

Thuja plicata 'Fastigiata': 'Fastigiata' Giant Arborvitae¹

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Introduction

A native western North American tree, giant cedar can reach 180 to 200 feet in height in some areas of the Northwest but is more often seen at 50 to 70 feet in height with a spread of 15 to 20 feet. Forming a narrow pyramidal or columnar silhouette with strongly horizontal branches, giant cedar is an evergreen with fragrant, dark green, delicate needles which generously clothe the branches, casting dense shade beneath the tree. The insignificant yellow flowers are followed by small, half-inch cones which seem a little out-of-place on such a large tree. 'Fastigiata' ('Hogan'), has a dense columnar silhouette, and is reportedly very resistant to bagworms compared to the species.

General Information

Scientific name: *Thuja plicata*

Pronunciation: THOO-yuh ply-KAY-tuh

Common name(s): 'Fastigiata' giant arborvitae, 'Fastigiata' western redcedar

Family: *Cupressaceae*

USDA hardiness zones: 6A through 8A (Figure 2)

Origin: native to North America

Invasive potential: not assessed/incomplete assessment

Uses: hedge; screen; specimen; highway median



Figure 1. Mature *Thuja plicata* 'Fastigiata': 'Fastigiata' giant arborvitae.
Credits: Ed Gilman, UF/IFAS

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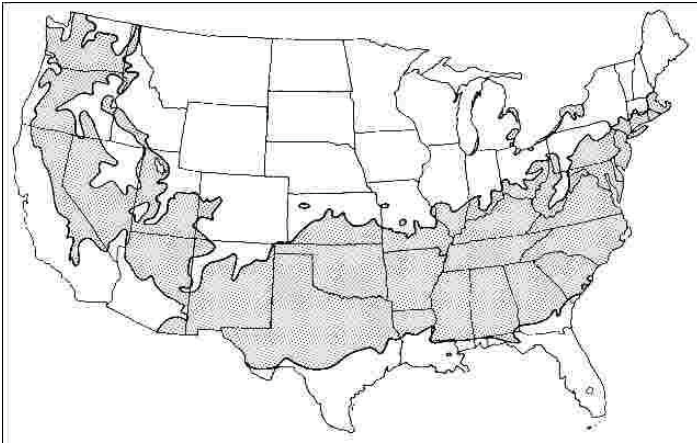


Figure 2. Range.
Credits: UF/IFAS

Description

Height: 50 to 70 feet

Spread: 15 to 20 feet

Crown uniformity: symmetrical

Crown shape: columnar

Crown density: dense

Growth rate: moderate

Texture: fine

Foliage

Leaf arrangement: unknown (Figure 3)

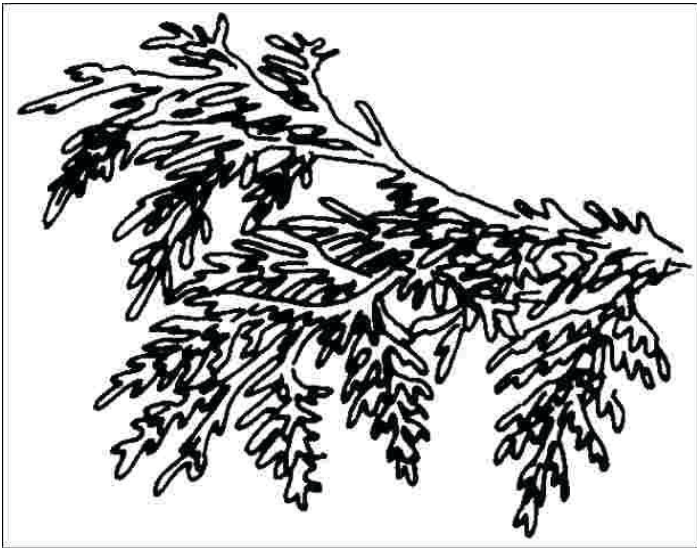


Figure 3. Foliage
Credits: UF/IFAS

Leaf type: simple

Leaf margin: entire

Leaf shape: scale-like, ovate

Leaf venation: none, or difficult to see

Leaf type and persistence: evergreen, fragrant

Leaf blade length: less than 2 inches

Leaf color: green

Fall color: no color change

Fall characteristic: not showy

Flower

Flower color: yellow

Flower characteristics: not showy

Fruit

Fruit shape: cone, elongated

Fruit length: 0.5 to 1 inch

Fruit covering: dry or hard

Fruit color: brown

Fruit characteristics: does not attract wildlife; not showy; fruit/leaves not a litter problem

Trunk and Branches

Trunk/bark/branches: branches don't droop; very showy; typically one trunk; thorns

Pruning requirement: little required

Breakage: resistant

Current year twig color: green, brown

Current year twig thickness: thin

Wood specific gravity: 0.32

Culture

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

Soil tolerances: clay; sand; loam; acidic; alkaline; well-drained; occasionally wet

Drought tolerance: moderate

Aerosol salt tolerance: moderate

Other

Roots: not a problem

Winter interest: no

Outstanding tree: yes

Ozone sensitivity: unknown

Verticillium wilt susceptibility: resistant

Pest resistance: free of serious pests and diseases

Use and Management

Tolerating shearing quite well, giant cedar is ideal for use as a hedge, screen, or specimen planting. The wood of this tree is commercially used in North America for the manufacture of roof shingles, deck boards, and siding and the split trunks were often used by Native Americans for making totem poles or canoes. Due to its narrow crown, works well close to buildings where soil is frequently alkaline, and drainage is poor.

Giant cedar naturally occurs on riverbanks, swamps, and even bogs so it should be grown in full sun or partial shade on moist, well-drained, fertile soil, and prefers a moist atmosphere. Apparently pH adaptable, growth is stunted on dry soils. Provide irrigation during the summer or locate in an area with moist soil and growth should be rapid.

Two of the other cultivars include: 'Atrovirens', excellent shining green foliage and 'Canadian Gold' with yellow foliage.

Propagation is by seed or cuttings.

Pests and Diseases

No pests or diseases are of major concern but may be occasionally bothered by bagworm, although this cultivar is reported to be more resistant than the species.