

SOME MEDICINAL PLANTS OF NIGERIA

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ABSTRACT

An investigation on the indigenous uses of plants for medicinal purposes was carried out in some parts of Nigeria. The Medicinal uses of twenty-four plant species comprising of sixteen dicotyledonous and one monocotyledonous families were recorded. The vernacular names in one or more of the three main Nigerian languages were also recorded. The present investigation clearly shows that the various parts of plants, viz: seeds, leaves, stems, roots, etc. are used for medicinal preparations. In some cases, various parts of the same plant may be used for different medicinal preparations. In spite of Western civilization the inhabitants still strongly believe in the efficacy of the herbal medicines.

INTRODUCTION

The classical floristic work of Hutchinson and Dalziel (1954) has shed light on the taxonomy of the plants of West Africa. Other recent publications on the plants of West Africa have also dealt with only the systematic aspects (Keay *et al.*, 1964; Gladhill, 1972). These workers gave much emphasis on the collection and recording of plants of the different regions. Botanists and Naturalists and plant collectors have over-looked the ethnobotanical aspects of these plants though products are used for medicinal purposes.

This paper documents some of the medicinal uses of various plants used indigenously in Nigeria. All the informations were obtained through series of interviews with herbalists and other elderly people from various parts of the country. The vernacular names of the plant species in the three main Nigerian languages-Hausa, Ibo and Yoruba were also recorded where possible.

MEDICINAL USES OF PLANTS

Alternanthera nodiflora R. Br.

(Amaranthaceae)

Vernacular name : Dangunro (Yoruba)

As a pain reliever: The leaves are put on a hot stone and later smeared with white palm oil.

The leaves and palm oil are then used to massage the affected part of the body.

Celosia trigyna L. (Amaranthaceae)

Vernacular name : Ata (Yoruba)

As a treatment for guinea worm infection: The leaves together with three alligator pepper seeds (*Amomum subulatum*) are ground. Seven incisions are made on the affected part and the mixture rubbed in.

Gomphrena globosa L.- Bachelor's button (Amaranthaceae).

Vernacular name : Kandiri (Hausa)

As a treatment for body sore: The leaves are crushed into a paste which is applied to the

affected part and covered with the leaf of the same plant.

Pupalia lappacea (L.) Juss. (Amaranthaceae)

Vernacular names : Emo-agbo (Yoruba); Marin kusu (Hausa); Ose (Ibo).

As a treatment for sterility in women: A powdery mixture is prepared out of the fruits, dried squirrel and maize grains. Three teaspoonful of the powder are taken orally with pap.

Mangifera indica L.- Mango (Anacardiaceae)

Vernacular names : Mangoro (Yoruba); Mangwaro (Hausa); Mangolo (Ibo).

As a treatment for body fever : The bulk of plant is cooked along with the leaves of *Cymbopogon citratus*, some bark of *Citrus* sp. and the leaves of *Alchornea cordifolia* in earthen pots for 3-4 hours. The decoction is used orally and as a bath. Dosage: half a cup for children and a full cup for adults.

Spondias monbin L.- Hog plum
(Anacardiaceae)

Vernacular names : Ekika (Youba); Isadar (Hausa); Ijikara (Ibo).

As an antivomit medicine: The leaves are crushed and the juice is obtained. This is then orally taken at the time of need. Two-three spoonful are taken at a time.

The leaves are also crushed in water and the mixture used to wash the face of the patient. This is also administered orally. Dosage : Half a cup at a time.

Uvaria chamae P. Beauv. (Annonaceae)

As a treatment for tooth-ache: The leaves are boiled in water for 12 hours in a clay pot. Shea butter oil obtained from kernels of *Butyrospermum paradoxum* is added. The

decoction is taken orally twice a day in small cups.

Strophanthus hispidus DC.- Arrow poison
(Apocynaceae).

Vernacular names: Isa (Yoruba); Kwankwani (Hausa).

(i) As a medicine for body fever: The roots are collected, crushed and sun-dried. The dried materials are ground to powder with three alligator pepper seeds. Dosage: One tea spoonful of the powder is administered twice daily.

(ii) As a treatment for cough: The leaves with a small quantity of table salt (NaCl) are ground together. This is taken orally with palm wine twice daily.

Pergularia daemia (Forsk.) Chiov.
(Asclepiadaceae)

Vernacular name: Atufa (Yoruba)

As a treatment for piles: The leaves are boiled in water in an earthen pot to prepare a decoction. The filtrate is taken orally. Three spoonful for children and one full glass cup for adults.

Coldenia procumbens L. (Boraginaceae)

Vernacular name: Ijaa (Yoruba)

(i) As a treatment for fever : The leaves along with the bark of *Mangifera indica* are boiled together with large amount of water in an earthen pot. The filtrate is taken orally or used as a bath.

