

Research Article

The perceptions of the Akoko Tribe of Nigeria on *Monodora myristica*

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Abstract: The perceptions of the Akoko tribe on *Monodora myristica* were determined in this study through the use of field observation and interviews of respondents using semi-structured questionnaire matrix. The results obtained revealed that though the respondents were dominated by males, adults of over 30 years of age, Muslim, illiterates and mostly of small and medium economic status yet recognition of the species cut across the defined socio-economic classifications. A gross dearth on investment on the species abounds in the study area as none of the respondents possessed the tree and very few respondents know someone who owned *M. myristica* tree. Similarly only few respondents have seen the species before the study. Most respondents had seen the seeds of this tree species which were sourced from markets or seen in the houses of relations, friends and neighbours. All the respondents have used the seeds of the species, mostly as spices, while only few respondents have used the seeds as medicine. Most respondents expressed willingness to plant the species either in their household farms or living areas or both. The willingness to plant the species by respondents was skewed towards planting for both subsistence and economic reasons rather than planting for either subsistence or economic reasons only. This willingness was attributed to its spices and medicinal values. Land tenure issues constituted disincentives to respondents that were not willing to invest in this species. Strategies to circumvent the disincentives were prescribed in this study.

Keywords: Perceptions, Akoko Tribe, Nigeria, *Monodora myristica*, Conservation.

INTRODUCTION

The Akoko tribe is an indigenous tribe found in Ondo and Edo States of Nigeria (Wikipedia 2019), who like other tribes in Africa have seen plants as an integral part of their life (Sidigia *et al.*, 1990) and depends on them for varieties of their products. According to Danjuma *et al.*, (2014) the dependence of people on trees and forests is unlimited. Trees are valued for the resources they provide, ecosystem services, support for the environment, medicinal properties, economic and nutritional properties (Kayode 2006).

In the recent times, however, Kayode *et al.*, (2017) asserted that the vegetation of Akoko is presently under stress, due to burning activities and other anthropogenic factors. Thus many plants that were previously abundant in the region are now grossly endangered. The most affected being the indigenous tree species (ITS). Kayode (2004) observed that most of these ITS regenerated poorly, sparsely populated in the

sampling stage and mostly vulnerable to threats of biodiversity loss.

In Nigeria, tree cultivation is poor (Jacewicz 2017). A myriad of reasons were attributed to this. Ugwu and Omoloye (2015) asserted that in south western Nigeria, planting of ITS is hindered by slow growth, bush burning, religious beliefs and lack of seeds. Other problems include government policy and tenure issues. At present most of the ITS occurred in the wild. Also a gross lack of accurate data base on their abundance status abounds in Nigeria. Thus, there is an urgent need for their domestication.

Recent study by Sanni *et al.*, (2019) identified *Monodora myristica* as one of the ITS that requires urgent domestication in Akoko division of the country. The species is used by this tribe for curing fever, headaches and also as stimulants. It is equally valued for its nutritional purpose, as an important spice by this tribe. It is now a common standard to consider the peoples' perception of a species in an effort to conserve

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the species, thus the study being reported here aimed at the determination of the perception of the Akoko tribe on this species in an effort to prescribe strategies that will conserve the species in the study area.

MATERIALS AND METHODS

Sanni *et al.*, (2019) has provided the detail description of the location, climate and political classification of the Akoko division of Ondo State, Nigeria, used in this study (Figs. 1 and 2). The four Local Government Areas (LGAs): Akoko South West (ASW), Akoko North West (ANW), Akoko South East (ASE) and Akoko North East (ANE) LGAs were used in this study.

In each LGA, five communities were randomly selected. In each of the selected community (Table 1), 10 respondents were purposively selected. These respondents were those that have lived in the

community for at least 10 years before this study. The respondents were interviewed with the aid of semi-structured questionnaire matrix. The interviews which were focused, conversational and two-way in communication were based on the perceptions of the respondents on *M. myristica*. The interviews started with more general question on the subject matter. However, questions were created during the interviews to allow both interviewer and the respondents the flexibility to probe for details.

