



Amelanchier arborea Downy Serviceberry¹

Edward F. Gilman and Dennis G. Watson²

INTRODUCTION

Downy Serviceberry grows 25 to 40 feet tall and can spread to 20 feet (Fig. 1). This native large shrub or small tree has a moderate growth rate in most soils. Multiple stems are upright and highly branched forming a dense shrub with many small-diameter branches or, if properly pruned, a small tree. Trees can be trained to, and are offered by nurseries, with one trunk. The main ornamental features are white flowers followed by purple fruit in late spring or early summer. Fruits are produced before the leaves in spring and are quickly eaten by birds. Serviceberry puts on a brilliant fall color display ranging from yellow and orange to dull red. This tree is suitable for naturalistic plantings and will attract birds. The tree suckers from the base of the trunk, which can be a maintenance problem in urban plantings or in formal landscapes.

GENERAL INFORMATION

Scientific name: *Amelanchier arborea*

Pronunciation: am-meh-LANG-kee-er
ar-BORE-ee-uh

Common name(s): Downy Serviceberry, Juneberry

Family: *Rosaceae*

USDA hardiness zones: 5 through 8 (Fig. 2)

Origin: native to North America

Uses: container or above-ground planter; wide tree lawns (>6 feet wide); medium-sized tree lawns (4-6 feet wide); near a deck or patio; narrow tree lawns (3-4 feet wide); specimen; residential street tree

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

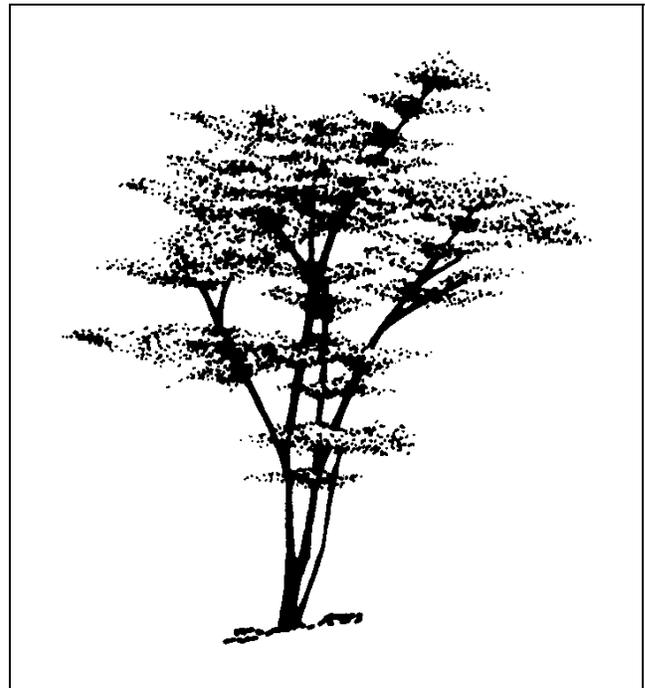


Figure 1. Middle-aged Downy Serviceberry.

DESCRIPTION

Height: 25 to 35 feet

Spread: 15 to 20 feet

Crown uniformity: irregular outline or silhouette

Crown shape: round; upright; vase shape

Crown density: moderate

Growth rate: slow

Texture: fine

1. This document is adapted from Fact Sheet ST-73, a series of the Environmental Horticulture Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida. Publication date: November 1993.
2. Edward F. Gilman, associate professor, Environmental Horticulture Department; Dennis G. Watson, associate professor, Agricultural Engineering Department, Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida, Gainesville FL 32611.



Figure 2. Shaded area represents potential planting range.

Foliage

Leaf arrangement: alternate (Fig. 3)

Leaf type: simple

Leaf margin: serrate

Leaf shape: elliptic (oval); oblong; obovate

Leaf venation: pinnate

Leaf type and persistence: deciduous

Leaf blade length: 2 to 4 inches; less than 2 inches

Leaf color: green

Fall color: orange; red; yellow

Fall characteristic: showy

Flower

Flower color: white

Flower characteristics: spring flowering; very showy

Fruit

Fruit shape: round

Fruit length: < .5 inch

Fruit covering: fleshy

Fruit color: purple

Fruit characteristics: attracts birds; suited for human consumption; no significant litter problem; showy

Trunk and Branches

Trunk/bark/branches: bark is thin and easily damaged from mechanical impact; routinely grown with, or trainable to be grown with, multiple trunks; grow mostly upright and will not droop; not particularly showy; tree wants to grow with several trunks but can be trained to grow with a single trunk; no thorns

Pruning requirement: requires pruning to develop strong structure

Breakage: resistant

Current year twig color: brown; gray

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; occasionally wet; well-drained

