Aesculus glabra - Ohio Buckeye (Hippocastanaceae)

Aesculus glabra is a medium-sized, native Ohio tree, typically found on moist stream banks, but which tolerates moderate drought. Ohio Buckeye is not a good landscape plant because of various aesthetic limitations, but is appropriate in naturalistic plantings of the Midwestern U.S.

FEATURES

Form
- small tree of central states, chiefly of Ohio and Mississippi Valley regions, 30-50' in height, 2-3' in diameter
- oval-rounded form
- branches droop as the tree grows
- generally symmetrical

Culture
- grows best in deep fertile soils, will usually reach maturity in 60-80 yrs.
- full sun but tolerates partial shade
- tolerates a wide range of soil conditions: all types of textures, acidic to slightly alkaline, wet soils moderate drought
- susceptible to diseases (leaf spot, leaf blotch, leaf scorch, and powdery mildew) and pests that affect most Aesculus; but particularly susceptible to summer leaf scorch under landscape conditions
- rare in the trade
- considered difficult to transplant

Foliage
- opposite arrangement
- palmately compound with 5 nearly elliptical, serrate leaflets 4-6" long
- petiole 3-5" long, but no petiolules
- dark green above, light green below
- one of the first trees to leaf out in the spring and drops its leaves early in the autumn
- autumn color is orange to red, if the leaves remain on the tree and have not dropped by late summer due to leaf scorch and other foliar problems

Flowers
- white to greenish yellow
- upright spikes 4-6" long
- early to mid-May
- fairly showy

Fruits
- 1-2" seed capsule, somewhat spiny with 1-5 non-edible seeds (nuts) inside

Twigs
- gray stout stems have prominent brown leaf scars, and a prominent terminal bud that is non-resinous
- gray branches become rough or lightly furrowed with age

Trunk
- short and knotty
- bark ash-grey, scaly plates

USAGE

Function
- shade tree, specimen
- appropriate in "natural landscapes" for the Midwestern U.S.
- not appropriate as a street tree

Texture
- coarse texture when bare
- medium texture in leaf

Assets
- a native Ohio tree of special significance to OSU Alumni
- one of the few (the only one?) botanical mascots in our sports-crazed society

Liabilities
- subject to leaf blotch, powdery mildew, and leaf scorch
- one of the earliest trees to drop its leaves in autumn, messy

Habitat
- Zones 4 to 7
- Native to the Eastern U.S. (Western Pennsylvania to Texas)

SELECTIONS

Alternates
- large shade trees that have showy flowers (Aesculus × carnea, Aesculus glabra, Aesculus hippocastanum, Liriodendron tulipifera, Magnolia grandiflora, etc.)
- large trees with nuts that attract wildlife (members of the genera Aesculus, Carya, Castanea, Corylus, Fagus, Juglans, Quercus, etc.)

Cultivars – Variants – Related species
- species form is the available choice

NOTE: The following excerpt is from the Ohio Department of Natural Resources:

"Ohio buckeye is found growing on fertile, moist soils of bottomlands and river banks throughout most of Ohio but less commonly in the eastern half of the state. It is also known as the fetid or stinking buckeye because the flowers, bruised bark, and broken twigs give off a disagreeable odor. The Indians named the fruit of the buckeye tree 'hetuck', meaning the eye of a buck, which it certainly does resemble. Today the buckeye has the distinction of being the state tree of Ohio. The fresh seeds of this tree are reported to be poisonous to man but not to squirrels. The Indians powdered the seeds and dumped them into small pools. This would stun the fish and make them rise to the surface, where the Indians quickly collected them. It is also reported that a flour made from the seeds makes an excellent library paste which will repel roaches. The pioneers favored the wood for cabin building and for making furniture. Early settlers cut long, thin shavings which were then woven into summer hats. Although buckeye wood is now used extensively for making artificial limbs because it is light, easily worked, and resists splitting, it is of little commercial importance. Its main modern use is for pulp."