Platycladus orientalis
Arborvitae¹

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

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

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2. 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.
**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
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.