



Pinus densiflora Japanese Red Pine¹

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INTRODUCTION

Japanese Red Pine reaches a height and spread of 30 to 50 feet in the landscape growing much taller in the woods (Fig. 1). Needles are arranged in pairs and remain on the tree for about three years. A distinguishing feature of this tree is the often crooked or sweeping trunk which shows reddish-orange peeling bark. Because lower branches are held nearly horizontal on the trunk forming a picturesque silhouette in the landscape it is used best as a specimen, not as a mass planting. Needles may turn yellowish during winter on some soils.

GENERAL INFORMATION

Scientific name: *Pinus densiflora*

Pronunciation: PIE-nus den-sih-FLOR-uh

Common name(s): Japanese Red Pine

Family: *Pinaceae*

USDA hardiness zones: 3B through 7A (Fig. 2)

Origin: not native to North America

Uses: Bonsai; specimen; no proven urban tolerance

Availability: grown in small quantities by a small number of nurseries

DESCRIPTION

Height: 30 to 50 feet

Spread: 30 to 50 feet

Crown uniformity: irregular outline or silhouette

Crown shape: oval

Crown density: moderate

Growth rate: medium

Texture: fine

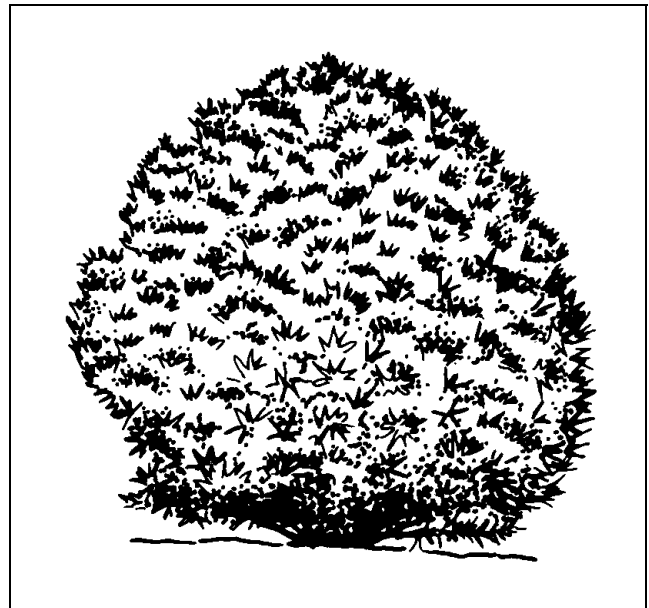


Figure 1. Young Japanese Red Pine.

Foliage

Leaf arrangement: alternate; spiral

Leaf type: simple

Leaf margin: entire

Leaf shape: needle-like (filiform)

Leaf venation: parallel

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

Leaf blade length: 4 to 8 inches; 2 to 4 inches

Leaf color: green

Fall color: no fall color change

Fall characteristic: not showy

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Figure 2. Shaded area represents potential planting range.

Flower

Flower color: yellow

Flower characteristics: inconspicuous and not showy

Fruit

Fruit shape: oval (Fig. 3)

Fruit length: 1 to 3 inches

Fruit covering: dry or hard

Fruit color: tan

Fruit characteristics: does not attract wildlife; inconspicuous and not showy; fruit, twigs, or foliage cause significant litter; persistent on the tree

Trunk and Branches

Trunk/bark/branches: routinely grown with, or trainable to be grown with, multiple trunks; grow mostly upright and will not droop; tree wants to grow with several trunks but can be trained to grow with a single trunk; very showy trunk; no thorns

Pruning requirement: needs little pruning to develop a strong structure

Breakage: susceptible to breakage either at the crotch due to poor collar formation, or the wood itself is weak and tends to break

Current year twig color: green

Current year twig thickness: medium

Culture

Light requirement: tree grows in full sun

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

Drought tolerance: moderate

Aerosol salt tolerance: low

Soil salt tolerance: poor

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: not known to be susceptible

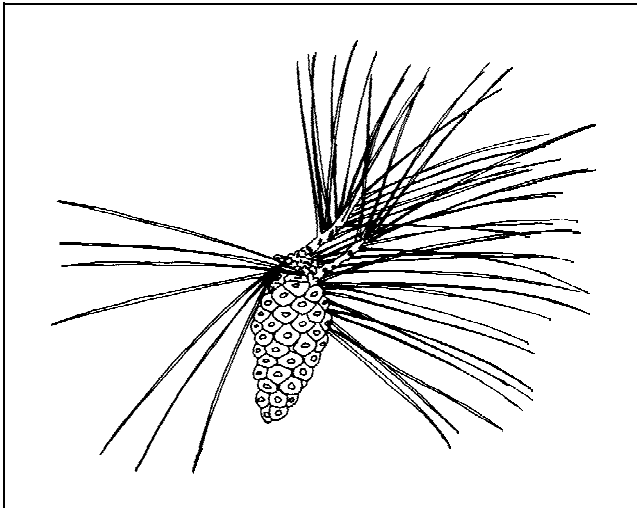


Figure 3. Fruit of Japanese Red Pine.

Pest resistance: long-term health usually not affected by pests

USE AND MANAGEMENT

The tree prefers a site with full sun and a well-drained, slightly acid soil. Clay soil is usually not suitable unless it is very well drained.

There are a few cultivars: 'Alboterminata' - yellowish needle tips; 'Aurea' - yellow needles; 'Oculus-draconis' - Dragon's Eye Pine - two yellow lines on needles; 'Umbraculifera' - Tanyosho Pine - 20 feet tall, multi-trunked.

Propagation is by seed.

Pests

This tree is usually pest-free, with occasional scale, but the list of potential problems is long.

Diseases

Some of its diseases are needle blight and rusts. Canker diseases may cause dieback of landscape Pines. Keep trees healthy and prune out the infected branches.

Needle cast is common on small trees and plantation or forest trees. Infected needles yellow and fall off.