Aesculus x carnea: Red Horsechestnut

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Introduction
This hybrid of Aesculus hippocastanum and Aesculus pavia has very large, dark green leaves composed of five to seven leaflets, and will ultimately reach a height and spread of 30 to 40 feet. Although deciduous, red horsechestnut does not produce any appreciable fall color and is well suited for use as a specimen. The tree is quite striking with dark green, coarse-textured foliage. Pyramidal in shape when very young, red horsechestnut develops slowly into a round, very dense shade tree by five to seven years of age, and is outstanding in the landscape for its beautiful springtime display of blossoms. The multitude of pink to bright scarlet blooms appear on erect, eight-inch-long panicles at each branch tip and are quite attractive to bees and hummingbirds. The prickly, rather messy, poisonous seedpods appear in fall.

General Information
Scientific name: Aesculus x carnea
Pronunciation: ESS-kew-lus x KAR-nee-uh
Common name(s): Red horsechestnut
Family: Hippocastanaceae
USDA hardiness zones: 5A through 7B (Fig. 2)
Origin: not native to North America
Invasive potential: little invasive potential
Uses: street without sidewalk; sidewalk cutout (tree pit); tree lawn 3-4 feet wide; tree lawn 4-6 feet wide; tree lawn > 6 ft. wide; parking lot island 100-200 sq. ft.; parking lot island > 200 sq ft; specimen; shade; screen; highway median; container or planter
Availability: somewhat available, may have to go out of the region to find the tree

Description
Height: 30 to 45 feet
Spread: 30 to 45 feet
Crown uniformity: symmetrical
Crown shape: pyramidal, round
Crown density: dense
Growth rate: slow
Texture: coarse
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**Foliage**
- **Leaf arrangement:** opposite/subopposite (Fig. 3)
- **Leaf type:** palmately compound
- **Leaf margin:** serrate
- **Leaf shape:** ob lanceolate
- **Leaf venation:** pinnate
- **Leaf type and persistence:** deciduous
- **Leaf blade length:** 4 to 8 inches
- **Leaf color:** green
- **Fall color:** no color change
- **Fall characteristic:** not showy

**Fruit**
- **Fruit shape:** round, oval
- **Fruit length:** 1 to 3 inches
- **Fruit covering:** dry or hard
- **Fruit color:** brown
- **Fruit characteristics:** attracts squirrels/mammals; not showy; fruit/leaves a litter problem

**Flower**
- **Flower color:** pink, red
- **Flower characteristics:** very showy

**Trunk and Branches**
- **Trunk/bark/branches:** branches droop; not showy; typically multi-trunked; thorns
- **Pruning requirement:** needed for strong structure
- **Breakage:** resistant
- **Current year twig color:** brown
- **Current year twig thickness:** thick
- **Wood specific gravity:** unknown

**Culture**
- **Light requirement:** full sun
- **Soil tolerances:** clay; sand; loam; acidic; well-drained
- **Drought tolerance:** moderate
- **Aerosol salt tolerance:** moderate

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

**Use and Management**
Leaf and flower litter in the summer and fall may be objectionable to some people since the leaves are large and decompose slowly. The nuts make good food for wildlife, but you may not want it scattered along city streets. They can make great ammunition for throwing at moving objects, windows, and other people, so locate it accordingly. Makes a great median street tree when provided with some irrigation during drought.

Red horsechestnut will grow in full sun or light shade and prefers moist, well drained, acid soils but grows in slightly alkaline soil. Plants are moderately tolerant to drought, wind, and salt, and resist the heat of the South very well. It holds up well in urban areas, even in restricted and compacted soil spaces. Red horsechestnut appears to be less susceptible to disease than either of the parents. Trunk bark may crack when exposed to the direct sun, so keep it shaded as much as possible by leaving lower branches on small trees, and don't over-prune the tree, exposing the trunk suddenly to direct sun.

The cultivar ‘Briotii’ has deep scarlet flowers in 10-inch-long panicles and no fruit; ‘Rosea’ has pink flowers. ‘O’Neill’s Red’ has double red flowers.

Propagation is from seed, an oddity for most hybrids.
**Pests and Diseases**

No pests or diseases are of major concern. Much less susceptible to leaf scorch and leaf blotch than *Aesculus hippocastanum*, and should be planted in its place.