

Lagenaria

Lagenaria is a genus of gourd-bearing vines from the family Cucurbitaceae, also known as the "Squash" family. It contains at least seven species, one of which is known as the Calabash (*Lagenaria siceraria*). Its species fruit can either be harvested young and used as a vegetable or harvested mature, dried, and used as a bottle or utensil.

The **calabash**, *Lagenaria siceraria* (synonym *Lagenaria vulgaris* Ser.), also known as **opo squash**, **bottle gourd** or **long melon** is a vine grown for its fruit, which can either be harvested young and used as a vegetable, or harvested mature, dried, and used as a bottle, utensil, or pipe. The fresh fruit has a light green smooth skin and a white flesh. Rounder varieties are called **calabash gourds**. They come in a variety of shapes, they can be huge and rounded, or small and bottle shaped, or slim and serpentine, more than a metre long.

The calabash was one of the first cultivated plants in the world, grown not primarily for food, but for use as a water container. The bottle gourd may have been carried from Africa to Asia, Europe and the Americas in the course of human migration, or by seeds floating across the oceans inside the gourd. It has been proven to be in New World prior to the arrival of Columbus. It shares its common name with that of the calabash tree (*Crescentia cujete*).



Origin and dispersal

*It is a commonly cultivated plant in tropical and subtropical areas of the world, now believed by some to have spread or originated from wild populations in southern Africa. Stands of *Lagenaria siceraria* that may be source plants, and not merely domesticated stands run wild, were reported recently in Zimbabwe. This apparent domestication source plant produces thinner-walled fruit that, when dried, would not endure the rigors of use on long journeys as a water container. Today's calabash may owe its tough, waterproof wall to selection pressures over its long history of domestication.*



Cultivation

Calabash had been cultivated in Asia, Europe and the Americas for thousands of years before Columbus' discovery of America. Historically, in Europe, Walahfrid Strabo (808–849), abbot and poet from Reichenau, advisor to the Carolingian kings, discussed it in his Latin Hortulus as one of the 23 plants of an ideal garden.



Recent research indicates some can have an African origin and at least two unrelated domestications: one 8–9 thousand years ago, based on the analysis of archeological samples found in Asia, a second, four thousand years ago, traced from archeological discoveries in Egypt.

The mystery of the calabash – namely that this African or Eurasian species was being grown in America over 8,000 years ago – came about from the difficulty in understanding how it came to be on the American continent. Genetic research on archeological samples published by the National Academy of Sciences in December 2005 suggests calabash may have been domesticated earlier than food crops and livestock and, like dogs, were brought into the New World at the end of the ice age to the native Paleo-Indians. It is supposed that bottle gourds were carried by new peoples in boats or on foot across a possible land bridge between Asia and America. Once in Florida and Mexico, bottle gourd seeds could still be viable after long periods of migration.

The rind of the domesticated calabash, unlike that of its wild counterpart, is thick and waterproof. Calabash previously was thought to have spread across oceans without human intervention, if the seeds were still able to germinate even after long periods at sea. This was the basis of the earlier, dominating theory, which proposed the calabash had drifted across the Atlantic Ocean from Africa to North and South America. The new research notes domestication had led to changes in morphology (shape) of Asian and African specimens, potentially allowing the identification of the calabash from different areas. Now, both genetic

and morphological considerations show calabash found in American archaeological finds are closer to Asian calabash variants than to African ones.

The English word calabash comes from Spanish calabaza with the same meaning. The origin of the Spanish word is obscure. It is possibly from Arabic qar'a yabisa "dry gourd", from Persian kharabuz, used of various large melons; or the Spanish may have come from a pre-Roman Iberian calapaccia.

Occasional toxicity

Like other members of the Cucurbitaceae family, calabashes contain cucurbitacins that are known to be cytotoxic at a high concentration. The tetracyclic triterpenoid cucurbitacins present in fruits and vegetables of the cucumber family, are responsible for the bitter taste, and could cause ulcers in the stomach. In extreme cases, people have died from drinking calabash juice. The toxic cases are usually due to the gourd being used to make juice, which the drinkers attested to being unusually bitter. And in the three lethal cases, the victims were all diabetics in their 50s and 60s.

However, the plant is not normally toxic when eaten and is safe to consume. The excessively bitter (and toxic) gourds are due to improper storage (temperature swings or high temperature) and over-ripening.

