



**VALUATION OF SOCIAL RELEVANCE OF PLANTS AMONGST
THE ANNANGS IN SOUTH-SOUTH NIGERIA.**

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ABSTRACT

Survey of economic and social plants in six communities in Ikot Ekpene Local Government Area was done between March and April, 2014. Ethnobotanical data were collected using a structured questionnaire, which was administered at the household level within the study area. A total of Twenty-nine (29) plant species from

Twenty (20) families used by the various communities was documented. Plants were categorized into Six(6) different groups Namely: Cosmetics, ropes/construction, farming/fishing, judicial signpost, entertainment and magico-religious categories respectively. *Elaeis guineensis*. was found relevant in all use categories. Results also revealed that such as *Pentaclethra macrophylla*, *Baphia nitida*, *Draceanea arborea* were symbolic to all the communities. This similarity in the usage of plants is attributed to common ancestry. This study advocates proper environmental education and conservation programmes in the area. Importantly, will be the introduction of afforestation programmes targeted at planting economic and socially relevant plants within these areas.

KEYWORDS: Social-plants, Relevance, Annangs, South-South, Valuation.

INTRODUCTION

Plants are either grown, or found naturally in the Wild, and are used by all ethnic groups for different purposes. Worldwide, tens of thousands of species of higher plants, and several hundreds of lower plants are currently used by humans for a wide diversity of purposes as food, fuel, fiber, oil, herbs, spices, industrial crops and as forage and fodder for domesticated animals. Human life therefore is influenced by how they perceive and integrate plants and

their resources into daily activities. The importance of plants therefore cannot be over emphasized.

Economic evaluation has always played an important role in studies of how plants are used by local people. Some researchers refer to their work as economic botany, putting the emphasis on the discovery of plants resources that attain importance in global or regional markets, thus possibly contributing to national and community development (Gary, 1995).

Additionally, Plants have been assigned social and spiritual roles since pre-history; for instance, Christians use plants and flower such as the Easter-lily to represent the history of Jesus Christ (Plant Life, 2011).

Generally, a lot of research has been done on ethnobotanical survey in Nigeria, including Akwa Ibom State (Ajibesin, *et al* 2007), however most of what is contained In present day literature focuses mainly on medicinal plants. Additionally, there exists little documentation on economic and social relevant plants from different ethnic groups within the state. Hence, the present study is relevant in building on existing knowledge of both economic and socially-specific plants associated with the Annang tribal group.

MATERIALS AND METHODS

The study was conducted in Ikot Ekpene Local Government Area. Ikot Ekpene is located within the North-Western axis of Akwa Ibom State. It is bounded by Ikono in the North-East, Obot Akara in the North-West and Essien Udim in the South. It lies between latitudes 5°10' and 5°30'North, and longitudes 7°30' and 7°45'East along the coastal highway between Calabar and Aba. Ikot Ekpene popularly known as “raffia city” is mainly inhabited by Annang people who are naturally endowed with craft work, and are closely associated with Ibibios and a small number of Igbo and Hausa traders. It comprises 47 communities and two clans; Amayam clan and Ikot Ekpene Urban clan, and has a population figure of 178,748 (NPC, 1991).

The climatic condition is influenced by wet and dry seasons which occur between April and October, and November through March respectively, with the peak of the wet season between June and July (Udo, 1970).

Data Collection

Ethnobotanical data were collected using a structured questionnaire. Six communities of the total communities within the Local Government Area were randomly selected as representative samples of the area. The six communities are; Ikot Ekpene, Abiakpo Ikot Essien, Abiakpo Edem Idim, Ikot Enwang, Adatak and Uruk Uso. Five households from different families were interviewed in each community, and a total of 30 households (one respondent per household) were visited and interviewed. Information on economic and social plants used by respondents within each community was documented. Additionally, interviews were conducted with “willing” traders on raffia and other products within the renowned ‘Raffia Market’ in Ikot Ekpene metropolis. Entries of the different categories of plants were done in the local Annang language and where possible common English names were noted. Botanical identification of documented plants was done by a taxonomist, Dr. (Mrs.) M. E. Bassey in the department of Botany & Ecological Studies, University of Uyo. The ethnobotanical survey exercise was executed between March and April, 2014.

