

# *Thuja plicata* 'Fastigiata': 'Fastigiata' Giant Arborvitae<sup>1</sup>

Edward F. Gilman and Dennis G. Watson<sup>2</sup>

## 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 (Fig. 2)

**Origin:** native to North America

**Invasive potential:** little invasive potential

**Uses:** hedge; screen; specimen; highway median

**Availability:** somewhat available, may have to go out of the region to find the tree

## Description

**Height:** 50 to 70 feet

**Spread:** 15 to 20 feet

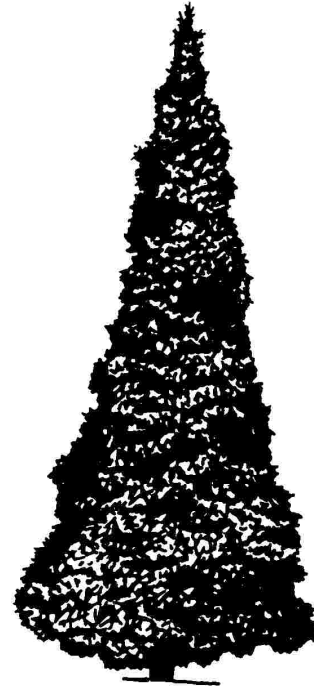


Figure 1. Mature *Thuja plicata* 'Fastigiata': 'Fastigiata' Giant Arborvitae

**Crown uniformity:** symmetrical

**Crown shape:** columnar

**Crown density:** dense

**Growth rate:** moderate

**Texture:** fine

## Foliage

**Leaf arrangement:** unknown (Fig. 3)

**Leaf type:** simple

1. This document is ENH-790, one of a series of the Environmental Horticulture, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida. Original publication date November 1993. Revised December 2006. Reviewed May 2011. Visit the EDIS website at <http://edis.ifas.ufl.edu>.

2. Edward F. Gilman, professor, Environmental Horticulture Department; Dennis G. Watson, former associate professor, Agricultural Engineering Department, Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida, Gainesville, FL 32611.



Figure 2. Range

**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:** .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



Figure 3. Foliage

## 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 Indians 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 river banks, 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.