

# 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.