

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 one-inch-long, winged seeds.

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

Description

Height: 40 to 50 feet

Spread: 25 to 35 feet

Crown uniformity: irregular

Crown shape: round



Figure 1. Mature *Acer grandidentatum*: Bigtooth Maple

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

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Figure 2. Range

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

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

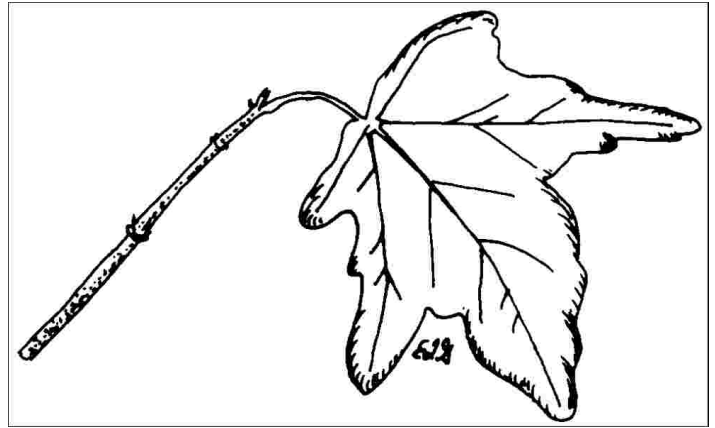


Figure 3. Foliage

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.