



Sorbus aucuparia European Mountain-Ash¹

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INTRODUCTION

European Mountain-Ash has a rapid growth rate at first but slows down with age, ultimately forming a 30-foot-tall, dense oval (Fig. 1). The white flowers are somewhat showy, appearing in the spring after the leaves. The tree shows its true colors when the fruit is set in mid-summer. The wonderfully-showy, orange-red fruit is borne in heavy clusters of about 40 berries although cultivars are available with pink, yellow and red fruits. Fruits are usually eaten by birds and often don't persist on the tree into the winter. Seeds germinate quite readily in the landscape. The fall color is red to yellow, although sometimes leaves simply drop green.

GENERAL INFORMATION

Scientific name: *Sorbus aucuparia*

Pronunciation: SOR-bus aw-kew-PAIR-ee-uh

Common name(s): European Mountain-Ash

Family: *Rosaceae*

USDA hardiness zones: 3B through 6 (Fig. 2)

Origin: not native to North America

Uses: wide tree lawns (>6 feet wide); medium-sized tree lawns (4-6 feet wide); narrow tree lawns (3-4 feet wide); specimen; residential street tree; tree has been successfully grown in urban areas where air pollution, poor drainage, compacted soil, and/or drought are common

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

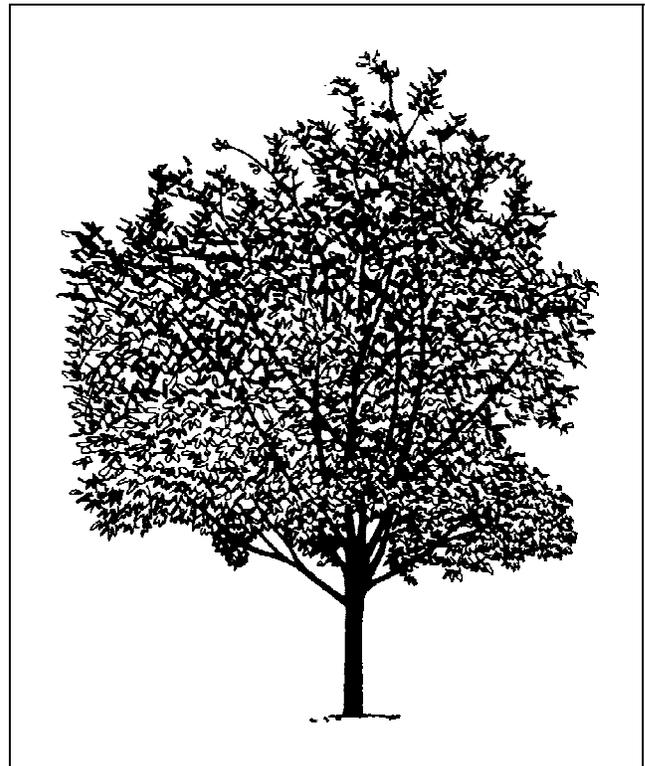


Figure 1. Middle-aged European Mountain-Ash.

DESCRIPTION

Height: 25 to 30 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; upright

Crown density: moderate

Growth rate: medium

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Figure 2. Shaded area represents potential planting range.

Texture: fine

Foliage

Leaf arrangement: alternate (Fig. 3)

Leaf type: odd pinnately compound

Leaflet margin: serrate

Leaflet shape: elliptic (oval); lanceolate; oblong

Leaflet venation: pinnate

Leaf type and persistence: deciduous

Leaflet blade length: less than 2 inches

Leaf color: green

Fall color: red; yellow

Fall characteristic: showy

Flower

Flower color: white

Flower characteristics: showy; spring flowering

Fruit

Fruit shape: round

Fruit length: < .5 inch

Fruit covering: fleshy

Fruit color: orange; red; yellow

Fruit characteristics: attracts birds; fruit, twigs, or foliage cause significant litter; showy

Trunk and Branches

Trunk/bark/branches: 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: 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; acidic; well-drained

