MEDICINAL PLANTS USED BY THE OKPAMERI PEOPLE IN EDO STATE

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The direct use of plants for curing and healing is as old as man himself. Herbalism is practised all over the country. Most Nigerian urban dwellers due to changes imposed by modern life on social structures and attitudes, reject the efficacies of traditional medicine. However, the prevailing economic recession in the country is forcing a large number of the populace to accepting traditional Medicare because of the high cost of orthodox drugs. Hence in the case of a developing nation like Nigeria over 80% of the population depend on herbal therapeutics. This, coupled with the high rate of deforestation, has also increased the cost of herbal plants, which are not easily available (Olapade and Bakare, 1992).

A survey conducted in Oyo State revealed that traditional medicine blends with the socio-cultural life of the people (Sofowora, 1984). A vast amount of information on medicinal plants used in Nigeria is therefore available from traditional medicine. Despite all the advances made in modern and orthodox medicine, the practice of traditional medicine, as a bold self-reliance effort, is still very much alive and playing a very important role in the health care of Nigerians. The practice aims at taking care of oneself within one's own means.

Nigerian forest plants are a valuable source of herbal medicine upon which her rural communities have for ages depended for healthy ways of living, which the present generation can learn from. There may be over 100,000 plant species in Africa. It is known that only about 1% of these plant species has been scientifically evaluated for their chemotherapeutic potentials. A recent survey conducted by FORMECU (1996) indicated that over 85% of the natural forest has been depleted for extensive agricultural development and other economic infrastructure. In the face of increasing land use, many plant habitats and species become endangered or extinct. This situation is now of concern to some individuals, Governmental and non-Governmental Organizations.

This paper attempts to highlight some of the valuable medicinal plants species commonly used by the Okpameri people of Akoko-Edo Local Government in Edo State, Nigeria. It is hoped that this will serve as a stimulus to various other ethnic groups in Nigeria to document the large number of medicinal plants in their areas; otherwise the knowledge will be lost, especially with the secrecy with which herbalism is practised.

