Fact Sheet ST-138
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Celtis laevigata
Sugarberry[1]

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INTRODUCTION

This very large, broad, fast growing deciduous North American native tree has a rounded vase crown with spreading, pendulous branches (Fig. 1). The medium-textured, light green leaves turn bright yellow in fall and can be showy in some years. Leaves have a longer, more slender tip than *Celtis occidentalis*. The grey-brown to silvery bark has some warty projections or corky ridges, making it attractive in wintertime. The bark is far less warty than *Celtis occidentalis*. Open-grown Sugarberry commonly reaches 50 to 70 feet in height with a similar spread, and makes a wonderful shade tree. It could be grown and used more in urban areas but, unfortunately, appears to compartmentalize injury poorly, resulting in branch and trunk rot. Be sure to locate the tree where mechanical injury will not occur.

GENERAL INFORMATION

Scientific name: *Celtis laevigata*
Pronunciation: SELL-tiss lee-vih-GAY-tuh
Common name(s): Sugarberry, Sugar Hackberry
Family: *Ulmaceae*
USDA hardiness zones: 5 through 10 (Fig. 2)
Origin: native to North America
Uses: Bonsai; large parking lot islands (> 200 square feet in size); wide tree lawns (>6 feet wide); recommended for buffer strips around parking lots or for median strip plantings in the highway; reclamation plant; shade tree; residential street tree
Availability: grown in small quantities by a small number of nurseries

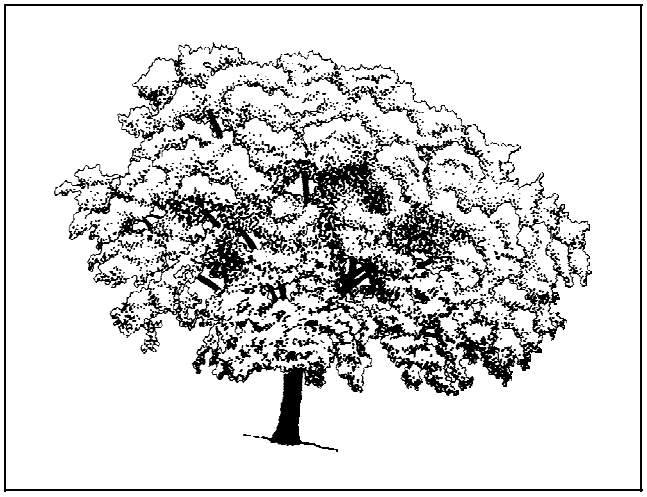

Figure 1. Mature Sugarberry.

DESCRIPTION

Height: 50 to 70 feet
Spread: 50 to 60 feet
Crown uniformity: irregular outline or silhouette
Crown shape: round; vase shape
Crown density: moderate
Growth rate: fast
Texture: medium

Foliage

Leaf arrangement: alternate (Fig. 3)
Leaf type: simple
Leaf margin: serrate
Leaf shape: lanceolate; ovate
Leaf venation: bowed; banchidodrome; pinnate; reticulate

