

# The Nigerian Field

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THE ORIGIN OF GOURD CARVING  
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## VARIETIES OF GOURDS (*LAGENARIA SICERARIA*) IN AKWA IBOM STATE

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The genus *Lagenaria* Ser. (family: Cucurbitaceae) is represented in West Africa by four species, three of which were formerly in the genus *Adenopus*. They are climbers or trailers, and the most important is the cultivated *L. siceraria* (Molina) Standley.

*L. siceraria*, also known as the white-flowered gourd or the calabash gourd, is cultivated in all tropical countries, and is found in a wild state in India. Its most probable region of origin is the Africa/Asia conjunction (Burkill, 1985). Belonging to a completely different family (Bignoniaceae) is the calabash tree of tropical America (*Crescentia cujete*) which is grown in Nigeria for ornament. The fruits of *Lagenaria* are usually too bitter to be used as food but, when young and tender, some varieties are reported to be as good eating as pumpkin (Burkill, 1985). Other local uses of *L. siceraria* include: as a source of dye stamps, for printing designs on cloth; as floats by fishermen; as bowls and basins; and as containers for palm wine, oil, gunpowder and seeds. Depending on their shape, medium-sized gourds are used as drinking vessels and ladles, and also as flutes and other musical instruments (Okoli, 1984). Various objects, including shells, bones, pieces of metal or beads, may be attached around carved or pyro-engraved gourds to form rattles (Heiser, 1979). Gourds may also be used as ornaments in the home, after patterns have been cut or coloured on to the surface. Rubin (1970) gives an interesting account of the techniques for decorating gourds and diversity of styles in N.E. State (now Borno State.)

Dried fruits of five different shapes of *L. siceraria* were obtained locally, and the seeds from these fruits were sown on a plot of land behind the Botany laboratory of the University of Cross River State, at Uyo (lat. 5° 02'N, long. 7° 58'E). Ten weeks after sowing, three leaves were measured on each of three plants; fruits and seeds were also measured. The results are given in Table 1. The uses of the fruits in Akwa Ibom State were noted.

In general, *L. siceraria* is an annual, scrambling or climbing musky-scented herb. The stem is robust, furrowed longitudinally and covered with jointed, gland-tipped hairs. The tendrils are usually bifid. The leaf-stalks are 5-30 cm long, with usually two sharply-pointed glands at the top. The leaf-blade is 10-30 cm long, widely ovate with a cordate

\* Present name: Margaret E. Bassey.

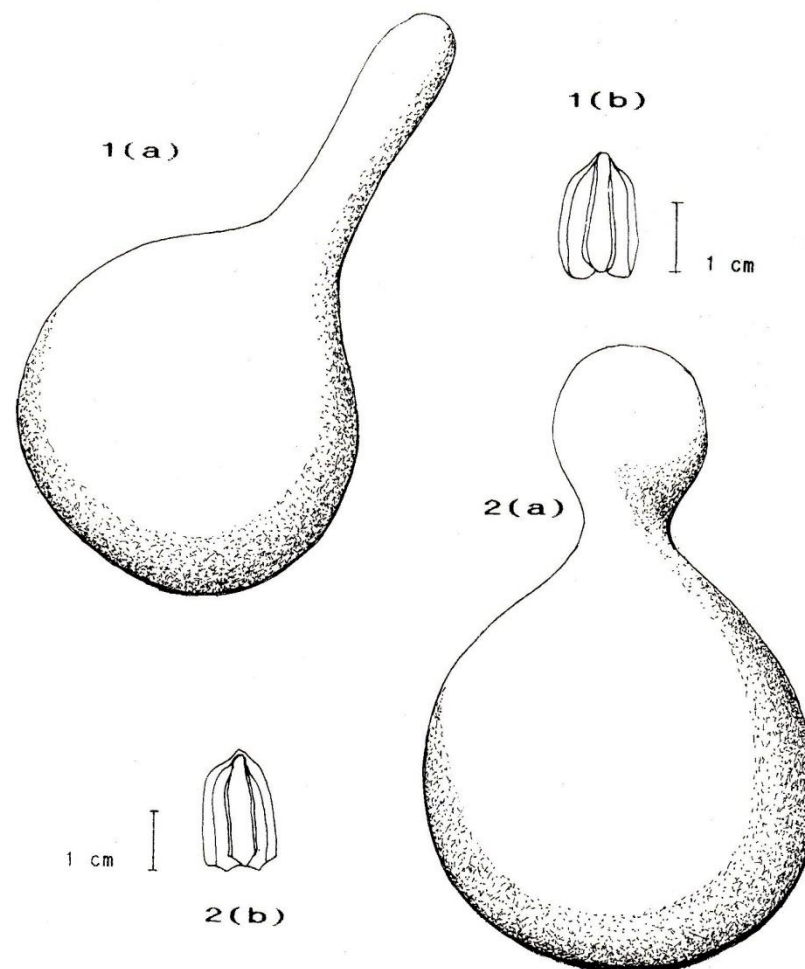


base and broad sinus; it may have 3-7 lobes or an undulate margin, and is softly white-hairy beneath. The plant is monoecious, with solitary unisexual flowers, which are short-lived. The calyx tube is campanulate, 1-1.5 cm long, with five narrow spreading lobes. The five petals are free, white, obovate and woolly, 2.5-5 cm long and 2-4 cm wide. Male flowers, borne on peduncles 5-25 cm long, have three stamens with free filaments; the anthers are white and slightly adhering. Female flowers are short, but lengthen after fertilization; they have an inferior ovary and three thick, bilobed stigmas. Fruits are variable in shape and size; the seeds are generally compressed or flat with two ridges running down the flat surfaces, usually about 2 cm long and 1-1.5 cm wide, white or dark brown in colour, with surface ornamentations.