To avoid poisoning, it is advised to:

- 1. Taste a small piece of the gourd to make sure it is not unusually bitter, before making juice*
- 2. Discard all excessively bitter calabash gourd or juice*
- 3. Not mix calabash juice with other juices, such as that of bitter gourd, so as not to mask calabash's taste if it has gone bad*

Culinary uses



In India, it is known as *lauki* (लौकी / लौकी), *dudhi* (दूदी / दूदी) or *ghiya* (घीया / घीया) in Hindi/Urdu/Gujarati/Marathi; *Laau* (ଲାଉ) in Oriya; *aal* (आल) in Marwari; *churakka* (ചുരക്ക) in Malayalam; *jatilao* in Assamese; *lau* (লাউ) in Bengali; *sorakaya* (সৌর কায়) or *anapakaya* in Telugu; *dudhi-Bhopala* (दुधी भोपळा) in Marathi; *sorekayi* (ಸೋರಕಾಯಿ) in Kannada; *sajmain* in Maithili and *suraiikkaai* (சுரைக்காய் colloquilly *sorakay*) in Tamil. A popular north indian dish is *lauki channa*, (*channa dal* and *diced gourd* in a *semidry gravy*). In Maharashtra, the skin of the gourd is used in making a *Chutney* preparation. In parts of India, the dried, unpunctured gourd is used as a float (called *surai-kuduvai* in Tamil) to learn swimming in rural areas. Indian musical instruments, such as the *tanpura*, *sitar* and *rudra veena*, are constructed from dried calabash gourds, using special cultivars that were originally imported from Africa and Madagascar. They are mostly grown in

Bengal and near Miraj, Maharashtra. These gourds are valuable items and they are carefully tended, sometimes they are given injections to stop worms and insects from making holes while they are drying., etc.

The calabash, as a vegetable, is frequently used in southern Chinese cuisine as either a stir-fry or in a soup. The Chinese name for calabash is *hulu* (simplified Chinese: 葫芦; traditional Chinese: 葫蘆; pinyin: *húlu*) or *huzi* (Chinese: 葫子; pinyin: *húzi*) in Mandarin. Two common kinds of calabash sold in Chinese stores are the "Opo" kind, which is elongated but still plump, and "Mao Gua" which is very similar to Opo, but it has hairs, as its Chinese name references, which translates to "Hairy Squash". The hairs, although small, can get embedded in the skin, but it is usually safe for adults to handle.

In Japan, the species is known as *hyōtan* (瓢箪, 瓢箪?) or *yūgao* (夕顔?), with the former word referring particularly to the larger-fruited variety whose fruits are used mostly for making containers or other handicrafts and the latter referring to the smaller-fruited variety whose fruits are more edible. Names used to refer particularly to the fruit of one or another variety of this species include *fukube* (瓠, 瓢, ふくべ?) and *hisago* (瓠, 匏, 瓢, ひさご?). It is most commonly sold in the form of dried, marinated strips known as *kanpyō*, and is commonly used as an ingredient for making *makizushi* (rolled sushi).

In Korea, it is known as *bak* (박) or *jorongbak* (조롱박).

In Burma, it is known as *boo thee*, a popular fruit; young leaves are also boiled and eaten with spicy hot, fermented fish sauce called *nga peet*. In the Philippines, it is known as *upo*. In Italian cuisine, it is known as *cucuzza* (plural *cucuzze*).

In Central America, the seeds of the calabash gourd are toasted and ground with other ingredients (including rice, cinnamon, and allspice) to make the drink *horchata*. Calabash is known locally as *morro* or *jícara*. In Colombia and Venezuela, the calabash is known as a *tapara* or *totuma*.

In Pakistan, the green Calabash is known as *Lauki* while the yellow variety is known as *kaddu* in Urdu.

In Bangladesh, it is called *lau* (লাউ). In Nepali, it is called *lauka* (लौका). In Arabic, it is called *qara*. In Aramaic, it is called *qura*. In the Talmudic period the young were boiled, whilst the mature fruit are eaten as desert. The tender young gourd is cooked as a summer squash. In Vietnam, it is called *bầu canh* or *bầu nộm*, and is used in a variety of dishes: boiled, stir-fried, soup dishes and as a medicine.

The shoots, tendrils, and leaves of the plant may also be eaten as greens.