Data analysis

Statistical software (PAST version 11), was used for data entry and analyses of socio-economic characteristics of the different respondents. Principal component analysis was used to Sort plant data/information into different groups.

RESULT

The specific uses of the different plant species within the study area is depicted in table 1. Entries comprise; Plant family, botanical name, common name, vernacular name (Annang), uses, part used and mode of use. Results show that a particular plant could be used for different purposes in different categories. Generally, the list comprise of 29 plants from 24 families.

Table 1: List of Plants and their Specific Uses

FAMILY	NAME OF PLANT	COMMON NAME	ANNANG NAME	USES	PART USED	MODE OF USED
AGAVACEAE	<i>Dracaena arborea</i> (Willd.) Link	Dragon tree	Okono	Js, Mr	Wp	Planted on land boundary between individuals or communities, and in specific areas where sacrifices are made to gods

ARECACEAE	<i>Cocos nucifera</i> L.	Coconut palm	Isip eyop	Rc, Cd, Et	Ft, Sm	Sawn trunk used in shade/house construction, locally extracted oil from dried fruit used as cream, trunk used in carving locally made drum for cultural dance
	<i>Raphia vinifera</i> P.Beauv.	Bamboo palm	Iya	Ff	Le	Mid-rib of leaves for making fish trap
	<i>Calamus deerratus</i> Mann & Wendl.	Cane plant	Obon	Rc, Et	Sm	Cane used in making baskets, tables, chairs, flower vase, and also in making rattle (cultural instrument)
	<i>Elaeis guineensis</i> Jacq.	Oil palm	Eyop	Cd, Ff, Rc, Mr, Js, Et	Ft, Le	Black kernel oil used as cream, ropes from frond used for basket, and mid-rib of laeves used for broom, Fruits as baits in fish trap, Young unfolding frond used in masking Masquerade, putting injunction on disputing property, and also used at Christmas to symbolize the birth of Christ.
	<i>Raphia hookeri</i> Mann & wendl	Wine palm	Ukod	Rc, Ff, Et	Le	Piassava used for weaving ropes for harvesting palm fruits, mid rib of leaves used for making fish trap, raffia from young leaves used in weaving masquerade/cultural dance materials
ANACARDIACEAE	<i>Anthrocaryon klaineanum</i> Pierre		Ukang	Rc	Sm	Used in building mud houses, and as firewood
APOCYNACEAE	<i>Alstonia boonei</i> De Wild.	Stool wood	Ukpo	Et	Sm	Used for carving masks for masquerade
BIGNONIACEAE	<i>Newbouldia laevis</i> (P. Beauv.)		Itumo	Js, Mr, Et,	Le, Wp	Leaves used as a symbol of identity by 'Ekpe' traditional

	Seemann ex Bureau					society, planted on land – boundary between individuals, Planted with <i>Dracaena arborea</i> , <i>Pterocarpus mildbreadii</i> in traditional rulers' compound or village squares for sacrifices to gods
BIXACEAE	<i>Bixa orellana</i> L.	Anatto	Iduot	Cd	Ft	Mashed fruit used by women on heel/palm
BURSERACEAE	<i>Dacryodes edulis</i> (G. Don) H.J.Lam	African pea	Eben	Rc	Sm	Trunk used for mortar carving
EUPHORBIACEAE	<i>Alchornea laxiflora</i> (Benth.) Pax & K.Hoffm.		Nwariwa	Et	Le	Used as symbol of identity by 'Oboon' traditional society
FABACEAE	<i>Lonchocarpus cyanescens</i> (Schum. & Thonn.) Benth.	African indigo	Awa	Cd	Le	Extracts used as dye on raffia
	<i>Pterocarpus soyauxii</i> Taub	African padauk	Ukpa	Rc, Et	Sm	Used for construction of houses/furniture, also used in carving traditional musical instrument ('Obodom, Ntakrok')
	<i>Pentacletra macrophylla</i> Benth.	African oil bean	Ukana	JS, Mr	Wp	Planted on land boundary between villages, and at village squares where traditional rites are performed
LEGUMINOSAE	<i>Millettia thonningii</i> (Schum. & Thonn.)Bak.		Ududu	Js	Sm	Planted as live fence around peoples' residential areas
	<i>Physostigma venenosum</i> Balfour.	Calabar/ Ordeal bean	Asere	Mr	Sd	Used for confession of wizard/witch
MORACEAE	<i>Milicia excelsa</i> (Welw.) C.C. Berg.	African teak	Akwe	Rc	Sm	Used for construction houses/furniture
PANDANACEAE	<i>Pandanus candelabrum</i> P.Beauv.	Screw pine	Nkon aya	Rc	Le	Used for weaving mats

