Full Length Research Paper

Ethnobotanical potentials of common herbs in Nigeria: A case study of Enugu state

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Research was carried out on the ethnobotanical potentials of common herbs in Nigeria using Enugu State as a case study. A total of 200 questionnaires were administered on herb sellers in major herb markets in the state. In all, 96 different plant species were encountered in the markets. Attempts were made to write the names of the species both in botanical and English languages as well as in the three major languages in Nigeria (Yoruba, Igbo and Hausa). The families of the species were also documented. Finally, the various uses of the species and the part(s) of the plant species used were highlighted. This will surely be of great assistance to researchers, herb sellers and the entire consumers in overcoming the long standing problems of communication and identification.

Key words: Ethnobotanical potentials, Common herbs, Enugu State, Nigeria.

INTRODUCTION

The term ethnobotany was first coined by an American botanist John Harshburger, in 1896, in an attempt to study the plants used by the primitive and aboriginal people. Since then, it has been defined as the traditional knowledge of indigenous communities, about surrounding plant diversity and how various peoples make use of indigenous plants found in their localities. Therefore, ethnobotany involves the study of how communities of a particular region make use of indigenous plants in the region for food, clothing and medicine. Historically, plants not only provided man with food but also with means of healing. The use of plants as medicine was practiced by our ancestors, a process which must have started by trial and error. This study is aimed at documenting the ethnobotanical potentials of common herbs in Enugu State of Nigeria, (Wikipedia.org).

METHODOLOGY

Data collection

The data collected were derived from questionnaire administration and oral interview of the herbal sellers.

The respondents were both men and women of various ages. Data obtained were collated and tabulated to give the botanical names, common names, families and the vernacular names of the various plant species (Yoruba, Igbo, and Hausa) as well as their uses and the part(s) used.

A total of 96 plants species were encountered in the state. Their names in the various languages, families, Uses and part(s) being used are shown in Table 1.

RESULTS AND DISCUSSION

Herbal preparations for treatment of different ailments in the study area

Diabetes: Extract from *Vermonia amyygdalina* mixed with pure honey and taken with two table spoonful twice daily before food. Unripe *Carica papaya* peeled and soaked in water for three days One glass of the liquid is taken thrice daily for three days. *Psidium guajava* and *Ocimum gratissimum* leaves concocted and sipped slowly would have spontaneous reaction with sucrose in the blood. The treatment should be repeated intermittently.

Ulcer: Scrap bark of *Saccharum officinarium* cut into piece and soaked in water for 3 days. One glass of the

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 Table 1. Ethnobotanical potentials of common herbs handled by herbal sellers in Enugu State of Nigeria.

No	Botanical name	Common name	Family	Yoruba	lgbo	Hausa	Uses	Part used
1	Ananas comosus	pineapple	Bromeliaceae	Ope oyinbo	Akwu- mbe/akwu-olu	Nkwu aba/abara	Anti hypethesion consitaption	Unripe fruit
2	Carica papaya	Pawpaw	Caricaceae	Ibepe	Okworo- beke/ojo	Gwanda	Boil purgative	Latex fruit / seed
3	Psidium quajava	Guava	Myrtaceae	Gurofa	Ugova/ugwoba	Gwaabaa	Reduce frigidity	Unripe fruit
4	Mangifera indica	Mango	Anacardiaceae	Mongora	Mango sawamsop	-	Malaria	Leaves
5	Annona muricata	Soursop	Annonaceae	-	Sawamsop	-	Relaxing nerves	Leaves
6	Anacadium occidentalis	Cashew	Anacardiaceae	Kaju	Sashu	Kanju	Cough high vit.c	bark, fruit
7	Musa nana/sapientum	Banana	Musaceae	Ogede wewe	Ule/uneri	Ayaba	High blood pressure	Fruit
8	Musa paradisiaca	Plantain	Musaceae	Ogede agagba	Abrika	Okamu/ayaba	Potent astrigent high iron	Fruit
9	Abelmoschus esculentus	Okro	Malvaceae	lla/ilasa	Okwuru	Kubewa	Sperm count fever	Fruit leaves
10	Capsicum annum	Pepper	Solanaceae	Ata wewe	Ose/totashi	Barkono	Stimulant	Fruit
11	Allium cepa	Onion	Alliaceae	Alubosa	Yabasi	Alabasa	Antidiabetic	Bulb
12	Allium sativum	Garlic	Alliaceae	Aayu	Ayo-ishi	Tafarunua	Antibiotic anti- diabetic anti hypertension	Bulb
13	Zingiber officinale	Ginger	Zingibercenae	Ata-ile	Jinga	Chita	Detoxify liver bronchitis	Corm
14	Citrullus lanatus	Water- melon	Cucurbitaceae	Egunsi	Elili egwusi/ogili	Egbsi/guna	Laxative digestion	Dried pulp
15	Piper guinenses	Black pepper	Piperaceae	lyere	Uziza	Uda	Cleanse womb	Seed/leaves
16	Myristica fragrans	Nutmeg	Myristiceae	ariwo	Ehuru		Anti parasitic	Fruit
17	Monodora mystrica	Nutmeg	Anonaceae	ariwo	Ehuru		Rheumatism	Oil
18	Persea americana	Avocado / pear	Lauraceae	Igba/apoka	Ube-beke		Anti hypertension ulcer/stomach	Fruit
19	Solanum melongena	Garden egg	Solanaceae	Igba ijesu	Ayanra/afefea	Yalo/jauta	Kidney problem / vit c	Seed & leaves
20	Telfairia occidentalis	Fluted pumpkin	Curcurbitaceae		Ugwu		Anti anaemic [blood tonic]	leaves

