






Sociocultural relevance of the bottle gourd and selected species of Cucurbitaceae family in West Africa



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Background: Since time immemorial, humans have devised means to improvise for survival on the planet earth. The environment has been the source of materials for manufacturing objects that have supported human existence. These materials include plants (plant parts and by-products) such as the Cucurbitaceae species.

Aim: To discuss bottle gourd and some selected species of Cucurbitaceae in relation to the history, sociocultural and spiritual lives of the West African people.

Methodology: A literature search was conducted on electronic databases such as *Google Scholar*, *Google Books*, *Scopus*, and *Web of Science*. The search was performed using several terms and free text words, combining them in an appropriate manner. The authors further set inclusion and exclusion criteria to screen for relevant articles.

Results and discussion: Plants play crucial roles in the global economic, social, cultural, and spiritual stability. Several plant families have especially played a fundamental role(s) in the spiritual and cultural ceremonies, and history of many tribes and communities in Africa. This is because entertainment tools such as rattles, drums, harps, and lutes used during most of these ceremonies are often by-products of plants. This study revealed that Cucurbitaceae family is a spectacular class of plants with such roles. Traditional musical instruments derived from bottle gourd, *Telfairia occidentalis* and *Momordica charantia*, form an integral part of the history, spiritual and sociocultural life of some West African communities.

Conclusion: The history of some tribes in West Africa is linked to specific Cucurbitaceae species.

Keywords: African culture; Cucurbitaceae species, bottle gourd, musical instruments

Introduction

The bottle gourd, *Lagenaria siceraria* (*L. siceraria*) (Mol) Standley, is a plant with remarkable morphology mostly characterised by its large hairy and rounded leaves with large vines bearing wide white flowers (~10 cm) that open at night (Schaffer & Paris 2003). It produces fruit with a long history of benefits to mankind across continents, climates, and cultures (Ellert 2006). The plant produces fruits with tremendous and fascinating shapes and sizes (Schaffer & Paris 2003). However, the big round-shaped bottle gourd fruit is more common in West Africa.

The various shapes include oblate, spherical (or ovoid), and pyriform. Other shapes include: club-shaped, dipper-shaped, bilobal, or cylindrical (Heiser 1993). In Nigeria, 24 fruit shapes are present viz., Snake Gourd, Pot Gourd, Bushel Gourd, African Bottle Gourd, Indian Gourd, Caveman Club Gourd, Cup Gourd, Kettle Gourd, Long Handle Dipper Gourd, Extra Large Pawpaw Gourd, Warded Bushel Gourd, Penis Shield Gourd, Palm Wine Gourd, Swan Gourd, Water Jug Gourd, Mini Dipper Gourd, Chinese Bottle Gourd, Long Siphon Gourd, Powder Horn Gourd, Goose Neck Gourd, Base Ball Gourd, Bird House Gourd, Nigeria Rattle Gourd and Microphone Gourd (Awala, Ndukwu & Agbagwa 2019). These morphological features of bottle gourd make it a versatile raw material to produce many cultural tools such as bowls for spiritual ceremonies, musical instruments in different parts of Africa, and handy storage for ceremonial traditional food and drinks.

The bottle gourd, *L. siceraria*, is often used in place of the fruit of the Calabash plant (*Crescentia cujete*) and is commonly referred to as Calabash. However, to avoid misconception, the use of the word 'Calabash' in this review will refer only to the dried fruit or finished product of *L. siceraria*.

Significance of study

The African history and culture are based on several myths and beliefs; whilst some of these are common to some regions of Africa others are specific to certain communities and tribes. They involve the roles of certain inanimate objects, animals, and plants in the existence of humankind. Plants and their by-products play significant roles in the lives of Africans. However, the spiritual, sociocultural, and historical relevance of plants has not been well highlighted in scientific literature. Some plant species are the bedrock on which the establishment and history, sanity, unity, and the advancement of several communities in Africa lie. Beyond the use of Cucurbitaceae plants as food and their roles in the African traditional medicine system, it is beneficial to document the sociocultural roles of these plants in West Africa. Several species of Cucurbitaceae and their by-products are like gems in the African culture. For instance, specific species are used as a medium of communication with members of the community, and with the spirit of the dead, spiritual fortification for protection, a tool to instil moral values and mutual respect in West Africa.