Group interviews were also conducted in each community to obtain group consensus on the responses provided by the respondents. Each group consisted of at least five respondents. Four groups were interviewed in each community. Key informants made up of agricultural and forestry officials in each LGA were identified and interviewed on the subject matter.

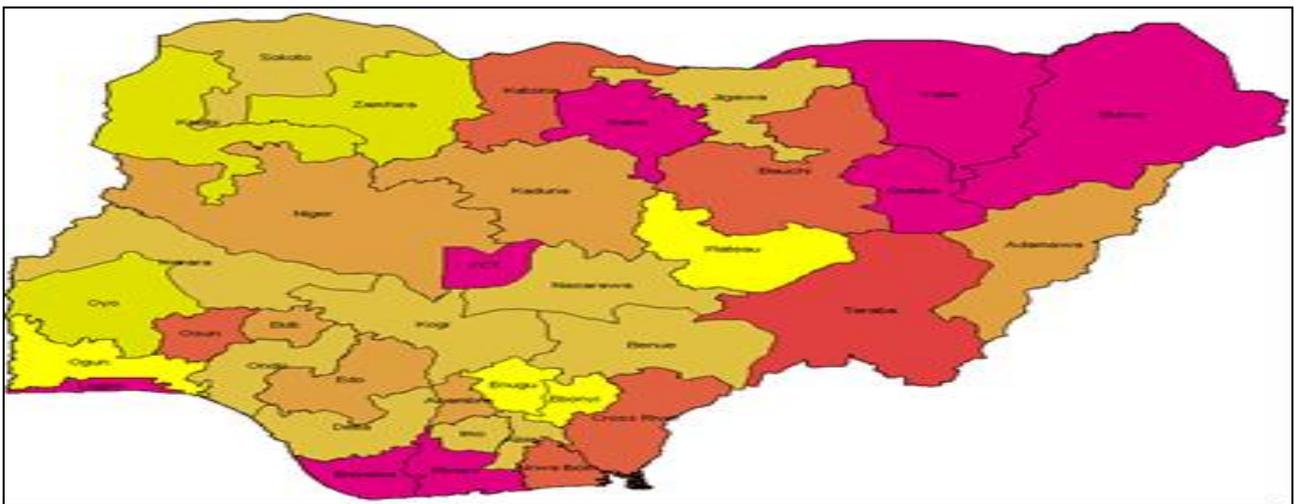


Fig 1. Map of Nigeria showing Ondo State, Nigeria

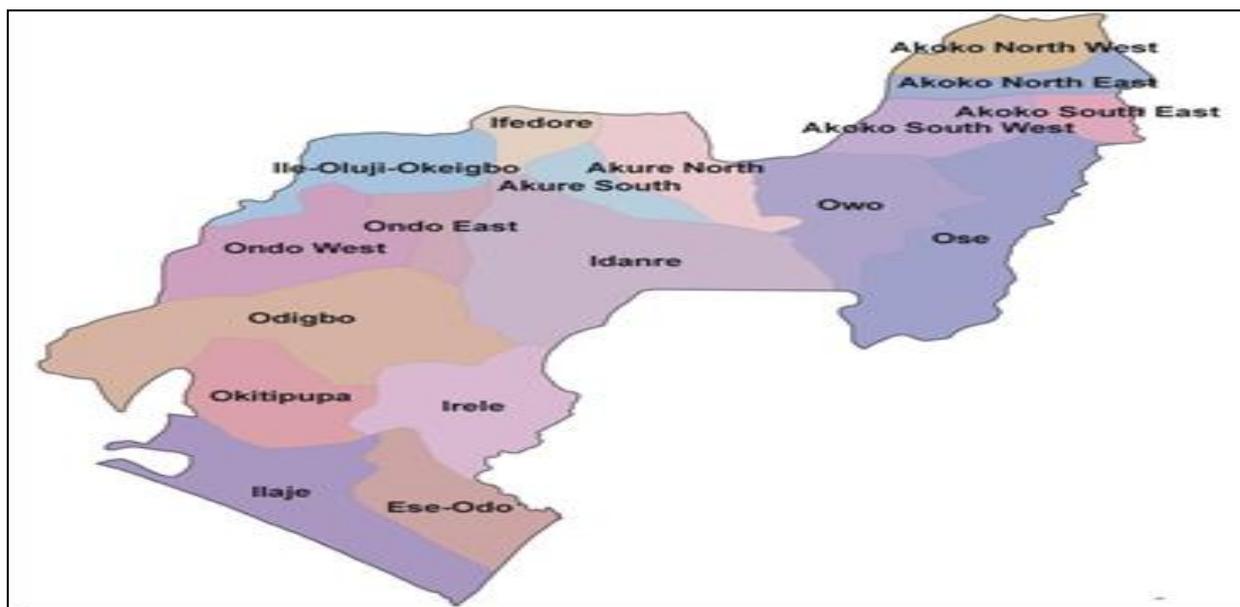


Fig.2. Map of Ondo State showing the Local Government Areas that specifies the Akoko Region

Table 1. Communities selected for the study in Akoko division, Ondo State, Nigeria

LGAs	Selected Communities
ANE	Ikare, Ise, Iboropa, Auga and Ugbe
ANW	Ogbagi, Afin, Ajowa, Irun and Okeagbe
ASW	Oka, Oba, Ikun, Akungba and Supare
ASE	Isua, Ifira, Sosan, Epinmi and Ipe

RESULTS AND DISCUSSION

The socio-economic status of the respondents was presented in Table 2. The results revealed that though the respondents were dominated by males (63%), adults of over 30 years of age (95%), Muslim (48%), illiterates (55%) and mostly of small (31%) and medium economic status (50%) yet recognition of the species (*M. myristica*) cut across the defined socio-economic classifications. Thus the field observation revealed that the recognition of this tree species transcends socio-economic classification of the respondents. A gross dearth on investment on the species abounds in the study area. This observation aligned with the previous observation of Kayode (2008). Studies by Donovan and Mills (2014), Mills *et al.*, (2016) and Nero *et al.