



Thuja plicata 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 25 feet (Fig. 1). Forming an upright pyramidal 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.

GENERAL INFORMATION

Scientific name: *Thuja plicata*

Pronunciation: THOO-yuh ply-KAY-tuh

Common name(s): Giant Arborvitae, Giant-Cedar, Western Redcedar

Family: Cupressaceae

USDA hardiness zones: 6 through 8A (Fig. 2)

Origin: native to North America

Uses: hedge; recommended for buffer strips around parking lots or for median strip plantings in the highway; screen; specimen; no proven urban tolerance

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

DESCRIPTION

Height: 50 to 70 feet

Spread: 15 to 25 feet

Crown uniformity: symmetrical canopy with a regular (or smooth) outline, and individuals have more

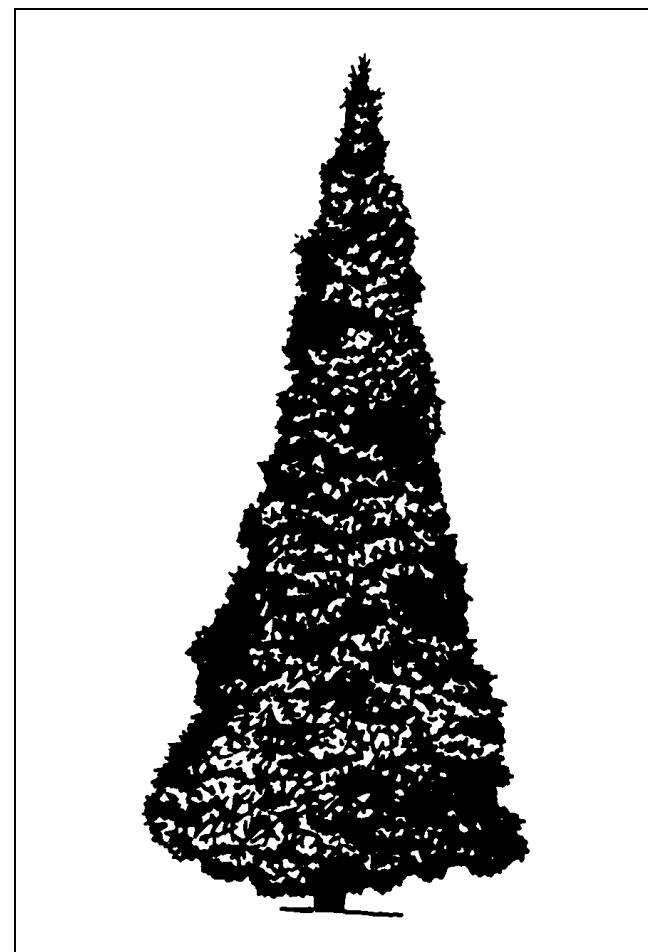


Figure 1. Mature Giant Arborvitae.

