



CROPS IN CRISIS: EGGPLANT

ORIGIN OF THE EGGPLANT

The earliest ancestors of eggplant were likely the wild varieties that are indigenous to India, Burma, Northern Thailand, Laos, Viet Nam, and Southwest China. The first records of cultivation come from China in the 2nd century. From there it spread to Africa, Italy, and the rest of Europe. It was being grown in America by the early 18th century.

The consumption of eggplant was long associated with negative health effects, including ulcers, leprosy, anger, elephantiasis, intestinal blockage, melancholy, blood thickening, insomnia, epilepsy, and even madness. But it was also viewed as having positive medicinal qualities. Much of its bad reputation likely stemmed from the extreme bitterness of early varieties, a trait that plant breeders had largely eliminated by the 18th century.

Eggplant features prominently in many ethnic cuisines, and is typically eaten cooked. It is also known as aubergine, brinjal, guinea squash, and nasubi. It is grown widely throughout the world. Top producers are China, India, Iran, Egypt, and Turkey.

Eggplant is a member of the Solanaceae (nightshade) family and high in histamines. Contact with the leaf fuzz and spiny fruit cap may cause skin irritations in some individuals.

Though eggplant is perennial, it is often grown as an annual. The seeds are easily collected for planting. It ranges in color from white to green to purple to black, and is typically either a globe-like oval shape, or slender and elongated.



WHY IS THE EGGPLANT A “CROP IN CRISIS”?

Though eggplant is an extremely popular vegetable throughout the world, it faces a number of threats during cultivation. It is susceptible to verticillium wilt, fungal diseases, fruit rot, and the mosaic virus, and bacterial wilt. Other pests include leaf-eating beetles, aphids, lace bugs, whiteflies, mealy bugs, leaf rollers, and red spider mites. It is also devastated by the fruit and shoot borer. To control the pest, some farmers spray 80 to 100 times in a growing cycle. This is very expensive, and also presents human and environmental health hazards. To reduce pesticide use, public sector scientists used the tools of genetic engineering to develop a variety that is resistant to the fruit shoot borer. It was first introduced in Bangladesh, where it is being grown commercially. Farmers cultivating the Bt brinjal variety report a significant reduction in pesticide use, as well as good yields, and positive consumer response.



NUTRITIONAL INFORMATION ABOUT THE EGGPLANT

One cup of diced eggplant has about 35 calories. It's high in fiber, supplying about 10 percent the daily requirement. It's also a good source of calcium, copper, manganese, potassium, folate, B vitamins, and vitamin K. It also contains flavonoid, which is a powerful antioxidant.

EGGPLANT CULTIVATION

Eggplants require warm temperatures to grow and are very susceptible to frost. Transplants take about 65 to 85 days to reach maturity. They prefer well-drained sandy loam, loam, or clay loam soils. The erect, bushy plants produce purple flowers that then produce the fruits, which can be harvested several times during the season.

FUN FACTS

- Eating eggplant was once thought to drive people insane, which led to its early name "mad apple."
- Eggplants are technically berries, not vegetables.
- Thomas Jefferson is credited with bringing the first eggplant cultivar to America.
- Early varieties were about the size of a duck's egg, giving rise to the name eggplant.
- China grows about 28 million tons of eggplant every year.
- Never store eggplant in plastic bags, as the skin needs to "breathe."
- Eggplant is popular in cooking because its flesh easily absorbs sauces and seasonings.

CROPS IN CRISIS: A ROLE FOR BIOTECHNOLOGY?

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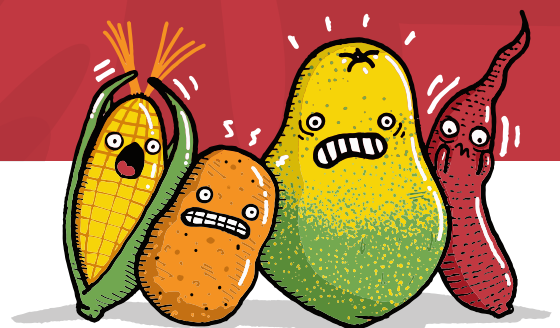
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