In the Cucurbitaceae family, the bottle gourd plays vital role in the African traditional music industry because of its use in the construction of several traditional harps and lutes. Various West African traditional musical instruments made from gourds were acquired by Europeans who visited Africa in the past centuries and some of these pieces have been deposited into European museums. Some of these instruments are national treasures in some parts of West Africa. Therefore, this review aims to investigate the Cucurbitaceae species that are related to the history, and the socio-cultural and spiritual lives of the West African people and West African traditional musical instruments produced from bottle gourd. The objectives were to: (1) determine which species of the Cucurbitaceae family are highly revered in specific communities, tribes or countries in West Africa, and their roles in the lives of the people; (2) determine the musical instruments produced from bottle gourd and their specific roles in the history, and the social, cultural, and spiritual lives of the communities; and (3) to determine musical instruments used across West Africa and those recognised as cultural heritage.

Methodology

A literature search was conducted on electronic databases such as *Google Scholar*, *Google Books*, *Scopus*, and *Web of Science*. The search was performed using several terms and free text words (such as 'Cucurbitaceae species in West Africa', 'cultural, social and spiritual use of Cucurbitaceae') combining them in an appropriate manner. The search also focused on old literature with crucial information about the relevance of Cucurbitaceae species in the history of the West African people as this information is on the verge of extinction. The authors further set inclusion and exclusion

criteria to screen for relevant articles. Each of the identified articles was independently reviewed to determine eligibility and extract study information.

Results and discussions

Information sourced from the literature shows that bottle gourd/calabash, fluted pumpkin and *Momordica charantia* are major species of the Cucurbitaceae family with crucial roles in the African region ranging from the historical significance, maintenance of good morals and communal unity and peace, protection from the and fortification against evil. The bottle gourd (or calabash) has been used since ancient times for the construction of musical harps and lutes which have played various roles including relaxation, set cadence, evoking of spirits, and a tool of war amongst many others. Some musical instruments are used across West African countries whilst some are used only by specific tribes or communities.

The calabash in relation to the myths, history, and sociocultural activities in Nigeria

Yoruba myth of earth creation

According to Yoruba mythology, the universe from the beginning was made up of only two elements. These elements were the sky above and the water beneath (Lynch & Roberts 2010). Oduduwa who was believed to be the servant of the Supreme Being (Olodumare) created the earth. According to the myth, Oduduwa was believed to have ventured down from heaven with a long chain carrying a Calabash filled with sand along with a five-toed fowl (Pemberton III 1997). He poured the sand in the Calabash on the water and as a result, the earth came into existence. Each step the fowl took produced new ground. A chameleon came down to determine if the land was dry and solid enough. The remaining water bodies in existence today are believed to be places not touched by the sand. However, besides the relevance of the Calabash in the creation of the earth, its spiritual significance to the Yoruba people is cosmic.

The calabash as a spiritual tool in the Yoruba land

The calabash plays an important role in ritual practices and serves as a container for spiritual and magical substances (Rice 2017). During the Yemoja festival, the calabash is used to convey spiritual matters from the forest into the palace where further rituals are carried out by the King. The Calabash which is carried by the Yemoja priestess would contain a mixture of spiritual substances and water (Rice 2017). The consecrated contents of the calabash would revitalise the Oba (king) and re-establish his mandate to reign (Rice 2017). However, should the Calabash be filled with the feathers of a dead parrot, it could signify his death (Rice 2017).

During 'Orisa' arts and worship, prominent symbols are carved on Calabash (De Silva 2006). At the end of the 'Sango' festival in Ede, a woman would carry the Calabash

as a percussion instrument (Beier 1959). Meanwhile, a virgin priestess called 'Arugba' of the 'Olufon' cult would carry the calabash to depict heaven and earth (Beier 1963). Epic imagery displaying the origins of 'orisa', and its related social practices are popular themes found in Yoruba land and it is not complete without showing the calabash (De Silva 2006). A female carrying a calabash on her head symbolises the connection between the 'orisa' devotee and the spiritual world (De Silva 2006) and when the woman kneels and holds a calabash, it signifies reverence to 'Osun' (Carroll 1967).

In an event where a king, for instance 'Alaafin', is rejected by his chiefs (the 'Oyomesi') for oppression, evil behaviour, or political intrigues, this would be communicated to him by the 'Bashorun' (Aborisade 2018). The 'Bashorun' (also known as the Prime Minister) would present an empty calabash or one filled with parrots' eggs to the king with the declaration, – 'the gods reject you; the earth rejects you; the people reject you' (Afolayan 1998). In 1817, Afonja who was the 'are-ona kakanfo' (war General) declared Ilorin's independence by sending an empty calabash to the 'Alaafin' (Falola 2018).