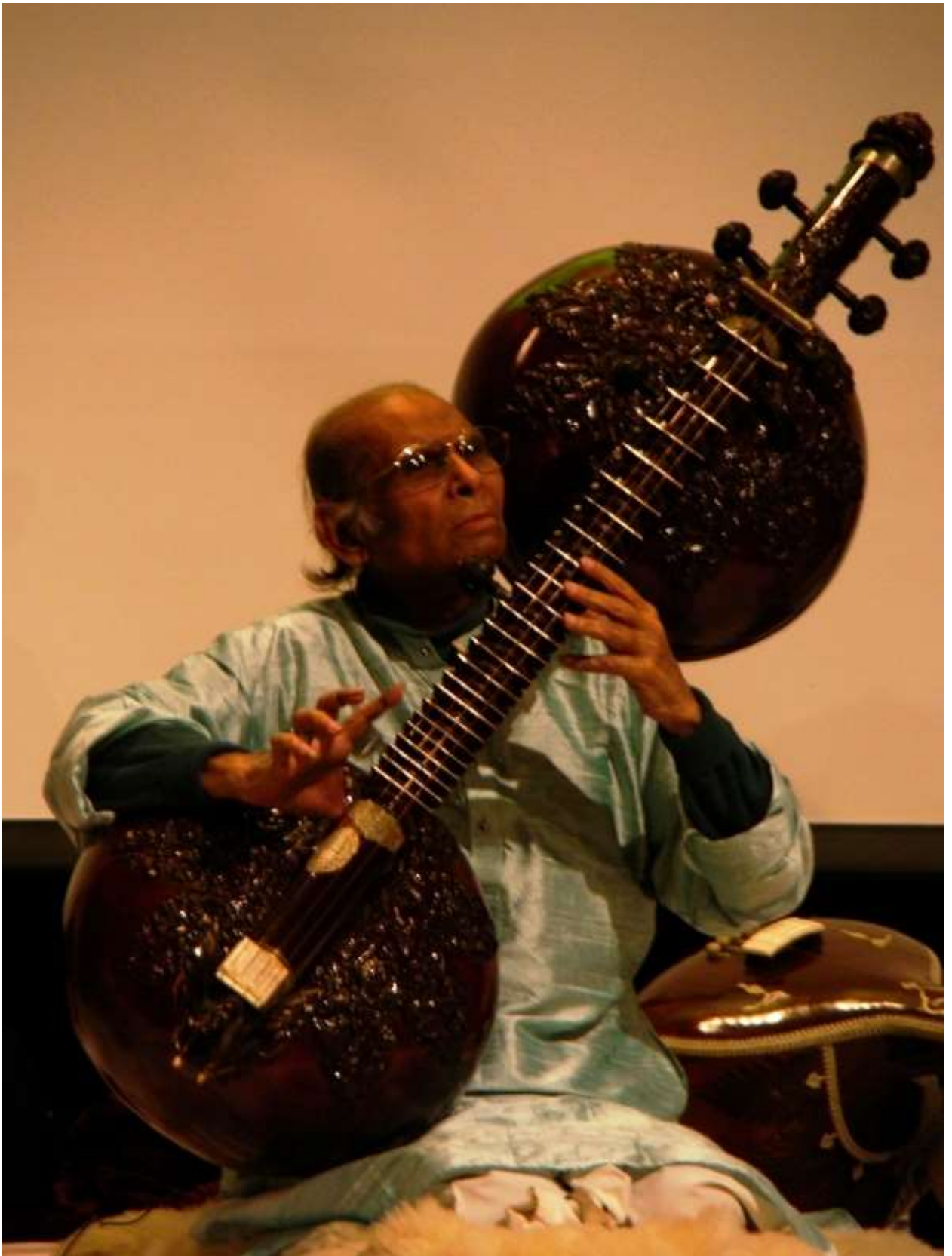
Cultural uses











The Caribbean

Calabash is primarily used for utensils, such as cups, bowls, and basins in rural areas. It can be used for carrying water or can be made for carrying items, such as fish, when fishing. In some Caribbean countries, it is worked, painted and decorated as shoulder bags or other

items by artisans, and sold to tourists. In Jamaica, it is also a reference to the natural lifestyle of Rastafarians. As a cup, bowl, or even water-pipe or "bong", the calabash is considered consistent with the "Ital" or vital lifestyle of not using refined products such as table salt, or using modern cooking methods, such as microwaves. In Haiti, the plant is called *kabas kouran*, literally "running calabash", and is used to make the sacred rattle emblematic of the Vodou priesthood, called an *asson*. As such, the plant is highly respected. It is also the national tree of St. Lucia.

