

# ETHNODERMATOLOGICAL STUDY AMONG THE ITSEKIRI PEOPLE OF WARRI SOUTH LOCAL GOVERNMENT AREA OF DELTA STATE, NIGERIA.

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**Abstract:** Ethnodermatological data were collected from the Itsekiri people of Warri South Local Government Area of Delta State between February and September, 2009. The study was carried out in 3 communities (Okorode-Itsekiri, Okorode-Urhobo and Ogbejaw) within the Local Government council Area. The data were gathered from 15 randomly selected Traditional healers/herbalist with the aid of a structured questionnaire. A total of 30 of medicinal plant species belonging to 21 families and 30 genera were of ethnodermatological importance for the treatment of 17 skin diseases. Herbs and trees form the most used growth form and the fruit being the most cited plant part in a greater number of the remedy preparations. Most of the remedies were prepared from a single plant source with other ingredients and a few common plants. The contributions of this study towards the understanding, documentation and safeguarding of indigenous knowledge and the possible utilization of the plants for greater economic uses were also highlighted.

**Keywords:** Ethnodermatology, Medicinal plant, Traditional healers, Herbalist, Itsekiri people, Delta State, Nigeria

## INTRODUCTION

In the time past, there has been an increase in the study of plants and their traditional uses in different parts of the world. Plants have been a major source of medicines and the presence of plant secondary metabolites has been implicated for most plants therapeutic activities (Gill, 1992; Yesilada, 2005; Aibinu, 2006; Iduet *et al.*, 2009).

Iwu in 1993 reported that medicinal plants are a source of great economic value in the African continent. In Nigeria, medical plants form an important component of the natural wealth of the country (Gbile, 1985; Iyamabo, 1990). The tropical rainforest of which Nigeria is a part has been described by Sofowora (1982) as a reservoir of phytomedicines with many of the plants containing substances that can be used for therapeutic purpose by man (Iwu *et al.*, 1999). Nature has bestowed on us a very rich botanical wealth and a large number of diverse plants grow in different parts of the continent (Gbile 1985).

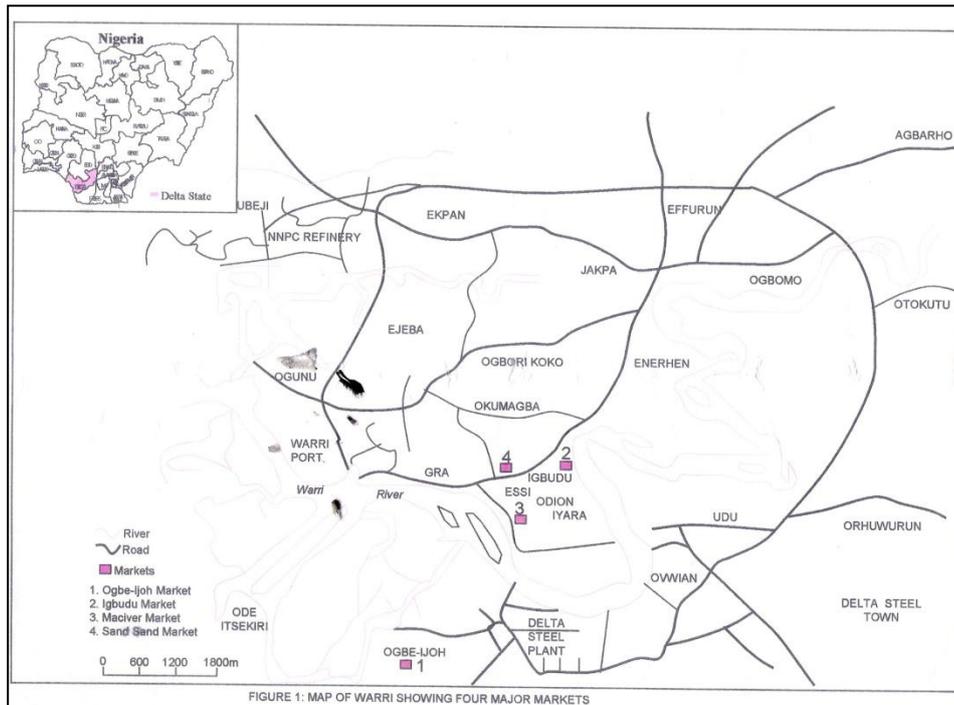
Ethnodermetology is a branch of ethnobotany that deals with skin care, beautification, diagnosis and treatment of various diseases and infections related to skin using (Nisha and Sivadasan, 2007). The importance of the skin to the general body

physiology is readily recognized in view of serious systematic disturbance arising after extensive and severe damage by burns or in generalized dermatitis (Olumayowa, 2009). Plant extracts are gaining popularity as ingredients in cosmetics formulations, perhaps because of the poor image of animal-derived extracts acquired during the past few years. Historically, plants have been the main source of cosmetic ingredients until methods for synthesizing substance with similar properties were discovered (Ashawat, *et al.*, 2009). Tribal's and local people have been in the habit of using certain plant parts such as leaves, roots, fruits and seeds for the treatment of skin diseases, beautification, skin care and for skin protection (Nisha and Sivadasan, 2007).

