Plant Profiles: HORT 2242 Landscape Plants II

Botanical Name: Pinus mugo

Common Name: Swiss mountain pine, mugo pine

Family Name: Pinaceae – pine family

General Description: *Pinus mugo* is a slow growing pine native to the mountainous areas of central and southern Europe. It is one of the few pine species that naturally have a multi-stem, shrub-like form. In the landscape it is frequently used as an evergreen in foundation plantings. *Pinus mugo* is extremely variable in size and for this reason the straight species is rarely used. There are many (too many) dwarf selections to choose from.

Zone: 3-7

Resources Consulted:

Dirr, Michael A. *Manual of Woody Landscape Plants: Their Identification, Ornamental Characteristics, Culture, Propagation and Uses.* Champaign: Stipes, 2009. Print.

"The PLANTS Database." *USDA, NRCS*. National Plant Data Team, Greensboro, NC 27401-4901 USA, 2014. Web. 17 Mar. 2014.

Creator: Julia Fitzpatrick-Cooper, Professor, College of DuPage

Creation Date: 2014

Keywords/Tags: Pinaceae, tree, conifer, cone, needle, evergreen, Pinus mugo, Swiss mountain pine, mugo pine



Whole plant/Habit:

- Description: The typical multi-stem shrub habit of *Pinus mugo* makes it a desirable landscape plant.
 However, it is highly variable in size and form.
 Cultivars should be selected with care to ensure a truly dwarf form that is true to size and does not, with age, develop a central leader.
- Image Source: Karren Wcisel, TreeTopics.com
- Image Date: April 3, 2012
- Image File Name: mugo_pine_1350769.png



Whole plant/Habit:

- Description: Believe it or not...these are mugo pines! They can vary in size from 3 to 30 feet. The habit can be prostrate, rounded shrub or even pyramidal.
- Image Source: USDA-NRCS PLANTS Database / Herman, D.E., et al. 1996. *North Dakota tree handbook*. USDA NRCS ND State Soil Conservation Committee; NDSU Extension and Western Area Power Administration, Bismarck.
- Image Date: Unknown
- Image File Name: pimu80_003_pvp.png



Bark:

- Description: Bark is not a distinctive identification feature.
- Image Source: Karren Wcisel, TreeTopics.com
- Image Date: January 23, 2014
- Image File Name: mugo_pine_5508

Branch/Twig:

- Description: On 2-3 inch branches bumpy protuberances remain at the site where the needles were attached before they fell off. Can be a useful identification feature.
- Image Source: Karren Wcisel, TreeTopics.com
- Image Date: April 3, 2012
- Image File Name: mugo_pine_1350765.png



Bud:

- Description: The buds are resinous, reddish brown and oblong. Buds are not a distinctive identification feature.
- Image Source: Karren Wcisel, TreeTopics.com
- Image Date: February 4, 2011
- Image File Name: mugo_pine_1250166.png

Flower:

- Description: Though not true flowers the reproductive structures on pines are often referred to as such. Pines are monoecious; producing male pollen cones (on left) and separate female seed cones (on right) all on the same plant. Male pollen cones are clustered at the base of new growth. Female cones form near the tip of new growth. The color phases can vary according to species. Note: This photo is meant to show general images for "flowers". The images are not from the same pine species and may not be of the same species referenced in this Plant Profile.
- Image Source: Karren Wcisel, TreeTopics.com
- Image Date: Early June
- Image File Name: pinus_flower-00.png



Cone:

- Description: The cones of mugo pine are 1-2 inches long, brown, and are attached to the stem either solitary or in groups of 2-4.
- Image Source: Karren Wcisel, TreeTopics.com
- Image Date: April 3, 2012
- Image File Name: mugo_pine_1350764.png



Cone:

- Description: The cones are somewhat egg-shaped to conical.
- Image Source: Karren Wcisel, TreeTopics.com
- Image Date: February 8, 2011
- Image File Name: mugo_pine_1250297.png

Leaf Number/Attachment:

- Description: *Pinus mugo* is a two-needle pine. The needles are 1-2 inches, somewhat stiff, and medium to dark green in color.
- Image Source: Karren Wcisel, TreeTopics.com
- Image Date: April 3, 2012
- Image File Name: mugo_pine_1350778.png



Leaf Number/Attachment:

- Description: *Pinus mugo* retains its needles for 5 or more years. This enhances the dense, bushy appearance of a mugo pine. It is also a good identification feature.
- Image Source: Karren Wcisel, TreeTopics.com
- Image Date: February 5, 2011
- Image File Name: mugo_pine_1250136.png



Winter interest:

- Description: Typical evergreen winter qualities.
- Image Source: Karren Wcisel, TreeTopics.com
- Image Date: January 18, 2014
- Image File Name: mugo_pine_5480.png



Special ID feature(s):

- Description: *Pinus mugo* identification features are rather nondescript. A combination of features must be used. The multi-stem shrub habit is the best identification feature. Also look for the 5 plus years of needles retained on the stem creating a dense branch and the small brown cones.
- Image Source: USDA-NRCS PLANTS Database / Herman, D.E., et al. 1996. North Dakota tree handbook. USDA NRCS ND State Soil Conservation Committee; NDSU Extension and Western Area Power Administration, Bismarck.
- Image Date: Unknown
- Image File Name: pimu80_001_php.png