#### CULTIVARS OF *LAGENARIA SICERARIA*

1. Ikibò. Leaves sometimes lobed. Fruit bottle-shaped. Seeds creamy-white in colour. Commonly used in chiefs' palaces and in palm wine bars as a jug to serve palm wine.
2. Ata Ikim. Fruits with a wide base and globose head. Seeds dark brown. Useful as a keg for tapping and storing palm wine. When covered with beads, it is used as a musical instrument.
3. Iko Ukot/Uta. Leaves lobed. Fruits oblong, sometimes squat (c.16 cm long and 12 cm wide); but may also be over 30 cm long and 7-9 cm diameter). Only the seeds of the squat type were collected -- they are dark brown. The dried fruits are used as tumblers for drinking palm wine. The longer ones are usually cut into two. In the past, the squat forms were grown for chiefs, and it was taboo for "commoners" to use them.
4. Ikpok. Fruits globose with a very short neck, sometimes ribbed. Seeds dark brown in colour, with light brown ridges. After the top half has been sliced off, the fruit is used as a bowl, with the short "neck" serving as a handle to the lid of the bowl. It is often used as a container to keep food warm. The fruit wall may also be cut up and the pieces used as scoops for turning "garri" when it is being fried.
5. Obò Ukebe. Fruits bottle-shaped with a long narrow neck. Seeds of two types, depending on the size of the fruit. In fruits up to 25 cm long, the seeds are creamy-white, 1.3-1.5 cm long and 8-9 mm wide. However, in fruits of 30 cm or more long, the seeds were generally dark brown, 1.6 - 2 cm long, and 11-13 mm wide. The gourds are widely used for giving enemas, the smaller ones for children. They can also be cut up into ladles, when the fruit curves into a kind of handle. Such fruits, after drying, are used as cups called akoop.

Fruits and seeds are illustrated in Figs. 1-5. It is also noteworthy that the local names of these gourds arose from the main uses of the different forms.



*Lagenaria siceraria* cultivars: Fig.1. Ikibò "Let us go and collect". (a) fruit; (b) seed. Fig.2. Ata Ikim "The real keg". (a) fruit; (b) seed.

#### DISCUSSION

The general description of *L. siceraria* given here accords with that of Okoli (1984). The detailed measurements and statistical analysis show that variations exist in the morphology of leaves, fruits and seeds of the different cultivars investigated (Table 1).



Table 1. Morphological variation in leaves, fruits and seeds of *L. siceraria*. (measurements in cm)

	Ikibo	Ata ikim	Iko Ukot	Ikpok	Obo Ukebe	L.S.D.* p=0.05
Leaf Length (L)	17.6±1.8	16.1±2.6	15.9±2.5	19.7±4.8	14.0±4.7	±3.73
Leaf Breadth (B)	23.4±3.4	20.7±3.6	17.9±2.5	26.8±7.0	16.0±5.7	±5.05
Ratio of L : B	0.8 : 1	0.8 : 1	0.9 : 1	0.7 : 1	0.9 : 1	
Fruit Length (L)	33.3±2.1	48.7±2.6	15.5±2.5	34.4±5.5	32.4±1.2	±3.34
Fruit Diam. (D)	24.3±2.1	37.7±1.3	12.7±1.8	36.3±6.2	21.0±5.4	±4.08
Ratio of L : D	1.4 : 1	1.3 : 1	1.2 : 1	0.9 : 1	1.5 : 1	
Seed Length (L)	2.0±0.1	1.7±0.1	1.3±0.1	2.1±0.1	2.0±0.1	±0.11
Seed Width (W)	1.2±0.1	1.3±0.1	0.9±0.1	1.3±0.1	1.2±0.1	±0.11
Ratio of L : W	1.7 : 1	1.3 : 1	1.4 : 1	1.6 : 1	1.7 : 1	
Seed Colour	creamy-white	dark brown	dark brown	dark brown	creamy-white	

\* L.S.D. = Least Significant Difference, at 0.05 probability level.

The reason for these differences could be genetical or ecological. However, the fact that the differences persisted when they were grown together in the same environment suggests that the variation is genotypic rather than phenotypic.

In the samples studied, variations in leaf-shape were relatively slight (in the length-width ratios), but *Ikpok* was clearly different from the others. *Obo ukebe* had two types of seeds, differing in size, shape, colour and surface ornamentation, but the fruits that produced these seeds were the same shape, and differed only in size.

