

## Ethnobotanical Benefits of *Phoenix dactylifera* Linn. In Nigeria. Forestry Research Institute of Nigeria

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### Abstract

An ethno-botanical survey of the plant commonly called Date Palm- *Phoenix dactylifera* L. mainly for medicinal usage in the treatment of common ailments among Nigerians was undertaken by means of oral and written questionnaire. It is grown mostly in the northern part of Nigeria. Date palm is believed to have been introduced into Nigeria in the early 8th century by Arab traders from North Africa. Date fruits are a highly valued delicacy among communities in Nigeria, especially during ceremonies and festivals. It has native names in Nigeria Dabinoo (Hausa), Esoo mecca / Esoo Anobi (Yoruba) and no native name Igbo. Despite the conduciveness of soil and climatic conditions for datepalm cultivation and the existence of local varieties with good fruit qualities, date palm cultivation is still at subsistence level and domestic production. And this calls for better conservative ideology base on its importance.

**Keywords:** Ethnobotanical survey; Conservative; Medicinal; Active constituents

### Introduction

According to history, date palm is believed to have been introduced into Nigeria in the early 8th century by Arab traders from North Africa. Date fruits are a highly valued delicacy among many communities in Nigeria, especially during ceremonies and festivals. The national consumption of dates in 2009 is estimated at 8,958 metric tons which placed the country among the world top 10 consumers of date [1-5]. Despite conducive soil and climatic conditions for date palm cultivation and the existence of local varieties with good fruit qualities, date palm cultivation is still at subsistence level and domestic production is estimated at only 1,958 metric tons. The use of plants as medicine to cure or prevent illness and to lubricate the wheels of social interaction at the interpersonal and group level is a behavior that predates civilization, and in today's civilization, it is found in every society irrespective of its level of development and sophistication [6].

Traditional medicine refers to health practices, knowledge and beliefs incorporating plants, animals and mineral based medicines, spiritual therapies, manual techniques and exercises, applied singularly or in combination to treat, diagnose and

prevent illnesses or maintain well being. The drugs of today's modern society are products of research and development by major pharmaceutical companies but among the most important raw materials researched and developed are naturally occurring materials obtained from plants. Hence, when we take well packaged medicines today, it is well to remember that we might be taking a processed plant product. Interest in medicinal plants as a re-emerging health aid has been fuelled by the rising costs of prescription drugs in the maintenance of personal health and well-being, and the bio-prospecting of new plant derived drugs. Based on current research and financial investments, medicinal plants will, seemingly, continue to play an important role as a health aid [7].

Nature is and will still serve as the man's primary source for the cure of his ailments. However, the potential of higher plants as sources for new drugs is still largely unexplored. Medicinal plants are of great importance to the health of individuals and communities. The medicinal value of these plants lies in some chemical substances that produce a definite physiological action on the human body. The most important of these bioactive constituents of plants are alkaloids, tannins, flavonoids, and phenolic compounds. Traditionally, plants contain numerous biologically and active secondary constituents (metabolites) such as carbohydrates, proteins, enzymes, fats and oils, minerals, vitamins, alkaloids, quinones, terpenoids, flavonoids, which have medicinal activities [8]. The rising masses in the cities of Nigeria over 190million people and as the largest black race on record, it calls for a rapid intervention of development in all forms of life where health care delivery is a major assignment which must be rendered if the human resources must fit in properly in the socio-economic settings of the states.

This invariably brings medicinal plants like datepalm, which are and would be in high demand, under threats; this trend would have serious consequences on the survival of some plant species, hence the need to conserve them. Conservation of medicinal plants is therefore, an important step that should be taken in order to prevent the extinction of threatened species of medicinal plants. Aydele suggested a working co-operation among taxonomists, conservationists and geneticists to obtain maximum results for biodiversity conservation. Because of the foregoing, the study was done in order to provide information on medicinal plants of high demand, availability status of the plants, method of collection, preservation methods before marketing, medicinal plant farm and conservation methods [9].

## Materials and Methods

Structured questionnaire was embarked on to source information from sellers of date palm in each geo-political vegetation zones. Herb sellers and traditional medicine practitioners from these zones were put into considerations on various species of date palm. Referencing of facts was carried out at the Forestry Research Institute of Nigeria, Natural Medicine Development Agency (NNMDA) and various ethno medicinal practitioners in Nigeria [10]. Forestry Research Institute of Nigeria (FRIN) Herbarium was consulted for plant nomenclature authentication. The folkloric uses of date palm were compiled during this survey. Alongside, several ailments / disturbances were also reported in the study which date palm can manage [11-12].

Over 2,000 people were interrogated with structured questionnaire on how they get them, prepare and prescribed for users in. A clear understanding on better conservation approaches that could cause endanger to plants such as dates was discussed with the years of experience in the trade and usage.

## Results

The summary of areas *Phoenix dactylifera* Linn. (Date palm) can be used to manage different purposes. Basically the fruit of date palm is most peculiar to manage common diseases and human body health disturbances. Medicinal fruit species life date palm found in the Nigerian metropolis shows in details how ordinary people in Nigeria can buy and identified without the plant scientist intervention, since the plant parts juice and other natural drug extracts can be remove by boiling, squeezing, soaking in water and other methods. As regards conservation, most of the herb sellers and practitioners have no idea about the threat levels of most medicinal plants species due to their low literacy level. When asked if they noticed any scarcity in some particular plants, many of them responded that the shortage is due to seasonal changes [13].

The collection method was reported in all markets to be hygienic in that well kept harvesting hatchets are used and transportation of the herbs is done almost immediately to prevent nutrient degradation.

## Conclusion

The result of the present survey suggests that, the plant species called *Phoenix dactylifera* possess significant healing and management properties while more and further research activity should be encouraged for the production of standard drugs. However, a more serious government intervention is required to uplift the quality status of the traditional medicine

practice in the country. The frantic efforts of Nigeria Natural Medicine Development Agency and other associate like Forestry Research Institute of Nigeria (FRIN) should be praised in ensuring safe delivery of medicinal plants and preparation in the country. It is therefore advised that the method of plant extract preparation should be looked into for the removal of deadly contaminants and herb sellers should be protected by government. Conservation of this plant is paramount in order to avoid extinction through education, establishment of medicinal plant farms, sustainable harvesting approaches and setting aside of thick forest in the local communities as special forest. As a result of improper exploration and use of less derived plant species that can be used to heal illnesses as alternative medicine, optimum reversed interest in drug of plant origin must be replaced to fight against extinction steadily.

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