**Castanea mollissima**  
Chinese Chestnut

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**INTRODUCTION**

Chinese Chestnut reaches a height and spread of about 40 feet in a sunny, open exposure and a well-drained soil (Fig. 1). It usually branches close to the ground making it a good candidate for a specimen or as a tree to climb. The tree is hard to transplant, perhaps due to a coarse root system. The chief ornamental feature is yellowish white catkins, present in early summer, and a coarse foliage. A very striking tree. The odor given off by the flowers for a short period may be considered offensive to some people. The nuts are edible but not as sweet as the American Chestnut. The soft, spiny nut could become a hazard on sidewalks (pedestrians could roll on the fruit and fall), so locate them accordingly. But it is also fun for children to collect. In cold climates the growing season may not be long enough for the nuts to mature.

**GENERAL INFORMATION**

**Scientific name:** Castanea mollissima  
**Pronunciation:** kass-TAY-nee-uh maw-LISS-sim-uh  
**Common name(s):** Chinese Chestnut  
**Family:** Fagaceae  
**USDA hardiness zones:** 5 through 8 (Fig. 2)  
**Origin:** not native to North America  
**Uses:** fruit tree; shade tree; specimen; residential street tree; tree has been successfully grown in urban areas where air pollution, poor drainage, compacted soil, and/or drought are common  
**Availability:** somewhat available, may have to go out of the region to find the tree

**DESCRIPTION**

**Height:** 35 to 40 feet  
**Spread:** 40 to 50 feet  
**Crown uniformity:** symmetrical canopy with a regular (or smooth) outline, and individuals have more or less identical crown forms  
**Crown shape:** round  
**Crown density:** moderate  
**Growth rate:** medium  
**Texture:** coarse
Foliage

Leaf arrangement: alternate (Fig. 3)
Leaf type: simple
Leaf margin: serrate
Leaf shape: lanceolate; oblong
Leaf venation: pinnate
Leaf type and persistence: deciduous
Leaf blade length: 4 to 8 inches; 2 to 4 inches
Leaf color: green
Fall color: copper; yellow
Fall characteristic: showy

Fruit characteristics: attracts squirrels and other mammals; suited for human consumption; fruit, twigs, or foliage cause significant litter; showy

Flower

Flower color: white; yellow
Flower characteristics: pleasant fragrance; showy; summer flowering

Fruit

Fruit shape: oval; round
Fruit length: 1 to 3 inches
Fruit covering: dry or hard
Fruit color: green

Trunk and Branches

Trunk/bark/branches: droop as the tree grows, and will require pruning for vehicular or pedestrian clearance beneath the canopy; routinely grown with, or trainable to be grown with, multiple trunks; not particularly showy; tree wants to grow with several trunks but can be trained to grow with a single trunk; no thorns

Pruning requirement: requires pruning to develop strong structure
Breakage: resistant
Current year twig color: brown
Current year twig thickness: medium

Culture

Light requirement: tree grows in full sun
Soil tolerances: clay; loam; sand; slightly alkaline; acidic; well-drained
Drought tolerance: moderate
Aerosol salt tolerance: moderate
Other

**Roots:** surface roots are usually not a problem  
**Winter interest:** no special winter interest  
**Outstanding tree:** not particularly outstanding  
**Invasive potential:** little, if any, potential at this time  
**Pest resistance:** long-term health usually not affected by pests

**USE AND MANAGEMENT**

This is an urban-tough tree which may not be a suitable tree for street or parking lot locations but it can make a nice shade tree. Any advantages of using this tree may be overshadowed by the potential disease problems (although it is moderately resistant to chestnut blight), so plant it in limited numbers. Makes a nice tree to line entry roads or along walks to create a low-canopy shade tree. The fruit attracts wildlife, and could be used in natural areas or other non-traffic situations, away from pedestrian traffic. This is a novelty tree which should be planted occasionally rather than a staple for urban planting.

Best growth is in full-day sun. Chinese Chestnut is tolerant of some drought but prefers good soil which is loose, not dry, and not too wet.

The following four cultivars have been selected for their nut production: ‘Abundance’, ‘Meiling’, ‘Nanking’, and ‘Kuling’. Others include: ‘Estate-jap’ - highly resistant to chestnut blight; ‘Sleeping Giant’ - grows larger than species; ‘Kelsey’ - smaller tree with good nut quality.

**Diseases and Pests**

Usually pest-free.

Blight of chestnut has virtually eliminated the American Chestnut from the landscape, but Chinese Chestnut is moderately resistant to the disease, not immune. The disease caused cankers on the branches then moved into the trunk killing the tree. There is no chemical control for the disease. Most chestnuts now grown are asiatic types and are resistant (but not immune) to the disease caused by the chestnut blight fungus.

Twig canker is a problem on asiatic chestnuts. The symptoms are a brown discoloration on a twig. The disease girdles the twig and moves down to a larger branch. The leaves on the girdled branch wilt, turn brown and die. The canker is obvious due to...
callus formation at the canker margin. The disease attacks seedlings, very old trees, or unhealthy trees of any age. No chemical control is available. Prune out diseased branches and prevent the disease by keeping trees healthy.

Leaf spots caused by various fungi can be a problem. These are not serious so no chemical controls are listed. Clean up and dispose of diseased leaves.

Powdery mildew causes a white powdery growth on the leaves.