Africa

Hollowed out and dried calabashes are a very typical utensil in households across West Africa. They are used to clean rice, carry water, and as food containers. Smaller sizes are used as bowls to drink palm wine.





Calabashes are used in making the West African kora (a harp-lute), xalam/ngoni (a lute) and the goje (a traditional fiddle). They also serve as resonators underneath the balafon (West African marimba). The calabash is also used in making the shegureh (a Sierra Leonean women's rattle) and balangi (a Sierra Leonean type of balafon) musical instruments. Sometimes, large calabashes are simply hollowed, dried and used as percussion instruments, especially by Fulani, Songhai, Gur-speaking and Hausa peoples. In Nigeria, the calabash has been used to avoid a law requiring the wearing of a helmet on a motorcycle. In South Africa, it is commonly used as a drinking vessel by tribes such as the Zulus. Eboe tribe children in Ethiopia wear hats made from the calabash to protect them from the sun. Recently, the Soccer City stadium which hosted the FIFA World Cup has been completed and its shape takes inspiration from the calabash.

Mexico

In many rural parts of Mexico, the calabash is dried and carved hollow to create a bule or a guaje, a gourd used to carry water around like a canteen. The gourd cut in half, called jícara, gave the parallel name to a clay cup jícara.

Costa Rica

The Costa Rican town of Santa Bárbara de Santa Cruz holds a traditional annual dance of the calabashes (baile de los guacales). Since 2000, the activity has been considered of

cultural interest to the community, and all participants receive a hand-painted calabash vessel to thank them for their economic contribution (which they paid in the form of an entrance ticket).

Aboriginals throughout the country traditionally serve chicha in calabash vessels to the participants of special events such as the baile de los diablitos (dance of the little fiends)

South America

In Peru, Brazil, Argentina, Uruguay and Paraguay, calabash gourds are dried and carved into mates, the traditional container for the popular caffeinated tea-like drink brewed from the yerba mate plant. In Brazil, this container is called cuia, porongo or cabaça. Gourds also commonly used as the resonator for the berimbau, the signature instrument of capoeira, a martial art/dance developed in Brazilian plantations by African slaves. The calabash gourd is possibly mankind's oldest instrument resonator.

In Peru, Bolivia and Ecuador, calabash gourds are known to have been used for medicinal purposes for over a thousand years by Andean cultures. The Inca culture applied folklore symbology to gourds to pass down from one generation to another, and this practice is still familiar and valued.

Bowls made of calabash were used by Indigenous Brazilians as utensils made to serve food, and the practice is still retained in some remote areas of Brazil (originally by populations of various ethnicities, origins and regions, but nowadays mainly the indigenes themselves).

Venezuela

The president of Venezuela, Hugo Chávez, has suggested Venezuelans avoid showers longer than three minutes. Critics of Chavez have ridiculed this (reductio ad incommodum) by ironically suggesting the use of a totuma to bathe (although Chavez himself did not suggest this). The inference is that Chavez's bathing suggestion is an unwelcome intrusion into Venezuelans' daily lives, and further, that bathing with a gourd is shamefully primitive. Compare U.S. President Jimmy Carter's speech urging Americans to conserve energy during the US 1979 energy crisis and negative reaction by his critics.

China



The hulu is an ancient symbol for health. In the old days, doctors would carry medicine inside it, so it has fabled properties for healing. The hulu is believed to absorb negative earth-based qi (energy) that would otherwise affect health, and is a traditional Chinese medicine cure. Dried calabash is also used as containers of liquids, often liquors or medicine. Calabash gourds were also grown in earthen molds to form different shapes with imprinted floral or arabesque design and dried to house pet crickets, which were kept for their song and fighting abilities. The texture of the gourd lends itself nicely to the sound of the animal, much like a musical instrument. It is a symbol of the Xian immortals.



India

Hindu ascetics (sadhu) traditionally use a dried gourd vessel called the kamandalu. The juice of bottle gourd is considered to have medicinal properties and to be very good for

health. The Baul singers of Bengal have their musical instruments made out of it. The practice is also common among Buddhist and Jain sages.

Hawaii

In Hawaii, a calabash is a large serving bowl, usually made from a hardwood rather than from the calabash gourd as in Maroon cultures. It is used on a buffet table or in the middle of the dining table. The use of the calabash in Hawaii has led to terms like "calabash family" or "calabash cousins", indicating an extended family grown up around shared meals and close friendships.

This gourd is often dried when ripe and used as a percussion instrument called an ipu heke in contemporary and ancient hula.

