









Domesticates	Geographical Distribution	Morphology/Description
Common, edible fruits		
Oil Palm <i>Elaeis guineensis</i> 	Tropical Africa, cannot tolerate full shade, but prefers disturbed habitats ⁵ West African origins, but has spread throughout tropical Africa ⁶ . 	A tree. The oil palm is now one of the most economically important palms in Africa. It has a walnut-size fruit clustered in big pods, with a fibrous pulp rich in oil (which is rich in energy, fatty acids, and a great source of Vitamin A). Within the husk is a hard-shelled seed containing an edible kernel (eaten by chimps and people). (The sap is tapped to make palm wine too.) The species still grows wild, as well as being cultivated and planted by people. The wild form growing in the Ituri Forest in the Congo, provides 9% of the total caloric intake for the Efe pygmies, for example (Bailey and Peacock 1988, McGrew 1992).
Okra <i>Hibiscus esculentus</i> ⁵	Savanna, full sun areas	Possible originated in East Africa ⁶
Melon <i>Citrullus lanatus</i> ⁵	Continent	Wild varieties of this melon still grow in many arid and semi-arid regions of the continent. They are smaller, and more bitter/toxic than the domestic versions.
Gourd <i>Lagenaria siceraria</i> ⁷	Tropical Africa	
Desert Date <i>Balanites aegyptiaca</i>	Dry regions of the continent	Scrambling shrub. Fruits are 1-2 inches long, with fibrous, oily flesh and large seed.
Baobab <i>Adansonia digitata</i>	Widespread in south-central Africa in semi arid regions	Large tree with huge trunk. Dry, fleshy pods 8-10 inches long containing numerous seeds

<p>Horned melon, wild cucumber <i>Cucumis</i> (many species)</p> 	<p>Widespread in Savannas</p>	<p>Wild varieties of cucumis, the cucumber genus, grow widely as spreading vines on the ground in savanna regions. Some are edible wild, but many have toxic seeds.</p>
<p>Figs <i>Ficus</i> (many species)</p>	<p>Savannas and tropical forests</p> 	<p>A wide variety of fig species grow in Africa, ranging from large trees to climbers. These grow wild, and are commonly eaten by people and primates, but not deliberately cultivated or domesticated.</p>
<p>Marula nut <i>Sclerocarya caffra</i></p>	<p>Native in deciduous woodlands in south-central Africa</p>	<p>This tree grows wild, but the wild form is encouraged and sometimes protected by villagers. The walnut-sized fruit has an edible, fleshy pulp, a very hard nut with two small kernels inside.</p>
<p>Monkey Orange <i>Strychnos</i> (several species)</p>	<p>Woodlands</p>	<p>Small, wild trees bearing large, round fruits 4-5 inches in diameter. The hard shell can be easily cracked, and the flesh is juicy. The soft seeds contain the toxin strychnine and are poisonous if chewed. <i>Strychnos</i> fruits are commonly eaten by both people and wild primates.</p>

<p>Grewia (many species)</p> 	<p>Semi-arid and arid bushlands</p>	<p>A wild shrub bearing many small, orange fruit, commonly harvested by hunter-gatherers and others today</p>
<p>Gingerbread plum Parinari (several species)</p>	<p>Savannas and woodlands</p>	<p>A wild tree bearing sweet, orange, fleshy fruits ~ 2 inches long, with large seeds.</p>
<p>Tamarind <i>Tamarindus indica</i></p>	<p>savanna</p>	<p>Tree with long, edible pods, used commercially now throughout the tropics</p>
<p>Sour plum Ximenia (several species)</p>	<p>Semi-arid and arid bushlands and woodlands</p>	<p>A wild fruit</p>
<p>Ziziphus <i>Ziziphus mauritiana</i></p>	<p>Semi-arid and arid regions</p>	<p>Small tree with marble-sized, round fruits</p>
<p>Coffee <i>Coffea arabica</i></p>	<p>Grown in parts of Ethiopia, Uganda, Kenya</p>	<p>Shrubs with small fruits. The seeds of the fruit are called "coffee beans." Beans were originally chewed, and more recently brewed⁶</p>