Importance of calabash in the social life of Yoruba people

When a meeting is called to discuss pending issues affecting a community or to settle a disagreement between community members, the calabash is used to serve kola nuts which are then broken and shared amongst attendees before the commencement of the meeting, an indication that the meeting will bring about peace and unity amongst the people. Calabash is also used as a decoration in houses as its beautifully tattooed body adds beauty to a room (Figure 1). The calabash is an important tool used during various ceremonies and festivals such as the Argungu fishing festival in some Northern parts of Nigeria (Figure 4c).

In earlier days when plastic bowls had not been introduced, the calabash was used as a container to store ink, mix, and hold dyes (Williams 2008) to dye clothes (Bray 1969) popularly known as 'Adire' in the Yoruba land (Figure 4a). 'Adire' is inextricably linked to the economic and social life of the Yoruba people (Gausa & Abubakar 2015). The designs on the clothes depict cultural heritage, using a variety of codes and symbols thus creating a feeling of unity and patriotism for which the Yoruba culture stands for (Kashim 2013). In the olden days, 'Adire' was the Yorubas' pride and was often worn when attending the most important social gatherings and ceremonies in Yoruba land such as the wedding ceremony where life-long relationships are established between two families giving their sons' and daughters' hands in marriage. Before the day of the ceremony, grandmothers, aunts, and female cousins prepare the bride for her ceremony by putting her through a beauty regimen. This involves scrubbing and massaging her skin with various beneficial ingredients mixed in a calabash. The traditional wedding day comes with lots of items from the groom's family mostly carried in beautifully



Source: Konan, M.A., 1974, 'Calabashes in Northern Nigeria', *Expedition* 17(1), 2

FIGURE 1: Decorated gourds.



Source: Lo-Bamijoko, J.N., 1987, 'Classification of Igbo musical instruments, Nigeria African Music', *Journal of the International Library of African Music* 6(4), 19–41

FIGURE 2: Sekere.

carved and painted calabash and in some cases, a bottle gourd ('Akeregbe') filled with fresh palm wine (Figure 3b).

Dried bottle gourd and Calabash as revered cultural tools amongst the Igbo people

The relevance of dried bottle gourd in the daily lives and culture of the Igbo people is noteworthy. During wedding ceremonies, kola nuts (*Cola nitida*) and nuts of bitter kola (*Garcinia kola*) are placed in a small calabash or tray and are broken by the elders and shared amongst the people to seal the friendship between the two families. The sharing of kola nuts and bitter kola is a common practice amongst other tribes of Nigeria and West African countries but more pronounced

amongst the Igbos. Calabash is used to predict marriage blessings. According to tradition, the bride is given a calabash and then asked to break it. The number of broken pieces is believed to signify the number of babies she will bear.

During an Igbo traditional wedding ceremony, the father of the bride would give his daughter a long-necked dried bottle gourd containing fresh palm wine and ask her to present it to the groom who is hidden in the crowd. The bride would dance around in the crowd with the palm wine, locate her groom and present the palm wine to him to drink (Figure 3). If the groom accepts the drink, it signifies that he is the man she wants to marry, and the father of the bride then consents to their marriage. It is generally known in Nigeria that a traditional Igbo wedding ceremony is incomplete without the use of calabash/bottle gourds.

The calabash, a valuable item in the Kanem-Bornu empire

The calabash plant is of great value in the economy, agriculture system, and history of the Kanem-Bornu kingdom (Abubakar 2018). In Kanem-Bornu, the calabash is utilised in almost every aspect of human daily activities such as eating, washing, drinking, decorations, worshipping, medicine, cooking, playing, fishing, gaming, mourning, marriage, solemnising, farming, music, weaponry, hunting, and food processing. However, the vital role of the calabash in farming, trading, and carving businesses in the Bornu-Empire is not well documented (Abubakar 2018).

The commercial cultivation of calabash and export in the Empire started much later after the unanticipated shortage of calabash caused by accelerated human population growth. Calabash plants naturally grew in the wild in most parts of the Kanem-Bornu for centuries until the Empire expanded and reached a population size that could no longer be sustained by the available plants in the wild. Calabash has since been a crucial tool of preserving and

