



Sorbus alnifolia Korean Mountain-Ash¹

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INTRODUCTION

Korean Mountain-Ash grows rather quickly into a 20 to 40-foot-tall deciduous tree with a broad, rounded, 15 to 25-foot-wide, dense canopy which casts dense shade below (Fig. 1). Young trees form a dense oval. The two to four-inch-long, glossy, bright green, simple leaves change to attractive hues of yellow, orange, and rust in fall before dropping. In late spring the trees are decorated with two to three-inch-diameter, flat-topped clusters of tiny white blossoms, which may appear in great number one year yet sparsely the next. These blooms are followed by the production of small but very showy, red to yellow fruits which pendulously hang in five-inch clusters of two to ten berries from tree branches. Fruit clusters are not as dense as those of Sorbus aucuparia. The smooth, grey bark of the branches provides a nice contrast for these colorful fruits. These attractive, abundant fruits ripen and cling to the tree, providing a welcome feast for various types of weary, migrating birds. Fruit are displayed nicely after leaves fall in autumn.

GENERAL INFORMATION

Scientific name: Sorbus alnifolia Pronunciation: SOR-bus al-nih-FOLE-ee-uh Common name(s): Korean Mountain-Ash Family: Rosaceae USDA hardiness zones: 4 through 7A (Fig. 2) Origin: not native to North America Uses: large parking lot islands (> 200 square feet in size); wide tree lawns (>6 feet wide); medium-sized parking lot islands (100-200 square feet in size); medium-sized tree lawns (4-6 feet wide); reclamation

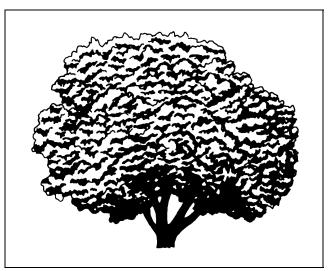


Figure 1. Mature Korean Mountain-Ash.

plant; narrow tree lawns (3-4 feet wide); specimen; residential street tree; no proven urban tolerance **Availability:** somewhat available, may have to go out of the region to find the tree

DESCRIPTION

Height: 20 to 40 feet
Spread: 15 to 25 feet
Crown uniformity: symmetrical canopy with a regular (or smooth) outline, and individuals have more or less identical crown forms
Crown shape: oval; vase shape
Crown density: dense
Growth rate: fast
Texture: medium

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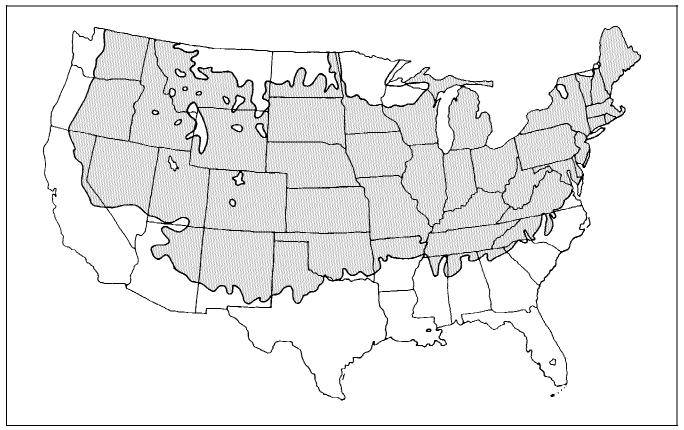


Figure 2. Shaded area represents potential planting range.

Foliage

Leaf arrangement: alternate (Fig. 3) Leaf type: simple Leaf margin: double serrate; serrate Leaf shape: elliptic (oval); ovate Leaf venation: pinnate Leaf type and persistence: deciduous Leaf blade length: 2 to 4 inches Leaf color: green Fall color: copper; orange; red; yellow Fall characteristic: showy

Flower

Flower color: white Flower characteristics: showy; spring flowering

Fruit

Fruit shape: round
Fruit length: .5 to 1 inch; < .5 inch
Fruit covering: fleshy
Fruit color: red
Fruit characteristics: attracts birds; no significant
litter problem; persistent on the tree; showy</pre>

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; no thorns **Pruning requirement:** needs little pruning to develop

a strong structure

Breakage: susceptible to breakage either at the crotch due to poor collar formation, or the wood itself is weak and tends to break

Current year twig color: brown Current year twig thickness: medium

Culture

Light requirement: tree grows in full sun Soil tolerances: clay; loam; sand; slightly alkaline; acidic; well-drained Drought tolerance: moderate Aerosol salt tolerance: moderate Soil salt tolerance: poor

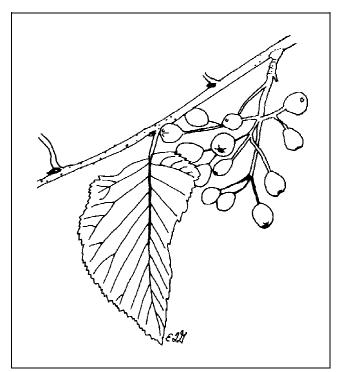


Figure 3. Foliage of Korean Mountain-Ash.

Other

Roots: surface roots are usually not a problem Winter interest: no special winter interest Outstanding tree: tree has outstanding ornamental features and could be planted more Invasive potential: little, if any, potential at this time Pest resistance: long-term health usually not affected by pests

USE AND MANAGEMENT

Partially due to the upright habit, weak crotches can develop on branches which are allowed to grow to larger than about half the diameter of the trunk. Pruning early in the life of the tree will improve the structure of the tree and help increase longevity in the landscape.

It is tempting to plant this tree due to the nice flowers, nice fruit display and bright fall color, but it may be short-lived and is susceptible to fireblight. But it is the most resistant of the Mountain-Ashes to borers. It is probably best to locate the tree where there is adequate open soil space for root development so the tree will not be subjected to much stress. Provided with some irrigation in a dry summer, this tree will serve the landscape well for a number of years. It has many outstanding attributes which people will enjoy for a number of years after planting. Plant it as an occasional specimen in a park or large landscape for ornamental value and diversity, not as a staple in large numbers.

Korean Mountain-Ash should be grown in full sun on any well-drained soil, including slightly alkaline. Any required pruning should be done in winter or early spring to avoid exposing the wood to the fireblight disease. Fireblight can cause serious damage to the tree.

The cultivar 'Redbird' has rosy red fruits which are quite popular with birds, and has a more upright form. There are other hybrids and cultivars, all with the same limitations.

Propagation is by seed, with difficulty, or by grafting.

Pests

Aphids, pear leaf blister mite, Japanese leafhopper, Mountain-Ash sawfly, and scales may infest this tree. Korean Mountain-Ash is somewhat resistant to borers which affect other *Sorbus* species, and probably should be planted instead of European Mountain-Ash.

Diseases

Fireblight, crown gall, canker, leaf rusts, and scab may infect this tree.