

DOWNY SERVICEBERRY

Amelanchier arborea (Michx.
f.) Fern.
Plant Symbol = AMAR3

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Alternate common names

Sarvis-berry, shadblow, shadbush, juneberry, sugarplum, Indian cherry

Uses

Trees of downy serviceberry are generally not large enough for sawtimber but they have been used for pulpwood. The wood is extremely heavy and hard and is occasionally made into tool handles. Cree Indians prized it for making arrows.

At least 40 bird species (for example, mockingbirds, cardinals, cedar waxwings, towhees, Baltimore orioles) eat the fruit of *Amelanchier* species. Mammals that either eat the fruit or browse the twigs and leaves of downy serviceberry include squirrels, rabbits, chipmunks, mice, voles, foxes, black bears, deer, and elk. The fruits taste similar to blueberry – they are eaten fresh or cooked in pastries or puddings.

The trees are used as ornamentals and many cultivars have been selected for variation in growth habit, flower size and color, and leaf color. The fall foliage blends orange and gold with red and green. It grows

in partial shade to full sun, preferring moist but well-drained soil but will also grow in dry sites.

Status

Please consult the PLANTS Web site and your State Department of Natural Resources for this plant's current status, such as, state status and wetland indicator values.

Description

Rose Family (Rosaceae). Native shrubs or small trees to 10 meters tall, with a narrow, rounded crown, the twigs often red-brown to purplish, becoming gray; bark smooth, grayish, "striped" with vertical fissures and very ornamental. Leaves: deciduous, alternate, simple, oval to oblong, 5-13 cm long, glabrous above, pubescent and paler beneath, the base rounded or heart-shaped, acute or acuminate at the tip, with finely toothed margins. Flowers: 3-15 in elongate clusters at the branch tips, before the leaves appear; petals 5, white, 10-14 mm long and strap-like. Fruits 6-12 mm wide, on long stalks, red-purple at maturity; seed 5-10 per fruit. The common name: in some regions, the flowers are gathered for church services, hence serviceberry or sarvis-berry; or "service" from "sarvis," in turn a modification of the older name "*Sorbus*," a closely related genus.

Variation within the species: Three varieties have been recognized: var. *alabamensis* (Britt.) G.N. Jones; var. *arborea*; and var. *austromontana* (Ashe) Ahles.

Distribution

Downy serviceberry is widespread in the eastern US and southeastern Canada (New Brunswick and southern Newfoundland to Quebec and Ontario); south to the northern tip of the Florida Panhandle and west to Alabama, southern Mississippi, Louisiana and Texas (rare), Oklahoma, Kansas, Nebraska, and Minnesota.

Adaptation

Downy serviceberry grows in a variety of habitats – swampy lowlands, dry woods, sandy bluffs, rocky ridges, forest edges, and open woodlands and fields. It is a late successional to climax species in mixed-hardwood forests of the central U.S., commonly as an understory species. In the southern Appalachians, downy serviceberry grows in red spruce-Fraser fir forests at elevations of 1500-2000 meters with yellow birch, mountain ash, elderberry, and hobblebush.

Flowering (March-)April-May, among the first of the early spring trees and shrubs to bloom; fruiting June-August.

Establishment

Downy serviceberry regenerates mainly by seed, but it also sprouts from the roots. Birds and mammals disperse seeds; scarification of the seeds after ingestion by birds is important for germination. Seeds can be sown after 2-6 months of cold stratification, but they will not usually germinate until after the second spring.

Management

Fire top-kills downy serviceberry, but it can sprout from root crowns and stumps following fire. A significant portion of the post-fire reestablishment is from seed dispersed from off-site by birds and mammals. Following wildfire in a spruce-fir forest of Appalachia, downy serviceberry was present in stands after 30 years but was less than 1% of the total basal area. Gypsy moth larvae (*Lymantria dispar*) feed selectively on downy serviceberry.

Cultivars, Improved and Selected Materials (and area of origin)

Natural, fertile hybrids occur between downy serviceberry and *A. bartramiana*, *A. canadensis*, *A. humilis*, and *A. laevis*. Some cultivars are selections from *A. X grandiflora*, the hybrid of *A. arborea* and *A. laevis*. Many individuals within *Amelanchier* arise through hybridization and species boundaries are often not clear.

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