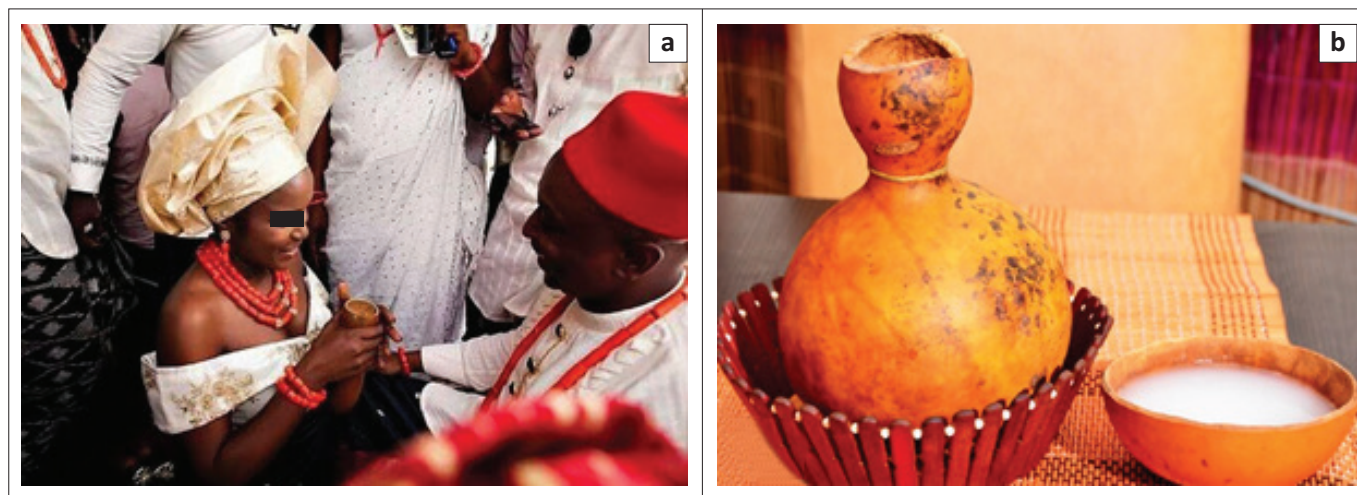
communicating cultural beliefs as many aspects of culture have been preserved and promoted by the calabash. For example, a well-carved or decorated calabash could convey the history, place of origin, and thoughts of an artist (Abubakar 2018).

The role of calabash as a spiritual tool in the protection of the Kanem-Bornu Empire in the 19th century

The son of Sheik Al-Kanemi (Al-Kanemi Muhammed Al-Amin) was a warrior, scholar, and religious leader who became the most powerful figure in the Kanem-Bornu Empire by protecting his people from the Fulani Jihad in the 19th century (Falola 2018). The Jihadists reached Bornu in 1808 but were driven out. In preparation for the battle, Al-Kanemi spent days praying and made a special charm out of the verses of the Quran written on a small calabash and when they met at Birni Gazargamu, he threw the charm to the floor, shattering it and the Fulani flee. He established his dynasty in 1814 at Kukawa as the Shehu (King) (Falola 2018).

Apart from bottle gourd/calabash, other Cucurbitaceae species are also of high relevance in the history and establishment and culture of tribes of West Africa. Fluted pumpkin, *Telfairia occidentalis*, is a strong, climbing, perennial vegetable widely cultivated in eastern Nigeria for its nutritious leaves and seeds (Okoli 1984), indigenous to south-eastern Nigeria and found throughout Sierra Leone, Angola, and Uganda (in eastern Africa) (Odiaka, Akoroda & Odiaka 2008), Benin Republic, and Cameroon (Kayode & Kayode 2011). The stems are branched with long twisting tendrils, and three to five leaflets with terminal leaflets up to 15 cm long. The male plant is grown principally for its leaves and seeds which are important ingredients for making soup (Iwu 1983).

The spread of Igbo people to the other parts of the country has greatly influenced the cultivation of fluted pumpkins in almost all the parts of the country (Akoroda 1990). It has various traditional names amongst different tribes in Nigeria



Source: naijaglamwedding.com and Daily Advent Nigeria

FIGURE 3: Bride presenting palm wine in a small gourd to the groom during an igbo traditional wedding ceremony (a) and A typical palmwine in a bottle gourd and served in a small calabash (b).

such as 'Ugu' in Igbo, 'Iroko' or 'Aporoko' in Yoruba, 'Ubong' in Efik, 'Umeke' in Edo, and 'Umee' in Urhobo (Akoroda 1990; Badifu & Ogunsua 1991). In the middle belt, which is in the Guinea Savanna region of Nigeria, *T. occidentalis* is being cultivated as a backyard and commercial crop during the wet and dry seasons (Odiaka et al. 2008).