The present study was undertaken to document the details of the various plants used in skin care, beautification and treatment of skin diseases by the Itsekiri people of Warri South Local Government Area of Delta State, Nigeria.

## MATERIALS AND METHODS

**Study Area:** The study was carried out in Okorode-Itsekiri, Okorode-Urhobo and Ogbejaw Communities in Warri South Local Government Area of Delta State, Nigeria. The area is situated between Latitude 5°31' North and Longitude 5°45' East (Fig. 1).



**Fig. 1:** Location Map of Warri South Local Government Area of Delta State, Nigeria.

**ETHNODERMATOLOGICAL INFORMATION**

Ethnodermatological data were collected between the months of February and September, 2009, using a structured questionnaire. Fifteen (15) randomly selected traditional healers/Herbalists were interviewed regarding the type of plant used for skin treatment and beautification. Throughout the interviews, the local plant names, useful plant part(s), method of preparation, mode of application, purpose of application and duration of application (where specific) were documented.

Species Identification: Some of the plant specimens were identified by the herbalists and later confirmed by Professor MacDonald Idu of the Department of Plant Biology and Biotechnology. Other plant

species were identified using literatures such as Ayensu (1978), Keay (1989), Gill (1992) and Akobundu and Agyakwa (1998). Specimens of the plants were kept in the form of a monograph in the Department of Plant Biology and Biotechnology Herbarium of the University of Benin, Benin City, Nigeria.

**RESULTS**

The study showed that a total of thirty (30) plants belonging to 21 families and 30 genera were identified. For each species the botanical name, family name, common name, local name, plant part used, preparation of remedy and usage were recorded. A summary of the ethnodermatological results are presented in Table 1.

**Table 1:** Enumeration of plants commonly used by the Itsekiri people for skin diseases.

Botanical Names	Family Names	Common Names	Local Names	Part(s) Used	Preparation and Usage
<i>Allium sativum</i> L.	Liliaceae	Garlic	Ayau Ayo	Bulb	Extracted juice from the bulb mixed with olive oil is applied twice daily to athletes

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					foot.
<i>Amaranthus spinosus</i> L.	Amaranthaceae	Amaranth	Tetel-elegun	Leaves	A paste of the leaf juice with a pinch of turmeric powder is applied on the face twice daily against pimples.
<i>Anacardium occidentale</i> L.	Anacardiaceae	Cashew	Kaju	Fruit and fresh leaves	The fruit and leaf juice heated over boiling water plus 5 table spoons of honey is rubbed on burnt and wrinkle.
<i>Ananascomosus</i> L.	Bromeliaceae	Pineapple	Ope-oyibo	Fruit	A paste of the juice with olive oil and honey is used as a skin moisturizer.
<i>Arachis hypogea</i> L.	Fabiaceae	Groundnut	Ipa	Peanut	Mashed peanut with milk and honey is used to remedy dry skin.
<i>Brassica oleracea</i> L.	Brassicaceae	Cabbage	Ewe eti-em	Leaves	Decoction of the leaves is used to treat an open wound internally while <i>Aloe vera</i> gel is rubbed externally to dry it up.
<i>Carica papaya</i> L.	Caricaceae	Pawpaw	Ibepe	Fruits	A paste of 3 ripe pawpaw fruits with an unflavoured gelatin and egg is used as a facial mask.
<i>Chromolaena odorata</i> L.R.M. King and Robinson	Asteraceae	Siam weeds	Awolowo leaf	Fresh leaves	The squeezed leaves extract is used to treat skin rashes.
<i>Citrullus lanatus</i> (Thumb) Mansf.	Cucurbitaceae	Water melon	Et we-we	Fruit	The juice is used for the removal of blemishes.
<i>Citrus aurantifolia</i> (Christm.) Swingl.	Rutaceae	Lime	Osanwewe	Fruit	The juice mixed with olive oil is used to manage rough skin.
<i>Citrus limon</i> L.	Rutaceae	Lemon	Orombo	Fruit	Splashes of the juice mixed with cold water are used to remedy oily

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						skin.
<i>Citrus paradisi</i> Macf.	Rutaceae	Grape	Wewe	Leaves		The squeezed leaf extract mixed with Shea-butter and olive oil is used against skin wrinkle.
<i>Citrus reticulata</i> Blanco.	Rutaceae	Tangerine	Tanjari	Fruit		Topical application of the juice is used for a glowing complexion.
<i>Citrus sinensis</i> L.	Rutaceae	Sweet orange	Osan	Fruit (peelings)		A fine paste of the blended fruit peelings with olive oil is used to remove blemishes from the skin.
<i>Cucumis sativus</i> L.	Cucurbitaceae	Cucumber	Wewo	Fruit		2 large cucumber fruits with evaporated milk mixed with few drops of lime are used as a cleansing lotion.
<i>Cocos nucifera</i> L.	Arecaceae	Coconut	Agbon	Fruit (oil)		The extracted fruit oil is applied to Athlete's foot.
<i>Daucus carota</i> L.	Apiaceae	Carrot	Carrote	Root tuber		A paste of 3 large carrots, boiled to soft and mashed with 2-3 tbs of honey is applied to the skin to beautify it.
<i>Lycopersicon esculentum</i> L.	Solanaceae	Tomatoes	Tomatoes	Fruit		2 table spoons of the juice plus 4 table spoons of evaporated milk is used to treat sun burns
<i>Malcus pumila</i> L.	Rosaceae	Apple	Agba	Fruit		1 table spoon of the juice with 1/4 table spoons of lime juice is used to remedy wrinkle.
<i>Mangifera indica</i> L.	Anacardiaceae	Mango	Magoro	Fruit		Boiled 3 unripe fruit, mashed with sheabutter to form a paste is used to treat skin rashes.
<i>Manihot</i>	Euphorbiaceae	Cassava	Gbaguda	Root tuber		A paste made from the tapioca and lemon juice can be used to