Drought tolerance: moderate

Aerosol salt tolerance: moderate

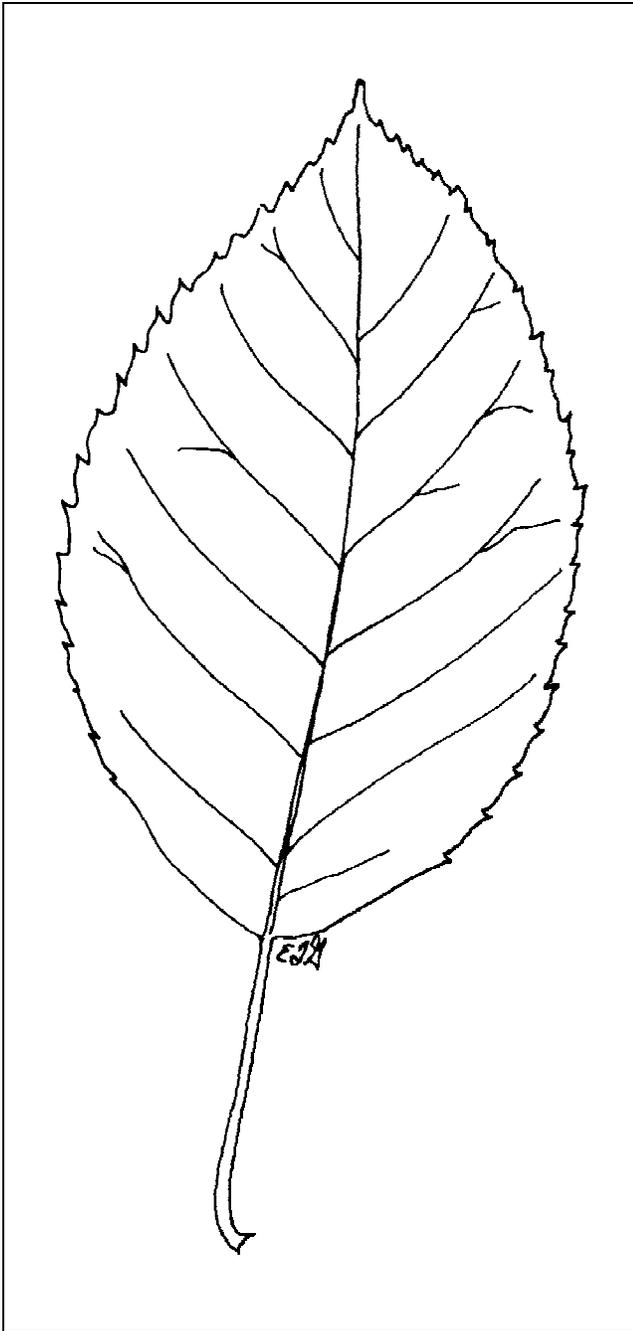


Figure 3. Foliage of Downy Serviceberry.

Soil salt tolerance: moderate

Other

Roots: surface roots are usually not a problem

Winter interest: no special winter interest

Outstanding tree: not particularly outstanding

Invasive potential: seeds itself into the landscape

Verticillium wilt susceptibility: not known to be susceptible

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

USE AND MANAGEMENT

Although native trees are often found growing along stream banks as an understory tree, they also tolerate drier, rockier soils, and grow well in urban areas. They may lose some leaves in drought to avoid injury in dry weather. They are well-suited for planting in shrub borders and in wet soils. Their small stature and moderately-slow growth rate make it ideally suited for planting beneath power lines, if provided with some irrigation during drought.

Pests

Cambium miners cause concern when noticed but are not very damaging to the tree. The mines can extend from a twig all the way down to the roots. The mines form light-colored lines in the bark. No controls are usually suggested.

A leaf miner will mine leaves, particularly the lower half of the leaf. The mines are irregular in shape.

The leaves of amelanchier are skeletonized by at least two insects. The first insect forms small cocoons on the undersides of leaves. Skeletonized leaves look as though they have windows in them after the insects scrape tissue off the top and bottom of the leaves. The second insect is the larva of the pear sawfly. The larvae are black to greenish black and look slimy. Adult sawflies lay eggs in early and late summer. Heavily skeletonized leaves drop off.

Several borers attack amelanchier. Healthy trees are considered less susceptible so regular fertilization and watering during dry spells will help prevent borer attacks.

Spider mites will feed on amelanchier. These insects are hard to detect as they are so small. The main symptom of mite injury is the loss of green leaf coloration. If the infestation is heavy, very fine webbing may be seen. Horticultural oil sprays help control mite infestations.

Aphids of several types suck juices from amelanchier. Heavy infestations cause distortion of the foliage and new growth, and deposit large amounts of sticky honeydew on lower foliage. Black sooty mold will grow on the honeydew.

Diseases

Witches broom, also called black mildew, infects the growing point causing the formation of many stems. The cluster of stems is called the witches broom. Another symptom is a black fungal growth, coating the undersides of the leaves. The damage to the tree is usually not serious and the brooms can be pruned off. No chemical controls are suggested.

Leaf blight can cause leaf drop when a severe infection occurs. The disease causes small purple spots on the leaves. The spots enlarge and turn brown, later a small black dot will be seen in the center of the spot. Large numbers of spots cause infected leaves to drop.

Fire blight is characterized by the sudden wilting and death of branch tips. The blossoms wilt, blacken and hang on the twig. The bark is shriveled and has small bumps or blisters on it. Sometimes gum oozes out of the infected area and a crack forms between the diseased and healthy bark. Control with chemicals is difficult. Diseased branches should be pruned out. Make the cut at least four inches beyond the diseased area. Disinfect pruning tools with bleach between cuts. Fertilizing heavily with nitrogen increases susceptibility to fire blight.

Powdery mildews of several types cause white powdery growth on the leaves of amelanchier. Late in the season no controls may be needed.

Fruit rot be a problem in wet weather. The fruits are often eaten by birds so may not be around long enough to become diseased.

Cedar rusts can be troublesome.