Sociocultural importance of fluted pumpkin (*Telfairia occidentalis*) amongst the Igbo people

Several folklore and tales in the Igboland are related to fluted pumpkin. For special occasions, such as when a woman gives birth or when a wife seeks special favours from her husband, *T. occidentalis* is cooked together with bitter leaf (*Vernonia amygdalina* Delile), 'Oha' (*Pterocarpus soyauxii* Taub), 'Okazi' (*Gnetum africanum* Linn.), and 'Ugba' (*Pentaclethra macrophylla* Benth.). In this instance, the crop symbolises luck, joy, and happiness (Akoroda 1990). If a pregnant woman intentionally or unknowingly plucks an immature fruit of *T. occidentalis* from its vine, it is believed that the act could invoke miscarriage and the death of her foetus (Akoroda 1990). It is also an abomination for a woman to cut (kill) the *T. occidentalis* plants of a mate. A woman who performs such an act, must appease the goddess of the earth otherwise, the field remains desecrated and is regarded unfit for crops. Similarly, a woman who harvests from the fluted pumpkin vine of an absent neighbour without prior permission has done a great evil (Akoroda 1990).

Traditionally, elderly women would pay the culprit a visit like that of a funeral ceremony to demand appeasement of the field and would pray after proper sacrifices saying, 'let us not again witness more of such acts in our lifetime' (Akoroda 1990). This tale suggests the importance of each female adult planting *T. occidentalis* in her garden because it is considered disgraceful and expensive to harvest the vegetable without the neighbour's consent. Consequences of stealing the plant include loss of social honour and high expenses relating to the cost of sacrifice to appease the earth goddess, 'Ani' (Akoroda 1990). This folklore indicates the importance of fluted pumpkin as a vital part of the culture of Igboland and Igbo agriculture systems for many generations, possibly before the arrival of Europeans to the area (Akoroda 1990). Therefore, the fluted pumpkin is sacred and highly revered amongst the Igbo people and has been used as a tool to instil good values, morals, and mutual respect amongst women in Igbo rural communities.

Sociocultural importance of *Momordica charantia* in the Togolese history

Momordica charantia is a highly revered plant in the history and culture of the Togolese. An investigation of the traditional uses of *Momordica charantia* in Togo revealed it as one of the most important local medicinal plants utilised in both ritual and ethnomedical practices (Beloin et al. 2005). Many traditional healers indicated that *M. charantia* has powerful medico-spiritual properties, protection against curses, diseases, evil spirits, spells, and madness (Beloin et al. 2005). It is also claimed to help in obtaining favours and used as a purifying plant before the spiritual manipulation of sacred objects (Beloin et al. 2005).

The plant is used during traditional ceremonies to connect the living with their ancestors, particularly amongst the 'Guin' tribe of coastal Togo (Beloin et al. 2005). The ancestors of the 'Guin' lived on the coast of Ghana near Elabadi in Accra (Beloin et al. 2005). In the mid-1600, they fled because of intertribal warfare fuelled by the slave trade and moved to the east which is now Togo (Cornevin 1969). According to oral tradition, they wore a necklace of *Momordica* vines which helped to repel their enemies and kept them safe during their journey to Glidji-Kpodji on the northern side of Lake Togo.

To date, the plant is considered a powerful charm and it is worn as a necklace, wrist or ankle bracelet, or crown to traditional ceremonies (Beloin et al. 2005). In Mina, the dialect of the Guin people, it is referred to as 'guinsika' (the gold of the Guin) or 'guingbe' (plant of the Guin) (Beloin et al. 2005). The plant is commonly used in traditional ceremonies including the famous consultation of the oracle named 'Epe-Ekpe' or 'Ekpessosso', which involves the uncovering of a sacred stone to predict the fortunes of the coming year (Piroux 1977). The king of the Guin, who is also the fetish priest of the sacred forest of 'Glidji-Kpodji', and his male attendants ('vodussi') wears *Momordica* vine during purification ceremonies (Beloin et al. 2005). African traditional ceremonies are often accompanied by chanting and singing where traditional musical instruments such as rattles made of gourds or chordophones, in which gourds are used as resonators, are played.

Musical instruments derived from dried gourds of *Lagenaria siceraria*

The use of fruits of *L. siceraria* known as bottle gourds in the production of musical instruments by West African tribes is unique. A variety of musical African traditional instruments are produced using bottle gourds and these include rattles, harps, and lutes. Most of these instruments are common to the region and some originate from specific areas but are now widespread across the West African region as the people of the area migrate to other parts of Africa. For example, the Sekere which is indigenous to Nigeria is also used in other West African countries such as Ghana and it is referred to as Axatse amongst the Ewe people of Ghana (Nettl et al. 2015) and Ficaw in Cameroon. Other West African traditional musical instruments sourced from gourds include: Kora, Bolon, and Balafon.