Table 1. contd.

21	Crysophylum albedum	Star apple	Sapotaceae	Agabalumo	Odara/udala	Agwaliba	Anti nausea	Fruit
22	Cocos nucifera	Coconut	Arecaceae	Agbon	Aku oyinbo	Mosara	Anti poison/neutralizes poison/drug	Nut
23	Elaeis guineensis	Palm kernel	Arecaceae	Ekuro	Aku	Kwakwa	Easy flow menses	Nut
24	Saccarum officinarum	Sugar cane	Poaceae	Ireke	Okepte	Ireke	Laxative	Stem
25	Aframonum melegueta	Alligator pepper	Zingiberaceae	Ataare	Ose-orji/okwa	Chilla/citta	Stimulant Sleeping sickness	Seed Seed
26	Citrus paradise	Grape	Rutaceae	Osan paya	Oroma-nkeresi	Lemu yamiku	Antibiotic	Fruit
27	Citrus sinensus	Sweet orange	Rutaceae	Osan	Oroma	Lmu	Vit c bowel moist	Fruit Roughages
28	Cola nitida	Kolanut	Sterculiaceae	Obi	Orji	Goro	Stimulant	Fruit
29	Citrus limon	Lime	Rutaceae	Osan wewe	Olomankilisi	Lemunoisami	Deworm	Juice/fruit
30	Solanum lycopersicum	Tomato	Solanaceae	Tomati	Tomato	Tomati	Anti hypertensive	Fruit
31	Tetracapiduim conophorum	Walnut	Europhorbiac eae	Awusa/asal	Ukpa	Hawuusa	Aprodisiac	Fruit
32	Vernonia amygdalina	Biter leaf	Asteraceae	Ewuro	Onugbu/olubu	Shiwaka/chukwu aka	Pile lower sugar content	Leaves
33	Thymus vulgaries	Curry leaf	Lamiacea	Efinrin wewe	Nchanwu		Antibiotic, carminative	Leaves
34	Ocimum gratissimum	Mint	Lamiaceae	Efinrin nla	Nchanwu	Dadoya	Stomach problem	Leaves
35	Xanthosoma sagittifolium	Cocoyam	Araceae	Koko	Akaso/ede/uli/ mmuo	Ghrsa/guaza	Heart problem anti hypertensive	Leaves Corn
36	Zea mays	Maize	Poaceae	Agbado	Oka	Masara	Anti hypertensive	Silk
37	Oryza sativa	Rice	Paoceae	Iresi	Osi-kakpa	Chinkafa	Energy-giving food	Grains
38	Dioscorea alata	Water yam	Dioscoreacea	Isu ewura	Awoke/ji- abana	Dugura	Fever	Leaves
39	Dioscorea cayennensis	Whire yam	Diocoreaceae	Ako isu	Ji-ocha	Doya danzaria	Anti diarrhea	Tubers
40	Manihot esculenta	Cassava	Euphorbiacea e	Ege / gbaguda	Abacha/akpu	Rogo	Diabetes	Tubers
41	Vigna unguiculata	Beans	Papilionaceae	Ewa/eree	Agua	Agwa/wake	Protein	Seed
42	Artocarpus altiles	Bread fruit	Moraceae	Pere	Ukwa		Starch	Fruit

Table 1. contd.

