Platycladus orientalis: Arborvitae
Edward F. Gilman and Dennis G. Watson

Introduction
Arborvitae is an easily-recognized shrub, with its large teardrop shape and flattened branchlets held vertically. 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: 6A through 10A (Fig. 2)
Origin: not native to North America
Invasive potential: little invasive potential
Uses: specimen; screen; urban tolerant; highway median
Availability: not native to North America

Description
Height: 15 to 20 feet
Spread: 10 to 15 feet
Crown uniformity: symmetrical
Crown shape: pyramidal, oval

Figure 1. Mature Platycladus orientalis: Arborvitae
Credits: Ed Gilman

Figure 2. Range

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Crown density: dense
Growth rate: moderate
Texture: fine

**Foliage**

Leaf arrangement: whorled (Fig. 3)
Leaf type: simple
Leaf margin: entire
Leaf shape: scale-like, deltoid
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 color change
Fall characteristic: not showy

**Flower**

Flower color: unknown
Flower characteristics: not showy

**Fruit**

Fruit shape: oval, round
Fruit length: less than .5 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 droop; not showy; typically multi-trunked; thorns
Pruning requirement: little required
Breakage: resistant
Current year twig color: green
Current year twig thickness: thin
Wood specific gravity: unknown

**Drought tolerance:** high
**Aerosol salt tolerance:** low

**Other**

Roots: not a problem
Winter interest: no
Outstanding tree: no
Ozone sensitivity: unknown
Verticillium wilt susceptibility: resistant
Pest resistance: resistant to pests/diseases

**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.