Sekere, a sensational musical instrument of the Yoruba people

'Sekere' is a musical instrument with ropes bearing beads and/or cowries woven on the outer part of a dried, carved, and painted bottle gourd (Figure 2). It is produced from matured fruits of bottle gourd and plays a crucial role in traditional and social ceremonies. At Yoruba traditional ceremonies, the beating of the 'Sekere' goes together with praise songs and spectacular dances (Waterman 1990). High calibre ceremonies in the southwestern region of Nigeria such as weddings and the coronation of a new king which involve feasting and rhythmic dancing to music are not complete without the use of the 'Sekere'.



Source: Abubakar, B., 2018, *Calabash complete*, viewed 08 February 2022, from <https://www.researchgate.net/publication/325989535>

FIGURE 4: Calabash Inkpot (a), Decorated long-necked gourd (b), Gourds used during fishing festival (c).

In addition to these, the Sekere is commonly used in traditional ceremonies in the Yoruba land which includes amongst others Odun Olojo, Osun festival, Olumo festival, and new yam festival (Figure 2). It serves as a rattle and can be beaten like a drum, thrown into the air, and caught still in the rhythm (Chinyere et al. 2009). To date, 'Sekere' remains a sensational musical instrument in the Yoruba land.

Balafon, a unique West African traditional heritage

The term 'Balafon' is used in both French and English languages, and it refers to a class of West African resonator xylophones, where hollow gourds hang beneath each key, tuned to resonate at the same frequency (McPherson 2018). Griots (also known as Jeli) are musicians and orators which is a hereditary position that involves singing praises and genealogies at social and spiritual gatherings, such as rituals and festivals (McPherson 2018). These musicians specialise in playing the 'Balafon' which is an inherited role

that has been passed down from one generation to the next amongst the Griots.

The 'Balafon' which originated from Mali is now used in different parts of the world because of the migration of the Mande people and the Griots globally. The Balafon is now found in countries such as Mali, Guinea, Senegal, Gambia, Guinea Bissau, Republic of Guinea, Sierra Leone (Jessup 1983), the Senufo of Côte d'Ivoire (Zemp & Soro 2010), the Lobi of Burkina Faso (Colnago 2007), and the Tusia of Burkina Faso (Strand 2009). The word 'Balafon' is derived from the Manding words *bála fó* or 'xylophone talk' (Zemp & Soro 2010). Soso Bala, a 'Balafon' (frame-xylophone), is a remarkable example of a musical instrument (Figure 5) that has been preserved over a long period in the town of Niagassola in modern Guinea (Blench 2013). This artefact is without doubt the most fascinating and best indication of the importance of gourds in Africa and its link to African existence and heritage.



Source: McPherson, L., 2018, 'The talking Balafon of the Sambla', *Anthropological Linguistics* 60(3), 225–294. <https://doi.org/10.1353/anl.2019.0006>

FIGURE 5: Sambla Balafon in Toronso, Burkina Faso.

There are different types of 'Balafon' in West Africa according to construction and the geographical origins of the musician and the builder (Yip 2020). Amongst the Bobo and Bamana tribes, a single-row pentatonic 'Balafon' is amongst the most important musical instruments used in rituals and daily activities (Yip 2020). McPherson (2018) described the production process of the Sambla 'Balafon' as follows — the traditional Sambla 'Balafon' has 23 keys and are carved from the wood of the *Pterocarpus erinaceus* tree known in Seenku as bënë.

According to the traditional production process, only dead wood trees are used in the manufacture of the Sambla 'Balafon'. The wood is subsequently carved into keys, smoked to dry until 'it becomes hard like metal and then the keys are tied to a wooden frame with string. Traditionally, the 'Balafon' is assembled using the thin, soft skin of the royal antelope to build the frame and attach the keys to the body of the resonator (the dried, half gourd). As a result of habitat loss and hunting, it is now a challenge to obtain this leather, and goatskin is now used as a replacement for the frame construction. A small hole is made into each resonator gourd, which is covered by a thin membrane that is traditionally made from spider egg sacs but now has been replaced by more durable plastic or paper (McPherson 2018).

