

Conservation and Biodiversity Erosion in Ondo State, Nigeria: (4). Assessing Botanicals Used in the Cure of Sexually Transmitted Diseases in Owo Region

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Abstract

A combination of social survey and direct field observation was used to assess the botanicals used in the treatment of sexually transmitted diseases in Owo region of Ondo State, Nigeria. A total of 33 belonging to 28 families were identified, 14 of which were found to be rare on the abundance scale used in the study. The need for the conservation of these species was stressed.

Key words: Botanicals, sexually transmitted diseases, Owo Region, Nigeria.

Introduction

In the recent times, there seems to be an unabated increase in the incidences of sexually transmitted diseases despite the series of awareness programs by governmental and non-governmental organisations. Previous studies had asserted that many indigenous groups in Nigeria depend on the use of botanicals for their health cures and maintenance. The dependency had been attributed to their ready availability, cheap, effectiveness with little or no side effects. It is also believed that the medicinal plants wiped away the diseases causative agents and unlike the orthodox medicines that treat only specific disease, medicinal plants have wider spectrum.

The Owo indigenous group, popularly referred to as *Owomode*, is a distinct group of Yoruba in the rainforest zone of Nigeria. They are extremely conscious of their culture and tradition which include the use of botanicals for health maintenance. The study being reported here is part of on-going studies on the ethnobotanical utilization in Ondo State being conducted by the Department of Plant Science, University of

Ado-Ekiti, Ado-Ekiti, Nigeria and the Department of Plant Science and Biotechnology, Adekunle Ajasin University, Akungba-Akoko, Nigeria.

Materials and Methods

A combination of social survey and direct field observation (after Kayode 2002, Kayode and Ogunleye 2008) was used in this study. Three major communities, each of which possessed big market centers were selected. In each of these communities, five botanical vendors, ten indigenes who had maintained continuous domicile in the region for minimum of ten years were selected and interviewed with the aid of semi-structured questionnaire matrix.

Botanicals identified as been used in for the cure of sexually transmitted diseases (STDs) were documented and their relative abundance determined by taken into consideration the time taken to physically come across the species in a distance of 500m form the center of the community. Voucher specimens of the species identified were obtained and later deposited at the herbarium of the Department of Plant Science, University of Ado-Ekiti, Ado-Ekiti, Nigeria.

Secondary information was obtained from records and key informants which consisted of the officials of the Local Governments, General Hospital, Owo and the Ondo State Ministry of Health office.

Results and Discussion

A total of 33 botanicals were observed to be commonly used for the cure of STDs in the study area. These species belong to a total of 28 families (Table 1). The part mostly utilized was the leaves. The leaves of 16 of the botanicals were used. This constitutes 48% of the botanicals. Other parts include the roots (27%), stem barks/stem (24%) and fruits (12%). The forest constituted the major primary source of these species. 20 of the botanicals, that is 61% of the botanicals were claimed to be sourced primarily from the aboriginal forests of the communities. Household farms constituted the major secondary source as 52% of the botanicals were sourced from farms while the major tertiary source was the herbal markets section in the communities from where over 40% of the botanicals were sourced.

The dependency of the respondents on the aboriginal forests and household farms confirmed the earlier assertions by Kayode *et. al.* (2008), Kayode and Omotoyinbo (2008, 2009) that the use of botanicals was freely assessable to the rural and urban resource-poor. Also the availability of botanical parts in major markets of the study area, though not a new phenomenon, confirmed the use of medicinal botanicals as important source of income in the study area. While the extraction methods used in most of these botanicals (leaves) could be said to be non-predatory, same cannot be said of the following species whose stem or stem barks or/and roots were used. They are *A. difformis*, *A. djalensis*, *C. gabonensis*, *D. guineense*, *D. senegambiensis*, *K. ivorensis*, *M. puberula*, *P. angolensis*, *S. anceps*, *S. mombin*, *T. macroptera*, *T. potatoria*,

U. afzeli and *Z. zanthoxyloides*. All these species were not even cultivated in the study area. Field observation revealed that hours of man time were taken before samples of these species were found in the study area. This observation tends to suggest that they were presently rare in the abundance scale. *F. capiensis* was observed to be found occasionally in the study area but field observation revealed that its being domesticated already existed in the study area where it is being cultivated as shade tree and wind breaker.