PAPILIONACEAE	<i>Pterocarpus mildbreadii</i> Harms.	White camwood	Mkpa	Js, Mr	Wp	Planted on land boundary within residential areas and with <i>Dracaena</i> on specific areas where sacrifices are made to gods
	<i>Millettia aboensis</i> (Hook. f.) Bak.		Isara	Js	Sm	Used as live fence in residential areas
POACEAE	<i>Bambusa vulgaris</i> Schra. ex J.C.Wendl.	Indian bamboo	Nyayaha	Rc	Sm	Used for decking concrete houses and in building thatched houses
RUBIACEAE	<i>Rothmannia whitfieldii</i> Lindl.		Okun	Cd	Ft	Used on the body for tattoo
SAPINDACEAE	<i>Blighia sapida</i> Koing	Akee apple	Oto	Ff	Le	Used as fish poison
SAPOTACEAE	<i>Tieghemella heckelii</i> Pierre ex A. Chev.	Cherry Mahogany	Uko	Et	Sd	Used as rattle in waist and ankle by cultural dancers
	<i>Omphalocarpum melatum</i> Miers.	Navel fruit tree	Etinsak	Mr	Wp	Planted as 'sacred' plant in areas where traditional rites are performed
SELAGINELLACEAE	<i>Selaginella kraussiana</i> (Kuntze) A.Braun.		Mkpatat	Et	Wp	Used in weaving masks for Masquerade
VERBENACEAE	<i>Gmelina arborea</i> Roxb.	Gmelina	Melina	Ff	Wp	Planted in agro-forest for wood production
ZINGIBERACEAE	<i>Aframomum melegueta</i> K. Schum.	Alligator pepper	Ntuen ibok	Mr	Sd	Used by Herbalists to identify a thief

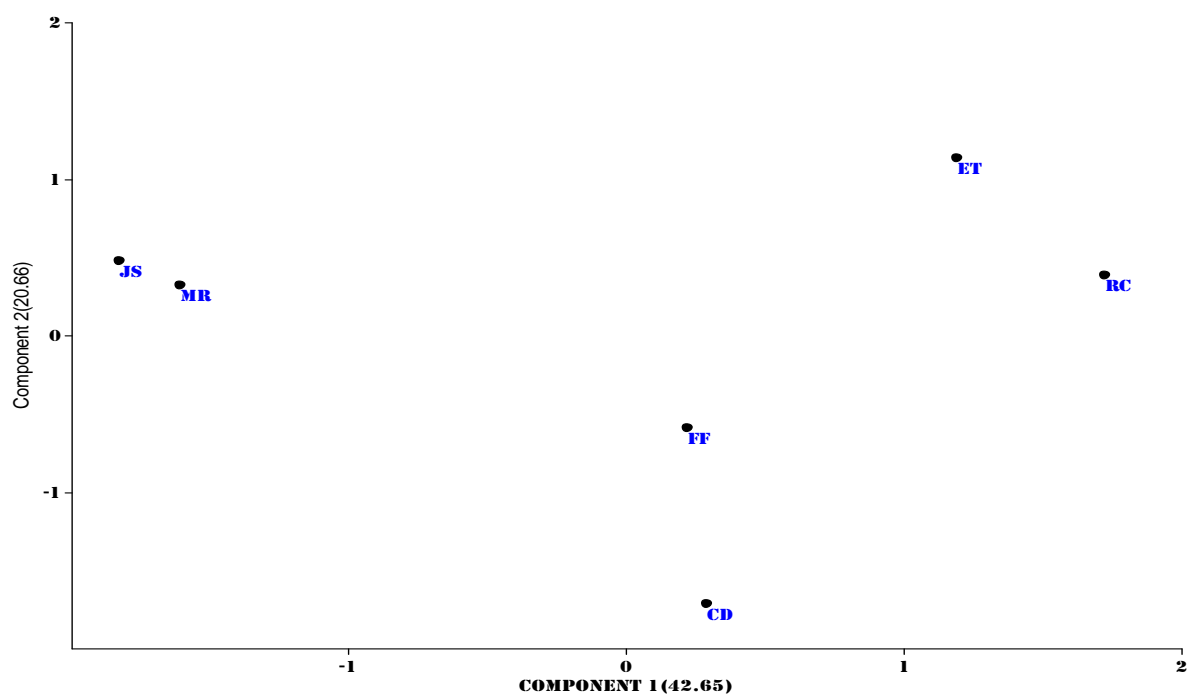
Key: **Js** = Judicial signpost; **Mr** = Magico – religious purpose; **Ff** = Farming / fishing; **Rc** = Ropes/constructions; **Cd** = Cosmetics/dye; **Et** = Entertainment; **Ft** = Fruit; **Le** = Leaf; **Wp** = Whole plant; **Sm** = Stem; **Sd** = Seed

