Lodgepole Pine
Lodgepole Pine
(*Pinus contorta* var. *latifolia*)

**General Description**
A tall straight-trunked, narrow-crowned pine that is native to the Rocky Mountain and Cascade-Sierra ranges. This tree is a major timber species for dimension lumber. In dense stands it forms clean, gradually tapering shafts which were used by Native Americans to make their lodges, hence the name “lodgepole pine.”

**Leaves and Buds**
Bud Arrangement - In whorls.
Bud Color - Brown.
Bud Size - Buds are medium in length, cylindrical in shape.
Leaf Type and Shape - Needles in fascicles of two.
Leaf Margins - Margin is minutely toothed.
Leaf Surface - Essentially smooth.
Leaf Length - Needles are short, range from 1½ to 3 inches long and remain on the tree six to eight years.
Leaf Width - Needles.
Leaf Color - Yellow-green.

**Flowers and Fruits**
Flower Type - Monoecious, separate male and female strobili.
Flower Color - Female dark purple; male pale brown.
Fruit Type - Cone is 1 to 2 inches long, each scale has a recurved prickle; two winged seeds per cone scale.
Cones remain unopened for years, similar to Jack Pine.
Fruit Color - Tannish cones, brown seeds.

**Form**
Growth Habit - Open stands result in oblong rounded crowns of large forked branches which may extend to the ground.
Texture - Medium-coarse, summer and winter.
Crown Height - 25 to 55 feet.
Crown Width - 15 to 25 feet.
Bark Color - Dark red-brown, rough, and scaly.
Root System - Moderately deep, subject to wind throw when shallow root systems are growing on impermeable layers or shallow, stony soils.

**Environmental Requirements**

**Soils**
Soil Texture - Will grow on a variety of soils if well-drained. Prefers reasonably moist fertile soils, but has proven to be drought tolerant once it is established in North Dakota.

**Soil pH** - 5.0 to 7.5.

**Windbreak Suitability Group** - 1, 3, 4, 5.

**Cold Hardiness**
USDA Zone 2.

**Water**
Drought resistant.

**Light**
Full sun only.

**Uses**

**Conservation/Windbreaks**
Medium evergreen on protected side of farmstead windbreaks.

**Wildlife**
Used as a food source by a variety of birds, squirrels, and porcupine.

**Agroforestry Products**
Wood - Used for dimension lumber and log homes. Native Americans used lodgepole pine for tepee and lodge poles.
Medicinal - Used as a diuretic and remedy for bladder, kidney and rheumatic infections.

**Urban/Recreational**
Rarely planted in ornamental landscapes.

**Cultivated Varieties**
None

**Related Species**
Jack Pine (*P. banksiana*)
Scotch Pine (*P. sylvestris*)
Swiss Mountain Pine (*P. uncinata*) - A tree form of mugo pine which merits landscape use in the Northern Plains.

**Pests**
Needle rust, western gall rust, and Comandra blister rust have been found in North Dakota.