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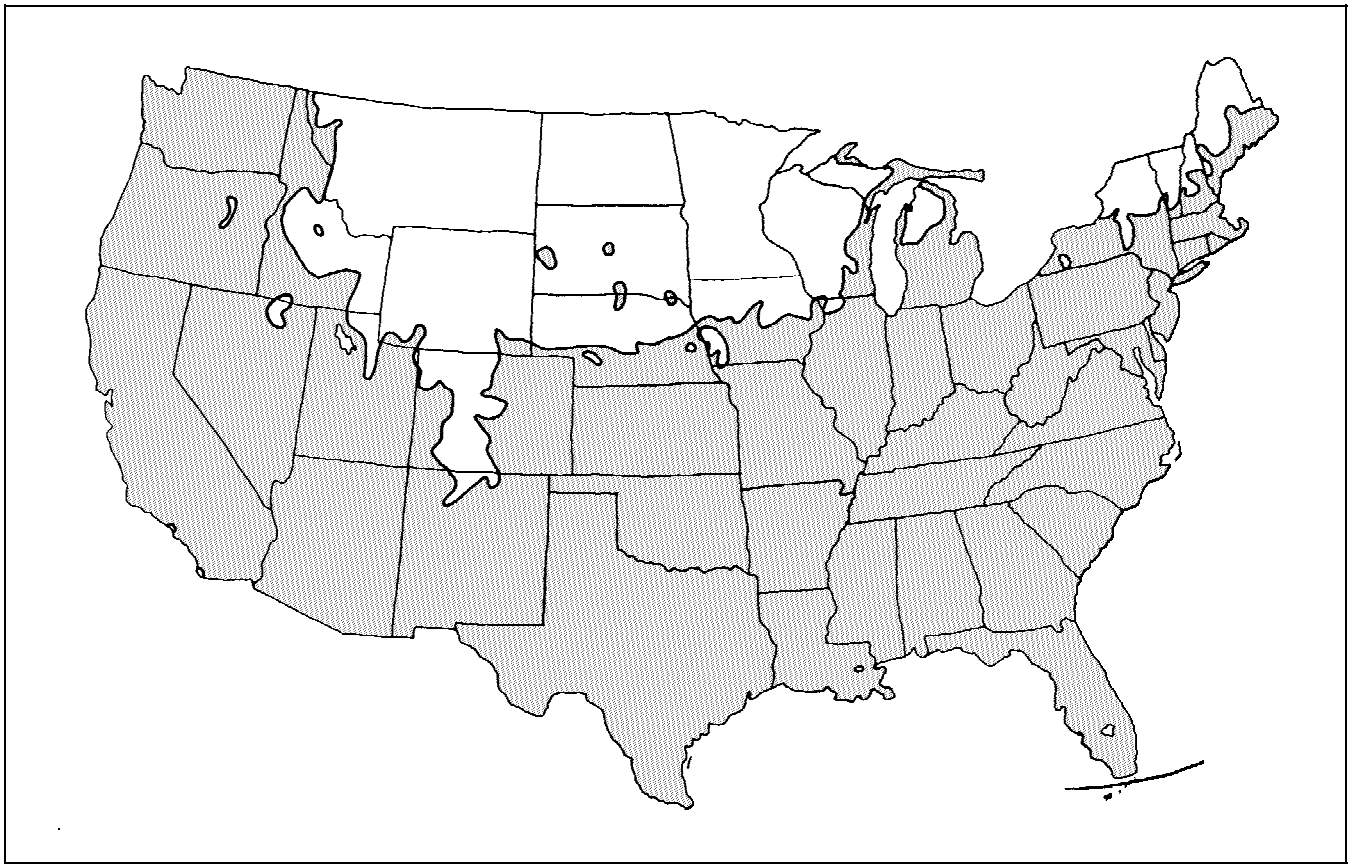

Figure 2. Shaded area represents potential planting range.

Leaf type and persistence: deciduous
Leaf blade length: 2 to 4 inches
Leaf color: green
Fall color: yellow
Fall characteristic: showy

Flower

Flower color: green
Flower characteristics: inconspicuous and not showy; spring flowering

Fruit

Fruit shape: round
Fruit length: < .5 inch
Fruit covering: fleshy
Fruit color: black; red
Fruit characteristics: attracts birds; attracts squirrels and other mammals; inconspicuous and not showy; fruit, twigs, or foliage cause significant litter

Trunk and Branches

Trunk/bark/branches: bark is thin and easily damaged from mechanical impact; droop as the tree grows, and will require pruning for vehicular or pedestrian clearance beneath the canopy; showy trunk; 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: brown; green
Current year twig thickness: thin

Culture

Light requirement: tree grows in part shade/part sun; tree grows in full sun
Soil tolerances: clay; loam; sand; acidic; alkaline; extended flooding; well-drained
Drought tolerance: high
Aerosol salt tolerance: high
Soil salt tolerance: good