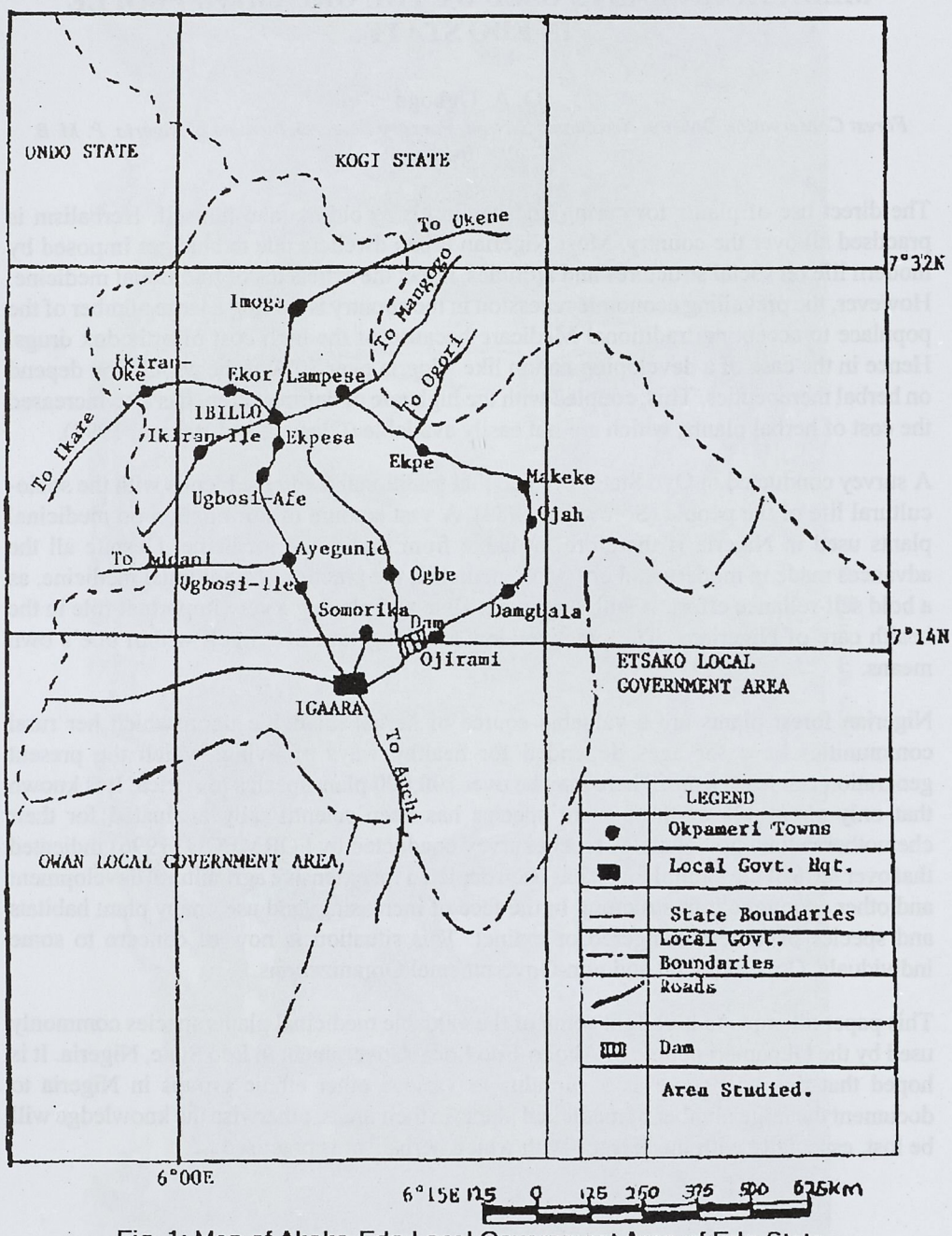


Fig. 1: Map of Akoko-Edo Local Government Area of Edo State, showing the Okpameri towns

Materials and methods

The Okpameri people are an ethnic group (with about 15 communities) in Akoko-Edo Local Government of Edo State, located at Latitude 7^0 14' to 7^0 32'N and Longitude 6^0 00' to 6^0 15'E (Fig. 1). The vegetation type is Guinea-Savanna and the people are generally farmers and traders. The level of literacy is average by Nigerian standards. The general administrative headquarters is Ibillo with one Federal Government College, a State owned Secondary School, three Secondary Schools, 4 Public Primary Schools and 5 private Nursery/Primary Schools. In Ibillo there are 4 orthodox Medicare centres – a State General Hospital, 1 Health Centre and 3 Private Hospitals. Different sets of people were interviewed to get the medicinal information. The people interviewed included those who are full-time traditional healers, part-time traditional healers, some relatives who have knowledge from family heads and some who have written information from their elders. The information on plants gathered from them includes their local names, preparation and administration.

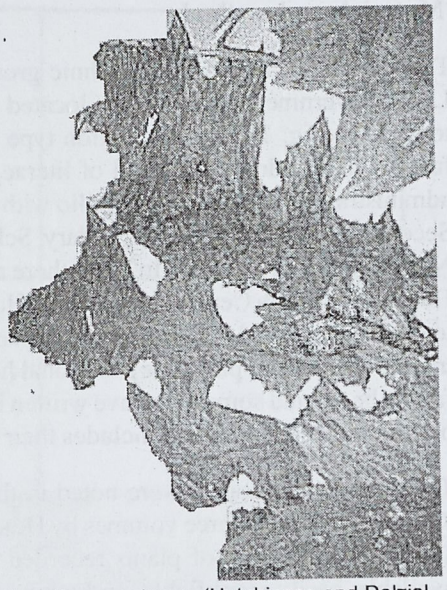
The habits and habitats were noted in the field and were identified using *Flora of West Tropical African* in three volumes by Hutchinson and Dalziel (1954, 1958, 1963, 1968 and 1972). The selection of plants recorded in this study is based on plants that are locally available, easily identifiable, and whose uses were confirmed by 2 or 3 persons without spiritual connections e.g. incantations, sacrifices. The plants are arranged in alphabetical order according to families and the species under each family are also arranged alphabetically.