Drought tolerance: moderate

Aerosol salt tolerance: moderate

Soil salt tolerance: poor

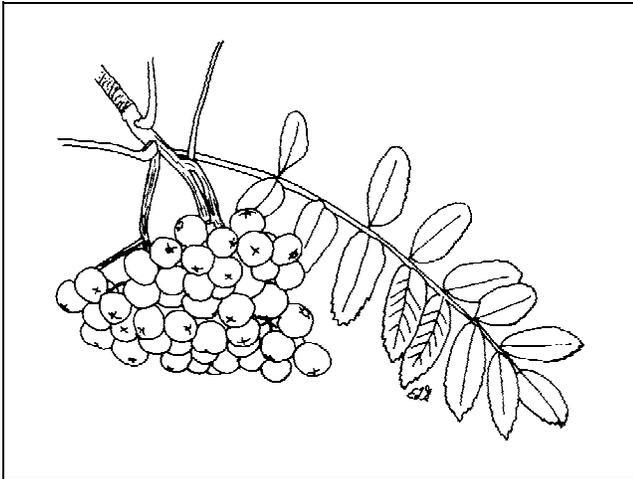


Figure 3. Foliage of European Mountain-Ash.

Other

Roots: surface roots are usually not a problem

Winter interest: tree has winter interest due to unusual form, nice persistent fruits, showy winter trunk, or winter flowers

Outstanding tree: tree has outstanding ornamental features and could be planted more

Invasive potential: little, if any, potential at this time

Ozone sensitivity: sensitive or moderately tolerant

Verticillium wilt susceptibility: not known to be susceptible

Pest resistance: very sensitive to one or more pests or diseases which can affect tree health or aesthetics

USE AND MANAGEMENT

Vertically-oriented branches and multiple trunks make this deciduous tree particularly attractive during the winter. But this same characteristic can also cause branches to break from the trunk due to poor connections with the trunk. The tree is restricted to northern areas due to lack of heat tolerance. It is a tough, urban tolerant tree but is susceptible to several pests including fire blight which can disfigure or kill the tree.

Several cultivars make excellent street trees.

Cultivars are: 'Asplenifolia' - leaflets doubly serrated; 'Apricot Queen' - apricot colored fruits; 'Beissneri' - deeply cut leaflets, red branchlets; 'Brilliant Pink' - pink fruits; 'Cardinal' - clear red fruits; 'Carpet of Gold' - yellow fruit; 'Cole's Columnar' - upright growth habit; 'Fastigiata' - upright growth habit; 'Kirsten Pink' - pink fruit; 'Maidenblush' - fruits white flushed with pink;

'Pendula' - weeping growth habit; 'Rowencroft Pink Coral' - coral pink fruits; 'Red Strain' - fruits red; 'Scarlet King' - fruits scarlet; 'Upright Yellow' - upright growth habit, yellow fruits; 'Wilson's Columnar' - upright growth; 'Xanthocarpa' - yellow fruit, not attractive to birds.

Pests

Aphids cause distorted growth and deposits of honeydew on leaves.

Mountain-Ash sawfly larvae are light green with black dots and tend to feed in groups. The insects curl the back of their bodies around the stems as they feed.

Scales of various types can usually be controlled with sprays of horticultural oil.

Diseases

Bacterial fire blight causes leaves at the branch tips to wilt, turn brown, but remain hanging on the tree. The infected branches have a scorched appearance and infected bark discolors, shrivels and may crack or be shredded. There is usually a crack between diseased and healthy bark. The bacteria are washed down the branches and onto the trunk by rain. Once the trunk is girdled the tree dies. Prune out infected branches. Use of high nitrogen fertilizers can increase susceptibility to fire blight.

Scab can cause severe defoliation. Early in the growing season, olive brown spots form along the mid-ribs of the leaflets. Later the leaves turn yellow and the spots become more prominent. If the infection is severe, infected leaves drop.

Several fungi cause twig and trunk cankers. As cankers enlarge the part of the stem beyond the canker dies. Avoid wounding trees and keep them healthy with regular fertilization.

Powdery mildew forms a white coating on the leaves.

Several rust diseases cause raised, light yellow spots on the leaves. Later, orange fruiting bodies appear on the spots on the lower leaf surface.