



Robinia pseudoacacia Black Locust¹

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INTRODUCTION

A fast-growing native deciduous tree, Black Locust is capable of reaching 70 to 80 feet in height but is more often seen 30 to 50 feet tall with a spread of 20 to 35 feet (Fig. 1). The upright growth and short, irregular branches form an open canopy and cast light shade below the tree, allowing a lawn to thrive. The 6 to 14-inch-long, dull, blue/green leaves, made up of multiple leaflets, are some of the last to appear in spring and often drop early in the autumn, just barely fading to a sickly yellow/green before dropping. For approximately a 10-day period in late spring, the trees are festooned with four to eight-inch-long, dense clusters of extremely fragrant, one-inch white blossoms (similar to sweet-peas) which are literally "alive" with the bustling activity of visiting bees. The honey which is produced is quite delicious and sought-after. The two to four-inch-long, dark red to black, leathery seeds pods which follow will persist on the trees throughout the winter.

GENERAL INFORMATION

Scientific name: Robinia pseudoacacia

Pronunciation: roe-BIN-nee-uh

Common name(s): Black Locust, Common Locust

Family: Leguminosae

soo-doe-uh-KAY-shuh

USDA hardiness zones: 4 through 8 (Fig. 2)

Origin: native to North America

Uses: reclamation plant; shade tree; no proven urban toleran rown density: open

Availability: somewhat available, may have to go out

of the region to find the tree

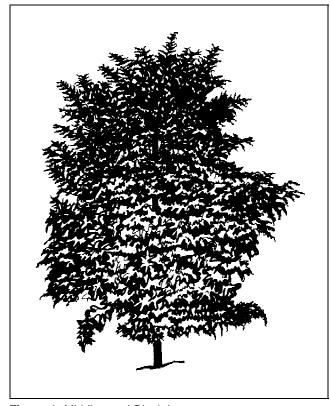


Figure 1. Middle-aged Black Locust.

DESCRIPTION

Height: 40 to 70 feet **Spread:** 25 to 35 feet

Crown uniformity: irregular outline or silhouette

Crown shape: oval; upright

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: elliptic (oval); oblong; obovate

Leaflet venation: pinnate

Leaf type and persistence: deciduous Leaflet blade length: less than 2 inches Leaf color: blue or blue-green; green

Fall color: yellow

Fall characteristic: not showy

Flower

Flower color: white

Flower characteristics: pleasant fragrance; spring

flowering; very showy

Fruit

Fruit shape: pod

Fruit length: 3 to 6 inches; 1 to 3 inches

Fruit covering: dry or hard Fruit color: black; red

Fruit characteristics: attracts birds; attracts squirrels and other mammals; inconspicuous and not showy; fruit, twigs, or foliage cause significant litter; persistent on the tree

Trunk and Branches

Trunk/bark/branches: grow mostly upright and will not droop; showy trunk; should be grown with a single leader; thorns are present on the trunk or branches **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: brown Current year twig thickness: thin Wood specific gravity: 0.69

Culture

Light requirement: tree grows in part shade/part sun;

tree grows in full sun

Soil tolerances: clay; loam; sand; acidic; alkaline;

well-drained

Drought tolerance: high

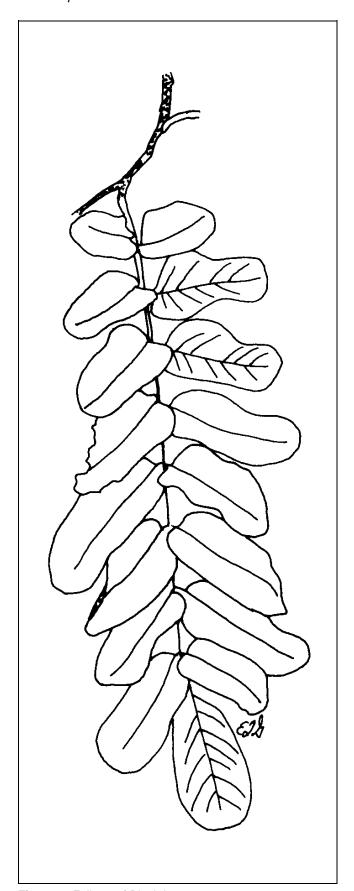


Figure 3. Foliage of Black Locust.

Aerosol salt tolerance: high

Soil salt tolerance: good

Other

Roots: surface roots can lift sidewalks or interfere with mowing

Winter interest: tree has winter interest due to unusual form, nice persistent fruits, showy winter trunk, or winter flowers

Outstanding tree: not particularly outstanding Invasive potential: seeds itself into the landscape

Ozone sensitivity: tolerant

Verticillium wilt susceptibility: susceptible

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

USE AND MANAGEMENT

These seeds are widely dispersed by birds and other wildlife, and along with the root suckering and invasive root system, Black Locust can spread into surrounding landscapes. This feature, along with the thorns found along the branches, should be considered when placing Black Locust in the ornamental garden. It is probably best saved for the reclamation project or roadside planting where trees receive no maintenance. If left to its own devices, it will form dense thickets, even on the poorest soils, a fact which makes it quite useful in reclamation applications.

Although the wood of Black Locust is reputed to be extremely strong and durable (pioneers used it to fashion nails for building ships and houses), the branches are brittle and subject to damage in high winds. This may be due largely to the tendency for the branches to form a narrow angle with the trunk and to grow aggressively relative to the trunk forming embedded bark. This can be partially corrected by pruning the major branches so they grow to no more than about half the size of the trunk.

Able to tolerate drought, salt, and poor soil, Black Locust will grow in full sun or partial shade on almost any soil acid or alkaline except that which is permanently wet. A tough tree which should be saved for the toughest sites. Not for general use in urban areas due to borer problems unless located in a moist, well-drained site with plenty of soil space.

Cultivars include: 'Erecta', upright form; 'Frisia' - yellowish leaves in early summer; and 'Purple Robe', lavender flowers. 'Purple Robe' is gorgeous in full bloom

Propagation is by seed or cuttings.

Pests

Locust borer is a serious pest although borerresistant clones are now being developed. It is also bothered by carpenterworm, locust leaf miner, and scales. Leaf miner is a universal problem, and the trees along the highways in the south can be seen in summer riddled with damage from this pest.

Diseases

Black Locust is susceptible to canker, leaf spot, and powdery mildew.