study were Leguminosae (44%), Caesalpinoideae (9%), Mimosoideae (5%), Papilionoidae (5%).

Other families with low number are listed below: Euphorbiaceae. Verbenaceae, Solanaceae, Apocynaceae, Asclepiadaceae, Compositae, Lecythidaceae, Bombacaceae, Moraceae, Rubiaceae, Gentiaceae. Rutaceae. Anacardiaceae, Boraginaceae, Sapindaceae, Bixaceae. Sapotaceae. Canaceae. Polygalaceae, Chenopodiaceae, Cannacaceae, Capparidaaceae, Annonaceae, Costaceae, Apocynaceae, Irvingaceae, Bignonaceae, Combretaceae, Cohrysobalanaceae, Tilliaceae, Lauraceae, Lecythidaceae, Meliaceae, Sapindaceae, Palmae. Mvrtaceae. Moringaceae. Mimosaceae. Sterculiaceae and Zingiberaceae.

It was equally discovered that the medicinal plants have other uses as some could be used as vegetables, fruits, trees, ornamentals etc. The different uses can be explained by the fact that, a single plant can serve many purposes or perform different functions and it may be due to the ecological variations observed in the different regions of the sampled area. Local traditional healers are commonly using the following plants to treat more number of diseases. They are: *Azadirachta indica*, *Vernonia amygdalina*, *Entanda abyssinica*, *Treculia africana*, *Ageratum conyzoides Calotropis procera*, *Physalis angulata*. Preference for their use may be related to their availability.

In the course of this research, questionnaire, personal interview and review of available records show that not up to thirty genera of these plants were well cultivated and conserved and that the commonly used plants especially the family Leguminosae could be endangered if there is no control on their harvesting. It was also observed in this study that much of the plant families have been endangered as they were not easily found during the field work with some of the respondents, thus demand an urgent attention to domesticate these medicinal plants in Southwestern Nigeria.

COMMONLY USED SPECIES ETHNOMEDICINALLY

Vernonia amygdalina Del. (Asteraceae)

Known as "bitter leaf" is a widely used medicinal plant in Africa. It is applied in various ailments (Iwu, 1993). The leaves are reputed to be an effective remedy for fevers and gastro-intestinal disorders. The fresh leaves are believed to be abortifacient and also used in purgative enemas. The leaf extract of *Vernonia amygdalina* yields a sesquiterpene lactone vernolepin which possesses antiplatelet activity (Venton et al., 1991). Table 1. Identified and ethnomedicinal information on selected plant species in IITA and FRINS' arboretum Ibadan, Oyo State, Nigeria.

