

Pinus flexilis 'Columnaris': Columnar Limber Pine¹

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Introduction

This cultivar of the North American native tree, typically 30 to 50 feet high and 10 feet wide, has a fairly narrow silhouette. 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.

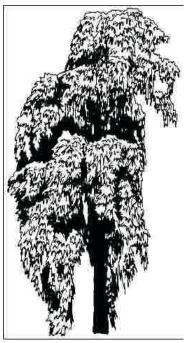


Figure 1. Mature *Pinus flexilis* 'Columnaris': Columnar limber pine. Credits: UF/IFAS

General Information

Scientific name: Pinus flexilis

Pronunciation: PIE-nus FLECK-sih-liss

Common name(s): Columnar limber pine

Family: Pinaceae

USDA hardiness zones: 4A through 7A (Figure 2)

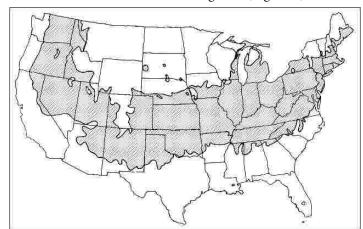


Figure 2. Range. Credits: UF/IFAS

Origin: native to North America

Invasive potential: not assessed/incomplete assessment

Uses: container or planter; specimen; bonsai

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Description

Height: 30 to 50 feet

Spread: 10 to 12 feet

Crown uniformity: symmetrical

Crown shape: columnar

Crown density: dense

Growth rate: slow

Texture: fine

Foliage

Leaf arrangement: spiral

Leaf type: simple

Leaf margin: entire

Leaf shape: needle-like (filiform)

Leaf venation: parallel

Leaf type and persistence: needled evergreen, evergreen,

fragrant

Leaf blade length: 2 to 4 inches

Leaf color: green, blue or blue-green

Fall color: no color change

Fall characteristic: not showy

Flower

Flower color: yellow

Flower characteristics: not showy

Fruit

Fruit shape: elongated, cone

Fruit length: 3 to 6 inches

Fruit covering: dry or hard

Fruit color: brown

Fruit characteristics: does not attract wildlife; showy; fruit/

leaves a litter problem

Trunk and Branches

Trunk/bark/branches: branches don't droop; not showy;

typically multi-trunked; thorns

Pruning requirement: needed for strong structure

Breakage: resistant

Current year twig color: green

Current year twig thickness: medium

Wood specific gravity: unknown

Culture

Light requirement: full sun, partial sun, or partial shade

Soil tolerances: sand; loam; clay; acidic; alkaline; well-

drained; occasionally wet

Drought tolerance: high

Aerosol salt tolerance: unknown

Other

Roots: not a problem

Winter interest: no

Outstanding tree: yes

Ozone sensitivity: unknown

Verticillium wilt susceptibility: resistant

Pest resistance: resistant to pests/diseases

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: 'Glauca', foliage is a deeper blue/green than the species; 'Glauca 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 of pine trees.