Results and discussion

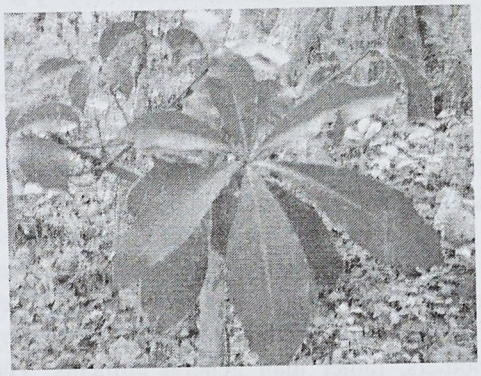
Information on twenty-two species belonging to thirteen families were obtained (Appendix 1). The usages of these plants were obtained together with their local names. The habits of the plants studied were trees (T) – 4 species; shrubs (S) – 3 species; climbing shrubs (C/S) – 1 species; herbs (H) – 13 species and grass (G) – 1 species. The parts of the plants used include barks, leaves, roots, seeds and bulbs. The medicinal uses of the plants range from curing cough, malaria, gynaecological problems and convulsions to snakebite. A greater store of knowledge exists in the area of medication for children's ailments followed by women's ailments, particularly those of mothers, rather than general ailments. The information under the remark column is to indicate the uses that were also reported by Burkill (1985, 1994, 1995, 1997 and 2000). Illustrations of some of the plants are shown in figures 2 and 3.

The practice of traditional medicine is relatively higher than orthodox medicine especially amongst very rural dwellers. In serious cases and when traditional medicine fails them, they rush the patients to the State General Hospital or any private hospital at Ibillo. As indicated earlier, this is not unconnected with the high cost of drugs coupled with scarcity of trained doctors. According to Ransome Kuti (1991), there are very few Western trained medical practitioners in Nigeria with a ratio of 1 doctor to over 200,000 patients.

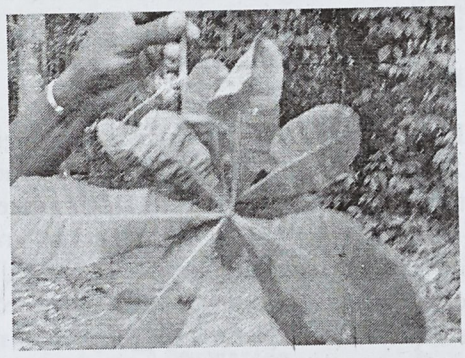
Parkia biglobosa (Keay, 1989)



Acanthus montanus. (Hutchinson and Dalziel, 1963)



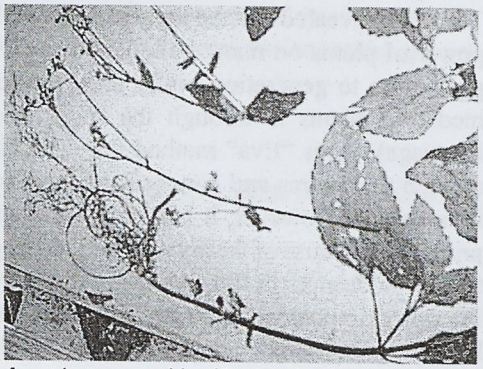
Alstonia boonei (Agoha, 1973)



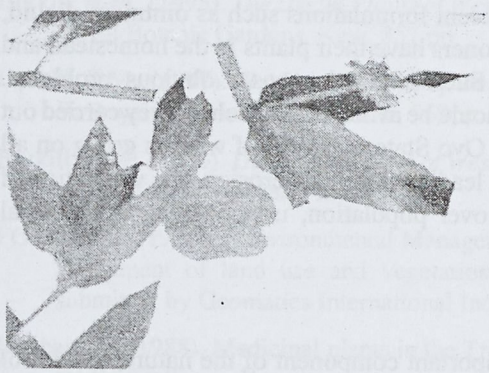
Anarcardium occidentale (Keay 1989)

Figure 2. Some photographs of the medicinal plants [courtesy Dept of Botany, Herbarium, University of Ibadan, with special thanks to Donatus Esimekhuai].