Species	Local Name	Uses	Family	Classification
Acacia aulocarpa (Guill & Perr.)	Kassia (Yor.)	Purgative	Leguminosae	Tree
Acacia auriculiformis (Guill & Perr.)	Kasia eleti (yor)	Astringent	Leguminosae	Tree
Acacia grassicarpa (Guill & Perr.)	Unknown	Stimulants	Leguminosae	Tree
Acacia mangium (Guill & Perr.)	Unknown	Blight, High fever	Leguminosae	Tree
Acacia melanoxylon (Guill & Perr.)	Unknown	Purgatives	Leguminosae	Tree
Acacia nilotica (Benth)	Baani,booni (Yor), gabaruwa (Hau)	Laxatives	Leguminosae	Tree
Adansonia digitata (Linn.)	Ose (Yor)	Arthritis	Bombacaceae	Tree
Adenanthera pavonina (Linn.)	Unknown	Antihypertensive	Mimosoidae	Tree
Afromomum melegueta (K.Schum)	Atare (Yor)	Aphrodisiac	Zingiberaceae	Herb
Afzelia africana (Hams)	Apa (Yor), akpalata (lobo)	Strong bone, local antidote	Leguminosae	Tree
Afzelia bella (Hams)	Arinyan (Edo), uza aka (Igbo)	Mouth wash	Mimisoideae	Tree
Ageratum convzoides L.	Imi-esu (Yor)	Frontal headache	Compositae	Herb
Albizia adianthifolia (Schumach)	Ayinreta, igbabo (Yor), kawo (Hau)	Psychotic	Leguminosae	Tree
Albizia bipidensis (Benth)	Unknown	Secondary infertility	Leguminosae	Tree
Albizia ferruginea (Benth)	Ayinre ogo (Yor).ngu kurmii (labo)	Internal fungi	Leguminosae	Tree
Albizia lebbeck (Benth)	labaqbo (Yor)	Hernia	Leguminosae	Tree
Albizia niopoides (Benth)	Unknown	Psvchotic	Leguminosae	Tree
Albizia glaberima (Schumach.&	Ayunre (Yor)	Epilepsy,Anaemia	Leguminosae	Tree
Albizia zvgia (J.F Macbr.)	Avinre-weere.kurmii (Yor)	Waist pain	Leguminosae	Tree
Alchornea cordifolia (Schumach.& Thonn	lpa, esinsin, eepa, bambami (Yor), ububo	Fever, rheumatism, antimicrobials purgative,	Euphorbiaceae	Shrub
Anarcadium occidentale (Linn)	(1950) Kasu (Yor), okpokpo (Igbo)	Kidney problem, Diarrhoea	Anarcadiaceae	Tree
Annona muricata (Linn)	Abo (Yor), Uburu-ocha (Igbo)	Yellow fever	Annonaceae	Tree
Anthocleista djalonensis (A.Chev)	Sapo (Yor)	Antidiuretic, purgative, jaundice.	Gentiaceae	Tree
Anthonotha macrophylla (P.Beeauv)	Abara, (Yor), ububa-iepa (Igbo)	Gonorrhea, dysentery, diarrhea, yellow fever.	Leguminosae	Tree
Artocarpus heterophyllus (Lam)	Taponun	Anti-ulcer	Moraceae	Tree
Azadirachta indica (A.Juss.)	Eke-oyibo, Dongo-yaro (Yor)	Anti malaria, insecticider	Meliaceae	Tree
Baphia nitida (Baill.)	Irosun (Yor), Majigi, Ufie (Igbo)	Stimulant, Constipation, skin diseases, venereal diseases, ringworm, enema, flatulence, smallpox	Papilionoideae	Tree
Baphia pubescence (Hook.f)	Awewi, Urohun, Maajigii (Yor)	Fever	Papilionoideae	Tree
Bauhinia monandra (Kurz)	Unknown	Hyperglycaemic, Post natal haemorrhage	Caesalpinoideae	Tree
<i>Bauhinia tomentosa</i> (Linn.)	Jinga(Hau)	Hypergycaemic	Caesalpinoideae	Tree
Berlinia grandiflora (Hutch. & Dalz.)	Apado (Yor), abaa, Dokar rafi, Ububa (Igbo)	Fibroid	Caesalpinoideae	Tree
<i>Blighia sapida</i> (Konig)	Ishin, isin (Yor), Okpu ulla (Igbo), Gwanja kusa (Hau)	Anti-ulcer Malaria, migraine, dysentery, ease labour, hypoglycaemic agent,(note that coat is poisonous).	Sapinadaceae	Tree
Bixa orellana <i>(Linn)</i>	Aje (Yor)	Diabetes	Bixaceae	Shrub

Table 1. Contd.

