

Pinus densiflora 'Aurea' 'Aurea' 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. The needles on this cultivar have a light yellow color and they have been described by some people as off-color. 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* 'Aurea'

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

Common name(s): 'Aurea' 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: 35 to 50 feet

Crown uniformity: irregular outline or silhouette

Crown shape: oval

Crown density: moderate

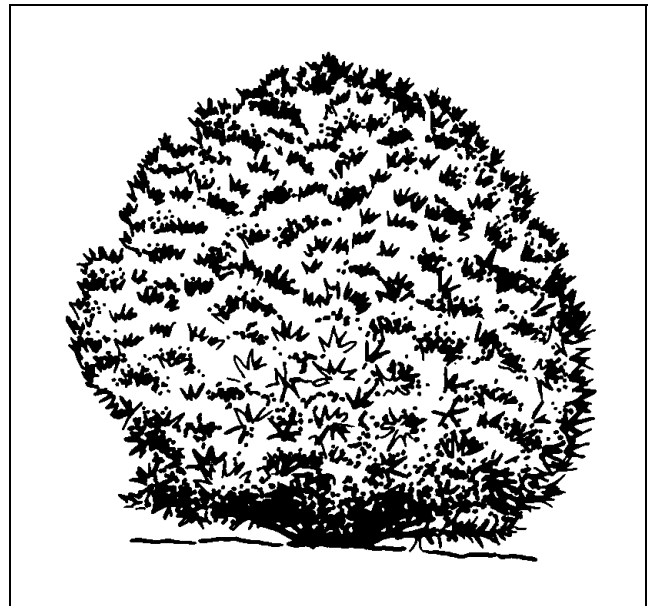


Figure 1. Young 'Aurea' Japanese Red Pine.

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: yellow

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Figure 2. Shaded area represents potential planting range.

Fall color: no fall color change

Fall characteristic: not showy

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; showy trunk; tree wants to grow with several trunks but can be trained to grow with a single trunk; no thorns

Pruning requirement: requires pruning to develop 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

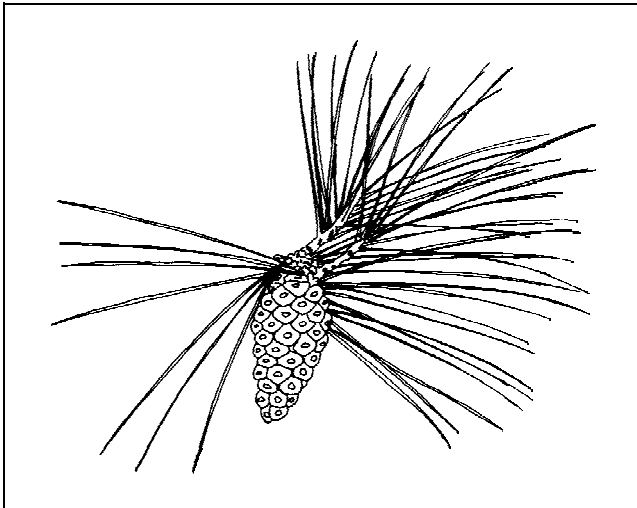


Figure 3. Fruit of 'Aurea' Japanese Red Pine.

Verticillium wilt susceptibility: not known to be susceptible

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 the site is well drained, such as on a slope.

There are a few other cultivars: 'Alboterminata' - yellowish needle tips; 'Oculis-draconis' - Dragon's Eye Pine - two yellow lines on needles; 'Umbraculifera' - Tanyosho Pine - 20 feet tall, multi-trunked, and perhaps the most popular cultivar.

Propagation is by seed.

Pests

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

Some adelgids will appear as white cottony growths on the bark. All types produce honeydew which may support sooty mold. European pine shoot moth causes young shoots to fall over. Infested shoots may exude resin. The insects can be found in the shoots during May. Pesticides are only effective when caterpillars are moving from overwintering sites to new shoots. This occurs in mid to late April or when needle growth is about half-developed.

Bark beetles bore into trunks making small holes scattered up and down the trunk. Stressed trees are

more susceptible to attack. The holes look like shotholes. Keep trees healthy.

Sawfly larvae caterpillars are variously colored but generally feed in groups on the needles. Some sawfly larvae will flex or rear back in unison when disturbed. Sawflies can cause rapid defoliation of branches if left unchecked.

Pine needle miner larvae feed on the inside of needles causing them to turn yellow and dry up.

Pine needle scale is a white, elongated scale found on the needles. Pine tortoise scale is brown and found on twigs. Depending on the scale, horticultural oil may control overwintering stages.

Pine spittle bug lives and hides in a foamy mass.

Spruce mites cause damage to older needles, and are usually active in the spring and fall. Mites cause older needles to become yellowed or stippled.

Zimmerman pine moth larvae bore into the trunk. The only outward symptoms may be death of parts of the tree or masses of hardened pitch on the branches.

The larvae of pine weevils feed on the sapwood of the leaders. The leader is killed and the shoots replacing it are distorted. First symptoms are pearl white drops of resin on the leaders. The leaders die when the shoot is girdled as adults emerge in August. Prune out and burn infested terminals before mid July.

Pine wilt nematode can cause considerable damage.

Diseases

Needle blight, 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.