Pinus flexilis ‘Columnaris’
Columnar Limber Pine

Edward F. Gilman and Dennis G. Watson

INTRODUCTION

This cultivar of the North American native tree, probably 30 to 50 feet high and 10 feet wide, has a fairly narrow, silhouette (Fig. 1). The 2.5 to 3.5-inch-long, dark blue/green needles are joined by light brown, 1.5-inch-wide, hanging cones which add to the tree’s overall attractiveness. Limber Pine is so-named due to the flexible nature of the branches. Young branches can literally be tied into a knot. The tree has the overall look of a White Pine when it is young.

GENERAL INFORMATION

Scientific name: Pinus flexilis ‘Columnaris’
Pronunciation: PIE-nus FLECK-sih-liss
Common name(s): Columnar Limber Pine
Family: Pinaceae
USDA hardiness zones: 5 through 7A (Fig. 2)
Origin: native to North America
Uses: Bonsai; container or above-ground planter; specimen; no proven urban tolerance
Availability: grown in small quantities by a small number of nurseries

DESCRIPTION

Height: 30 to 50 feet
Spread: 10 to 12 feet
Crown uniformity: symmetrical canopy with a regular (or smooth) outline, and individuals have more or less identical crown forms
Crown shape: columnar
Crown density: dense
Growth rate: slow

Figure 1. Mature Columnar Limber Pine.

Texture: fine

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Foliage

Leaf arrangement: spiral  
Leaf type: simple  
Leaf margin: entire  
Leaf shape: needle-like (filiform)  
Leaf venation: parallel  
Leaf type and persistence: evergreen; fragrant; needle leaf evergreen  
Leaf blade length: 2 to 4 inches  
Leaf color: blue or blue-green; green  
Fall color: no fall color change  
Fall characteristic: not showy

Flower

Flower color: yellow  
Flower characteristics: inconspicuous and not showy; spring flowering

Fruit

Fruit shape: elongated  
Fruit length: 3 to 6 inches  
Fruit covering: dry or hard  
Fruit color: brown

Fruit characteristics: does not attract wildlife; fruit, twigs, or foliage cause significant litter; persistent on the tree; showy

Trunk and Branches

Trunk/bark/branches: bark is thin and easily damaged from mechanical impact; routinely grown with, or trainable to be grown with, multiple trunks; grow mostly upright and will not droop; not particularly showy; tree wants to grow with several trunks but can be trained to grow with a single trunk; no thorns

Pruning requirement: requires pruning to develop strong structure  
Breakage: resistant  
Current year twig color: green  
Current year twig thickness: medium

Culture

Light requirement: tree grows in part shade/part sun; tree grows in full sun  
Soil tolerances: clay; loam; sand; acidic; occasionally wet; alkaline; well-drained  
Drought tolerance: high
**Other**

**Roots:** surface roots are usually not a problem  
**Winter interest:** no special winter interest  
**Outstanding tree:** tree has outstanding ornamental features and could be planted more  
**Invasive potential:** little, if any, potential at this time  
**Verticillium wilt susceptibility:** not known to be susceptible  
**Pest resistance:** long-term health usually not affected by pests

**USE AND MANAGEMENT**

Limber Pine grows best in full sun or partial shade on moist, well-drained soil but will easily adapt to harsher sites. Some horticulturists say they grow better under poor cultural conditions of drought and compacted clay soil. It adapts to wet soil by growing a shallow root system. One of the most tolerant of cold, windy weather in the winter and is not cold damaged when most other Pines show needle browning.

A few of the other cultivars include: ‘Glauc’a’, foliage is a deeper blue/green than the species; ‘Glauc’a Pendula’, irregular, wide-spreading shrub with blue/green needles; ‘Glenmore Dwarf’, small, upright, pyramidal tree with blue/grey foliage; ‘Nana’, dwarf bushy type; and ‘Pendula’, wide, weeping silhouette.

Propagation is by seed.

**Pests and Diseases**

There are a large number of pests and diseases on Pine.