Brachystergia eurycoma (Harms)	Ako, Akolodu (Yor)	Strong bone	Caesalpinoideae	Tree
Vitellaria paradoxa	Emi-emi, emi (Yor), Osisi (Igbo), Ka'danya (Hau)	Pain reliever	Sapotaceae	Tree
<i>Caesalpinia bonduc</i> (Roxb)	Ayoo (Yor)	Anti fungi	Caesalpinoideae	Shrub
Calliandra haeematocephala (Hassk.)	Tude, ule (Yor)	Antihelminthes, Antimicrobials	Leguminosae	Tree
Calotropis procera (Ait.)Ait.f.	Bomubomu (Yor)	Measles, diaphoretic, emetic, asthma, abortifacient, convulsion, antipyretic.	Asclepiadaceae	Shrub
Canavalia ensiformis	Pokondo (Yor)	High fever, measles	Leguminosae	
Canna indica	ldo (Yor)	Local birth control , Malaria	Cannaceae	Herbs
<i>Carpolobia lutea</i> (G.Don)	Osunsun (Yor)	Stomach problem	Polygalaceae	Shrub
<i>Cassia fistula</i> (Linn)	Kasia (Yor)	Purgatives	Caesalpinoideae	Tree
Cassia spectabilis (DC.)	Kasia (Yor)	Laxatives	Caesalpinoideae	Tree
Ceiba petandra (Linn.)	Araba (Yor)	Stomach ache	Bombacaceae	Tree
Chenopodium ambrosioides	Arunpale (Yor)	Anti-hypertensive ,Gonorhoea,syphilis	Chenopodiaceae	Herb
Cnestis ferruginea (Guan.)	Omu Aja (Yor)	Laxative, mouth odour, cough	Connaraceae	Shrub
<i>Cola millenii</i> (K.Schum)	Obi-edun (Yor)	Antiviral	Sterculiaceae	Tree
Cordia alliodora (Linn)	Omo (Yor)	Antifungal	Boraginaceae	Shrub
Costus afer (Ker-Grawl.)	Ireke omode (Yor)	Abortifacient, Aphrodisiac, arthritis, hypertension	Costaceae	Shrub
Dactyladenia barteri (Engl.)	Icheku, Ahaba (Igbo)	Cough, fatigue	Chrysobalanaceae	Shrub
Dalbergia lacteal (Roxb)	Ojiji, abinrere (Yor)	Soot throat, pimples, anathematic, ease labour	Leguminaceae	Tree
<i>Dalbergia latifolia</i> (Roxb)	Ogun-aja (Yor)	Yellow fever	Leguminaceae	Tree
<i>Dalbergia sissoo</i> (Roxb)	Sissoo, Shisham (Hau)	High fever	Leguminaceae	Tree
Daniella ogea (Harms)	lyaa (Yor)	Nerves, back pain	Leguminaceae	Tree
Daniella oliveri (Rolfe)	Emi ya (Yor), Kadaura, Ozabwa, Maje	Stimulant, local cosmestics	Leguminaceae	Tree
<i>Delonix regia</i> (Hooks)	Seke seke, ayin. (Yor)	Diuretic, anthelmintics, astringent, leucorrhoea	Leguminaceae	Tree
<i>Dialium guineense</i> (Willd.)	Awin (Yor), Icheku (Igbo), Tsamiyar kurm (Hau)	Antiulcer, vitamin supple	Leguminaceae	Tree
<i>Elaeis guineensis</i> (Jacq.)	Eyin (Yor)	Mensual flow	Palmae	Tree
Elaeophorbia grandiflora (Croizat)	Oroigi, oroonigi (Yor)	Latex as embrocation	Euphorbiaceae	Tree
Entanda abbysiniaca (Steud)	lgbaa (Yor)	Bronchitis		Tree
Entanda gigas (Steud)	Agba (Yor)	Gastrointestinal disorder		Tree
<i>Enterolobium cyclocarpum (</i> Guill. & Perr.)	Unknown	Pile	Leguminosae	Tree
<i>Erythrophleum suaveolens</i> (Guill. & Perr.)	Obo Erun obo, olu-obo, Ajeku, Obo (Yor), Gwaska (Hau), inyi,akpa. (Igbo)	Anti-oxidants, antiviral, antihelminthic	Leguminosae	Tree
Erythrinia abbyssinica (Linn)	Ologbosere, lakale, Majiriya (Yor), echichi (Igbo)	Yellow fever	Leguminosae	Tree
Euadena trifoliolata (Olive.)	Logbokiya (Yor)	Conjunctivitis, stomach disorder	Capparidaceae	Shrub
Ficus asperifolia (Miq).	lpin (Yor)	Hypotensive	Moraceae	Tree

Table 1. Contd.

