

# Catalpa spp.: Catalpa<sup>1</sup>

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## Introduction

*Catalpa speciosa* (Northern Catalpa) grows in a loose oval, 50 feet tall in most urban locations, but occasionally grows to 90 feet. This coarse, large leaved tree spreads 50 feet and tolerates hot, dry weather, but leaves may scorch and some drop from the tree in very dry summers. *Catalpa bignonioides* (Southern Catalpa) is somewhat smaller reaching about 30 to 40 feet tall, leaves are arranged opposite or in whorls (*speciosa* leaves are opposite) and it is native and has some salt tolerance. A sunny exposure and a well-drained, moist, rich soil are preferred for best growth of Catalpa but they will tolerate a range of soils from acid to calcareous. Both trees have a coarse, very open growth habit forming an irregularly-shaped crown. Popular in older gardens and has a moderately-long life (60 years or so), but trunks on large trees often contain rot. Catalpas are very adaptable and they are tough trees, having naturalized in many parts of the south.

## General Information

**Scientific name:** *Catalpa spp.*

**Pronunciation:** kuh-TAL-puh species

**Common name(s):** Catalpa

**Family:** *Bignoniaceae*

**USDA hardiness zones:** 5A through 9A (Fig. 2)

**Origin:** native to North America

**Invasive potential:** weedy native

**Uses:** urban tolerant; reclamation; shade



Figure 1. Middle-aged *Catalpa spp.*: Catalpa

**Availability:** somewhat available, may have to go out of the region to find the tree

## Description

**Height:** 50 to 60 feet

**Spread:** 40 to 50 feet

**Crown uniformity:** irregular

**Crown shape:** oval

**Crown density:** moderate

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Figure 2. Range

**Growth rate:** fast

**Texture:** coarse

## Foliage

**Leaf arrangement:** opposite/subopposite (Fig. 3)

**Leaf type:** simple

**Leaf margin:** entire

**Leaf shape:** ovate

**Leaf venation:** pinnate

**Leaf type and persistence:** deciduous

**Leaf blade length:** 8 to 12 inches

**Leaf color:** green

**Fall color:** yellow

**Fall characteristic:** not showy

## Flower

**Flower color:** white/cream/gray

**Flower characteristics:** very showy

## Fruit

**Fruit shape:** elongated

**Fruit length:** 12 inches or more

**Fruit covering:** dry or hard

**Fruit color:** brown

**Fruit characteristics:** attracts squirrels/mammals; showy; fruit/leaves a litter problem

## Trunk and Branches

**Trunk/bark/branches:** branches droop; not showy; typically one trunk; thorns

**Pruning requirement:** needed for strong structure

**Breakage:** resistant

**Current year twig color:** green, brown

**Current year twig thickness:** very thick

**Wood specific gravity:** unknown

## Culture

**Light requirement:** full sun, partial sun or partial shade

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

**Drought tolerance:** high

**Aerosol salt tolerance:** moderate

## Other

**Roots:** not a problem

**Winter interest:** no

**Outstanding tree:** no

**Ozone sensitivity:** unknown

**Verticillium wilt susceptibility:** susceptible

**Pest resistance:** sensitive to pests/diseases

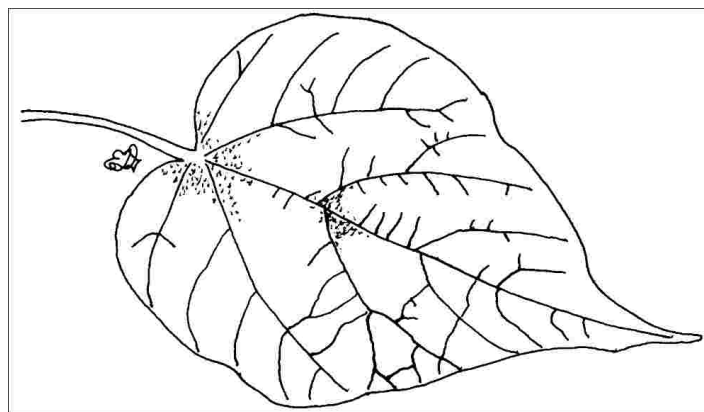


Figure 3. Foliage

## Use and Management

Growth is rapid at first but slows down with age as the crown begins to round out and the tree increases in spread. The main ornamental feature is panicles of white with yellow and purple markings produced in spring and early summer, depending on the particular tree. But leaves fall throughout the summer in USDA hardiness zone 8 making a mess and the tree looks ragged with yellow leaves in late summer. Flowers make somewhat of a slimy mess for a short period when they drop on a sidewalk but are no problem falling into shrubs, groundcovers, or turf. The fruit is a long pod (up to two feet long) resembling a string bean that can be a slight litter problem to some, but it is quite interesting. The tree is useful in areas where quick growth is desired, but there are better, more durable trees available for street and parking lot plantings. Sixty-year-old trees in Williamsburg, Virginia have three to four-foot-diameter trunks and are 40 feet tall. Catalpa often escapes cultivation and invades surrounding woodlands.

Catalpas are planted to attract Catalpa worms, a large caterpillar prized for fish bait because the skin is very tough and the caterpillar is juicy. The caterpillar can be frozen for use as a fish bait at a later time. The caterpillar can defoliate

the tree once or twice a year but there appear to be no adverse consequences to the tree.

Catalpa tolerates a wide range of soils, including pH in the 7's, and is moderately drought-tolerant. It is a tough tree suited for planting in large-scale landscapes.

## **Pests**

The larva of the Catalpa sphinx moth can eat large quantities of leaves. The caterpillar is yellow with black markings. The tree is regularly defoliated and often looks terrible by the end of the summer.

## **Diseases**

Anthracnose will cause dead areas on the leaves.

Brown leaf spots caused by several fungi can attack Catalpa. They are rarely serious so no chemical control is suggested.

Powdery mildew causes a white powdery coating on the leaves. When severe, the leaves yellow and fall off.

Catalpa is susceptible to verticillium wilt. Branches die and eventually the entire tree may die. A symptom of verticillium wilt is discoloration of the sapwood but the symptom is hard to find.

During hot, dry seasons the leaves may turn yellow and brown due to scorch, but the tree lives. Little can be done other than watering.

Catalpa may turn chlorotic due to a high soil pH, but the tree does not appear to otherwise suffer from alkaline soil.