In conclusion, the conservation of these species, especially the identified rare species, is now desirable. Previous strategies already suggested by Kayode *et al.* (2009) in a study conducted in other part of Ondo State will still be quite relevant.

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Table 1. Botanicals used in the cure of STDs in Owo region of Ondo State, Nigeria.

S/N	Botanical Name	Family	Vernacular Name	Parts Used	Sources*		
					1 ⁰	2 ⁰	3 ⁰
1.	<i>Abrus precatorius</i>	Papilionaceae	Omisimisi	Leaves	HA	FA	-
2.	<i>Ageratum conyzoides</i>	Asteraceae	Imi-esu	Leaves	HA	FA	-
3.	<i>Alcornea laxiflora</i>	Euphorbiaceae	Iya peepe	Leaves	FA	HF	HA
4.	<i>Anchomanes difformis</i>	Araceae	Isu-abirisoko	Stem	HA	HF	FA
5.	<i>Annona senegalensis</i>	Annonaceae	Ewe-aso	Leaves	FA	HF	HA
6.	<i>Anthocleista djalonensis</i>	Loganiaceae	Sapo	Root	FA	HF	PM
7.	<i>Capsicum frutescens</i>	Solanaceae	Ata wewe	Fruits	HF	PM	-
8.	<i>Carica papaya</i>	Caricaceae	Ibepe	Fruits	HF	HA	PM
9.	<i>Colocynthis citrullus</i>	Curcubitaceae	Eso-bara	Fruits	HF	FA	PM
10.	<i>Cylicodiscus gabonensis</i>	Mimosaceae	Olisa-rogun	Roots	FA	PM	HF
11.	<i>Dialium guineense</i>	Caesalpiniaceae	Uyan	Stem bark	FA	PM	HF
12.	<i>Dissotis senegambiensis</i>	Melastomataceae	Atawo edun	Roots, Stem bark	FA	PM	-
13.	<i>Dracaena mannii</i>	Dracaenaceae	Peregun wewe	Leaves	FA	HF	PM
14.	<i>Dracaena sp</i>	Dracaenaceae	Ope- orisa	Leaves	FA	PM	-
15.	<i>Elaeis guinensis</i>	Arecaceae	Ojele imo ope	Young leaves	HF	HA	FA
16.	<i>Ficus capiensis</i>	Moraceae	Opoto	Stem bark	FA	HF	HA
17.	<i>Ficus exasperata</i>	Moraceae	Ipin	Leaves	FA	HF	PM
18.	<i>Glyphae brevis</i>	Tiliaceae	Atorin	Leaves	HF	FA	PM
19.	<i>Heinsia crinite</i>	Rubiaceae	Tannaposo	Leaves	FA	HF	PM
20.	<i>Jatropha gossypifolia</i>	Euphorbiaceae	Alabose/ Lapalapa	Leaves	HA	HF	FA
21.	<i>Khaya ivorensis</i>	Meliaceae	Oganwo	Roots	FA	HA	HF
22.	<i>Microdermis puberula</i>	Pandaceae	Apeta	Roots	FA	HF	PM
23.	<i>Musa paradisiaca</i>	Musaceae	Ogede agbagba	Fruits	HF	PM	HA
24.	<i>Pycnanthus angolensis</i>	Myristicaceae	Ifu	Stem bark	FA	HF	PM
25.	<i>Sida acuta</i>	Malvaceae	Iseketu	Stem, Leaves	HF	FA	HA

26. <i>Smilax anceps</i>	Smilacaceae	Igbao	Stem, Leaves	FA	PM	HF
27. <i>Sorgum bicolar</i>	Poaceae	Oka baba	Leaves	HF	PM	-
28. <i>Spondias mombin</i>	Anacardiaceae	Ekikan/Iyeye	Stem bark, Roots	HA	HF	FA
29. <i>Terminalia macroptera</i>	Combretaceae	Idi	Roots	FA	HF	PM
30. <i>Tetracera potatoria</i>	Dilleniaceae	Efun-amuren	Leaves	FA	HF	PM
31. <i>Uvaria afzeli</i>	Annonaceae	Gbogbonise	Stem bark, Roots	FA	HF	PM
32. <i>Xylopia aethiopica</i>	Annonaceae	Erinje/Eru	Leaves	FA	HF	PM
33. <i>Zanthoxylum zanthoxyloides</i>	Rutaceae	Orin-ata	Roots	FA	HF	PM