Chrysophyllum cainito (Linn)	Agbalumo eebo (Yor)	Diabetes	Sapotaceae	Tree
<i>Gliricidia sepium</i> (Jacq.)	Agunmaniye (Yor)	Rheumatism	Papilionaceae	Shrub
<i>Glyphea brevis</i> (Spreng.)	Atori (Yor)	Malaria	Tiliaceae	Shrub
Gmelina arborea (Roxb)	lgi Melina (Yor)	High blood pressure,Diarhoea	Verbenaceae	Tree
Grewia pubescens (P.Beauv)	Oraigbo (Yor)	Wound healing	Tiliaceae	Shrub
Hollarrhena floribunda (G. Don)	Irena (Yor), Bakin mutum	Gall stone	Apocynaceae	Shrub-Tree
Irvingia gabonensis (O'Rorke)	Oro Oro (Yor) (Ogbono), Gooron birii (Igbo)	Infertility, Oedema	Irvingaceae	Tree
Lannea taraxalifolia (A. Rich)	Yanrin (Yor)	For dislocation	Anacardiaceae	Herb
<i>Lecaniodiscus cupanioides</i> (Planch)	Akika (Yor), Okpu, Kaafi (Igbo) naamaa –zaakii (Igbo)	Side pain	Sapindaceae	Tree
<i>Leucaena leucocephala</i> (Lam)	Unknown	Difficult respiration	Leguminaceae	Tree
Leucaena macrophyllum (Lam)	Unknown	Fever	Leguminaceae	
Lonchocarpus cyclocarpum (Guill&Perr)	Elu, Ipapo (Yor)	Jaundice	Leguminaceae	Shrub
Mansonia altisima	Ofun (Yor)	Constipation, leprosy.,aphrodisiac	Sterculiaceae	Tree
Markhamia lutea (Benth)	Iru aya (Yor)	Yellow fever	Bignonaceae	Tree
Milicia excelsa	Iroko (Yor)	Rheumatism	Meliaceae	Tree
Millettia griffonianas (Baill.)	Ito (Yor)	General weakness	Papilionaceae	Shrub
Millettia aboensis (Hook.f)	Unknown	Constipation	Papilionaceae	Shrub
Millettia drastica (Welw.)	Unknown	Gastritis	Papilionaceae	Shrub
Millettia thonningii (Baker.)	Ito (Yor), okeokpa (Igbo)	Pain reliever	Leguminaceae	
Morinda lucida (Benth.)	Oruwo (Yor)	Fever. anti malaria	Rubiaceae	Tree
Moringa oleifera (Lam)	Ewe igbale (Yor)	Vitamin supplement, acute rheumatism	Moringaceae	Tree
Morus alba (Stapf.)	Berri (Yor)	Hypoglycemic	Moraceae	Tree
Napoleonaea imperialis (P. Beauv)	Irosun-igbo, Irosun, Akbodo (Yor).	Vermifuge	Lecythidaceae	Shrub
Nauclea diddericchii (Merill)	Opepe Opepe (Yor),Uburu (Igbo), Tafashiya (Hau)	Arthritis, febrifuge.	Rubiaceae	Tree
Nauclea latifolia (Seem)	Egbesi (Yor)	Antibacterial	Rubiaceae	Shrub-Tree
Newbouldea leavis (P.Beauv)	Akoko (Yor)	Infertility	Bignonaceae	Tree
Parkia biglobosa (Jacq.)	Iru, Igba, Igi-iru (Yor), Dadawa (Hau)	Antihypertensive	Leguminaceae	Tree
Parkia bicolor (A.chev.)	Iru (Yor)	Diarrhea, Dysentery	Mimosaceae	Tree
Parkia clappertoniana (Keay)	Unknown	Anti hypertensive	Mimosaceae	Tree
Pentaclethra macrophylla (Benth.)	Apapa, Pala, pakala (Yor)	Wound dressing	Leguminaceae	Tree
Pericopsis elata (Harms.)	Avan (Yor)	Syphilis	Leguminaceae	
Persea americana (Mill.)	Pia. apoka (Yor)	Blood pressure	Lauraceae	Tree
Physalis angulata L.	Koropo, papo (Yor)	Anti-cancer	Solanaceae	Herb
Pinus caribaea (Morelet)	Pine	Wound healing	Bombaceae	Tree
Prosopis africana (Guill&Perr)	Avan (Yor)	Pile	Mimosaceae	Tree
Psidium guajava (Linn)	Guava (Yor)	Dysenterv	Myrtaceae	Tree
Pterocarpus indicus (Guill&Perr)	Unknown	Filariasis	Leguminaceae	Tree
Pterocarpus mildbraedii (Harms.)	Unknown	Antiageing	Leguminaceae	Tree
Pterocarpus osun (Craib)	Osun (Yor)	Antiageing	Leguminaceae	Tree
Pterocarpus rotundofolia (Craib)	Unknown	Impotence	Leguminaceae	Tree
Pterocarpus santalinoides (L'Herit)	Gbengbe (Yor)	Infertility	Leguminaceae	Tree
Pterocarpus soyauii (Taub)	Gbingbin, Imo-osun (Yor)	Anti inflammatory	Leguminaceae	Tree
Samanea saman (Jacq.)	Rain tree		Leguminaceae	Tree

