

American (*Fagus grandifolia*) and European (*Fagus sylvatica*) Beeches

Alex X. Niemiera, Associate Professor, Department of Horticulture

Summary

Foliage: About 4 inches long; alternate; deciduous

Height: About 60 feet

Spread: About 35 feet

Shape: Oval to rounded

Main Features

Beeches, both the American and European species, are large stately and noble trees. They have a smooth sensuous dark gray bark that is exceptionally attractive. Unfortunately, this feature often beckons graffiti practitioners to denigrate trees by carving their initials on trunks. Newly emerging spring foliage is lime-green, and the fall foliage color is an attractive gold-brown. In the fall and winter, bright tan leaves (dead) on young trees stay attached to branches (this leaf retention characteristic is a juvenile plant characteristic). The sight of young beech trees clad with bright tan foliage in the dormant season is a beautiful forest/landscape sight. Un-pruned trees typically have short trunks (major limbs coming off lower portions of the trunk). Beeches are slow to medium growers and generally require a well-drained soil with ample moisture to prosper. European beech tolerates alkaline and less-than-ideal soils more so than American beech. There are no cultivars of the American beech, but there are many cultivars of the European beech (see Additional Information section). European beeches are less adapted to the heat of the south (zones 7b and higher) than the American beech.

Plant Needs

Zone: American beech 4 to 9; European beech 4 to 7

Light: Full sun to part shade

Moisture: Average to moist

Soil type: Average (well-drained soil is a must)

pH range: American beech requires acid; European beech will tolerate alkaline soils

Functions

Beeches are certainly worthy to be specimen trees (sufficient attributes to be featured as focal points). They serve as beautiful shade trees. In Europe and the United Kingdom, European beeches are often pruned as hedges.

Care

Avoid any activity that will compact the soil within the root zone (the root zone of a mature tree extend far beyond the branch tips). As with all large trees, plant beeches at least 50 feet from structures or other large trees to accommodate the mature width of the canopy.

Additional Information

There are currently no cultivars of the American beech. There are many cultivars of the European beech. Cultivar characteristics include columnar forms, various foliage types (narrow or dissected leaves), weeping forms, dwarf forms, and foliage colors (purple, chartreuse, variegated). Purple-leaf beeches are popular in the trade and are quite attractive, but the purple foliage of most of these cultivars fade in the mid to late summer. The cultivar 'Roseomarginata' (same as 'Tricolor') has leaves that emerge with shades of pink, cream, and green; the pink colors fade by mid-summer.