43	Corchorus olitorius	Jew fiber telteria Jews	Titiaceae	Ewedu	Ariraa/ulogburu	Lalo	Blood purifier	Leaves
44	Bridelia micrantha	mallow	Euphorbiaceae	Ira	Oha (ola)	Kirni	Oral flora	Stem bark
45	Afalia africana		Caesalpiniaceae	Apa	Akpalata	Kawo	Condiment	Seed
46	Alstonia boonei	Stool wood/patten wood	Apocynaceae	Ahun	Egun		Fever tumour	Stem bark, root
47	Xylopia aethipica	Ethiopian pepper	Annonaceae	Eeru/ erunje	Uda	Kimba	Analgesic/stimulant	Fruit
48	Tetrapleura tetraptera		Mimiossaceae	Aidan	Okpokrikpo/os osho		Sickle cell	Fruit
49	Ceiba pentandra	Silk cotton	Bombacaceae	Araba	Akpu owu	Rimi	Stimulant/laxative	Thorns on the stem
50	Syzygium aromaticum	Clove	Myrtaceae	Kanafuru	Osasagbogbo	Kanumfari	Tooth ache/mouth infection	Fruit
51	Azadiractha indica	Neem tree	Meliaceae	Dongoyaro	Atu yabasi / ogwu akom	Maina	Boils Anti malaria	Fruit juice Leaves & tree bark
52	Cymbopogon citratus	Lemon grass	Poaceae	Koriko-oba	Nche awula		Malaria	Leaves
53	Garcinia kola	Bitter kola	Clusiaceae	Orogbo	Adu/aku-inu	Namiji goro	Cough	Fruit
54	Neubouldia laevis	African tylip tree	Bignoniaceae	Akoko	Ogilisi/ogirisi	Aduruku	Asthma	Leaves
55	Rauvolfia vumitoria	Inidan snak root/African rauivofia	Apocynaceae	Asofeyeje	Akanta	Wadda	Sedative , mental disorder	Root bark
56	Anthodeista diaglomensis		Loganiaceae	Sapo	Akpakoro	Putaa	Diabetes inflammation	Stem bark
57	Nauclea latifolia		Rubiaceae	egbesi	Uburu inu/ mbitinu	Marga	Yellow fever	Root
58	Spondia mombin	Hogplum	Anacardiaceae	lyeye	Ngulungwu / isikarA	Isada	Infertility	Fruit
59	Morinda lucida		Rubiaceae	Oruwo	Eze ogu		Fever	Leaves
60	Blighia sapida	Akee apple	Sapindaceae	Isin	Okpu	Gwanja kusa	Anti ulcer	Fruit/seed
61	Terminalia catapa	Umbrella tree/almod tree	Combretaceae	Igifuruntu	Ibulu		Insomnia sleeplessness	Leaves
62	Argemone mexicana	Bean spp	Papaveranceae	Ahon-ekun	Akede		Anti pasmodic	Leaves, stems seeds

Table 1. contd.

63	Zanthocylum zanthoxyloides	Candle wood	Rutaceae	Ata	Aga	Fasakwari	Sickle cell/ tooth ache	Root
64	Vitellaria paracloxum	Shea butter	Sapotaceae	Ori/emi-emi	Osisi	Kadanya	Rheumatic pains	Fat
65	Cajanus cajan	Pigeon pea	Papilionaceae	Otiili	Fiofio		Malaria	Leaves
66	Kalanchoe pinnatum	Never die/leaf of life	Crassulaceae	Abamoda	Odaa-opue / nkwonkwu	Gawa	Anti-inflammatory	Leaves
67	Cactus sp	Cactus	Cactaceae	Oro	Utamazi-ngwulo		Gonorrhea	Leave/ste m
68	Ertyphleum suaveolens		Caesalpinaceae	Obo	Nyi/ihi	Gwaska	Poison	Bark
69	Milicia excelse	Mulberry	Moraceae	Iroko	Orjih/oji	Loko/liko	Rheumatism	Root
70	irvingia excelsa	Bush mango	Irvingiaceae	Oro mopa	Ogbono/ube	Mamujigoro	Condiment	Seed
71	Shorgum bicolar	Millet	Poaceae	Oka baba	Sorgum	Jero	Blood tonic	Leaves
72	Gossypium arboreum	Cotton	Malvaceae	lgi owu	Osisi-owu / kotiini	Ali diga	Anti malaria	Leaves
73	Talinum triangular	Water leaf	Portulacaceae	Gbure	Nte-oka/inene	Alenyruwa	Rat poison	Root
74	Parkia bigglobossa	Locust beans	Papilionacea	Igba iru	Ugba/ogiri	Dadawa	Anti-hypertension	Seed
75	Ficus exasperata	Fig tree	Moraceae	Oporo/opoto	Ogbu	Achedinnini	Venereal disease	Root
76	Kigelia africana	Sausage tree	Bignoniaceae	Pandoro	Uturubein	Rawuya	Fibroid	Fruit
77	Calotopis procera	Sodom apple	Asclepeceae	Bomubomu		Tumifafiya	Measles	Leaves
78	Dialium guinenses	Black tumbler	Caesalpinacea	Awin	Icheku	Tsamiyar	Anti ulcer/ Vit. C	Fruit
79	Annona senegalensis	Custard apple	Annonaceae	Abo/abobo	Ubunu-ocha	Gwandar daji	Yellow fever	Leaves
80	Abrus precatoriuos	Crab's eye	Papilioniaceae	lwerejeje/ ojuologbo	Anya nnunu	Da marzaya	Cough	Leaves
81	Amacanthus spinosus	Green	Amaranthaceae	Tete	Opotoko		Malaria	Leaves
82	Boehaavia diffusa	Hogweed	Nyctaginceae	Etiponola	Azeigwe	Babba-juju	Root Leaves	Dropsy Infertility
83	Dennettia tripetala	Pepper fruit	Annonaceae	Igberi	Mmimi		Stimulant	Fruit
84	Urena lobata		Malaceae	Akeeri	Odoazezo	Rama-rama	Malaria	Leaves