Table 1. Contd.

Sansiviera liberica	Oja ikoko (Yor)	Conjunctivitis and convulsion		Tree
Secamone afzelii (Roet & Schult)	Arilu, alu, ailu (Yor)	Anti-inflammatory	Asclepiadaceae	Climber
Senna alata (Linn.)	Asunwon (Yor)	Anti bacteria, Laxative	Caesalpiniodeae	Shrub
<i>Senna siamea</i> (Linn.)	Senna (Yor)	Laxatives	Caesalpiniode	Tree
Senna spectabilis (DC.)	Asunwon eebo (Yor)	Syphilis	Leguminaceae	Tree
Solanum terminale (Benth.)	Unknown	Kwashiorkor	Solanaceae	Shrub
Spondias monbin (Linn.)	lyeye (Yor)	Diabetes	Anarcadiaceae	Tree
Sterculia setigera (Dell.)	Ose-awere, kukuki (Yor)	Constipation	Sterculiaceae	Tree
Synsepalum dulcificum (Daniell)	Agbayun (Yor)	Sweetner	Sapotaceae	Tree
Tamarindus indica (Linn.)	Ajagbon, pala (Yor), Tsamiya (Hau)		Leguminaceae	Tree
Terminalia ivoriensis (A. Chev.)	ldigbo (Yor)	Tranquilizer	Combretaceae	Tree
Terminalia superba (Engl. & Diels.)	Afara (Yor)	Antisickling	Combretaceae	Tree
<i>Tetrapleura tetraptera</i> (Taub.)	Aidan (Yor)	Antisickling	Leguminaceae	Tree
<i>Treculia africana</i> (Decne.)	Afon (Yor)	Diabetes, laxatives, antiheminthics.	Moraceae	Tree
Trilepsium madagascariensis (DC.)	Unknown	Gastritis	Moraceae	Tree
<i>Triplochyton scleroxylon</i> (K. Schum.)	Arere (Yor)	Back ache	Sterculiaceae	Tree
Vernonia amygdalina (Dell.)	Ewuro (Yor)	Haemorhoid, antihypertensive.	Compositae	Shrub
<i>Xylopia aethiopica</i> (Dunal.)	lyere (Yor), Uda (Igbo)	Analgelsic, Spice	Anacardiaceae	Tree
<i>Zanthozyllum leprieurii</i> (Guill & Perr.)	Unknown	Antisikling	Rutaceae	Tree
Zanthozyllum zanthozyloides (Lam.)	Ata (Yor)	Asthma, Antisickling	Rutaceae	Tree

Entada abyssinica Steus. Ex A. Rich. (Mimosaceae)

It is a tree that is found all over tropical Africa. The plant has been used for the treatment of bronchitis, coughs and to alleviate arthritic pains (Kokwaro, 1976). It is also used in the treatment of miscarriage, fever and abdominal pain. The juice of *Entada abyssinica* is employed as an instillation for eye inflammation (Watt and Breyer-Brandwijk, 1962). *E. abyssinica* has been demonstrated to be antibacterial, antitrypanocidal and antifungal in various studies (Iwu, 1993).