Heliotropium indicum (Agoha, 1973)

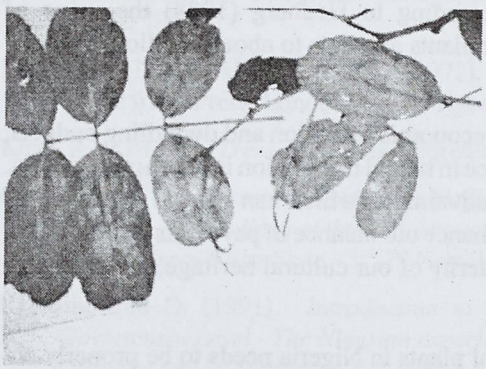


Ageratum conyzoides (Agoha, 1973)



Aspilia africana (Agoha, 1973)

Vernonia amygdalina (Hutchinson and Dalziel, 1963)



Kigelia africana (Keay, 1989)

Pennisetum purpuruem (Hutchinson and Dalziel, 1972)

Figure 3. Photographs of some of the medicinal plants [courtesy Herbarium, UI]

The study revealed that the early people of Okpameri based their knowledge of the curative power of plants on many beliefs and assumptions. This knowledge is then passed from generation to generation orally or in written form. Another means of the discovery of medicinal plants is through the ritual incantation known as "Eva" ("Ifa" in Yoruba language). This "Eva" method does not have scientific proof. Traditional healers have derived their cures and concoctions from myriads of plants in Okpameri land from time immemorial. However, it has been almost impossible to unravel the acclaimed curative properties because of the mystery and secrecy with which the plants have been guarded. The traditional healers in the area claim they have plant preparations for high blood pressure, infertility, impotence, epilepsy and even lunacy, but the healers would not divulge their knowledge to outsiders, not even their children in the majority of cases.

Most medicinal plants in Okpameri and Nigeria at large are harvested from their natural habitats and prepared for medical use in different formulations such as ointment, liquid, powder, infusion etc. Only a very few practitioners have their plants in the homestead and these are smaller plants rather than trees. Such a practice poses obvious problems. Excessive exploitation of the natural habitat should be avoided. The field survey carried out by Olapade and Bakare (1992) for Ibadan in Oyo State is typical of what is going on all over the country in terms of over-exploitation, leading to genetic erosion.The vegetation of Okpameri land is particularly disturbed by over population, urbanization, agricultural activities and annual bush fires.

Conclusion and recommendation

The indigenous medicinal plants form an important component of the natural wealth of Okpameri as many of these have been used for curing various ailments for many years. Economically, medicinal plants play an important role even in the industrialized countries, however this is seldom acknowledged. According to Hedberg (1988) the value of prescribed medicine from 40 species of higher plants amounts to about 8 billion US $ per year in USA.

In conclusion, in these days of national global economic recession and dwindling budgets, an inward-looking policy of relative self-reliance in herbal medication is worth considering. This is an area in which we have a decided advantage, which can help to improve our people's health standard. In addition, it will enhance our balance of payments position. But far more important is the preservation for posterity of our cultural heritage, which such a policy could provide.

The widely acclaimed knowledge of medicinal plants in Nigeria needs to be properly co-ordinated up to end-users. Since the level of participation of the younger people in the use of medicinal plants is very low, there should be operational and developmental activities backed up financially so as to attract their interest. It is time that the traditional healers on the one hand and orthodox medical personnel, as well as scientists, on the other, come

together to form a consortium with a well articulated plan to interact and work together to identify and document the large number of medicinal plants known by various ethnic groups in Nigeria.

