UF IFAS Extension UNIVERSITY of FLORIDA

ENH406

Fagus sylvatica 'Pendula': Weeping European Beech[1]

Edward F. Gilman and Dennis G. Watson[2]

Introduction

Weeping European Beech grows into a wide, weeping mass of green foliage, 30 to 50 feet tall and spreads 30 to 50 feet. Branches normally grow up, sag to the horizontal, then sweep toward the ground in a graceful fashion. Young trees are often trained with a central leader for 10 feet or more into the crown, then the tree is allowed to weep to the ground. This can produce a tree wider than tall, or if side branches are removed, one that is tall and narrow. It grows slowly but is worth the wait. Leaves show a lustrous dark green color throughout the summer and form a very dense canopy. Some specimens have a narrow crown, others grow as wide as they are tall so allow plenty of room for growth. Not a tree for residential or other small landscapes. The branches are thin but not as flexible as those of weeping willow.



Figure 1. Middle-aged *Fagus sylvatica* 'Pendula': Weeping European Beech

General Information

Scientific name: *Fagus sylvatica*
Pronunciation: FAY-gus sill-VAT-ih-kuh
Common name(s): Weeping European Beech
Family: *Fagaceae*
USDA hardiness zones: 4A through 7B (Fig. 2)
Origin: not native to North America
Invasive potential: little invasive potential
Uses: specimen
Availability: not native to North America



Figure 2. Range

1. This document is ENH406, one of a series of the Environmental Horticulture, UF/IFAS Extension. Original publication date November 1993. Revised December 2006. Reviewed February 2014. Visit the EDIS website at http://edis.ifas.ufl.edu.

2. Edward F. Gilman, professor, Environmental Horticulture Department; Dennis G. Watson, former associate professor, Agricultural Engineering Department, UF/IFAS Extension, Gainesville, FL 32611.

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Description

Height: 30 to 50 feet
Spread: 30 to 60 feet
Crown uniformity: irregular
Crown shape: weeping
Crown density: dense
Growth rate: moderate
Texture: medium

Foliage

Leaf arrangement: alternate (Fig. 3)
Leaf type: simple
Leaf margin: undulate, entire
Leaf shape: ovate, elliptic (oval)
Leaf venation: pinnate
Leaf type and persistence: deciduous
Leaf blade length: 2 to 4 inches
Leaf color: green
Fall color: copper
Fall characteristic: showy



Figure 3. Foliage

Flower

Flower color: unknown
Flower characteristics: not showy

Fruit

Fruit shape: oval
Fruit length: .5 to 1 inch
Fruit covering: dry or hard
Fruit color: brown
Fruit characteristics: attracts birds; not showy; fruit/leaves not a litter problem

Trunk and Branches

Trunk/bark/branches: branches droop; showy; typically one trunk; thorns
Pruning requirement: needed for strong structure
Breakage: resistant
Current year twig color: brown, gray
Current year twig thickness: thin
Wood specific gravity: unknown

Culture

Light requirement: full sun, partial sun or partial shade
Soil tolerances: clay; sand; loam; acidic; slightly alkaline; well-drained
Drought tolerance: moderate
Aerosol salt tolerance: low

Other

Roots: can form large surface roots
Winter interest: yes
Outstanding tree: yes
Ozone sensitivity: unknown
Verticillium wilt susceptibility: resistant
Pest resistance: resistant to pests/diseases

Use and Management

Though not a street tree, it makes one of the finest specimens of all those available in North America for large-scale landscapes. It may be the most picturesque of all the weeping trees. It can be pruned to create a tunnel or walkway beneath the crown for pedestrians. It is probably best located in a large open area where people can enjoy it from a distance.

The tree grows slowly, is hard to transplant, and prefers a sunny location on moist, light soil. Weeping Beech is somewhat tolerant of heat and dry soil but it is best to locate it where it would receive adequate moisture. Over-watering can kill the roots due to the tree's intolerance of low soil oxygen. Not for clay soil unless drainage is very good and not for dry climates. A rather tricky tree to grow.

Pests

Most problems are seen on the bark.

Aphids colonies on the lower branches can be dislodged with a strong stream of water from the garden hose. Colonies are often disposed of by predatory insects. Borers such as flat-headed appletree borer or two-lined chestnut borer bore into trees weakened by some stress. Prevent the insect infestations by keeping trees healthy with regular fertilization.

Regular inspections of the trunk and branches are suggested for early detection of scales. Horticultural oil sprays will help control scales.

Certain caterpillars can be controlled with sprays of *Bacillus thuringiensis* . Insect identification allows proper spray recommendations to be made.

Diseases

Some bark inhabiting fungi cause problems.

Several fungi cause leaf spots but are generally not serious to warrant chemical control.

Powdery mildew causes a white coating on the leaves. The disease is most common late in the season.

Bleeding canker forms cankers from which a brownish liquid oozes. Crown symptoms include leaves of smaller size and lighter green color than normal. In severe cases the leaves wilt and the branches die. Avoid feeding with high nitrogen fertilizers as it seems to worsen the condition of infected trees.

Beech bark disease occurs when the feeding site of woolly Beech scale is invaded by a fungus. The fungus kills the bark and, in the process, the insects. There are no satisfactory controls for the fungus. Control the disease by controlling the scale with a horticultural spray of oil.

Cankers infect, girdle, and kill branches. Prune out the infected branches.

During periods of high temperatures and low rainfall weeping Beech may scorch. Make sure trees are adequately watered.