**Introduction**

Young’s weeping European birch is graceful, weeping ornamental with wonderful yellow fall color but is susceptible to fatal attacks of bronze birch borer. The leaves are often browned by birch leaf miner. When grown, plan to provide the necessary insect control and provide the necessary cultural conditions for best growth. It grows moderately with a variable height, depending on how it was trained. Some specimens appear sloppy, others more tailored. Lawn grasses grow fairly well in its light shade. A moist soil and a regular fertilization program plus watering in dry weather are suggested. Although popular, the tree requires more care and spraying than other ornamental trees. Not a low-maintenance tree. Maintaining a good mulch around the root zone is helpful for best growth.

**General Information**

**Scientific name:** *Betula pendula*

**Pronunciation:** BET-yoo-luh PEND-yoo-luh

**Common name(s):** ‘Youngii’ European birch

**Family:** Betulaceae

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

**Origin:** not native to North America

**Invasive potential:** little invasive potential

**Uses:** deck or patio; specimen; shade

**Availability:** not native to North America

**Description**

**Height:** 12 to 20 feet

**Spread:** 15 to 25 feet

**Crown uniformity:** irregular

**Crown shape:** weeping

**Crown density:** moderate

**Growth rate:** slow

**Texture:** fine

**Figure 1. Middle-aged Betula pendula ‘Youngii’: ‘Youngii’ European Birch**

**Foliage**

**Leaf arrangement:** alternate (Fig. 3)

**Leaf type:** simple

**Leaf margin:** double serrate

**Leaf shape:** rhomboid, ovate

**Leaf venation:** pinnate
**Betula pendula 'Youngii': 'Youngii' European Birch**

**Leaf type and persistence:** deciduous  
**Leaf blade length:** less than 2 inches, 2 to 4 inches  
**Leaf color:** green  
**Fall color:** yellow  
**Fall characteristic:** showy

**Culture**

**Light requirement:** full sun  
**Soil tolerances:** sand; loam; clay; acidic; well-drained  
**Drought tolerance:** moderate  
**Aerosol salt tolerance:** moderate

**Other**

**Roots:** not a problem  
**Winter interest:** yes  
**Outstanding tree:** no  
**Ozone sensitivity:** unknown  
**Verticillium wilt susceptibility:** resistant  
**Pest resistance:** sensitive to pests/diseases

**Use and Management**

Several cultivars are listed, but these too will have pest problems: 'Dalecarlica'—deeply lobed leaves on pendulous branches; 'Laciniata'—cut leaves; 'Fastigiata'—upright growth habit; 'Purple Splendor' (purpurea), 'Scarlet Glory'—purple leaves; 'Tristis'—weeping habit; 'Youngii'—weeping habit.

**Pests**

A light aphid infestation may not be serious, but heavy infestations cause distorted and stunted growth and produce large amounts of honeydew. The honeydew serves as a substrate for sooty mold.

Birch skeletonizer feeding causes leaf browning. The skeletonizer larva is yellowish-green and one quarter-inch long.

Birch leaf miner is a common insect pest of birch. A small white worm eats out the middle of the leaf, which turns brown. Severe attacks of birch leaf miner predispose trees to bronze birch borer infestation. The insect shows up in mid-May, but timing can vary from one year to the next and will vary according to your location in the country. The first of two generations per year is the most damaging.

The most serious pest of landscape white birches is bronze birch borer. Stressed trees are most susceptible to borer attacks. The insect bores in the sapwood, beginning in the top third of the tree, causing death of the tree crown. The tunnels are slightly raised and faintly rust colored. Emergence holes in the trunk are shaped like capital Ds. Keep the trees healthy by controlling other insects, fertilizing, and watering as needed. Chemical control is applied to the trunk and main branches. Timing of the first spray will vary from year to year depending on weather conditions.
A commercial sprayer may be needed to apply the spray adequately.

**Diseases**

Several fungi cause canker diseases on birch. These diseases infect and kill sapwood, causing sunken areas on the trunk and larger branches. There is no chemical control for canker diseases. Preventive measures include keeping the tree healthy and avoiding wounding. Regular fertilization will keep birches vigorous and more resistant to cankers. Water in dry weather to prevent water stress.

Dieback is characterized by a slow death of the branches. The tree crown accumulates dead branches. Injury caused by bronze birch borer is similar but far more prevalent. Prevent dieback by maintaining tree vigor with water and fertilizer. When the disease does occur, prune out dead branches and increase tree vigor.

Several fungi also cause leaf spots that, when severe, can cause defoliation.