

Pistacia chinensis Chinese Pistache¹

Edward F. Gilman and Dennis G. Watson²

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

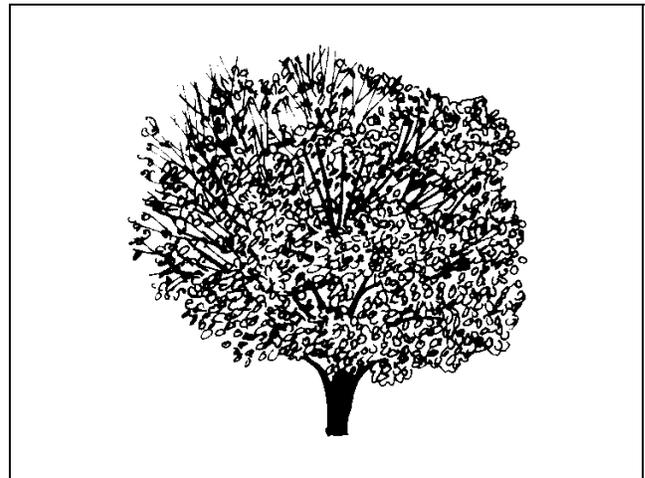


Figure 1. Middle-aged Chinese Pistache.

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.