



A Brief History of Plants

Potato: In the Andes Mountains of South America indigenous people, including the ancient Incas, survived on potatoes for the past 7,000 years. When the Spanish explorers arrived in South America in 1531, the sailors recognized the potato's nutritional value and adopted it as a food source for long voyages. By 1600, farmers in Spain were planting crops of potatoes and by 1800 the potato was one of the most important foods in Europe due to its combination of essential vitamins, minerals and fiber, and its easy adaptation to different climates. The potato was so productive and easy to grow in rocky soil that the people of Ireland developed an exclusive dependence on potatoes as a primary food source. The lack of alternative foods led to the Irish potato famine when a potato blight began in 1845. This precipitated a mass emigration to the United States. Today, Americans consume more potatoes than any other vegetable, mostly in the form of French fries.

Sugar: Sugar cane, though native to Polynesia, was first refined into sugar in India about 8,000 years ago. It made its way west arriving in Europe in the 12th century. It was a very exotic expensive spice, used for medicines and after dinner sweets. In 1400, it was still a costly commodity due to small production, and Europeans were beginning to learn to grow sugar cane outside of the tropics. The Spanish planted sugar cane in the Canary Islands, where Columbus acquired it from his second trip to the Americas in 1493. Sugar cultivation is very labor-intensive and the Spaniards enslaved the native inhabitants of Hispaniola (the Dominican Republic and Haiti today) to grow and process sugar for growing markets in Europe. In 1516, the first shipment of sugar arrived in Europe fueling a demand for this sweetener for tea, coffee, and chocolate. Meanwhile the enslaved indigenous labor force in the Caribbean was dying off due to the introduction of "Old World" diseases, so sugar producers turned to Africa to supply labor. These producers cleared large swaths of land with slash-and-burn techniques, to great ecological detriment, to build plantations which depended on slavery to produce an adequate supply of sugar to satisfy the demand of the European upper classes.

Coffee: Coffee, a shrub with red berries, can only grow in tropical climates. It originated on the mountainsides of Ethiopia under rainforest canopy, although it is often more commonly associated with Central America and the South Pacific isles. The demand for coffee began as a medicinal drink (prescribed at various times as an enema, nerve calmer, and life-extender) for the elite, but soon became a working-man's pick-me-up. In the 1870s, the industrialization of roasting technology and railroads facilitated the global spread of coffee consumption. Coffee is the second most widely exported legal commodity (second only to petroleum) and Americans consume more coffee than any other nation. Over 20 million people in the world produce coffee, over fifty percent of them small, family farmers who mostly live in poverty, subject to the whim of constantly fluctuating commodity markets.



Tomato: The Aztecs deserve the credit for introducing the world to the tomato, not the Italians as many people assume. The Spanish first encountered this fruit during their conquest of Mexico in 1519. The Aztecs ground tomatoes with chilies to make salsa to accompany a wide array of dishes. Though the Spanish in Mexico enjoyed tomatoes, many Europeans considered them poisonous upon arrival because they belong to the same family as the deadly nightshade. It wasn't until the early 1800s that the poisonous myth was debunked and the tomato was adopted in Europe, particularly Italy, for its versatility in sauces and soups. Today, the tomato is one of the most popular fruits or vegetables across the globe, and the U.S. is the largest commercial producer of tomatoes in the world. Americans consume 12 million tons of tomatoes annually, both fresh and, most often, in processed foods like ketchup.

Collard Greens: Collard greens (*Brassica oleracea acephala*) are often thought to have African origins, but these greens originate in Asia. They eventually spread through Europe, and the Greeks and Romans grew kale and collards in domestic gardens over 2,000 years ago. The leafy greens may have made it to Africa through Roman and Greek trade networks. But historic documents show that collards were brought to Central Africa during the Trans Atlantic Slave Trade. Central Africa had a climate that supported a continuous variety of edible greens from both cultivated and wild plants and these greens were an important part of people's diets. As early slave forts sprung up on the eastern coast of Africa via Portuguese traders, these traders established gardens to supply their dietary needs. Kale and colewort (collard) were frequently mentioned in letters and records of slave forts and their gardens. The seeds and plants left the fort gardens and made their way into what is now Ghana, Angola, Senegal and Nigeria, and to the Americas. As enslaved laborers prepared greens with seasonings and a bit of meat, the consumption of collards, and with them—turnip, kale, rape, mustard, and other greens, became a healthy blend of tastes—Asian, Portuguese, Central African, and Southern.

Corn: Corn is native to Mexico. It was first cultivated 7,000 years ago and rapidly spread throughout the Americas to become a staple of the Mayan, Aztec, and Incan civilizations as well as the Mississippi Period Indians of the southeastern United States. People relied heavily on corn for a primary source of energy and prepared it by boiling the ears or grinding the kernels into meal, which helped preserve it through the winter. When the Spaniards arrived in the Americas, they saw corn for the first time. Columbus introduced corn to Europe where it spread widely and then on to Turkey, Africa, and Asia. Many Europeans did not develop a taste for corn, but they used it to feed livestock, which increased the availability of protein sources throughout the continent. Corn continues to play a vital role in the Americas and in the midwestern United States forty percent of the world's corn is grown. Most of the corn is not eaten, but fed to livestock and used to make a variety of products, including paint and gasoline additives. Plus, cornstarch processed into syrup (high-fructose corn syrup) has surpassed sugar as a sweetener and can be found in soda and almost every processed food.