The species of gourd used by the Sambla and the neighbouring Tusia differs from the gourds used on the more universal Jula 'Balafon', and they are cultivated specifically for this purpose (Strand 2009). The gourds used are more oblong and coated in clay which gives them a reddish appearance, with the application of this clay being kept a secretive process, which is only known to the initiator (McPherson 2018). The Keita brand of 'Balafon' usually consists of 20 wooden slats sourced from rosewood and different sizes of natural calabashes used as resonators

(Yip 2020). The calabashes are dried and emptied after which one to three small holes of a centimetre in diameter is cut into the shell. The holes are then covered by fine membranes to produce a buzzing effect (Yip 2020).

The Mande 'Balafon' is a heptatonic traditional xylophone, traceable to the Sosso Bala which is believed to date back to the establishment of the Mande Empire of Mali in the 13th century (Williams 2006). The Sosso Bala is preserved in Guinea and is regarded as a national treasure and symbol of unity amongst the Mande people. The Dökala Kouyatés who are the indigenous people in the area from which the Sosso Bala originated have chosen to remain in the Mande heartland area which is located near the border of the present-day countries of Guinea and Mali. In this area, they have preserved the Sosso Bala, the instrument from which all Mande 'Balafon' originated.

To preserve the Mande musical culture, a biannual international festival is observed with the help of the Guinea government to celebrate the importance of the Sosso Bala which has been recognised by The United Nations Educational, Scientific and Cultural Organization (UNESCO) as a 'masterpiece of the oral and intangible heritage of humanity'. The 'Balafon' originally belonged to Soumaoro Kanté, the oppressive, sorcerer-king of the Susu people, and the Bala was saturated with supernatural powers as it was created and given to Soumaoro Kanté by Jinns or the supernatural spirit (Williams 2006).

According to Conrad and Kondé (2004), Soumaoro had to bargain with the king of the Jinns, Jinna Maghan, to gain the Sosso Bala, as the instrument belonged to all the Jinns. According to Mande oral history, Soumaoro used the supernatural powers of the Sosso Bala for personal benefit as he consulted the instrument as an oracle to reveal future conditions that would support his battles (Williams 2006). Thus, Soumaoro Kanté played the instrument to gain

insights into his future and to glorify his past achievements. The Sosso Bala was a reservoir of spiritual power for Soumaoro and a motivation for his worldly achievements. Thus, the Sosso Bala symbolises and embodies Soumaoro's power. Sunjata defeated Soumaoro and took the Sosso Bala as a war trophy after which he burned Soumaoro's palace and all his other possessions. The Sosso Bala is thus the main historical object and sole symbol of Soumaoro's defeat by Sunjata and his united army of different Mande clans, and is therefore regarded as a symbol of the unity and freedom by the present-day Mande people.

The Bolon, an ancient and special West African harp

The component and shape of the Bolon are described by Sylla (2017). The Bolons are made from a ubiquitous gourd which is used as a component in a lot of West African traditional musical instruments (Sylla 2017). It can be made from a complete large gourd, or two smaller gourds cut and sewn or glued together. The Bolon is a traditional musical instrument of Mande origin and consists of half a calabash which is used as a sound box and a wooden pole that forms the neck (Camara, O'Toole & Baker 2013). It has three or four strings and a neck that is curved like the bow (Conrad 2010; Stone 2010) of a hunter or warrior.

The Bolon seems to be the oldest style amongst all the Mande harps (Conrad 2010), with a deeper tone than the hunters' harp (Conrad & Konde 2004). The shape of the neck is a 'reflection of the hunters' bow' (Figure 6) and adds to the Bolons magical qualities (Sylla 2017). The Bolon was traditionally played to incite soldiers to battle, commend them after victory (Conrad 2010) and praise them as warriors (Conrad & Konde 2004). Thus, it is an instrument of war. People often mistake a Bolon for a Kora. The Bolon has two or three strings and produces a deeper

sound, which was used by the armies to set the cadence whilst the Kora is used for relaxation purposes (Camara et al. 2013).

Kora, a West African traditional musical instrument with an elegant combination of a harp and lute

The Kora (Figure 6) is an exceptional West African traditional musical instrument made up of a variety of materials which include animal hide, string, metals wood, and the most important which is dried, half gourd. The kora is the youngest of three Jeli musical instruments, the others being the Ngoni (a small lute with 5–8 strings) and the balafon (xylophone with 18 keys) (Durán 2008). Kora belongs to a family of calabash harps which are found in the West African savannah and are of ancient Mandé origin (Durán 2008). It has 21 strings (Camara et al. 2013; Hale 1994; Nettle et al. 2015; Stone 2010) and combines the features of both the lute (with a soundbox and neck) and the harp (Nettl et al. 2015), hence often described as a harp-lute (Durán 2008). The wide bridge that stands upright on the sound table, lifting the strings out in two nearly parallel rows on the Kora is popularly referred to as the 'bellybutton' and is what makes the Kora a distinctive instrument (Durán 2008). Cowhide is stretched over the gourd, whilst strings come off the neck in two parallel rows which are perpendicular to the face of the soundbox (Nettl et al. 2015).