Common grass seeds		
Wild sorghum <i>Sorghum verticilliflorum</i>	A common grass throughout the continent, especially in damp areas and in savanna grasslands	A wild grass, thought to be the progenitor of the domestic sorghum. Stands of wild sorghum are harvested for grain in many regions of Niger, and other parts of Africa, particularly during times of domestic crop failure
Sorghum <i>Sorghum bicolor</i> (many local varieties) 	Widespread throughout semi-arid regions in western, central and southern Africa, adaptable to a wide range of ecological conditions, including both temperate and tropical zones. 	This is a domesticated, tall, cane-like grass indigenous to Africa. Today it is Africa's main contribution to the world's top commercial crops, and globally is a dietary staple for over 500 million people in 30 countries. It was first exported to India and China over 2000 years ago. It matures extremely quickly, in 70 days, and can thrive in marginal growing conditions, and is drought-tolerant. As a grain, its food value is compromised because it has a poor balance of amino acids (low in lysine, and high in prolamine, which is difficult for people to digest), and its seed coats are high in tannins, which makes it difficult to process. Thus, it is commonly used as feed grain, or fermented for beer, or used for sugar extraction (molasses). Presumably derived from wild <i>Sorghum verticilliflorum</i> . The domestic species has larger spikelets and grains, they do not shatter, and they have fewer branches. Possible early date of 6th millennium B.C in Khartoum area, but dates are not confirmed by radiocarbon.2

<p>Bulrush or Pearl Millet <i>Pennisetum americanum</i></p> 	<p>Found all over intertropical Africa</p>	<p>Wild forms found in the Sahara.²</p> <p>Relatively drought resistant. Differ in color range and size from wild forms. Wild millet has head approx. 10cm long, while domesticate is up to 2 meters long.²</p> <p>Today, Pearl Millet is the world sixth largest cereal crop. It is extremely tolerant of heat and drought, and yields reliably even in arid regions, and is both more resistant to diseases than sorghum or other commercial grains, and pest-resistant as well.</p> <p>Very palatable and nutritious, seeds can be ground for flour, boiled as a grain, like rice, or fermented as a beer. In Nigeria it is fermented to produce <i>ogi</i>, a traditional starchy weaning food.²</p>
<p>Fonio , “Acha” or “Fundi Millet” <i>Digitaria exilis</i>³</p>	<p>West Africa, adapted to wetter areas. Usually grown in areas with 1500mm of rain. Commonly grown along rivers.</p>	<p>Resembles mustard seeds, but smaller and whiter. This is an indigenous West Africa crop that is grown today mainly on small farms for home consumption. It is probably the world’s fastest maturing cereal, and grows well on poor, sandy soils.</p> <p>Ground into flour and cooked as a gruel, it has notably high levels of the amino acids methionine and cystine, which makes it an extremely nutritious cereal.</p> <p>Closest wild species seems to be <i>Digitaria longiflora</i></p>
<p>Black Fonio³ <i>Digitaria iburua</i></p>	<p>Hausa region of Nigeria in West Africa, Togo and Daomey</p>	<p>Closest wild species <i>Digitaria barbinodis</i></p> <p>Fixed in a manner similar to couscous</p>

<p>Teff or Tef <i>Eragrostis abyssinica</i> Or <i>Eragrostis. tef</i></p>	<p>Nile Valley of Egypt and Sudan, Ethiopia, but also found in parts of Central and Southern Africa in areas of high elevation and high rainfall</p>	<p>An annual, tufted grass, similar in appearance to millet. It has extremely small grains – 2500-3000 seeds to the gram! The plant has a C4 photosynthetic pathway, using daylight efficiently while having very low moisture demands. So it is drought-resistant.</p> <p>Once thought to be African domesticate, it may have originated in the Middle East, and been introduced to Ethiopia⁴ Its likely wild ancestor may be <i>Eragrostis pilosa</i>, but it has been grown in Ethiopia for thousands of years. Samples of tef have been found in tombs of Egyptian pharaohs. The plant is still harvested in the wild, and eaten with a mix of other wild grains, but several species are cultivated. Seeds are ground into flour, mixed with water, and fermented to form the flat bread common to Ethiopian cuisine - <i>enjera</i>⁵</p>
<p>Guinea Millet <i>Brachiaria deflexa</i></p> <p>Guinea Millet <i>Brachiaria deflexa (cont.)</i></p>	<p>Found in Sudan-Zambezi and Yemenite regions of Africa.</p>	<p>Domesticated Guinea millet is cultivated today in only a small area of northwestern Guinea. This cereal grows extremely quickly, sometimes maturing in only 70-75 days. Farmers often use fast-maturing Guinea Millets to fill in any gaps in their fields of other cereals, like sorghum or fonio. The wild variety of this cereal grows throughout the Sahelian zone of Africa, and in the coastal savannas of western Africa. The main difference is the domestic variety has larger seeds and a non-shattering seed head. The wild form is also harvested for food.³</p> <p>Its soft seeds can be ground into flour, used to make cakes and fritters.</p> <p>Seed impressions found in ceramics at the archaeological site of Dhar Tichitt, in Mauritania (Munson, 1977)³</p>