Dosage: Young children, half glass cup, adults, full glass cup.

(ii) As a treatment for piles: The leaves are crushed in water with clean hands and the filtrate is taken orally. Dosage: Half cup for children and 1-2 cups for adults.

Cassia alata L. (Caesalpinaceae)

Vernacular names : Asunwon (Yoruba); Ogala (Ibo).

(i) As a treatment to relieve constipation: The sun-dried leaves are ground along with potassium aluminium sulphate to a fine powder. This is taken orally. Dosage: Two teaspoonful at the time of need.

(ii) As a treatment for ringworm: The leaves are crushed in small quantity of water. This is used to rub the affected part of the body.

Carica papaya L.- Pawpaw (Caricaceae)

Vernacular names : Ibope (Yoruba); Gwanda (Hausa); Ojo (Ibo).

(i) As a treatment for catarrh and cough: The leaves are boiled along with honey in water for 5 hours and allowed to cool. The cold liquid is taken orally. Dosage: A cupfull for adults and half cup for children twice a day.

(ii) As a medicine for the relief of constipation: The soft sweet part of the ripe fruit is eaten to relieve constipation.

(iii) As a medicine for stomach upset: The unripe fruit is eaten to relieve the stomach upset.

(iv) As a medicine for abortion: The unripe fruits with seeds are taken by pregnant women for abortion.

Chenopodium ambrosioides L. (Chenopodiaceae)

For the treatment of guinea worm infection: The leaves and the seeds of the plant are ground together, palm oil is added to it and mixed together. This is applied to the affected area. It makes the worm to come out of the leg without pain.

Ageratum conyzoides L.- Goatweed

(Compositae)

Vernacular names : Imi-esu (Yoruba); Akwekwe-nwaosi n'aka (Ibo).

(i) As a treatment for irregular menstruation and menstrual pain: The leaves are crushed with hand in a pot containing water. The filtrate is taken orally. Dosage: A full cup twice daily.

(ii) As a treatment for neck pain: The leaves are washed thoroughly to remove the exotic particles and sun-dried. The dried leaves are ground to powder and mixed with a small quantity of shea butter. This ointment is used to massage the affected part of the neck.

(iii) As a medicine to stop bleeding: The liquid is squeezed by crushing the leaves with the hands. The liquid is directly applied to the cut part of the body without adding water to it.

(iv) As a medicine to prevent infection of a wound: The crushed leaves are used to cover the wound.

Eupatorium odoratum L.- Siam weed

(Compositae)

(i) As a medicine for yellow fever: The leaves and roots together with *Citrus* leaves and the bark of *Mangifera indica* are boiled in earthen pots. The decoction is taken orally and used as a bath. Dosage: A full cup is taken orally three times a day and half a cup for children.

(ii) To protect an injury against infection: The leaves are crushed between the palms of the hand. The soft crushed leaves are used to cover the affected part.

Commelina lagosensis L. (Commelinaceae)

As a treatment for piles: The leaves are crushed along with those of *Phyllanthus rotundi-*

folium in water. A small quantity of salt (NaCl) is added before it is taken orally. Dosage: Half a cup for children and a full cup for adults.

Byrsocarpus viridis (Gilg.) Schellent
(Connaraceae)

(i) As a treatment for tooth-ache: The leaves are crushed to squeeze out juice. This liquid is applied with cotton wool to the affected part of the tooth. This is applied three times a day until the ache stops.

(ii) As a treatment for sore-throat: The leaves are crushed and sun-dried. Seven alligator pepper seeds are added and ground to powder. This powder is taken orally. Dosage: Half teaspoonful twice a day.

Momordica charantia L. (Cucurbitaceae)

As a treatment for piles: The whole plant is crushed to extract the liquid. A small quantity of table salt (NaCl) is added before it is taken orally. Dosage: Half cup for children and full cup for adults once daily.

Euphorbia prostrata Ait. (Euphorbiaceae)

Vernacular names : Emile (Yoruba); Kurar shanu (Hausa).

(i) As a treatment for irregular menstruation : The whole plant is ground along with a small quantity of *Baphia nitida* (Camwood) to a smooth powder. This is taken orally with pap. Dosage : Two teaspoonful twice daily.

(ii) As a treatment for stomach-ache : The whole plant is ground along with small quantity of table salt. This is taken orally. Dosage : Two teaspoonful for children and a full cup for adults twice daily.

Jatropha podagrica Hook. (Euphorbiaceae)

(i) As a treatment for piles : The leaves with those of *Heliotropium indicum* are crushed

together in small quantity of water. The filtrate is taken orally. Dosage : A cup twice daily.

