**Celtis laevigata** ‘All Seasons’

‘All Seasons’ Sugarberry

Edward F. Gilman and Dennis G. Watson

**INTRODUCTION**

This very large, broad, fast growing deciduous North American native tree has a rounded vase crown with spreading, pendulous branches (Fig. 1). This cultivar provides for a more uniform crown shape than the species and does not shed twigs as the species does. The medium-textured, light green leaves turn bright yellow in fall and can be showy in some years. Fall color is more reliable north of USDA hardiness zone 8b. 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 but the trunk on most trees is smooth. Sugarberry commonly reaches 40 to 50 feet in height with a somewhat lesser spread, and makes a wonderful shade tree. It could be grown and used more in urban areas but, unfortunately, may compartmentalize injury poorly as the species does, resulting in branch and trunk rot.

**GENERAL INFORMATION**

Scientific name: *Celtis laevigata* ‘All Seasons’

Pronunciation: SELL-tiss lee-vih-GAY-tuh

Common name(s): ‘All Seasons’ Sugarberry, ‘All Seasons’ Sugar Hackberry

Family: Ulmaceae

USDA hardiness zones: 5B through 11 (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; specimen; residential street tree; tree has been successfully grown in urban areas where air pollution, poor drainage, compacted soil, and/or drought are common

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

**DESCRIPTION**

Height: 40 to 60 feet

Spread: 35 to 55 feet

Crown uniformity: symmetrical canopy with a regular (or smooth) outline, and individuals have more or less identical crown forms

Crown shape: round; vase shape

Crown density: moderate

Growth rate: medium

Texture: medium
Foliage

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

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: tree has outstanding ornamental features and could be planted more
Invasive potential: seeds itself into the landscape
Pest resistance: no pests are normally seen on the tree

USE AND MANAGEMENT

The tiny, red to black, berry-like, sweet fruits attract many birds, and Sugarberry should be included in any natural landscape setting. 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 of the species, but this cultivar is much more uniform in shape and the tree should be used more. 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 Common Hackberry. 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 at 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 cultivar a try in some of your urban and suburban plantings.

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

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 with a more warty bark and smaller, sandpapery leaves than *Celtis laevigata*.

Propagation of the species is by seed. The cultivar is cutting propagated.

**Pests**

The most common insect on Hackberry causes the Hackberry nipple gall, but this is not much of a problem on this tree. A pouch or gall forms on the lower leaf surface in response to feeding.

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

**Diseases**

Trunk rot and leaf spots.

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.