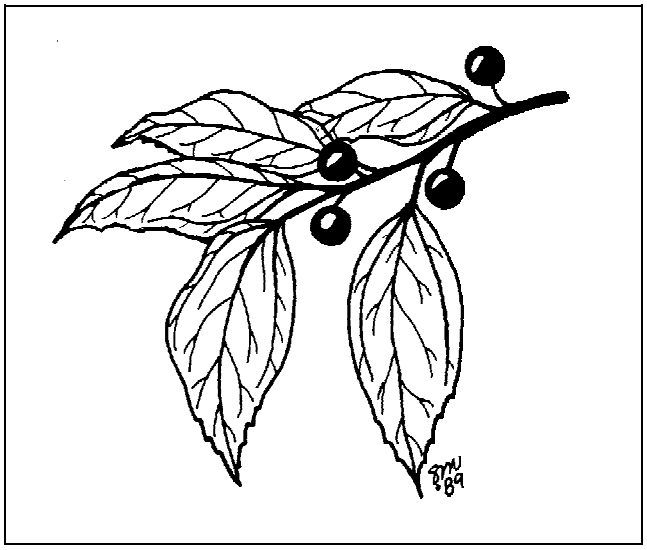

Figure 3. Foliage of Sugarberry.

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
Pest resistance: no pests are normally seen on the tree

USE AND MANAGEMENT

The tiny, berry-like, sweet fruits attract many birds, and Sugarberry should be included in any natural landscape setting. It is not normally grown by wholesale nurseries. It will grow rapidly and require regular pruning and training to develop a strong branch structure and to keep it looking neat in the nursery. Lack of popularity may be due to the open, awkward appearance of young trees and susceptibility to trunk rot in mature trees. But it appears to be no more sensitive to trunk rot than Laurel Oak. Avoid injury to the trunk and existing trees will serve you for many years.

Sugarberry will grow in a variety of soil types but grows best in moist, fertile soils in a full sun location, though it will tolerate partial shade. It is sensitive to highly alkaline soils. Chlorosis develops on alkaline soil, but witches broom and nipple gall are not a problem as they are on *Celtis occidentalis*. Sugarberry is moderately drought- and salt-tolerant once established and is very adaptable, growing in wet sites fairly well. Skilled pruning is required several times during the first 15 years of life to prevent formation of weak branch crotches and multiple trunks. But once this is accomplished, trees should grow with little care. Avoid pruning large-diameter branches from the trunk since the tree compartmentalizes decay poorly. A number of southern cities use Sugarberry as a street tree while others ban it. Give this tree a try in some of your urban and suburban landscapes.

The wood is used in much the same way as elm in the lumber industry for plywood, furniture and veneer.

'All Seasons' has a rounded crown, bright yellow fall foliage, and is very hardy (USDA hardiness zone 5). In the North and Midwest, the native *Celtis occidentalis* is used in place of *Celtis laevigata*. Somewhat similar in overall appearance, it is a smaller tree (to 60 feet) with a more warty bark and smaller, sandpapery leaves than *Celtis laevigata*.

Propagation is by seed.

Pests

The most common insect on Hackberry causes the Hackberry nipple gall. A pouch or gall forms on the lower leaf surface in response to feeding. There are sprays available if you care to reduce this cosmetic problem, but galls generally do no harm to the tree.

Scales of various types may be found on Hackberry. These may be controlled with horticultural oil sprays.

Diseases

Trunk rot, leaf spots, witches broom.

Several fungi cause leaf spots on Hackberry. The disease is worse during wet weather but chemical controls are seldom needed.

Generally resistant to witches broom. Witches broom is caused by a mite and powdery mildew. The main symptom is clusters of abnormally short twigs which are scattered throughout the tree crown. Prune out the clusters of twigs when practical.

Powdery mildew may coat the leaves with white powder. The leaves may be uniformly coated or only in patches.

Sugarberry is a favority host for mistletoe.