*, (2018) have also revealed that people with low income were less likely to participate in tree planting due to a number of reasons that included the lack of space to plant trees, the long time taken to realize benefits from trees, the interference of tress with building foundations and roofs when cultivated in the household environment, the time and other resources consumed in cleaning wastes such as falling litter and trees association with some negative

incentives such as serving as hideouts for criminals, habitats for dangerous pests, etc when planted in around human settlements.

None of the respondents possessed *M. myristica* tree (Table 3), only 3% of the respondents knows someone who owned *M. myristica* tree. Similarly only 4% of the respondents (Table 3) claimed to have seen this tree species before the study. 94% of the respondents had seen the seeds of this species which were sourced from markets or seen in the houses of relations, friends and neighbours. Thus field observation revealed that the task of identifying the tree species was lacking among the respondents however familiarities abounds, especially by the women, on the seeds of the tree as they were available in the market thus supporting the previous assertions of some previous researchers such as Voeks (2007), Camou-Guerrero *et al.*, (2008), Souto and Ticktin (2012), Honfo *et al.*, (2015) and Salako *et al.*, (2018).

All the respondents (100%, Table 3) however claimed to have used the seeds of this species, mostly as spices while only few respondents (28%, Table 3) have used the seeds as medicine. 96% of the respondents expressed willingness to plant the species either in their household farms or household areas or both. The willingness to plant the species by respondents (96%, Table 3) was skewed towards planting for both subsistence and economic reasons rather than planting for subsistence or for economic reasons only. Sher *et al.*, (2014) had earlier made similar observation.