Treculia africana Deacne (Moraceae)

It is a common forest tree also called African breadfruit because of the large fruit and edible seeds. The small brown seed are edible with groundnut flavor and are sold in Ibo market of South-East Nigeria. In Sudan, the kernel are eaten whole or made into paste or sauce.

The decoction of the root is used as febrifuge and vermifuge in Nigeria while in Ghana, it is drunk as tonic after illness. The stem bark decoction is used for coughs and as a laxatives and a galactogougue in the western province of Ghana. Report has been given on the sap of the male tree to be caustic and toxic and application with cotton wool on carious tooth causes it to drop.

Ageratum conyzoides L. (Asteraceae)

This is widely used in traditional medicine by various cultures world wide, although application varies from one region to another. In Africa, it is used to treat pneu-monia, wounds, burns rheumatism, headache and colic (Durodola, 1997; Bioka et al; 1993; Igboasoiyi et al., 2007). It is used as a bacteriocide, antidysenteric and antilithic (Borthakar et al., 1987).

Calotropis procera (Ait.) (Asclepiadiaceae)

Is a drought resistant, salt-tolerant weed found along degraded roadsides, lagoon edges and in overgrazed pastures. It is native to Nigeria and many other countries in Africa, Asia and Latin America where the plant is of high socio-economic value (F.A.O. 1986; Abbas et al., 1992).

The bark is used traditionally in the treatment of coughs, dermatitis, dysentery, elephantiasis, jaundice, leprosy and ulcer (Oladimeji et al., 2006). The latex is used on conjunctiva, epiphora, in local anesthesia, to treat ringworm and other skin disease. (Arora, 1982). The

flower is used as a digestive tonic for asthma and catarrh while the sap serve as rubefacient and purgative (Oladimeji et al., 2006).

Physalis angulata (Solanaceae) Nigeria (Yor) Koropo

It is an annual herb indigenous to many parts of the tropics. It grows up to 1 m high, sometimes referred to as gooseberry. All parts of the plant have been used medicinally in traditional herbal medicine systems. Entire plant is for Childbirth, diuretic, fever, gonorrhea, jaundice, liver diseases, malaria, nephritis, postpartum hemorrhage, rashes, skin sores, sleeping sickness, to prevent abortion, tumors. Fruit is for infection, infertility, inflammation, postpartum infection, pruritis, skin diseases.

Leaf is also used for asthma, dermatitis, diarrhohea, diuretic, earache, fever, gonorrhea, hemorrhage, heaptitis, infections, inflammation, liver disorders, malaria, postpartum infection, pruritis, rheumatism, skin diseases, to prevent abortion, worms. The root is used for diabetes, earache, fever, hepatitis, jaundice, liver disorders, malaria and rheumatism.

Conclusion

Ethno medicinal studies are very important in order to understand the social, cultural and economic factors influencing ideas and actions concerning health and illness and also to get information on types of diseases and health problems prevalent among the people of a particular locality. Such studies may help to provide the basic health-care services to the greater part of the rural resources poor population in an effective way, provided that such studies are conducted hand-in-hand with phytochemical, pharmacological and perhaps clinical studies. Further research on the screening of the secondary metabolites of these medicinal plants is on going. In order to prevent overexploitation that could lead to extinction, efforts should be made to conserve natural resources and to domesticate selected plant species which are commonly used among the herbal practitioners. Preference for their use may be related to their availability or multipurpose use. A high level of pharmacological content should be ensured, using modern cultivation and preparation methods. The sustainable cultivation of medicinal herbs could facilitate industrial scale processing.

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