



# Platycladus orientalis Arborvitae<sup>1</sup>

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

#### INTRODUCTION

Arborvitae is an easily-recognized shrub, with its large teardrop shape and flattened branchlets held vertically (Fig. 1). Most young plants are seen as shrubs, but they can be pruned into a small tree by removing the lowest branches. This forms a distinctive vase shape and is common on older landscapes where the plant was located too close to a walk or home.

#### **GENERAL INFORMATION**

Scientific name: Platycladus orientalis

Pronunciation: plat-ih-KLAY-dus or-ee-en-TAY-liss

Common name(s): Arborvitae

Family: Cupressaceae

**USDA hardiness zones:** 6 through 10A (Fig. 2)

Origin: not native to North America

**Uses:** recommended for buffer strips around parking lots or for median strip plantings in the highway; screen; specimen; tree has been successfully grown in urban areas where air pollution, poor drainage, compacted soil, and/or drought are common

Availability: generally available in many areas within

its hardiness range

## **DESCRIPTION**

**Height:** 15 to 20 feet **Spread:** 10 to 15 feet

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

or less identical crown forms **Crown shape:** oval; pyramidal

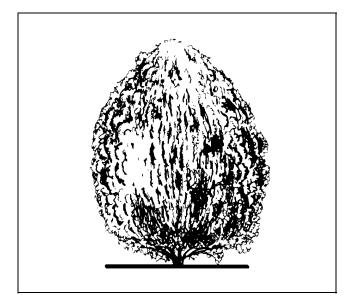


Figure 1. Mature Arborvitae.

**Crown density:** dense **Growth rate:** medium

Texture: fine

## **Foliage**

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

Leaf type: simple Leaf margin: entire

Leaf shape: deltoid; scale-like

Leaf venation: none, or difficult to see Leaf type and persistence: evergreen Leaf blade length: less than 2 inches

Leaf color: green

Fall color: no fall color change

This document is adapted from Fact Sheet ST-489, a series of the Environmental Horticulture Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida. Publication date: October 1994.

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



Figure 2. Shaded area represents potential planting range.

Fall characteristic: not showy

## Flower

Flower characteristics: inconspicuous and not

showy

#### Fruit

Fruit shape: oval; round Fruit length: < .5 inch Fruit covering: dry or hard

Fruit color: brown

Fruit characteristics: does not attract wildlife; inconspicuous and not showy; no significant litter

problem

# **Trunk and Branches**

**Trunk/bark/branches:** droop as the tree grows, and will require pruning for vehicular or pedestrian clearance beneath the canopy; routinely grown with, or trainable to be grown with, multiple trunks; not particularly showy; no thorns

Pruning requirement: needs little pruning to develop

a strong structure **Breakage:** resistant

Current year twig color: green Current year twig thickness: thin

## Culture

**Light requirement:** tree grows in part shade/part sun;

tree grows in full sun

Soil tolerances: clay; loam; sand; acidic;

well-drained

Drought tolerance: high
Aerosol salt tolerance: low
Soil salt tolerance: poor

#### Other

Roots: surface roots are usually not a problem Winter interest: no special winter interest Outstanding tree: not particularly outstanding

**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

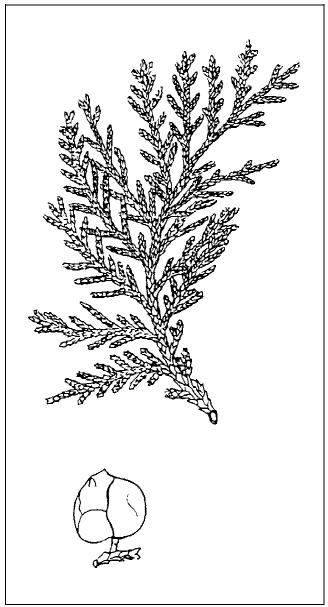


Figure 3. Foliage of Arborvitae.

#### **USE AND MANAGEMENT**

Arborvitae does not tolerate pruning well since all foliage is toward the outside of the crown, but it is well-suited for use as a barrier, background, or specimen planting in a large landscape where it is properly located so pruning is not needed. Its distinctive appearance does not fit easily into natural or informal landscapes. It is often planted in cemeteries and referred to as Cemetery Plant.

Arborvitae grows moderately fast in full sun or very light shade and tolerates drought well once established. Sandy or loam soil is best, clay soil is only suited on a slope where drainage is good. Available cultivars include: 'Aureus', 3 to 5 feet tall, compact, golden leaves in spring, globe-shaped; 'Baker', height 7 to 9 feet, bright pale green foliage, hardy in hot, dry areas; 'Berckmanii', height 4 to 6 feet, compact and globe-shaped with golden-tipped branchlets; 'Bonita', cone-shaped, 3 feet tall, leaves with yellow tips; 'Globosa', globe-shaped dwarf; 'Juniperoides', 3 feet tall, juvenile foliage needle-like, purplish foliage in fall; 'Meldensis', 3 feet tall, narrow, purplish foliage in fall.

Propagation is by cuttings.

## **Pests and Diseases**

Pest problems include spider mites and bagworms. A fungus blight causes the interior twigs to turn brown. This blight can be controlled by fungicides in early fall and by pruning out and destroying affected areas. Locate the plant in a sunny area with good air circulation to keep the foliage as dry as possible.