<p>African Rice <i>Oryza glaberrima</i>³</p>	<p>West Africa</p>	<p>The wild progenitor of this modern crop, <i>Oryza breviligulata</i>³, is native to West Africa, and African rice has been cultivated in for at least 2500 years. This red-hulled species is a different species than the Asian crop plant, <i>Oryza sativa</i>, and was probably first cultivated in the inland delta region of the Niger River.</p> <p>Many populations in West Africa today are just as rice-oriented as any Asian ones, but often plant the commercial Asian varieties because they have been bred to produce better yields and scatter less of their seed. However, African rice is better at tolerating fluctuating water depths and soil conditions, and is also resistant to local diseases and pests. It also matures faster than the Asian variety and has a distinctive taste, so some farmers continue to plant it.</p> <p>Radiocarbon date 2455 B.P. (Porteres, 1970)</p>
<p>Finger Millet <i>Eleusine coracana</i></p>	<p>Cool, intertropical regions, grows well in high altitude areas of East Africa, Uganda, Ethiopia, Kenya.</p>	<p>Presumably derived from wild <i>E. indica</i>³</p> <p>Wild variety has 2n=18 chromosomes, while domestic species is 2n=36. Overall, the domesticate is larger than its wild counterpart. Rachis and spikelet do not disarticulate from plant at maturity. Glumes and lodicules differ morphologically between wild and domestic varieties.³</p> <p>Used primarily today to make beer.</p>
<p>Kram Kram <i>Cenchrus biflorus</i></p>	<p>Arid and semi-arid Sahelian regions of west Africa, on the southern fringes of the Sahara.</p>	<p>A wild, annual grass sometimes collected as a famine food in the Sudan and Chad today. It colonizes sandy plains and stabilized dune fields in massive stands over many acres.</p> <p>Some kram kram seeds are quite nutritious, containing 9% fat, perhaps the highest energy content of any cereal, and about 21% protein, about twice the level found in normal wheat or maize.</p>

Kram Kram, cont.		<p>However, kram kram plants protect their seeds in clusters surrounded many sharp spines, and have been “thorns in the side” of travelers for many years.</p> <p>When mature, the burs fall to the sand in great quantities, often clinging together in giant masses of tumbleweed, that roll with the wind, growing as they go. People sweep them up, throw them into wooden mortars and pound and winnow away the troublesome spines, leaving the white, nutritious and flavorful seeds.</p>
Bourgou <i>Echinochloa stagnina</i>	River banks and moist areas in central Africa, and Niger River delta	A wild grass that was traditionally harvested for food in delta regions of Niger River, before replaced by commercial rice. The grains are nutritious, and sugars collect in the stem of the plant, which can be fermented.
Desert Panic <i>Panicum laetum</i>	Semi-arid regions from Mauritania in west Africa to the Sudan and Tanzania.	<p>A wild, annual plant, commonly growing in dense, almost pure stands on black soils in seasonally flooded areas. The cereal commonly harvested in Niger today by Tuareg women while their group is moving between wet and dry season pastures. It is considered a delicacy, and is sometimes sold in markets. It is ground and used to make porridge.</p> <p>They use the following methods to collect it:</p> <p>If the seed is ripe and ready to fall, they harvest early in the morning when dew tends to hold the seed in the inflorescence. They swing a deep, cone-shaped basket through the tops of the plants to gather the grain. If the seed is not ripe enough to fall, they first cut the grass, then dry, thresh and winnow the grain, as if it were a domesticated cereal. If the seed has already ripened and fallen, they cut or burn the stands and later sweep the seeds off the ground. This can spoil the taste, but sometimes they have no choice. In famine times, women will even search for seeds in ant nests and termite mounds.</p>

Legumes & other seeds		
Bambara & Kersting's Groundnuts <i>Voandzeia subterranea</i> <i>Kerstingiella geocarpa</i>	Tropical Africa	Probably domesticated in West Africa ⁶ Legumes that produce seeds underground similar to peanuts ⁵
Cowpeas <i>Vigna unguiculata</i>	Continent	A legume that is highly nutritious and palatable ⁵
Sesame <i>Sesamum indicum</i> ⁶		Origins possibly Ethiopia or Sudan ⁶
Greens		
Ensete <i>Ensete edule</i>	Ethiopia	Grown for leaves and fibers, although it is a member of the banana genus. ⁵ Leaves are used to wrap food, or they are fermented, dried and ground into flour.
Chat <i>Catha edulis</i>	Ethiopia	A stimulant ⁷
Roots		
Yams <i>Dioscorea rotundata</i> <i>cayenensis</i> <i>bulbifera</i> <i>preussii</i> <i>praehinsilis</i> <i>sansibarensis</i> <i>dumetorum</i>	Genus is found all over Africa, in between the Sahara and the arid portions of southern Africa	Due to the nature of the tuber, preservation of organic remains is rare. Most evidence is indirect based on ubiquity of plants today, presence of possible processing implements such as digging sticks.

References

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