

## American Holly

*Ilex opaca* Ait.

**Leaves:** A simple evergreen leaf that is oval shaped, glossy and thick. It has sharp pointed teeth. Leaves are 2-4 inches long and  $\frac{3}{4}$  -  $1\frac{1}{2}$  inches wide and alternate on the branch.

**Twigs:** brown or gray, covered with fine hairs when young, buds are very small

**Flower:** off-white,  $\frac{1}{4}$ ", found in clusters at the base of the new leaves

**Fruit:** bright red berry-like maturing in autumn

**Bark:** Smooth, light gray, mature tree may have rougher bark

**General:** The American Holly is found in moist or well drained soils. It is a small to medium size tree growing 15-40feet tall. It has occasionally reached 100'. The wood of this slow growing tree is often used for musical instruments, furniture inlays, cabinetwork, handles, carvings, toys, sporting and athletic goods. This tree is also enjoyed as a Christmas holiday decoration. Many songbirds, gamebirds and mammals eat the bitter berries.



Photos courtesy of W. Kindig, YCCD

## **Crabapple**

*Malus sp.*

**Leaves:** A simple, serrate, oval or elliptical leaf with a rounded leaf base. 3-5 inches in length and 1½ -2 inches wide. Alternate on the stem.

**Twigs:** Reddish-brown, with small buds, – ¼ inch long.

**Flower:** Showy, 5 petal flowers, usually pink but occasionally red or white, depending on variety. May have semi-double (6-10 petals) or double (10 petals) flowers.

**Fruit:** A pome that varies in size depending on variety from ¼ to 2 inches. It may be shades of red, orange, or yellow.

**Bark:** Gray-brown to reddish-brown, often mottled and sometime peeling.

**General:** Commonly planted in urban areas due to its year round aesthetic value and small size. Usually grows to 30 feet or less. Crabapples are edible but are tart and bitter. Hundreds of varieties exist with about 100 available in the U.S. Trees grow best in full sun. Fruits are eaten by many birds and mammals.





Courtesy of W. Kindig, YCCD



Courtesy of K. Ward, YCCD



Courtesy of Va. Tech

## Ginkgo

### *Ginkgo biloba*

**Leaves:** 3 – 5 leaves are gathered in a cluster on a spur. Leaves are 1-2 inches wide and 1-2 inches long. The fan shaped leaves have a wavy edge and are slightly leathery. Veins are parallel.

**Twigs:** light green to light brown, Spurs, or short side twigs, where the leaves attach are especially noticeable when leaves have dropped.

**Flower:** Tree is dioecious, meaning there are male and female trees. Males produce a tiny 1 inch catkin. Female flowers are unnoticeable. Pollination is by wind.

**Fruit:** Yellow thick-walled edible seed, 1-3 inches in size. Matures after the first frost. Mature fruit has a bad odor when crushed that varies from rancid butter to vomit.

**Bark:** pale brown

**General:** Leaf fossils from this tree have been dated back from 270 million years ago. It is native to eastern China. A mature tree may range from 50-80 feet tall and 30-40 feet wide. Because of the offensive odor of the fruit, cuttings from male trees are often propagated for planting in urban settings. The leaves turn a brilliant yellow in the fall.



Fig. 314. *Acer palmatum* Thunb.  
Fruit, leaf,  $\times \frac{3}{4}$ .



## Japanese maple

### *Acer palmatum*

**Leaves:** Simple, toothed, 2 – 5 inches long, red to purple colored, palmately lobed with 5 – 11 long lobes. Opposite on the branch.

**Twigs:** Slender, green or red. Lacks a terminal bud.

**Flowers:** Small red or purple flowers arranged in clusters.

**Fruit:** A paired red or green fruit called a samara. Samaras separated by 60 – 90 degrees.

**Bark:** Gray, usually smooth.

**General:** Native to Japan and Korea. Common as an ornamental in yards. Will sprout from seed. Over 1,100 variations world-wide. Usually a small tree.





## Sweetgum

*Liquidambar styraciflua*

**Leaves:** Alternate, simple, palmately veined, 4-6 inches across with 5-7 lobes, a finely serrate margin.

**Twigs:** Shiny green to yellow-brown, usually with apparent corky outgrowths. The terminal bud is large and is usually sticky, covered with orange brown scales.

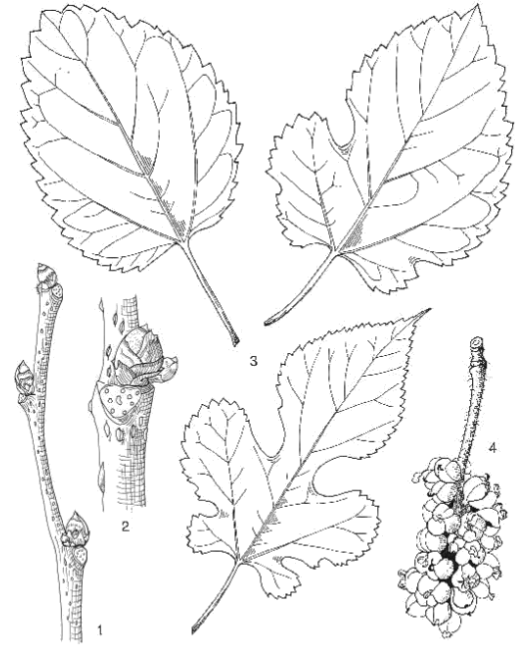
**Flower:** Tiny greenish ball like clusters in spring. Male flowers in clusters along the stalk and female flowers in drooping clusters. Both are present on the same tree.

**Fruit:** Woody brown sphere "gumballs". 1-1 ½ inches in diameter with openings in the surface that release 2 seed from each capsule. Maturing in September or November.

**Bark:** Gray brown, irregular furrows and ridges.

**General:** A medium to large tree (30-100 feet tall) with a straight stem and a pyramidal crown, especially when young. In pioneer days, a gum was obtained from trunks by peeling the bark and scarping off the resin-like solid. This gum was used medically as well as for chewing gum. It is an important timber tree and is used for furniture, cabinet work, plywood, pulpwood, veneer, and barrels. Many birds and small mammals eat the seeds.





1. Winter twig,  $\times 1$ .
2. Portion of twig,  $\times 2$ .
3. Leaves,  $\times \frac{3}{4}$ .
4. Fruit, multiple of drupes,  $\times 2$ .



## White Mulberry

*Morus alba*

**Leaves:** broadly ovate with variable shapes; divided into 3 or 5 lobes or sometimes heart shaped; coarsely toothed; shiny green above; 2 ½ to 7 inches long; 2 to 5 inches wide, arranged alternately on the branch

**Twigs:** hairless or slightly hairy; buds are red brown with 5-6 scales; scales lack darker scale borders

**Flower:** tiny, greenish structures appearing in short clusters usually from April to June

**Fruit:** purple, pink, or white berry depending on maturity; appears in June and July; 3/8 to ¼ inch long

**Bark:** light brown or yellow-brown in color; becoming furrowed with scaly ridges with age

**General:** White mulberry grows rapidly attaining a height of 30 – 60 feet. The tree is native to China but was brought to the US as part of a failed silkworm production. The seeds are spread by birds and other animals which eat the berries.