

Acer grandidentatum: Bigtooth Maple¹

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Introduction

This North American native reaches 50 feet in height with a broad, spreading canopy and grayish-brown bark which may be either smooth or scaly. The 2-to 5-inch-diameter, lustrous, dark green, lobed leaves which have a pale underside are noted for their striking brilliance in fall, when they change into beautiful shades of red, orange, and yellow before dropping. The insignificant, hairy, yellow flowers appear among the leaves in late spring and are followed by the production of 1-inch-long, winged seeds.



Figure 1. Mature *Acer grandidentatum*: Bigtooth Maple
Credit: Ed Gilman

General Information

Scientific name: *Acer grandidentatum*

Pronunciation: AY-ser gran-dih-den-TAY-tum

Common name(s): Bigtooth maple, Rocky Mountain sugar maple, canyon maple

Family: *Aceraceae*

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

Origin: native to North America

Invasive potential: little invasive potential

Uses: specimen; reclamation; street without sidewalk; shade; parking lot island 100-200 sq. ft.; parking lot island > 200 sq. ft.; tree lawn 4-6 feet wide; tree lawn > 6 ft. wide

Availability: not native to North America

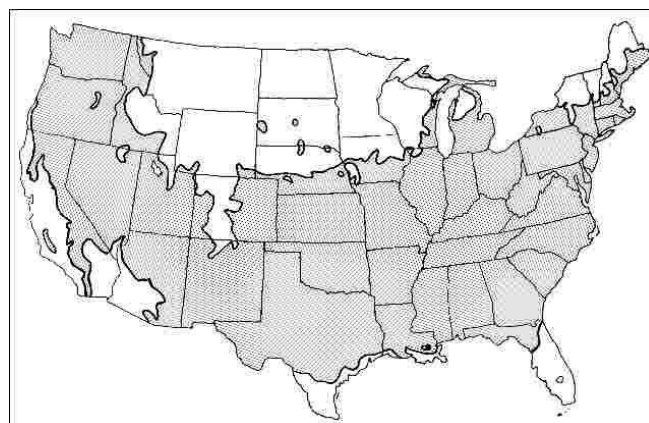


Figure 2. Range

Description

Height: 40 to 50 feet

Spread: 25 to 35 feet

Crown uniformity: irregular

Crown shape: round

Crown density: moderate

Growth rate: moderate

Texture: medium

Foliage

Leaf arrangement: opposite/subopposite (Fig. 3)

Leaf type: simple

Leaf margin: lobed, dentate

Leaf shape: star-shaped

Leaf venation: palmate

Leaf type and persistence: deciduous

Leaf blade length: 2 to 4 inches, 4 to 8 inches

Leaf color: green

Fall color: yellow, red, orange

Fall characteristic: showy

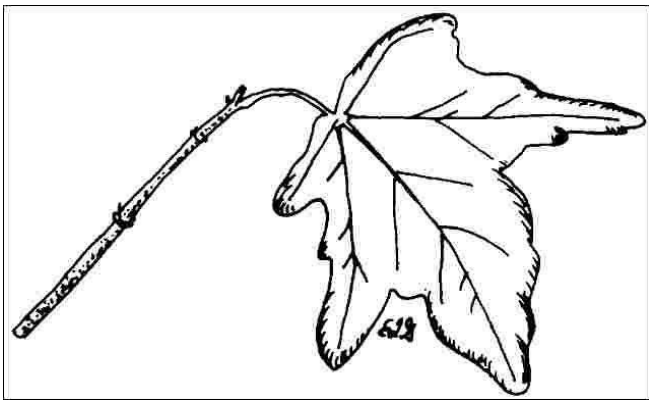


Figure 3. Foliage

Flower

Flower color: yellow

Flower characteristics: not showy

Fruit

Fruit shape: elongated

Fruit length: .5 to 1 inch

Fruit covering: dry or hard

Fruit color: green

Fruit characteristics: attracts birds; not showy;
fruit/leaves not 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: reddish, brown

Current year twig thickness: thin, medium

Wood specific gravity: unknown

Culture

Light requirement: full sun, partial sun or partial shade

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

Drought tolerance: moderate

Aerosol salt tolerance: none

Other

Roots: not a problem

Winter interest: no

Outstanding tree: yes

Ozone sensitivity: tolerant

Verticillium wilt susceptibility: susceptible

Pest Resistance: resistant to pests/diseases

Use and Management

This maple may need some training to develop a dominant central leader. Once selected, this leader should more or less stay dominant. This can make bigtooth maple a good candidate for planting along streets in an area with plenty of soil space for root expansion.

Bigtooth maple will grow in full sun or partial shade and is found most often in its natural habitat in moist, well-drained soils. It tolerates limestone soils well. Plants in the wild grown in open areas have withstood long periods of drought.

Pests

No pests are of major concern.

Diseases

No diseases are of major concern.

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