



Sophora japonica 'Regent' 'Regent' Scholar Tree¹

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INTRODUCTION

'Regent' Scholar Tree grows 40 to 50 feet in height with a spread of 30 to 40 feet, forming a large, rounded canopy even as a young tree (Fig. 1). The canopy appears more uniform and predictable than the species. The dark green, shiny leaves turn yellow before dropping in fall. The very showy, greenish-white to yellow flowers are produced in mid to late summer and provide an airy feel to the tree for several weeks. A yellow dye can be made by boiling the dried flowers and buds in water. The young green twigs turn dark grey with age. The species tree must be at least 10-years-old to bloom but the cultivar 'Regent' blooms at two to eight-years of age.

GENERAL INFORMATION

Scientific name: *Sophora japonica* 'Regent'
Pronunciation: sah-FOR-uh juh-PAWN-ih-kuh
Common name(s): 'Regent' Scholar Tree, 'Regent' Japanese Pagoda Tree
Family: *Leguminosae*
USDA hardiness zones: 5B through 8A (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 or patio; 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

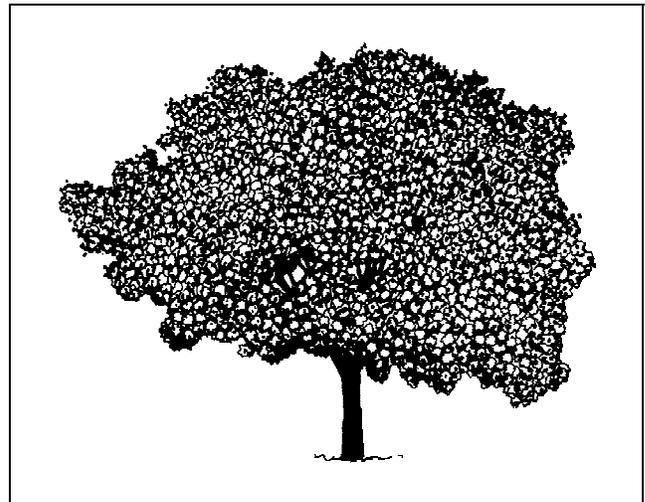


Figure 1. Middle-aged 'Regent' Scholar Tree.

Availability: generally available in many areas within its hardiness range

DESCRIPTION

Height: 40 to 50 feet
Spread: 30 to 40 feet
Crown uniformity: symmetrical canopy with a regular (or smooth) outline, and individuals have more or less identical crown forms
Crown shape: round
Crown density: moderate
Growth rate: fast
Texture: fine

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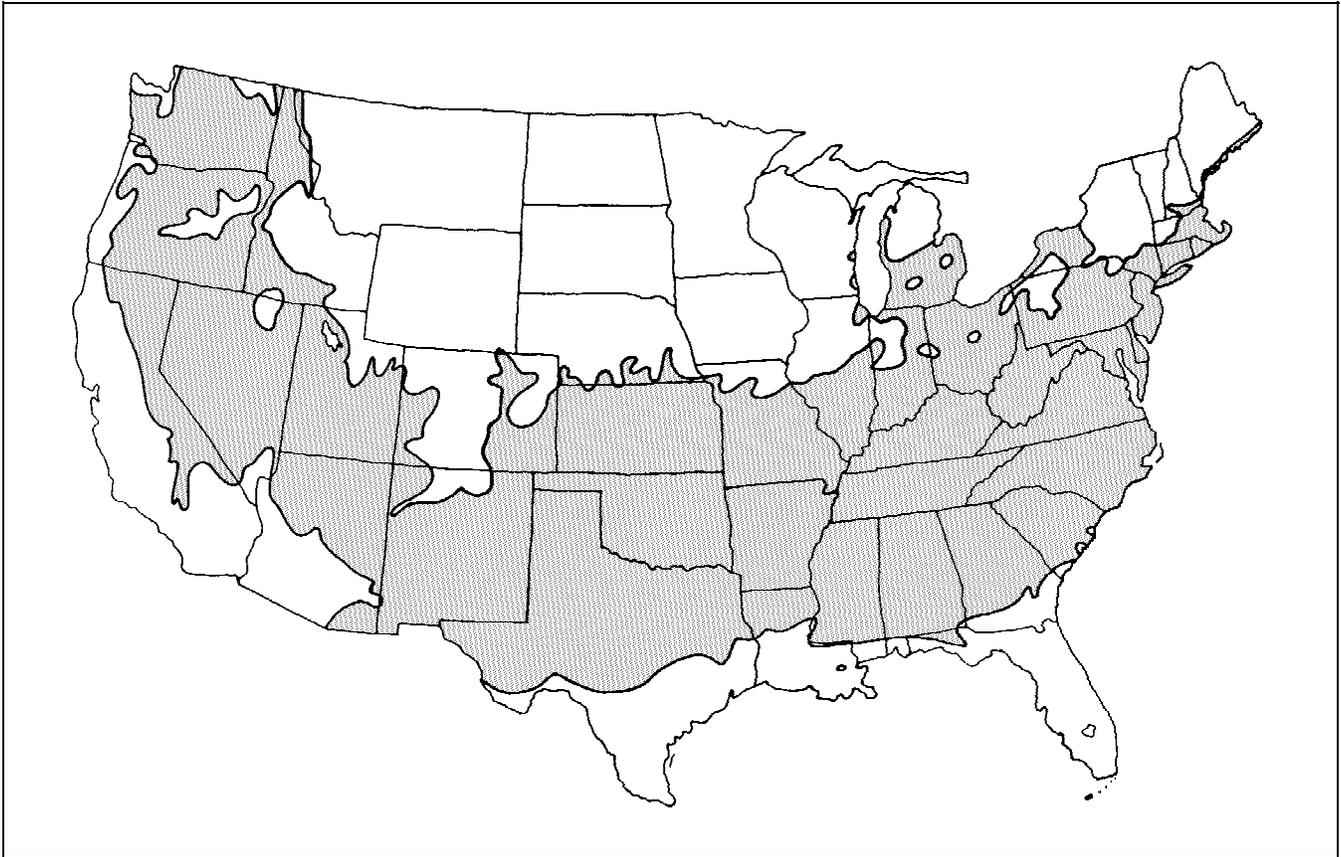


