Pinus densiflora
Japanese Red Pine

Edward F. Gilman and Dennis G. Watson

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

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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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 2. Shaded area represents potential planting range.
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 a few cultivars: ‘Alboterminata’ - yellowish needle tips; ‘Aurea’ - yellow needles; ‘Oculis-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.