Table 1. contd.

85	Trumfetta rhomoboidea	Burweed	Tilaceae	Molanganrsn/ak o bolobolo	Odo	Yanka-dafi	Gonorrhea	Leaves Flower Fruit
86	Cassia occidentalis		Caesalpinaceae	Rere	Akede- agbara	Rai dore		
87	Citrus aurantium	Sour orange	rubiacae	Osan ghanhin- ghanhin	Oloma- oyinbo	Babban lemu	Fibroid	Fruit
88	Khaya ivorensis	Mahogany	Mehaceal	oganwo	Ono		Blood tonic	Stem Bark
89	Ipomoea batatas	Sweet potato	Convolvulaceae	odunkun	Ekimako	Dankali	Pile	Leaves
90	Nicotiana tobacum	Tobacco	Solanaceae	Ewe taba	Utaba	Taba	Stimulant Infertility	Leaves
91	Daucus carota	Carrot	Apiaceae	karoti	Carrot	Carrot	Male infertility	Fruit
92	Detarium microcarpum		Caesalpinaceae	ogbogbo	Ofo	Taura		
93	Treculia africana	Africa breadfruit	Moraceae	Afon	Ukwa		Heart problem	Leaves
94	Europhorbia convolvuloides	Asthma herb	Euphorbiacece	Egele	Udani	Nonan kurdiiya	Asthma	

liquid is taken thrice daily.

Hypertension: Fresh leaves of *Talinum triangulare* crushed in 2 liters of water, filtered and stored. Half a glass is taken before food twice daily. Decoction of *Persea americana* leaves and fruit of *Xylopia aethiopica* taken (one full glass) twice daily before meal serve as laxative.

Arthritis: Paste of *Xylopia aethiopica* (fruits) *Vernonia amygdalina* leaves mixed with soap.

Cholera: Paste from processed seeds of *Parkia biglobossa* (locust beans) chewed and extract swallowed every two hours would stop the stooling and vomiting.

Whitlow: Latex of *Carica papaya* applied on the affected finger three to four times daily would burst it.

Yellow fever: Root of *Nauclea latifolia* soaked in corn water for three days and taken one glass thrice daily before meal would clear the fever

Dewormer: Two tablespoonful of citrus limon juice taken before meal would deworm.

Pile: Leaves of *Ocimum gratissimum* and root of *Zanthoxylum xanthoxyloides* powdered active ingredients extracted with gin and taken twice daily for one week would eliminate the pain.

Typhoid fever: The paste of *Allium sativum* and *Zingiber officinale* boiled with citrus lemon fruit for 30 min and taken twice daily with wine glass.

Malaria: The bark of *Alstonia boonei* and leaves of *Cymbopogon citratus* boiled and one full glass of the filtrate taken three times daily.

CONCLUSION

Most of the species are highly medicinal because they are used both to sustain health and to cure illness (Osunwole, 1999). Before the advent of insulin, diabetes

had been treated with phytomedicine (Osunwole, 1999). Even, locally in the study area, the ailment had been controlled by the use of *Rauvolfia vomitoria*, *Psidium guajava*, and *Ocimum gratissimum*. This compilation as Gbile (1988) puts it will help to preempt communication problems that exist between ethnic groups, plant research scientists, the herbalists, herb-sellers and the entire consumers. More of this documentation should be encouraged because it is not enough to know what local people use the plant for, but scientific and clinical validation of the claims is required.

REFERENCES

Osunwole SA (1999). Traditional Medicinal Uses of Selected Plants on the University of Ibadan Campus. The Nigr. Field 64: 168-173. Gbile ZO (1988). Study on Medicinal Plants. A Lecture delivered at the Meeting of the Nigerian Field Society, Ibadan. p. 8. Osunwole SA (1999). Traditional Medicinal Uses of Selected Plants on the University of Ibadan Campus. The Nigerian Field 64:168-173

Wikipedia (2006). Wikipedia, the free encyclopaedia.p. 3.