



## *Pistacia chinensis* Chinese Pistache<sup>1</sup>

Edward F. Gilman and Dennis G. Watson<sup>2</sup>

### INTRODUCTION

Finely divided, lustrous, dark green foliage, bright red fruit (on female trees) ripening to dark blue, peeling, attractive bark, and wonderful fall colors combine to make Chinese Pistache an outstanding specimen, shade, or street tree (Fig. 1). Capable of reaching 60 feet in height with a 25 to 35-foot spread, Chinese Pistache is usually seen at 25 to 35 feet in height with an oval, rounded canopy and light, open branching creating light shade. Branches form a vase-shape which is particularly evident during the winter. Lower branches often droop to the ground with time, forming a wonderfully spreading crown. Older, more mature trees become more dense and uniformly-shaped. Young trees are asymmetrical and a bit awkward-looking unless properly pruned in the nursery. For this reason, it has not been widely planted but should be due its adaptability to urban soils.

### GENERAL INFORMATION

**Scientific name:** *Pistacia chinensis*

**Pronunciation:** piss-TAY-shee-uh chih-NEN-sis

**Common name(s):** Chinese Pistache

**Family:** *Anacardiaceae*

**USDA hardiness zones:** 6B through 9 (Fig. 2)

**Origin:** not native to North America

**Uses:** large parking lot islands (> 200 square feet in size); wide tree lawns (>6 feet wide); medium-sized parking lot islands (100-200 square feet in size); medium-sized tree lawns (4-6 feet wide); recommended for buffer strips around parking lots or for median strip plantings in the highway; near a deck

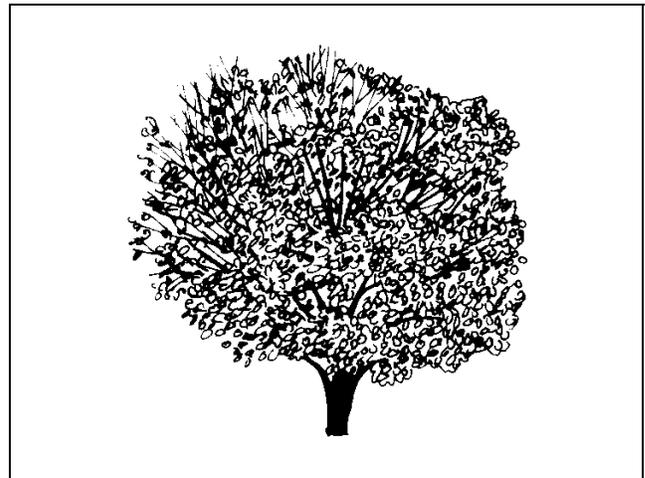


Figure 1. Middle-aged Chinese Pistache.

or patio; reclamation plant; shade tree; specimen; sidewalk cutout (tree pit); 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:** 25 to 35 feet

**Spread:** 25 to 35 feet

**Crown uniformity:** symmetrical canopy with a regular (or smooth) outline, and individuals have more or less identical crown forms

**Crown shape:** oval; round; spreading; vase shape

**Crown density:** moderate

**Growth rate:** medium

1. This document is adapted from Fact Sheet ST-482, a series of the Environmental Horticulture Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida. Publication date: October 1994.
2. Edward F. Gilman, associate professor, Environmental Horticulture Department; Dennis G. Watson, associate professor, Agricultural Engineering Department, Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida, Gainesville FL 32611.



Figure 2. Shaded area represents potential planting range.

**Texture:** medium

### Foliage

**Leaf arrangement:** alternate (Fig. 3)

**Leaf type:** even pinnately compound

**Leaflet margin:** entire

**Leaflet shape:** lanceolate

**Leaflet venation:** pinnate

**Leaf type and persistence:** deciduous

**Leaflet blade length:** 2 to 4 inches

**Leaf color:** green

**Fall color:** orange; red

**Fall characteristic:** showy

### Flower

**Flower color:** red

**Flower characteristics:** showy; spring flowering

### Fruit

**Fruit shape:** oval; round

**Fruit length:** < .5 inch

**Fruit covering:** fleshy

**Fruit color:** blue; green; red

**Fruit characteristics:** does not attract wildlife; fruit, twigs, or foliage cause significant litter; showy

### Trunk and Branches

**Trunk/bark/branches:** droop as the tree grows, and will require pruning for vehicular or pedestrian clearance beneath the canopy; showy trunk; should be grown with a single leader; no thorns

**Pruning requirement:** requires pruning to develop strong structure

**Breakage:** resistant

**Current year twig color:** brown

**Current year twig thickness:** thick

### Culture

**Light requirement:** tree grows in part shade/part sun; tree grows in full sun

**Soil tolerances:** clay; loam; sand; acidic; alkaline; well-drained

**Drought tolerance:** high

**Aerosol salt tolerance:** none

**Soil salt tolerance:** poor



Figure 3. Foliage of Chinese Pistache.

### Other

**Roots:** surface roots are usually not a problem

**Winter interest:** tree has winter interest due to unusual form, nice persistent fruits, showy winter trunk, or winter flowers

**Outstanding tree:** tree has outstanding ornamental features and could be planted more

**Invasive potential:** little, if any, potential at this time

**Verticillium wilt susceptibility:** susceptible

**Pest resistance:** no pests are normally seen on the tree

### USE AND MANAGEMENT

The wood is extremely durable and the outer, grey-brown, fissured bark flakes off to reveal the attractive, salmon red or orange inner bark. The colorful red-orange to pink fruits appear in large panicles and are quite showy in late summer and autumn in USDA hardiness zones 8 and 9 but do not cause a significant litter problem. Fall color is reliably bright red or orange in USDA hardiness zone 8 and colder areas and makes one of the most brilliant shows of any tree, but fall color is less reliable in warmer climates. This is one of the last trees to color in the fall, extending the fall color show in many parts of the south into November.

The tree needs special pruning and training in the early years to create branches in desirable places along the trunk. It often grows with few branches, or with

branches clustered at one point on the trunk, if it was topped in the nursery. To train an unbranched young sapling, prune the top to force development of several branches. Pick one to be the trunk, another to be a branch and remove the rest. Allow the tree to grow taller and again top the unbranched trunk 18 to 24 inches above the first pruning cut to force branch development there. Build the tree in this fashion until a desirable structure with well spaced branches is achieved.

This is certainly an underutilized urban tree. It has merit for wider use in urban street tree plantings and in other adverse sites due to its drought tolerance, adaptability, moderate size, and wonderful form and fall color. It is hard to go wrong with Chinese Pistache in all areas within its range. Its range is occasionally extended to hardiness zone 6a.

Chinese Pistache grows quickly in full sun to partial shade on moderately fertile, well-drained soils and will withstand heat and drought extremely well. The crown is quite round and symmetrical on older specimens when grown in full sun but becomes misshapen in too much shade - best for full sun areas. Grows in clay, loam, or sand in a wide range of soil pH.

Chinese Pistache is used as the understock on which the commercial pistachio nut (*Pistacia vera*) is grafted. The cultivar 'Keith Davey' has outstanding autumn color.

Propagation is by seed.

### Pests

No pests are of major concern. This tree is about as pest-free as any tree.

### Diseases

Verticillium wilts and oak root fungus occasionally affect Chinese Pistache.