Other uses

Additionally, the gourd can be dried and used to smoke pipe tobacco. A typical design yielded by this squash is recognized (theatrically) as the pipe of Sherlock Holmes, but Doyle never mentioned Holmes using a calabash pipe. It was the preferred pipe for stage actors portraying Holmes, because they could balance this pipe better than other styles while delivering their lines. See, Smoking pipe (tobacco)#Calabash.

<i>Nutritional value per 100 g (3.5 oz)</i>	
<i>Energy</i>	63 kJ (15 kcal)
<i>Carbohydrates</i>	3.69 g
<i>- Dietary fiber</i>	1.2 g
<i>Fat</i>	0.02 g
<i>Protein</i>	0.6 g
<i>Thiamine (vit. B₁)</i>	0.029 mg (3%)
<i>Riboflavin (vit. B₂)</i>	0.022 mg (2%)
<i>Niacin (vit. B₃)</i>	0.39 mg (3%)
<i>Pantothenic acid (B₅)</i>	0.144 mg (3%)
<i>Vitamin B₆</i>	0.038 mg (3%)
<i>Folate (vit. B₉)</i>	4 µg (1%)
<i>Vitamin C</i>	8.5 mg (10%)
<i>Calcium</i>	24 mg (2%)
<i>Iron</i>	0.25 mg (2%)
<i>Magnesium</i>	11 mg (3%)
<i>Manganese</i>	0.066 mg (3%)
<i>Phosphorus</i>	13 mg (2%)
<i>Potassium</i>	170 mg (4%)

Sodium	2 mg (0%)
Zinc	0.7 mg (7%)
<p><i>Link to USDA Database entry</i> <i>Percentages are roughly approximated</i> <i>using US recommendations for adults.</i> <i>Source: USDA Nutrient Database</i></p>	

Lagenaria abyssinica is a species of squash plant. It is a climbing vine. The stem and branches are covered in hair-like spines. It ranges from Africa to Asia. The fruit is used to make bottles and instruments. It is also grown as an ornamental plant.

Lagenaria rufa is a squash plant. It is a climbing vine. Its flowers range from white to yellow. The fruit is a gourd, dark green when developing but becomes cream-orange when ripe. It is native to western Africa.

Lagenaria sphaerica is a herbaceous climber in the Cucurbitaceae family. It is commonly known as the *Wild Melon*.



These plants are found in low lying areas from the Eastern Cape of South Africa to east Africa. They may grow along river floodplains or up into the canopy of riparian forests. They may also be found in coastal dune vegetation.



*These plants produce large white flowers which attract many insects. The melon—
gourd is green.*

Лагенария



Лагенария (лат. *Lagenaria*) — род растений семейства Тыквенные, включающий в себя по меньшей мере 7 видов травянистых лиан, распространённых большей частью в тропических областях планеты.

Биологическое описание

Виды Лагенарии — однолетние ползучие лианы с гранёным стеблем длиной до 15 м, покрытым пушком. Листья гофрированные пятиугольные. Цветки мелкие белые трубчатые одиночные, с колесообразным венчиком, располагаются в пазухах листьев, причём цветки раскрываются только ночью. Плод — тыква, как и у других представителей семейства Тыквенные. Форма плода у разных видов и подвидов лагенарий различна. Встречаются плоды вытянутой, круглой, грушевидной, бутылковидной и многих других форм.

Использование

Недозрелые плоды, имеющие рыхлую мякоть и обладающие слегка горьким пряным вкусом, употребляют в пищу. При созревании мякоть постепенно высыхает, а оболочка, состоящая из деревянистых элементов и содержащая каменные клетки, становится прочной и водонепроницаемой. Благодаря последним свойствам зрелый плод

используется населением Африки, Южной и Средней Азии, Латинской Америки и тихоокеанских островов для изготовления курительных трубок, посуды, музыкальных инструментов и игрушек. Длинные гибкие стебли лагенарий идут на изготовление плетённых изделий. Из семян получают жирное масло, используемое в пищевых целях.

