Mugo Pine
Mugo Pine  
(Pinus mugo)

**General Description**
A small to large sized shrubby evergreen which varies in form and size. Introduced from Europe in 1779. Needles persist for more than 5 years. Dark green color year-round and resists winterburn.

**Leaves and Buds**
Bud Arrangement - In whorls, scales closely appressed.
Bud Color - Reddish-brown scales encrusted with resin.
Bud Size - 1/4 to 1/2 inch long, oblong-ovoid in shape.
Leaf Type and Shape - Needles in fascicles of two.
Leaf Margins - Margin is finely toothed, apex short, blunt point.
Leaf Surface - Nearly smooth.
Leaf Length - 1½ to 3 inches.
Leaf Width - Needles.
Leaf Color - Medium green to dark green.

**Flowers and Fruits**
Flower Type - Monoecious.
Flower Color - Purplish to reddish-tan.
Fruit Type - Cone, 1 to 2 inches long.
Fruit Color - Dark brown, glossy cone.

**Form**
Growth Habit - Usually low, broad-spreading and bushy.
Texture - Medium-coarse, summer and winter.
Crown Height - 3 to 20 feet.
Crown Width - 5 to 30 feet.
Bark Color - Brownish-gray, scaly.
Root System - Moderately deep, spread is more than height.

**Environmental Requirements**

**Soils**
Soil Texture - Adapted to a variety of soils.
Soil pH - 4.0 to 7.5, but performs well at 7.8.
Windbreak Suitability Group - 1, 3, 5.

**Cold Hardiness**
USDA Zone 2.

**Water**
Drought resistant, no watering necessary.

**Light**
Full sun only.

**Uses**

**Conservation/Windbreaks**
Not commonly used in windbreaks since other, taller conifers are more readily available for conservation uses. Swiss Mountain Pine (P. uncinata) is a taller choice for windbreaks.

**Wildlife**
Cover for some birds and mammals.

**Agroforestry Products**
Medicinal - A source of oil of turpentine.

**Urban/Recreational**
Good for ornamental landscaping, foundation plantings and mass plantings on public grounds. May need pruning to control crown spread and height.

**Cultivated Varieties**
Compact Mugo Pine (Pinus mugo ‘Compacta’) - Dwarf compact, 4 to 5 feet.
Dwarf Mugo Pine (P. mugo var. mugo) - 7 feet tall, 8 to 12 feet wide.
Gnom Mugo Pine (P. mugo ‘Gnom’) - Very dwarf, mounded.
Mops Mugo Pine (P. mugo ‘Mops’) Dwarf globe, 3 feet tall and wide.
Pumilio Mugo Pine (P. mugo var. pumilio) - Shrubby, mound-like, grows 8 to 10 feet wide.

**Related Species**
Scotch Pine (Pinus sylvestris)
Swiss Mountain Pine (P. uncinata) - Tree-like, otherwise similar to Mugo Pine.
Swiss Stone Pine (P. cembra) - 5-needle species. Excellent landscape tree.

**Pests**
Sawfly and pine needle scale are sometimes troublesome.