Figure 2. Shaded area represents potential planting range.

Foliage

Leaf arrangement: alternate (Fig. 3)

Leaf type: odd pinnately compound

Leaflet margin: entire

Leaflet shape: ovate

Leaflet venation: pinnate

Leaf type and persistence: deciduous

Leaflet blade length: less than 2 inches

Leaf color: green

Fall color: yellow

Fall characteristic: not showy

Flower

Flower color: white; yellow

Flower characteristics: showy; summer flowering

Fruit

Fruit shape: elongated; pod

Fruit length: 6 to 12 inches; 3 to 6 inches

Fruit covering: dry or hard

Fruit color: brown; yellow

Fruit characteristics: does not attract wildlife; fruit, twigs, or foliage cause significant litter; persistent on

the tree; showy

Trunk and Branches

Trunk/bark/branches: droop as the tree grows, and will require pruning for vehicular or pedestrian clearance beneath the canopy; not particularly showy; should be grown with a single leader; 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; thin

Culture

Light requirement: tree grows in full sun

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

Drought tolerance: high

Aerosol salt tolerance: moderate

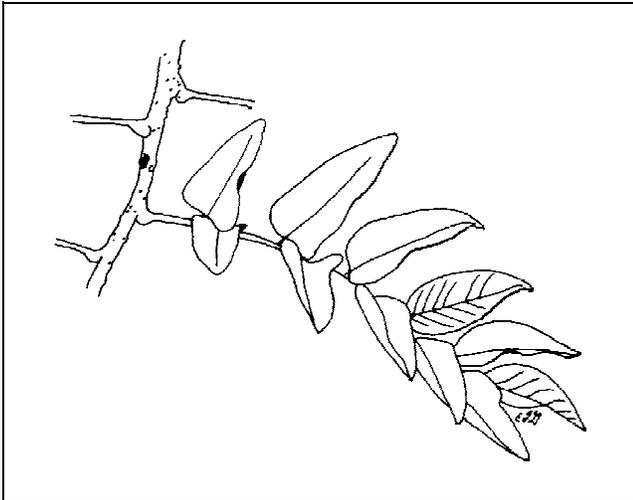


Figure 3. Foliage of 'Regent' Scholar Tree.

Other

Roots: surface roots are usually not a problem

Winter interest: no special winter interest

Outstanding tree: tree has outstanding ornamental features and could be planted more

Invasive potential: little, if any, potential at this time

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

USE AND MANAGEMENT

The tree drops flower petals creating a creamy white carpet for several weeks on the ground, but they temporarily stain sidewalks. The fruit pods drop later in the winter and could be a nuisance to some people. The leaflets are small, creating light shade beneath the tree and are mostly washed away with rain or fall into shrub beds or between the grass blades.

This urban-tough tree is highly recommended for urban street tree planting. The tree reportedly has a straight trunk, but the trees commonly need pruning and training to form one central trunk. Some trees come from the nursery with multiple trunks or branches clustered together at one spot on the trunk. Buy those with one central trunk growing up the center of the tree or prune the tree to a central leader to create a strong, durable structure. Space branches along the central leader to ensure good branch attachment. It may take several prunings to train the tree to the proper form.

'Regent' Scholar Tree has a growth rate which is faster than the species and tolerates polluted city conditions, salt, alkaline soil, heat, and moderate drought. The tree prefers a sunny, open location on

any light soil but trees perform poorly on clay or poorly-drained soil.

'Princeton Upright' has a narrower crown.

Propagation is by cuttings, grafts, or seed, though seedling trees of 'Regent' can take as long as the species to flower, 10 to 12-years.

Pests

This tree is pest-resistant. 'Regent' Scholar Tree is reportedly more resistant than the species to the potato leafhopper which kills young stems causing profuse branching, or witches broom, on small branches.

Diseases

Sophora species is generally not affected severely by diseases. A canker fungus forms cankers two-inches or less across with raised reddish-brown margins and light brown centers. The infected stem is killed when the fungus girdles the stem. Another fungus is sometimes found on dead branches on *Sophora* species. Frost injury may give both fungi an entrance into the tree. Prune out dead, damaged, or diseased branches.

If infected by twig blight or dieback, then prune out infected branches and avoid unnecessary wounding. Keep trees vigorous by regular fertilization.

Powdery mildew can infect the surface of the leaves.