or less identical crown forms

Crown shape: columnar; pyramidal

Crown density: dense

Growth rate: medium

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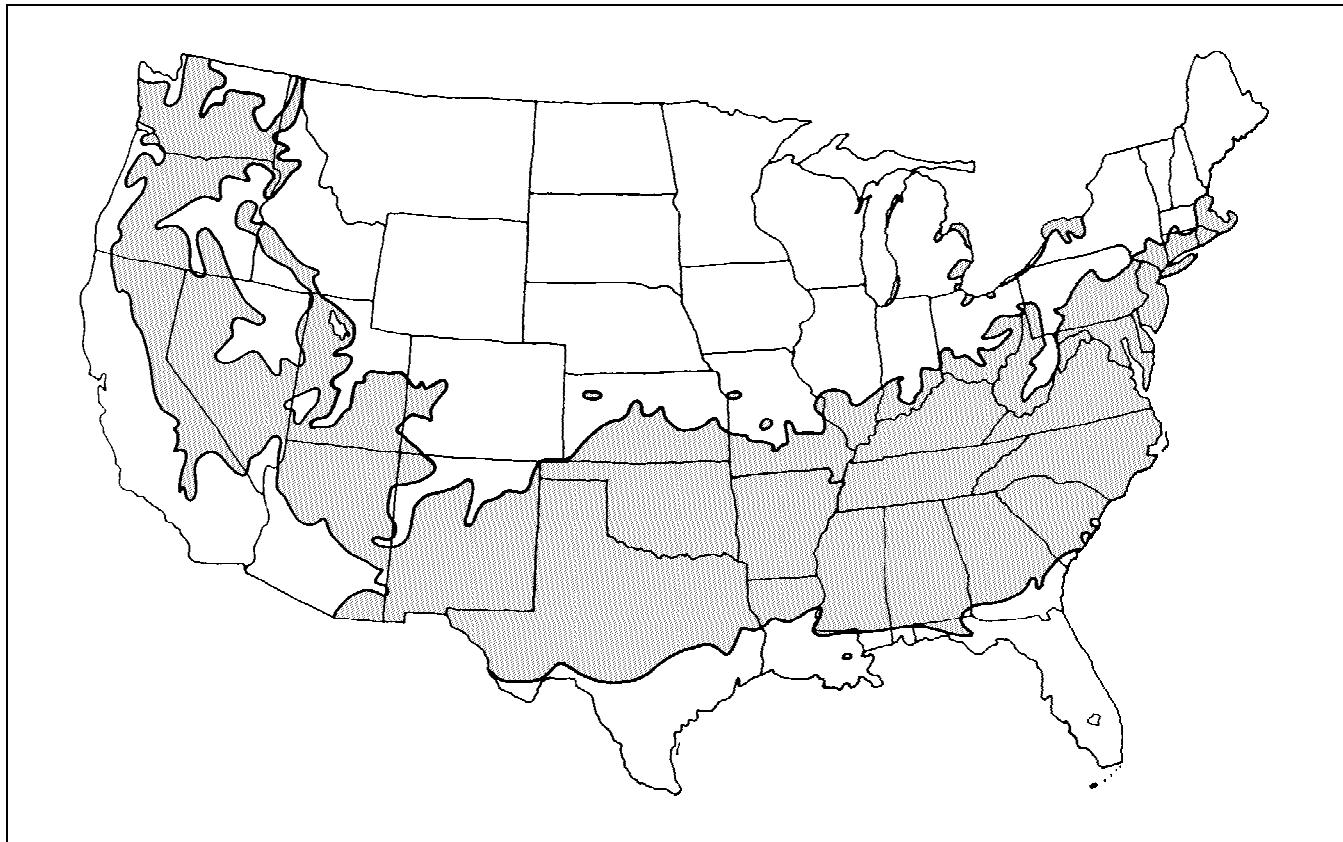


Figure 2. Shaded area represents potential planting range.

Texture: fine

Foliage

Leaf arrangement: unknown (Fig. 3)

Leaf type: simple

Leaf margin: entire

Leaf shape: ovate; scale-like

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 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: .5 to 1 inch

Fruit covering: dry or hard

Fruit color: brown

Fruit characteristics: does not attract wildlife; inconspicuous and not showy; no significant litter problem; persistent on the tree

Trunk and Branches

Trunk/bark/branches: grow mostly upright and will not droop; should be grown with a single leader; very showy trunk; no thorns

Pruning requirement: needs little pruning to develop a strong structure

Breakage: resistant

Current year twig color: brown; green

Current year twig thickness: thin

Wood specific gravity: 0.32



Figure 3. Foliage of Giant Arborvitae.

Culture

Light requirement: tree grows in part shade/part sun; tree grows in the shade; tree grows in full sun

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

Drought tolerance: moderate

Aerosol salt tolerance: moderate

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

Tolerating shearing quite well, Giant-Cedar is ideal for use as a hedge or screen, or a specimen for a large landscape. 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, it 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 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.

A few of the many cultivars include: 'Atrovirens', excellent shining green foliage; 'Canadian Gold', golden foliage; and 'Fastigiata' ('Hogan'), dense columnar silhouette, very resistant to bagworms - they do not appear to infest this cultivar as much as the species.

Propagation is by seed or cuttings.

Pests and Diseases

No pests or diseases are of major concern but may be occasionally bothered by bagworm.