In spite of their traditional importance as containers, and for musical instruments, etc., gourds are becoming obsolete, and among the people of Akwa Ibom State, the cultivation of gourds is no longer common. They are being replaced by plastic and glass receptacles. In those houses where gourds can be found, they are usually kept for occasions sanctioned by custom. Some palm wine bars use them, because many people still prefer to drink palm wine from gourd cups. Also in chiefs' palaces, palm wine is traditionally stored and served in gourds. Moreover, *Ikpok* is still being cut and used for frying "garri".

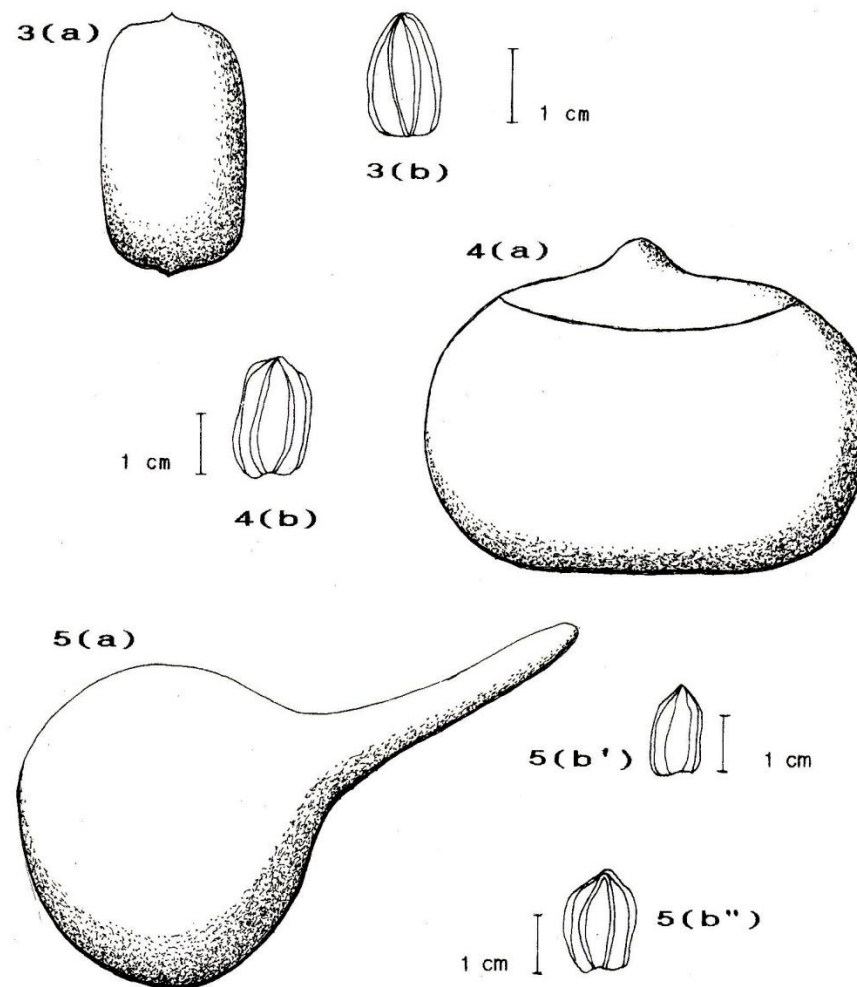


Fig.3. *Iko Ukot* "Cup for palm wine". (a) fruit; (b) seed. Fig.4. *Ikpok* "The outer covering of ..." (probably a reference to the thickness of the fruit wall). (a) fruit; (b) seed. Fig.5. *Obo Ukebe* "Bottle for enema". (a) fruit; (b') seed of fruits up to 25 cm long; (b'') seed of fruits over 30 cm long.

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## THE NIGERIAN FIELD SOCIETY

## INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR 1990

EXPENDITURE	₦	INCOME	₦
Production cost of		Subscriptions: *	
Vol.55 parts 1-2	11,500.00	Ife	395.00
parts 3-4	11,500.00	Kano	900.00
Editorial & secretarial charges	3,467.10	Lagos	2,613.50
		Port Harcourt	450.00
		Sales of:	
		Back numbers	2,502.00
		Notelets	800.00
		Indexes & others	756.00
		Advertising	1,000.00
		Interest Income	1,224.05
		Excess of Expenditure over income	15,826.55
	<u>₦ 26,467.10</u>		<u>₦ 26,467.10</u>
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## BALANCE SHEET AS AT 31ST DECEMBER 1990

Funds at 1.1.90	35,967.47	Cash at Bank:	
		First Bank of Nigeria	195.00
Excess of Expenditure over income	(15,826.55)	Union Bank of Nig.Ltd.	
		Current Account	19,945.92
	<u>₦ 20,140.92</u>		<u>₦ 20,140.92</u>
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P.V.Hartley, Hon. Treasurer.      U.A.Shah, Hon. Auditor.

\* More Branch subscriptions were received, but were not credited to the Bank Account until after 31st December 1990.

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