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<i>esculenta</i> Crantz.						treat infected sores and abscess.
<i>Mentha piperita</i> L.	Labiatae	Pepper mint	Pepper mint	Fruit		The juice from the mint is topically applied twice daily to treat pimples.
<i>Momordica charantia</i> L.	Cucurbitaceae	Bitter melon	Ejiurinewewe	Fruit		The mashed fruit with few drops of vegetable oil is topically applied to treat dry skin.
<i>Musa sapientum</i> L.	Musaceae	Banana	Ogedewewe	Fruit		A cream of mashed 10 fingers of banana with few drops lime and water is used to tone the skin.
<i>Persea americana</i> Mill.	Lauraceae	Avocado pear	Pia	Fruit		A paste of the mashed fruit with few drops of fresh lime juice can be used against crack and rough skin.
<i>Senna alata</i> L.	Caesalpiniaceae	Ringworm plant	Asunwon	Leaves, stem bark and seed		The leaves stem bark and seeds crushed with honey can be applied topically to treat ringworm.
<i>Terminalia cattapa</i> L.	Combretaceae	India Almond	Ebolebo	Leaves and bark		The powder of the leaves and bark mixed with sheabutter can be applied twice daily to remedy itching and rashes.
<i>Tetracarpidium conophorum</i> Mull. Arg.	Euphorbiaceae	African walnut	Ausa	Fruit and leaves		A paste of the pounded mixture of the fruit and leaves is used to treat parched skin.
<i>Vernonia amygdalina</i> Del.	Asteraceae	Bittter leaf	Ewuro	Fresh Leaves		The fresh leaf extracts is used in treating skin rashes, eczema and ringworm.
<i>Zea mays</i> L.	Poaceae	Maize (Corn)	Agbado	Grains		A paste of the extracted starch diluted with vinegar water is used in treating diasper rash

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## DISCUSSION

The use of traditional medicine for dermatological condition is not uncommon among the Itsekiri people of South -South Nigeria and elsewhere. It was observed that most of the medicinal plants species used were collected from within the vicinity of the traditional healers, while the ones not readily available were either purchased from the market or collected from the wild. This is however not in agreement with similar studies conducted by Nisha and Sivadasan (2007) and Egharevba and Ikhatua (2008). The implication of this observation is that the medicinal plants used by the healers were cultivated consciously or unconsciously ashome garden plants within their vicinity.

Herbs and trees were the most dominant growth forms for remedy preparations in the study area. This could be attributed to the availability of these growth forms in virtually all seasons as they could relatively withstand the dry season with little or no effect by seasonal variations (Albuquerque, 2006). Of the various plant parts used, the fruits were mostly used by the traditional dermatological for the preparation of traditional medicines. The fruits were observed to be top priority as used in 19 medicinal preparations followed by leaves 9, seeds and roots 4, stem bark 2 and bulb 1 (Table 2). This finding disagrees with the results of several other ethnomedicinal studies (Gidayet *al.*, 2003; Maciaet *al.*, 2005; Almeida *et al.*, 2006; Haile and Delenasaw, 2007; Kamatenesi-Mugisha and Oryem-Origa, 2007; Iduet *al.*, 2008, Egharevba and Ikhatua, 2008) who reported the leaves to be the most cited plant part used in herbal remedy preparations.

The findings of this study revealed that most of the remedies were prepared from a single plant source but in combination with other ingredients (honey, olive oil, Shea butter, evaporated milk, vegetable oil, vinegar water.) and a few common plants. The administrations of the plants were all topical in the form of juice, paste and ointment.

**Table 2:** Frequency of Plant Parts Used for

Herbal Remedies.

Plant Parts	Frequency
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Fruits	19
Leaves	9
Seeds and Roots	4
Stem Bark	2
Bulb	1

## CONCLUSION

In the present study, thirty plant species were used in treating seventeen skin problems. The study strongly support the need to strike a fine balanced between science and nature in order to integrate global and local perspective in the use of plants. However, the conservation of these plant resources in view of the current uninformed and unguided harvesting for the various traditional uses could be better handled with proper and accurate documentation. It is against this backdrop that this present study had become very relevant.

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