(ii) As a treatment for coated tongue. The latex is collected from a fresh cut on the plant. This is applied on the tongue with a clean cotton wool.

Kalanchoe crenata (Andr.) Haw.-Life plant
(Crassulaceae)

Vernacular names : Odundun (Yoruba); Onwa (Ibo).

As a treatment for convulsion; The fresh leaves are heated with fire to soften them. The soft leaves are squeezed and the liquid collected in a plate. The liquid is mixed with a small quantity of red palm oil. It is taken orally or used to massage the body.

Pterocarpus lucens Lepr. ex Guill & Perr.
(Papilionaceae)

As a treatment for rashes : The leaves with the bark of *Citrus* sp. are boiled together in earthen pots for about 8 hours. This is used for bath while the fresh leaves are used as a sponge.

Nicotiana tabacum L.-Tobacco (Solanaceae)

Vernacular names : Ewe taba (Yoruba); Taba (Hausa); Anwere (Ibo).

(i) As a treatment for convulsion : The leaves are crushed to collect the juice. This juice is used as a bath in water.

(ii) As a stimulant: The sun-dried leaves are ground to a smooth powder and used as a snuff or put on the tongue and taken orally.

Octolepis cesearia Oliv. (Thymelaeaceae)

(i) As a treatment for rheumatism : The sun-dried leaves are ground along with seven alligator pepper seeds. The powder is applied to the affected part of the body after making seven incisions on the affected part.

(ii) As a treatment for ear-ache : The leaves are crushed to extract the juice. The liquid is mixed with the latex of *Rauwolfia vomitoria* and the feather of a bird is used to apply the mixture into the ear.

DISCUSSION

Before the advent of the Europeans in West Africa plants were used for traditional medicines. This practice is still continued with wide application (Irvine, 1966; Oliver, 1960). Remedies for common diseases such as piles, pains, fever are known to most of the common people (Holland, 1972). However the knowledge of herbal medicines for complicated diseases is confined to mostly the practising herbalists or to certain family members who inherit the knowledge from their forefathers. The curative art is kept with some sanctity and secrecy with the belief that the herbal medicines will lose their potency if revealed to other people.

The fear of losing patronage is also a probable factor for the monopoly of the curative art. Similar observations have also been made in other parts of the world (Singh *et al.*, 1980).

The knowledge and use of herbal medicines are also associated with supernatural powers and hence some of the preparations and treatments are followed by rituals and chanting of incantations. Similar observations have also been made by Jain and Borthakur (1980). It is also believed that complicated diseases are attributed to the spell of evil spirits or by the violation of the laws of their traditional gods. The purpose of the rituals accompanying medicinal preparations or uses, therefore, is to appease these traditional gods. However minor ailments are regarded as natural.

The traditional medicines fall under three

categories :-

(1) Those common remedies which are not followed by any rituals;

(2) Those which are considered to be family secrets handed down from one generation to the other;

(3) Those medicines known to the professional herbalists who go through strict and rigorous practice while paying heavily for the acquired knowledge (Egunjobi, 1978). Although some herbs may have medicinal values, sometimes the medicinal preparations inflict side effects (Shiv and Kamlesh, 1980). However the present knowledge on medicinal uses of plants needs scientific investigation to confirm their medicinal values.

REFERENCES

- EGUNJOBI, J.C. 1978. *Uses of West African Plants*. Ibadan Oxford University Press, pp. 22-30.
- GLEDHILL, D. 1972. *West African trees*, pp. 57-58, 64, 108 and 117. Longman Group Ltd., Nigeria.
- HOLLAND, J.H. 1922. Useful plants of Nigeria. *Bulletin of Miscellaneous information IX*: 19-21.
- HUTCHINSON, J. AND J.M. DALZIEL 1954. *Flora of West Tropical Africa*, Vol. I, II and III.
- IRVINE, F.R. 1966. *West African Botany*, 2nd edition, Oxford University Press, London.
- JAIN, S.K. AND S.K. BORTHAKUR 1980 Ethnobotany of Mukurs of India. *Eco. Bot.* 34 (3): 268.
- KEAY, R.W.J., C.F.A. ONOCHIE AND D.P. STANFIELD 1964. *Nigerian trees*, Vol. 1 and 2.
- OLIVER, BEP. 1960 Medicinal Plants. *Journal of Nigerian field society* 24 (2): 54-71.
- SHIV DARSHAN LAL AND KAMLESH LATA 1980. Plants used by the Bhat Community for Regulating Fertility. *Eco. Bot.* 34(3): 273-275.
- SINGH, M.P., S.B. MALLA, S.B., RAJBHANDARI AND A. MANADKAR 1980. Medicinal plants of Nepal. *Eco. Bot.* 33 (2): 185-193.