

RAPHIA PALM IMPORTANCE IN THE NIGER DELTA, NIGERIA: CASE STUDY OF GIN DISTILLERS IN AMASSOMA, SOUTHERN IJAW, BAYELSA STATE

Jasper Ezenwaka
Department of Crop and Soil Science, Faculty of Agriculture,
Niger Delta University, Bayelsa State, Nigeria.

Email: jezenwaka2001@gmail.com; jasper.ezenwaka@ndu.edu.ng
ORCID: 0000-0002-6745-5427

ABSTRACT

The Raphia grows in abundance in the fresh water swamp forests of the Niger Delta. There are no known policies to harness the benefits from this species as it is also not much studied. There are pockets of settlers whose work it seems, centres around the Raphia which is in abundance in the fresh water swamp forests. This work tried to assess the usefulness of the Raphia to the people because it forms a major plant cover within the fresh water swamp forests. Through semi-structured interviews with 120 persons that were purposively and conveniently selected, the ethnobotany of this species was appraised. It found that the Raphia is an income earner and very useful to the people. Among many other benefits, the wine, which apart from being taken fresh, is also distilled into ogogoro (another good income earner), was the most ranked. The Raphia was also confirmed to be very much in abundance because its growth environment is not in competition with agricultural purposes as it is waterlogged. Also, the Raphia are not harvested as other timbers. Despite its not being threatened at the moment, it is recommended that policy for its conservation be formulated and also, efforts to promote its economic importance be encouraged.

Keywords: *fresh water swamp forest, ethnobotany, conservation, forest, livelihood*

INTRODUCTION

There are many plant species of economic importance to the rural poor, that are yet unpopular, which if well studied and policy developed, has the ability, according to Mahatma Gandhi (Gandhi, 1939), to become "an antidote to poverty"; the Raphia is one of such species that so much is yet to be understood because there are not much studies on them (Ingram and Schure, 2010; Couvreur and Fumtim, 2017). Mogue Kamga et al (2018, 2019) explained that field researchers rarely collect samples of these species during field studies because of its "massive stature" and that this may be a reason for the poor knowledge of its taxonomy.

There are 22 species contained in the genus, *Raphia*, but *Raphia hookeri*, according to Obahiagbon (2009) seem to be the most important in Nigeria. These species have several importance or uses in Tropical Africa; the uses include food, medicine, construction, and for commerce, and despite these relevance, these species are still very much under-studied (Mogue Kamga et al, 2020). Non-wood forest products are said to be of great economic importance to the rural dwellers across Tropical Africa (Brussaard et al, 2010; Sunderland, 2011; Balick and Beck, 1990; Balslev, 2011; Brokamp et al, 2011) as they serve several purposes including medicine, food, and income earning.

Mogue Kamga et al (2020) has deepened the understanding of the uses and cultural significance of the Raphia species in their work where they listed several various uses (including construction, cultural, domestic utensils and tools production, food, tools for hunting and fishing, fuel, medicine, environmental uses, and apparel; see more in Box 1) of many species within the genus, *Raphia*; they posited that among the several uses, wine was the most important, followed by grubs and then fibre production. Tuley (1995) recorded that most parts of the Raphia are actually useful. Ayogu

(1999) and Obahiagbon (2009) supported that the sap is most important and also the most studied of all the usefulness of the Raphia.

Owing from the economic importance of the Raphia, it could easily become a resource for poverty alleviation if properly promoted or managed. Going further, FORENET (2010), Ingram and Schure (2010), Ingram et al (2012), and Stauffer et al (2014) stated that the Raphia are among the most important palms in Africa because of the several uses they are put to.

Box 1: Various uses of the Raphia (extracted from Mogue Kamga et al, 2020)

- Bamboo for construction and furniture
- Sap for wine
- Grubs
- Fibers
- Wax
- Trunk for building
- Apical meristem (palm heart/cabbage) eaten
- Oil from fruit
- Mesocarp eaten and for traditional hair dressing
- Fiber for various art work
- Domestic utensils production
- Production of traditional attires
- Thatch
- Fish-traps production
- Dryers
- Animal cages
- Crafts
- Fuel
- Medicinal plants infused in wine for various treatments
- Wine as antidiabetic
- Fruits for stupefying fish
- Fences
- Ropes from petiole to tie grated cassava
- Midribs/midvein for brooms
- Fibers for decoration
- Fruit mesocarp used to treat diabetes
- Leaflets used for weaving of bags, baskets and hats
- Bamboo (Raphia leaf petiole and rachis) as prop poles for banana harvesting
- Toys
- Piassava
- Barns; ceilings
- Young seed edible
- Handbags; earrings
- Against diabetes and high blood pressure
- Inner soft tissue of bamboo used to weave mats
- Hard outer epidermis used for fencing
- Cosmetics and medicine.