Table 2 shows the PCA-ordination scores of the six use criteria (Js= Judicial plants, Mr = Magico religious plants, Et = Entertainment plants, Ff = Fish farming, Cd = Cosmetics and dyes and Rc = Ropes and construction plants) of plants in the area.

Table 2: PCA- Ordination scores

	PCI	PCII	PCIII	PCIV	PCV	PCVI
Js	-1.8235	0.4768	-0.25934	0.49706	0.93982	3.2756E-13
Mr	-1.6077	0.32115	-0.11974	-0.23542	-1.1514	2.6955E-13
Et	1.1948	1.1328	1.3025	0.096863	0.012289	8.1073E-13
Cd	0.28905	0.47434	0.68976	-0.13201	5.5493E-13	-1.171
Rc	1.7267	0.38232	-1.3614	0.29487	-0.12416	3.2756E-13
Ff	0.22065	-0.036336	-1.3431	0.45545	1.0019E-13	0.596

Figures 1 and 2 show the ordination diagram (component 1 and 2) and ordination biplot respectively generated from the plant data revealing the relationship between plant use groups and the hierarchy of the different groups in the area.

**Figure 1: Ordination diagram of plant Data (Axis I and II)**

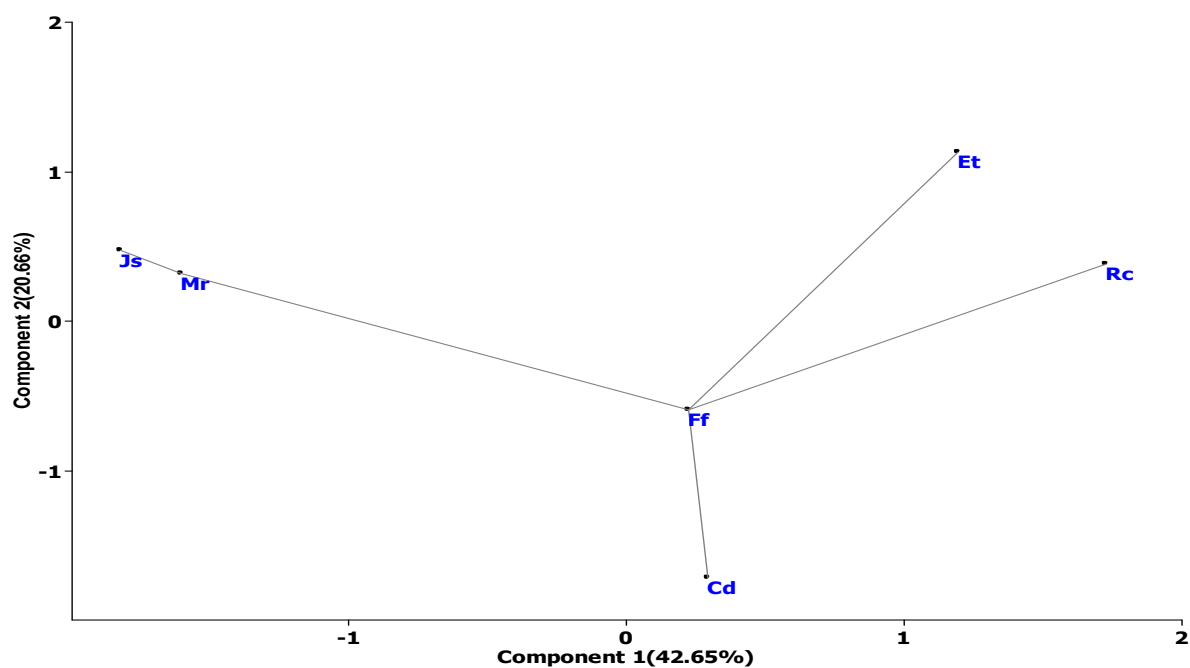


Figure 2: Ordination Biplot of plant Data (Axis I and II)

DISCUSSION

The result of this study reveals that strong cultural Beliefs influences the use of plant species in Ikot Ekpene Local Government Area. Plant species recorded from the study area has various functional uses including use as medicines in areas whertraditional medicine practise is common (Abdurhman, 2010).

The result of this research indicates that plants serve a variety of cultural and symbolic functions in West African societies and are intimately linked with ancestry and cultural heritage. This observation aligns with the reports of Romney *et. al.* (1986) who reported that plants serve as social symbols which contribute to cultural identity and social structure in a rapidly changing environment. Nwauzoma, *et. al.* (2013), posited that certain plants may have more than one usage within a particular community. This is evidenced in this research. Also, there is an overwhelming acceptance of species such as *Elaeis guineensis*, *Pentacletra macrophylla*, *Baphia nitida* and *Dracenea arborea* as socially relevant plants in all six communities. This is Note worthy and might imply that these communities Emanated from a common ancestral origin.

Again, the survey has shown that many other plants have social significance in the lives of the study area. These include: *Pterocarpus Mildbreadii*, *Milletia aboensis* *Newbouldia laevis*,

