Aesculus pavia
Red Buckeye

Edward F. Gilman and Dennis G. Watson

INTRODUCTION

Red Buckeye is a small North American native tree, capable of reaching 25 to 30 feet tall in the wild though is most often at 15 to 20 feet high when grown in cultivation (Fig. 1). Red Buckeye is most popular for its springtime display of three to six-inch-long, upright, terminal panicles composed of 1.5-inch-wide, red flowers which are quite attractive to hummingbirds. These blooms are followed by flat, round capsules which contain bitter and poisonous seeds. The large, dark green, palmate leaves usually offer no great color change in fall and often drop as early as late September.

GENERAL INFORMATION

Scientific name: Aesculus pavia
Pronunciation: ESS-kew-lus PAY-vee-uh
Common name(s): Red Buckeye
Family: Hippocastanaceae
USDA hardiness zones: 6 through 9A (Fig. 2)
Origin: native to North America
Uses: container or above-ground planter; wide tree lawns (>6 feet wide); medium-sized tree lawns (4-6 feet wide); recommended for buffer strips around parking lots or for median strip plantings in the highway; near a deck or patio; reclamation plant; shade tree; specimen; residential street tree
Availability: somewhat available, may have to go out of the region to find the tree

DESCRIPTION

Height: 15 to 20 feet
Spread: 15 to 25 feet
Crown uniformity: irregular outline or silhouette
Crown shape: round; pyramidal
Crown density: moderate
Growth rate: medium

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Figure 2. Shaded area represents potential planting range.

**Texture:** coarse

**Foliage**

Leaf arrangement: opposite/subopposite (Fig. 3)
Leaf type: palmately compound
Leaflet margin: double serrate; serrate
Leaflet shape: elliptic (oval); obovate
Leaflet venation: pinnate
Leaf type and persistence: deciduous
Leaflet blade length: 4 to 8 inches; 2 to 4 inches
Leaf color: green
Fall color: no fall color change
Fall characteristic: not showy

**Flower**

Flower color: red
Flower characteristics: spring flowering; very showy

**Fruit**

Fruit shape: round
Fruit length: 1 to 3 inches
Fruit covering: dry or hard
Fruit color: brown
Fruit characteristics: attracts squirrels and other mammals; fruit, twigs, or foliage cause significant litter; showy

**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; tree wants to grow with several trunks but can be trained to grow with a single trunk; no thorns
Pruning requirement: requires pruning to develop strong structure
Breakage: resistant
Current year twig color: brown
Current year twig thickness: thick
Figure 3. Foliage of Red Buckeye.

**Culture**

**Light requirement:** tree grows in part shade/part sun; tree grows in the shade  
**Soil tolerances:** clay; loam; sand; acidic; extended flooding; well-drained  
**Drought tolerance:** moderate  
**Aerosol salt tolerance:** moderate

**Other**

**Roots:** surface roots are usually not a problem  
**Winter interest:** tree has winter interest due to unusual form, nice persistent fruits, showy winter trunk, or winter flowers  
**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**

The coarse, open structure and the light brown, flaky bark is quite attractive and offers great winter landscape interest. Branches arise from the typically straight trunk at a wide angle forming a durable structure. There are many, small-diameter branches with an occasional upright, aggressive one growing as large as the trunk. Main branches begin forming low on the trunk and remain there when grown in the full sun.  

The tree is best used as a novelty patio tree or as part of a shrubbery border to add bright red color for several weeks in the spring and coarse texture during the rest of the year. Plant it in a medium- to large-sized residential landscape as a very coarse accent. Extremely coarse in winter without leaves, Red Buckeye will attract attention with the bright brown or tan bark reflecting the rays of the sun. Lower branches can be removed to allow for clearance beneath the crown, but the tree looks its best planted in the open to allow branches to fully develop to the ground.

Red Buckeye will flower well in rather dense shade but takes on its best form when grown in full sun with some afternoon shade on moist, well-drained soil. It is native along moist stream banks and is not very drought-tolerant.

The cultivar ‘Atrosanguinea’ has deeper red flowers; ‘Humilis’ is a low or prostrate shrub with small panicles of red flowers. Hybrids between *Aesculus pavia* x *Aesculus sylvatica* have been seen, bearing red and yellow flowers.

Red Buckeye is easily grown from seed, with plants flowering after three years.

**Pests and Diseases**

No pests or diseases are of major concern.