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APPENDIX
MEDICINAL PLANTS COMMONLY USED BY THE OKPAMERI PEOPLE

TAXA	FAMILIES	OKPAMERI NAMES	PART USED	USES
Acanthus montanus (Nees T. Anders (H)	Acanthaceae	Ebe-Igba	Leaves	Abdominal pains
PREPARATION / ADMINISTRATION The young leaves prepared into soup and taken for the treatment of abdominal pains caused by indigestion				**REMARKS** Not reported for this use by Burkill (1985)
Crinum jagus (Thomps. Dandy (H)	Amaryllidaceae	Ebe-Eyan	Bulb	(a) Snake bite (b) Cough
(a) The bulb eaten raw as a remedy for snakebite. (b) The bulb and the fruit of *Tetrapleura tetraptera* are cut into pieces and put into a bottle. The bottle with its contents kept beside stove. After a few days the bulb degenerates, its liquid serving as a soaking medium for the *T. tetraptera*. This is ready for taking after a week and one teaspoonful is taken weekly as remedy for cough (first thing in the morning, long before food).				Not reported for these uses by Burkill (1985)
Anacrdium occidentale Linn. (T)	Anacardiaceae	Ikhashu	Bark	(a) Malaria (b) Cough
(a) The bark cooked togetther with other plants (e.g. *Mangifera indica*) and a glass cup full of the decoction taken thrice daily. (b) The bark cooked together with *Xylopia aethiopica* and the decoction taken thrice daily (a glass cup full) against cough.				Not reported for these uses by Burkhill (1985)
Alstonia boonei De Wild. (T)	Apocynaceae	Usha-Iyanzi	Bark	(a) Malaria (b) Dysmenorrhoea
(a) The decoction of the bark taken thrice daily against malaria. (b) The bark infusion prepared together with *Nephrolepis biserrata* is taken twice.				Not reported for these uses by Burkhill (1985)

Ageratum conyzoides Linn. (H)	Asteraceae (Compositae)	Ebebekeze	Leaves	(a) Convulsion (b) Emetic agent (c) Haemostatic agent (d) Headache/ stomach ailments
(a) Juice of the leaves dropped into the eyes of convulsing child. (b) Leaves taken raw againstpoison as emetic agent. (c) Juice of leaves applied to a fresh cut to stop bleeding. (d) Leaves chewed with *Aframomum melegueta*.				b & c uses also reported by Burkhill (1985)
Aspilia africana (Pers.) C.D. Adams (H)	Asteraceae (Compositae)	Ogbia	Leaves	(a) Febrile headache (b) Strength (c) Haemostatic agent
(a) Decoctions of leaves applied or used to wash face to relieve febrile headache. (b) Infusion of leaves drunk by woman after birth to regain strength. (c) Juice of leaves applied to fresh cut or wound to stop bleeding and hasten healing.				a & c uses also reported by Burkhill (1985)
Chromolaena odorata (L.) King & Robertson (S)	Asteraceae (Compositae)	Awolowo	(a) Leaves (b) Leaves (c) Plant	(a) Dysentery (b) Haemostatic agent (c) Malaria
(a) Infusion of leaves drunk as remedy for dysentery. (b) Juice of leaves applied to fresh cut to stop bleeding. (c) Plant cooked together with other plants (e.g. *Morinda lucida*) and decoction drunk thrice daily.				Not reported for these uses by Burkhill (1985)
Synedrela nodiflora Gaert. (H)	Asteraceae (Compositae)	Alugan	Leaves	(a) Laxative (b) Haemostatic agent
(a) Infusion of leaves drunk as laxative. (b) Juice of leaves applied to fresh cut to stop bleeding				(a) Use also reported by Burkill (1985)
Vernonia amygdalina Del. (H)	Asteraceae (Compositae)	Uha	Leaves	(a) Cough (b) Mouth odour