Table 2: Socio-economic classification of respondents in Akoko division, Ondo State, Nigeria

S/n	Feature	Description	Proportion (%) of Respondents/ LGA*				Average total
			ANE	ANW	ASW	ASE	
1	Sex	Male	60	52	66	68	62
		Female	40	48	34	32	38
2	Age (Yrs)	<30	12	4	0	2	5
		30-50	46	36	48	42	43
		>50	42	60	52	56	53
3	Religion	Christian	48	44	40	44	44
		Muslim	46	56	50	40	48
		Others	6	0	10	16	8
4	Literacy	Literates	30	52	40	56	45
		Status	70	48	60	46	56
5	Economic	Small	30	36	30	28	31
		Medium	50	52	40	56	50
		High	20	12	30	16	20

Table 3: Discernment of randomly selected respondents on *M. myristica* in Akoko division, Ondo State, Nigeria

Attribute	Proportion (%) of Respondents	
	(n= 200)	N*
1. Own <i>M. myristica</i> tree	0%	
2. Know someone who own <i>M. myristica</i> tree	3%	
3. Seen <i>M. myristica</i> tree before	4%	
4. Seen <i>M. myristica</i> seeds	94%	
5. *Sources of the seeds seen (N=188):		
(a) Purchased	100%	
(b) Houses of relations / friends / neighbours	87%	
6. Have used <i>M. myristica</i> seeds before	100%	
7. *Form of usage of <i>M. myristica</i> seeds (N=200)		
(a) As spices in soups	100%	
(b) As medicine	28%	
8. Could be interested in planting <i>M. myristica</i>	96%	
*Proposed location of planting (N=191)		
(a) Household farms only	52%	
(b) Household areas only	21%	
(c) Both household farms and areas	27%	
*Reasons for the proposed interest in planting (N=191)		
(a) Subsistence use	25%	
(b) Economic use	37%	
(c) Both subsistence and economic uses	38%	
Not willing to plant <i>M. myristica</i>	4%	
*Reasons for unwillingness (N=9)		
(a) Tenure issue	75%	
(b) Possible change in residence	25%	

Field observation revealed that respondents' interest in investing on this tree species was attributed to its spices and medicinal values. Panickar (2013) has earlier observed that herbs and spices have been used since ancient times to not only improve the flavour of edible food but also to prevent and treat chronic health maladies. This tradition has continued even after the advent of modern medicine due to an increased interest in understanding the nutritional effects of herbs/spices more comprehensively.

Few respondents (4%, Table 2) were not willing to cultivate the species. The lack of willingness was mostly attributed to tenure issues (75%, Table 2) while 25% feared that they might change their places of residence later. Studies by WAC (1994) and Kayode (2011) have observed that insecurity of tenure or unclear rights to land are strong disincentives to tree growing. Efforts that will circumvent this is now required in the study area. Tree cultivation practice, as earlier observed by Leakey (2011) will encourage diversifications and conservation. The use of this species for spices and medicine is expected to serve as incentives to its cultivation. Study by Garen *et al.*, (2009) revealed that on-farm tree planting decisions are influenced by the market, food, medicinal, cultural and other social values of the tree species.

Also in Nigeria, previous efforts to encourage tree cultivation have failed woefully (Kayode and Kadeba 2001) as governments have continued to promote the cultivation of exotic species to the detriments of the indigenous species. This attitude will continue to fail to yield the desired results. Schreckenber *et al.*, (2006a) observed that indigenous

species are poorly integrated in existing government policies dealing with poverty reduction. Also, research on agroforestry policies that include indigenous species is scarce (Schreckenber *et al.*, 2006b). In Nigeria, a gross dearth of policies that could encourage investment in indigenous tree species abounds. The existing policies focused primarily on exotic species especially *Gmelina arborea*, *Tectonia grandis* and other export species such as rubber and cocoa. Studies by Schreckenber *et al.* (2006a), Laird *et al.* (2010), Ndoye and Awono (2010) observed that in many countries, government policies' focus on indigenous species are often highly normative. A shift in this approach is now required, especially in Nigeria where only less than 10% of her land area is under forest reserves (NEST 1991). The need for domestication of the indigenous species cannot be over-emphasised. Leakey and Newton (1993) had earlier advocated this position.

In conclusion, this study expressed the willingness of respondents in Akoko division of Nigeria to invest in this tree species. Therefore concerted efforts that will enhance the attainment of this desire should be encouraged.

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