The West African Griot lutes and xylophones are instruments used since ancient times and are so common across West Africa in different cultures and with a variety of names, all the way from northern Nigeria to Mauritania (Durán 2008). Such musical instruments with both straight and curved necks are found all over the sub-Saharan region (Nettl et al. 2015). The kora is the most popular and developed of the calabash harp family with many more strings than the other variants (Durán 2008).



Source: Sylla, C., 2017, *The bolon, a rarely seen member of the harp family*, The Gambia Experience, viewed 10 January 2022, from https://www.gambia.co.uk/blog/article?id=669&fb_comment_id=1253586944653866_4396308443715018.

FIGURE 6: Man, and his son holding Kora, Bamako, Mali (a) Men playing Bolon (b).

Other gourd harps and lutes of West African origin

Most calabash harps tend to have a maximum of 7–8 strings. The most common of these harps is the Donsongoni which means hunters' harp which originates from Wasulu (Durán 1995), a region overlapping three borders of southern Mali, eastern Guinea, and northern Cote d'Ivoire (Durán 2008). The Donsongoni, also known as Kamalengoni is a six-stringed harp (Stone 2010) arranged in two parallel rows of three strings tuned to a pentatonic scale and is played by members of hunters' societies and their specialist musicians, whose ancient traditions are at present being revived in Mali (Durán 1995). Kamalengoni (youth harp) has a distinctive timbre that indicates its regional identity (Durán 1995).

Donsongoni is played in the designated ritual contexts of the hunters' societies whilst Kamalengoni has no such requirements nor special powers (Durán 1995). Kamalengoni is rapidly gaining international recognition (Durán 2008) as a secular replica of the more esoteric and ritual hunters' Donsongoni (Durán 1995, 2008). The Donsongoni is a ritual instrument believed to contain occultic force or energy with a highly distinctive timbre, which evokes, by associative process, the 'mystique' of hunting (Donsoya), and its values such as bravery, skill, cunning and access to that esoteric power that master hunters possess (Durán 1995). Thus, Kamalengoni is a powerless, playful youth version of the hunters' harp. Some calabash harps such as the Simbin of south-west Mali have a single row of strings (Durán 2008).

There are other musical instruments with the major part made of dried gourd that are popularly known or well-documented in the literature. Koworo, commonly known as Dan is an inverted open calabash instrument with a neck for each of its strings. Soron is a large and rarely seen harp of the northeastern Guinea origin, like the Kora but with 12 strings (Charry 2000). Soron is a Mandinka harp-lute with 19–21 strings (Stone 2010), believed to be a predecessor to the kora (Ridenour 2010).

Conclusion

Plants and its by-products are an integral part of the African people existence and survival. The Cucurbitaceae have been a family of significant species since time immemorial and would continue to be a source of comfort and support to the existence of mankind for centuries to come. The record of the use of dried gourd/calabash as either cultural, ceremonial, or spiritual tool in different parts of Africa shows that the calabash is an indispensable African heritage. The calabash and derived musical instruments have significant role in battles for leadership in the history and unity of tribes in West Africa.

Other Cucurbitaceae species are highly revered in the spiritual and cultural life of West Africans and thus have been engraved in the ancient history and minds of the people. Musical instruments made from the bottle gourd

have been sources of unity and healing amongst the African people whilst fluted pumpkin has helped to instil morals and values in women and *Momordica charantia* has helped to protect against curses and evil spirits and to repel enemies. Hence, these species and several others from the Cucurbitaceae family have formed fundamental principles upon which the African culture and social beliefs are built.

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Authors' contributions

With the submission of this manuscript, we would like to undertake that this work is originally put together by the authors and no part thereof has been submitted nor published elsewhere. All authors agree with the contents of the manuscript and its submission to the journal. OO FAJINMI conceived the idea and designed the article. OO Fajinmi and OO Olarewaju wrote the article while GD Arthur, RM Coopoosamy and K Naidoo gave guidance and edited manuscript. No part of the research has been published in any form elsewhere.

Ethical considerations

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