Species description

Jujubes are small, deciduous trees with rough bark, and the branches bear curved spines at each node. The glossy, dark green leaves have three conspicuous longitudinal veins and finely toothed margins. The roots produce shoots that may form a thicket over time. The small, perfect flowers are born on leaf axis of deciduous branches. Jujube fruit have a somewhat dry and spongy texture and mild, sweet flavor. The fruit are dark red to brown, spherical to plum-shaped to elongated, and contain a single seed.

Natural and cultural history

The trees are indigenous and widely distributed in arid regions of China, and they have naturalized on many continents. Jujube trees grow best in areas with hot summers, though they can tolerate very cold winters. Jujubes likely originated in southern Asia, perhaps as early as 9000 BC, and have been cultivated for at least 4,000 years in China. There are over 400 known cultivars. Jujube trees were first introduced to Texas in 1875.

Planting considerations and propagation techniques

Jujube trees are long lived; they may grow 20-40 feet tall, with a canopy diameter of 12 feet. The trees require 50-450 chill hours, though some cultivars require up to 700 hours. They are frost-tolerant to at least -10º F. Warm to hot summer, full sun, and plenty of water will give the highest yields, though the trees can be very drought tolerant. Jujubes can tolerate a wide variety of soil conditions. Jujubes are used as shade trees and pollinator attractants; they also form thickets easily and may be used as hedges or windbreaks to protect other trees.

Most jujubes require cross-pollination. Even the self-pollinating cultivars will produce higher yields if cross-pollinated. Jujube trees spread easily by root suckers and seed, and may produce a dense thicket if left unchecked. To propagate by seed, remove stones from fruit and dry them for several weeks. Extract the seeds by clipping stones open with shears. Before planting, soak seeds for two days in several changes of fresh water and stratify in moist sand or peat at 5ºC for 60 days. Plant in warm, moist, well-drained soil. Softwood cuttings may be rooted under mist. Jujube trees may be grafted or budded, similar to apples. A common technique is to graft cultivars onto less-prolifically sprouting rootstock. Jujubes have no known insect or disease problems.
Water needs

The trees are extremely drought tolerant, but if soils are well drained, they may also live in areas of high moisture or rainfall.

Care

Jujubes require pruning to keep them shaped and to prevent suckering if a thicket it not desired.

Harvesting and processing

The jujube fruit can be eaten fresh, dried, smoked, cooked or baked as apples or dates. They can also be made into sauce, fruit butter, jams, and jellies. The fermented pulp can also be used to make an alcoholic beverage. Harvest fruit from mid-summer until the end of the growing season. Fresh fruit does not keep well (about a week), but dried fruits can last for months in a cool, dry environment.

References and resources