



Aesculus hippocastanum 'Baumannii' 'Baumannii' Horsechestnut¹

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INTRODUCTION

If Horsechestnut is to be planted, this is the one to plant (Fig. 1). Horsechestnut can grow 60 or 70 feet tall, but is often seen 40 to 55 feet with a spread of 40 to 50 feet. The trunk grows to three feet thick and is covered with dark, somewhat exfoliating bark. The prominent double white flowers, occurring in panicles at the branch tips, are the main ornamental feature of Horsechestnut. The large brown nuts so characteristic of the species are missing from this fruitless cultivar which makes this a better choose for urban landscapes than the species.

GENERAL INFORMATION

Scientific name: Aesculus hippocastanum 'Baumannii' Pronunciation: ESS-kew-lus hip-oh-kass-TAY-num Common name(s): 'Baumannii' Horsechestnut

Family: *Hippocastanaceae*

USDA hardiness zones: 4 through 7 (Fig. 2) **Origin:** not native to North America

Uses: 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; screen; shade tree; specimen; residential street tree; tree has been successfully grown in urban areas where air pollution, poor drainage, compacted soil, and/or drought are common **Availability:** somewhat available, may have to go out of the region to find the tree

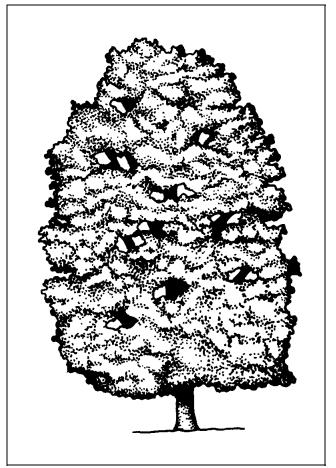


Figure 1. Mature 'Baumannii' Horsechestnut.

DESCRIPTION

Height: 50 to 80 feet Spread: 40 to 50 feet Crown uniformity: symmetrical canopy with a regular (or smooth) outline, and individuals have more

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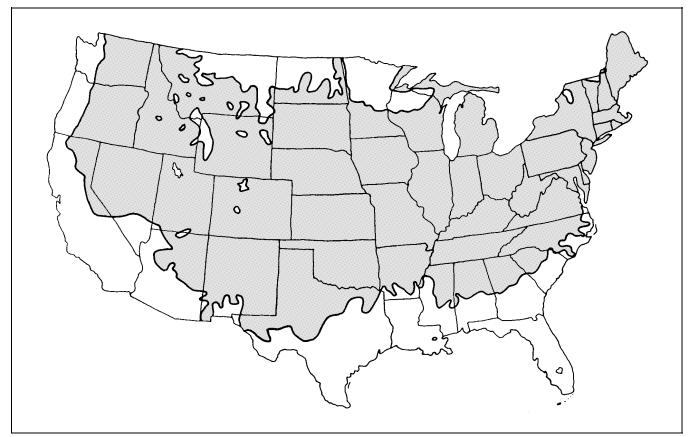


Figure 2. Shaded area represents potential planting range.

or less identical crown forms Crown shape: oval; round Crown density: dense Growth rate: slow Texture: coarse

Foliage

Leaf arrangement: opposite/subopposite (Fig. 3) Leaf type: palmately compound Leaflet margin: double serrate Leaflet shape: obovate Leaflet venation: pinnate Leaf type and persistence: deciduous Leaflet blade length: 8 to 12 inches; 4 to 8 inches Leaf color: green Fall color: yellow Fall characteristic: not showy

Flower

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

Fruit

There is no fruit on this tree.

Trunk and Branches

Trunk/bark/branches: droop as the tree grows, and will require pruning for vehicular or pedestrian clearance beneath the canopy; showy trunk; should be grown with a single leader; no thorns Pruning requirement: requires pruning to develop strong structure Breakage: resistant Current year twig color: brown Current year twig thickness: stout

Culture

Light requirement: tree grows in full sun Soil tolerances: clay; loam; sand; acidic; alkaline; well-drained Drought tolerance: moderate Aerosol salt tolerance: moderate

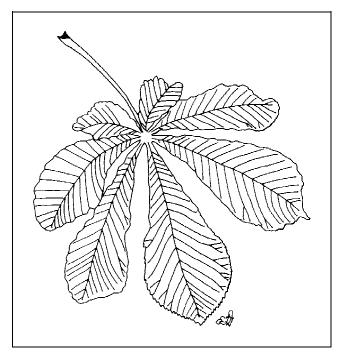


Figure 3. Foliage of 'Baumannii' Horsechestnut.

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: very sensitive to one or more pests or diseases which can affect tree health or aesthetics

USE AND MANAGEMENT

The growth rate is rapid while the tree is young but slows down with age. Horsechestnut is weakwooded and some branches break from the trunk under ice or snow loads. The tree usually develops leaf scorch in dry soil, and powdery mildew during the summer, causing leaves to drop. Leaf blotch is also prevalent. This limits its wide use in any one area, but any landscape would benefit from a Horsechestnut or two. It is also very tolerant of city conditions and does well in small, restricted root zone areas such as along streets. Sensitivity to air pollution injury makes it unsuited for downtown areas - best in the suburbs.

Horsechestnut prefers a sunny exposure sheltered from wind but casts dense shade with coarse-textured leaves. The tree is easily transplanted and grows in almost any urban soil, including alkaline. The large leaves and dropping twigs create litter which is considered by many to be objectionable. The species is probably best located away from hard surfaces due to dropping nuts, but this cultivar produces no nuts, making it a more versatile tree. Only moderately drought-tolerant. Will grow in calcareous soil.

Several other cultivars may be grown but will still have leaf scorch problems: 'Pendula' - has drooping branches; 'Pyramidalis' - upright; 'Rubicunda' flowers salmon red; 'Tortuosa' - contorted growth.

Pests

White-marked tussock moth is a fuzzy caterpillar. The insect has black marks and four tufts of hair on its back.

Japanese beetle eats the leaves down to the veins. Leaves at the top and south side of the plant are often most affected and attacks can be quite sudden.

Diseases

Leaf blotch causes diseased areas of variable size on the leaves. The diseased areas are at first discolored and watersoaked, later turning light reddish brown with bright yellow margins. If the entire leaf is affected it will dry, turn brown, and fall off. Leaf stalks may also be attacked. This disease looks very much like scorch from dry soil. Rake up and destroy old leaves.

A leaf spot disease will cause small brown circular spots on the leaves.

Powdery mildew covers the undersides of the leaves with white mold.

Anthracnose may infect terminal shoots several inches from the tip. The infected area is shrunken and the outer layers of tissue may be ruptured.

Leaf scorch is a physiological problem but will not kill the tree. The leaf margins turn brown then browning moves progressively inward between the veins. Eventually the entire leaf turns brown. The condition occurs in mid-summer. Keep the plant well-watered during dry weather.