



Pinus pinea Stone Pine¹

Edward F. Gilman and Dennis G. Watson²

INTRODUCTION

Just as its name implies, Umbrella Pine has a broad, somewhat flattened round canopy, and the tree will ultimately reach 80 to 100 feet in height though it is more often seen at 35 to 45 feet tall and wide (Fig. 1). The bright green, stiff, six-inch-long needles are arranged in slightly twisted bundles, and are joined by the heavy, five to six-inch-long cones which remain tightly closed on the tree for three years. The trunk is showy with narrow, foot-long orange plates set off nicely by darker fissures.

GENERAL INFORMATION

Scientific name: *Pinus pinea*

Pronunciation: PIE-nus pie-NEE-uh

Common name(s): Stone Pine, Italian Stone Pine, Umbrella Pine

Family: *Pinaceae*

USDA hardiness zones: 7 through 11 (Fig. 2)

Origin: not native to North America

Uses: Bonsai; fruit tree; 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; screen; shade tree; narrow tree lawns (3-4 feet wide); specimen; sidewalk cutout (tree pit); no proven urban tolerance

Availability: somewhat available, may have to go out of the region to find the tree

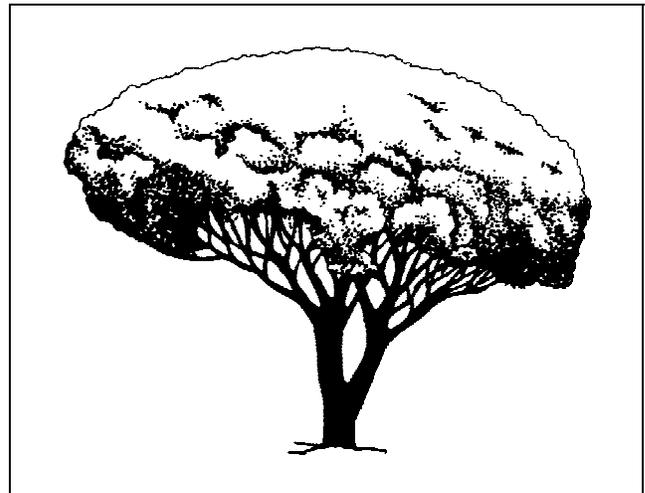


Figure 1. Mature Stone Pine.

DESCRIPTION

Height: 35 to 60 feet

Spread: 35 to 45 feet

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

Crown shape: round; vase shape

Crown density: dense

Growth rate: medium

Texture: fine

Foliage

Leaf arrangement: alternate; spiral (Fig. 3)

Leaf type: simple

Leaf margin: entire

Leaf shape: needle-like (filiform)

1. This document is adapted from Fact Sheet ST-472, 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.

Leaf venation: parallel

Leaf type and persistence: evergreen; fragrant;
needle leaf evergreen

Leaf blade length: 2 to 4 inches

Leaf color: green

Fall color: no fall color change

Fall characteristic: not showy

Flower

Flower color: yellow

Flower characteristics: inconspicuous and not
showy; spring flowering

Fruit

Fruit shape: oval; round

Fruit length: 1 to 3 inches

Fruit covering: dry or hard

Fruit color: brown

Fruit characteristics: does not attract wildlife; suited
for human consumption; fruit, twigs, or foliage cause
significant litter; persistent on the tree; showy

Trunk and Branches

Trunk/bark/branches: grow mostly upright and will
not droop; showy trunk; should be grown with a single
leader; no thorns

Pruning requirement: needs little pruning to develop
a strong structure

Breakage: resistant

Current year twig color: brown

Current year twig thickness: thick

Culture

Light requirement: tree grows in full sun

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

Drought tolerance: high

Aerosol salt tolerance: high

Soil 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

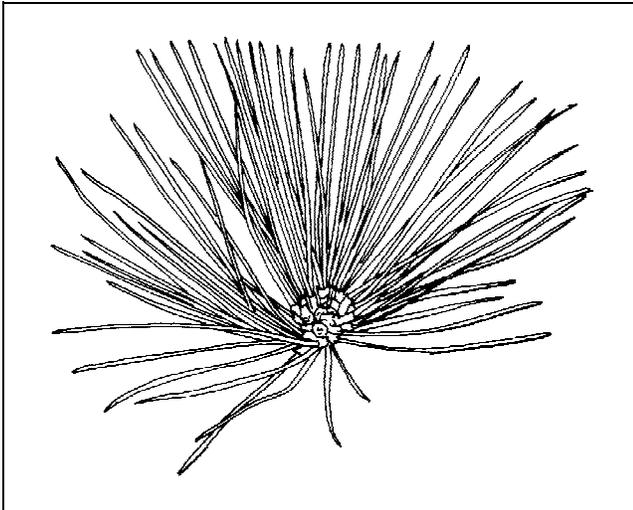


Figure 3. Foliage of Stone Pine.

Pests

There are a large number of pests on Pine.

Diseases

This tree is usually disease-free.

Verticillium wilt susceptibility: not known to be susceptible

Pest resistance: very sensitive to one or more pests or diseases which can affect tree health or aesthetics

USE AND MANAGEMENT

It is the seeds inside the cones which are of particular interest, called pignolia or Pine nuts in the stores. The closed cones are gathered, then laid out in the direct sun which forces them to open so the seeds can be harvested. Eaten raw or roasted like peanuts, pignolia nuts are a traditional ingredient of certain Italian dishes. In fact, the tree is native to southwest Europe around the Mediterranean to Greece and Asia Minor, and remains of the cones have been discovered in Roman camps in Britain attesting to their long-time popularity.

Umbrella Pine has not been extensively tried as a street tree except in parts on California where it has done well, but has the attributes of an urban tolerant tree. Drought and salt tolerance is high making it suited for areas such as western Texas and Oklahoma. Grows well in soil with a pH in the mid 7's or lower, but may do poorly with higher pH. Umbrella Pine should be grown in full sun on well-drained soil. Winter winds and low temperature in USDA hardiness zone 7a cause needles to brown and they remain unsightly all winter.

Propagation is by seed.