(a) Infusion of leaves drunk for cough. (b) Leaves eaten raw as mouthwash againsst bad mouth odour.				(a) Use also reported by Burkill (1985)
Kigelia africana (Lam.) Benth. (T)	Bignoniaceae	Okiya	Root bark	Gonorrhea
Root bark together with *Xylopia aethiopica* fruits soaked in local gin or palm wine for 3 days in a bottle. Botle must not touch the ground but be placed on something throughout its use. Infusion taken thrice daily—one glass full.				Not reported for this use by Burkhill (1985).
Heliotropium indicum (H)	Boraginaceae	Ukuevai	Leaves	(a) Convulsion (b) Worm-expeller (c) Eye infection
(a) Infusion of leaves drunk 3 times daily to cure convulsion. (b & c) Infusion can also be used as worm-expeller and eye lotion				(a & b) Uses also reported by Burkill (1985)
Commelina diffusa Burm. f. (H)	Commelinaceae	Godogbo-Odo	(a) Leaves (b) Plant	(a) Premature labour (b) Itching, boils
(a) Young leaves together with 7 pieces of meat prepared into soup and eaten to stop premature labour. (b) Infusion of plant rubbed on affected areas.				Not reported for these uses by Burkhill (1985)
Euphorbia hirta Linn. (H)	Euphorbiaceae	Ajemugba	Leaves	(a) Thorn-removal (b) Breast-milk production (c) Cough
(a) Leaf latex applied to affected area to ease removal of thorn. (b) Infusion of leaves taken thrice daily by nursing mother for production of more breast-milk. (c) Latex of plant taken to cure cough.				All these uses also reported by Burkill (1994)
Euphorbia sp. (S)	Euphorbiaceae	Ukhokho	Plant	To aid drying of umbilical cord

Latex of plant mixed with fine sand and salt, applied twice daily to umbilical cord of newborn baby. This is kept moist by constantly applying palm oil with a feather. The umbilical cord falls off within 3 days of application.				Not reported for this use by Burkill (1994)
Jatropha curcas Linn.	Euphorbiaceae	Okoto	(a, b, c) Leaves (d) Seeds	(a) Teething (b) Toothache (c) Swollen area (d) Poisonous
(a) Sap from leaves applied to gums of children to ease teething. (b) Sap used to treat toothache. (c) Hot poultice used to treat swollen area before application of ointment. (d) Seed is recognised to be very poisonous.				(a, b, d) Uses also reported by Burkill (1994)
Phyllanthus amarus Schum. & Thonn. (H)	Euphorbiaceae	Obhobha	Leaves	Black menstruation
Leaves prepared into soup and taken to cure black menstruation caused by scanty and irregular menstrual flow.				Not reported for this used by Burkhill (1994)
Plukenetia conophora Mull. - Arg. Syn. *Tetracarpidium conophorum* (Mull. Arg.) Hutch. & Dalz. (C/S)	Euphorbiaceae	Ukuze	Seed	Snake-bite
The raw seed is eaten				Not reported for this use by Burkill (1994)
Sida acuta Burm. f. (H)	Malvaceae	Erumava-Ibia	Leaves	(a) Premature labour (b) Ulcerated wounds

(a) Infusion of leaves drunk and applied to belly of woman in premature labour to stop it. (b) Leaves ground together with lime juice and applied to affected area for healing.				Not reported for this use by Burkill (1995)
Parkia biglobosa (Jacq.) Bent. (T)	Mimosoideae	Usha-Upaza	Leaves	Erysipelas
The powdered leaves applied all over the body to cure erysipelas				Related report in Burkill (1995)
Boerhaavia diffusa Linn. (H)	Nyctaginaceae	Etiponla	(a) Leaves (b) Root	(a) Oxytocic agent (b) Chest pain
(a) Infusion of leaves drunk by woman in labour as an oxytocic agent, which makes labour progress normally. (b) Root prepared into soup and taken to relieve chest pains.				Not reported for these uses by Burkhill (1997)
Pennisetum purpureum Schum. (G)	Poaceae (Gramineae)	Omo	Root	Mumps
Root ground and mixed with ashes and applied to affected area.				Not reported for this use by Burkill
Scoparia dulcis Linn.	Scrophulariaceae	Atiotiousha	Leaves	Cough, chest pain
Leaves eaten raw to effect the healing				Not reported for this use by Burkill (2000)