This paper focuses on *R. hookeri*, which Obahiagbon (2009) referred to as the most important in Nigeria. This species grows in abundance within the fresh water swamps of the Niger Delta but still very much under-studied. Among available literatures, Tuley (1965) stated that it is capable of

producing up to 118litres of sap per year per stand, but Obahiagbon (2007) estimated the production to be in ranges of six and 20litres per tree per week.

Method

Apart from desktop studies of available literatures, primary data were collected through semi-structured discussions with a cluster of settlers of *Raphia* wine tappers settled along the major road leading from Yenagoa to the Niger Delta University in Amassoma community in Southern Ijaw Local Government Area of Bayelsa State. This community of *Raphia* wine tappers was *Purposively* selected because they fulfilled the Researchers best source of data for this work. This community of tappers are over 100 persons in population, settled in about ten clustered groups by the road; all the cluster settlements were interviewed. All they do primarily is tapping of wine from the abundant reserve of *Raphia* within the fresh water swamp forest of Amassoma, which they sell as fresh wine, fermented wine, and also distilled into Ogogoro (gin). In addition to this number, another 20 persons were *Conveniently* sampled and interviewed within the Amassoma community. All the interviews were centred around the ethnobotany of the *Raphia* which is quite abundant within the Amassoma forest. The responses were recorded in a field jotter and were later transcribed and sorted according to themes which emerged from the interviews.

Results

Abundance of the *Raphia*:

All participants confirmed that the *Raphia* was in great abundance within the fresh water swamp forest of the community. The abundance is because the species are not harvested for any other purpose; it is not so useful as timber as there are many other alternatives. Also, the environment where it grows *is not suitable for agricultural production (farming) as it is waterlogged* says a participant. This imply that the growth environment is not in competition with agriculture. A participant mentioned that *not many persons are into *Raphia* tapping*. Another said *they are mostly non-natives that are into *Raphia* tapping*.

Usefulness of the *Raphia*:

The family (natives) that owns the portions where any tapper operates earns a royalty from the tapper that operates there. A participant said *we earn money from the tappers that operate on our lands; this money is paid annually, upfront*. So, even as the natives do not tap or harvest the *Raphia*, it still is a source of income to them.

The tappers mentioned *we earn our living from the *Raphia*; that's our work*. An average family was up to eight persons. The children attends the schools in the Amassoma community. Their livelihood is centred on the *Raphia* which they said is not threatened in any way.

Uses:

Following from the many uses outlined by Mogue Kamga et al (2020), and as listed in Box 1, it is surprising to see how many uses were identified by the participants. These included construction, ornamental, weaving, trapping, production of fishing gears, fuel, oil, thatch, food, medicine, wine, gin, grubs, brooms, mats, baskets, and bridges to cross some water routes to their farms.

To the tappers, apart from thatch and construction of the homes in which they live, they ranked the wine as the most important product. This is so because it is the chief article of their trade, and earns them their living. They tap and sell the wine as fresh wine, fermented wine, and as ogogoro (the name for the locally distilled gin). The estimate given was that from about 400litres of sap tapped, 20litres of distilled gin is gotten. The men does the tapping, and the 'cooking' (distillation) is done mostly by the women, using a locally constructed distillers. The merchandising is also done mostly by the women and the adult children.

Domestication of the Raphia:

This became a laughable question to all that were interviewed; it does not make any sense to want to *domesticate what is abundantly naturally available!*

CONCLUSION

Raphia is of high value to these people. What has been reported in this study can be observed in many rural riverine Niger Delta communities; the Raphia is an income earner. But there are no policies to promote and transform it into a mega business. The quality of the locally distilled gin is also acclaimed to be very high. These group of peasant Raphia tappers can be aggregated into cooperatives to enable them access bigger markets. There is need to begin to draw attention also for the conservation planning for this species.

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