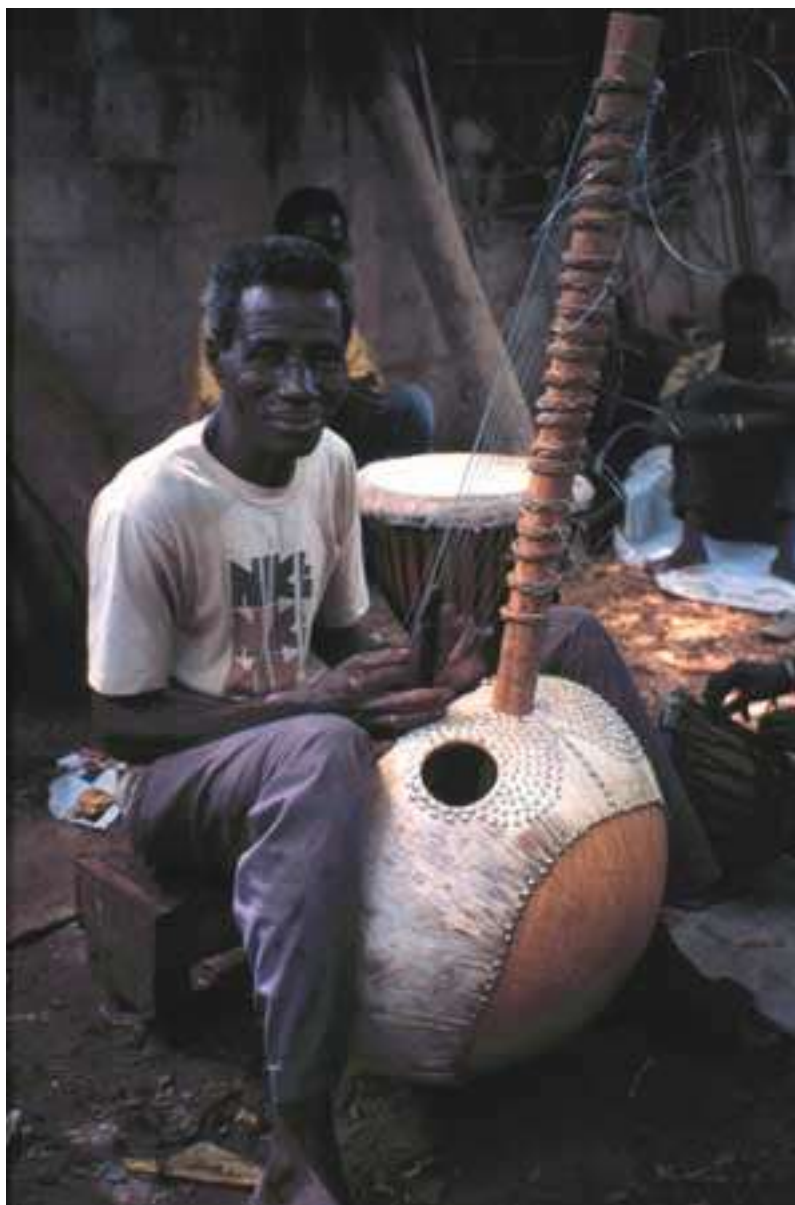
Лагенария обыкновенная

Лагенария обыкновенная (лат. *Lagenária sicerária*), или *горлянка*, или *қалабас* (қалембаса, қалабаш) — однолетняя ползучая лиана семейства Тыквенные, вид рода Лагенария (*Lagenaria*). Культивируется ради плодов, которые используются для различных целей. Молодые плоды можно употреблять в пищу; старые используются чаще всего в качестве сосудов, а также при изготовлении музыкальных инструментов.

Хозяйственное значение и применение

Қалембаса чаще всего используется в качестве сосуда для хранения пищи или воды; из қалембас меньших размеров делают сосуды для питья. Қалембасы также используются для изготовления музыкального инструмента қора.

Қалембас, обычно украшаемый выжженным или нарезным узором, в Южной Америке используется для заваривания и питья мате с помощью бомбилы.



Источники:

1. <http://ru.wikipedia.org/wiki/%CB%E0%E3%E5%ED%E0%F0%E8%FF>
2. http://ru.wikipedia.org/wiki/%D0%9B%D0%B0%D0%B3%D0%B5%D0%BD%D0%B0%D1%80%D0%B8%D1%8F_%D0%BE%D0%B1%D1%8B%D0%BA%D0%BD%D0%BE%D0%B2%D0%B5%D0%BD%D0%BD%D0%B0%D1%8F
3. <http://en.wikipedia.org/wiki/Lagenaria>
4. http://en.wikipedia.org/wiki/Lagenaria_abyssinica
5. http://en.wikipedia.org/wiki/Lagenaria_rufa
6. http://en.wikipedia.org/wiki/Lagenaria_sphaerica

7. <http://en.wikipedia.org/wiki/Calabash>