Alchornea laxiflora, *Selaginella kraussiana*. These plants are readily available in the Annang culture either as boundary demarcation, entertainment or Magico-religious plants. *Elaeis guineensis*, *Raphia hookeri*, *Cocos nucifera* are economic plants which occur Abundantly in the area and are useful as cosmetics, entertainment or judicial plants. Thus, certain plants are of economic and social importance to Annang people within Ikot Ekpene Local Government Area. The presence of trees species as socially significant life-forms in the area is not unprecedented. This is consistent with Calame-Griaule (1970), who emphasized the importance of trees in African myth and tales Thus, its occurrence accross most communities complements African tradition.

Romney *et. al.* (1986) maintained that plants play a role in human rites of passage in traditional African societies. This is not evidenced in this research. Also, this survey revealed that there is no instance where plants roots are used rather, other plants parts such as leaves, fruits, seeds or whole plants is used. In a related study, Birhane, et al. (2011) and (Lulekal, et al., 2008) indicated the use of plant roots in solving human related health problems. Ragnathan and Abay (2009) argued that collecting other parts such as fruits, seeds and leaves for therapeutic or other purposes aligns with current biodiversity conservation trends and Should be encouraged, rather than use plants roots which could reduce plant survival and diversity This trend is observed in the Annang tradition.

CONCLUSION AND RECOMMENDATION

This survey has shown that plant resources are of importance both socially and economically to the Annangs within Ikot Ekpene Local Government Area. While some are given top priority based on their uses others are considered less important. Also, the study has shown that Indigenous beliefs and knowledge of the Annang people in terms of plant resource utilization is conservation friendly. This, study advocates that conservation awareness be maintained within the formal and informal setting of the people within these areas for sustainable use and development of plant species.

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