

**SELECTED  
TREES AND SHRUBS  
OF WEST VIRGINIA**

By  
Norma Jean Venable

West Virginia University  
Extension Service

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**- Artists -  
Meredith Pearce  
Theresa Hudson  
Linda Rader**

**cover picture by Theresa Hudson**

**West Virginia University  
Extension Service**

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**WHITE ASH** (*Fraxinus americana*)

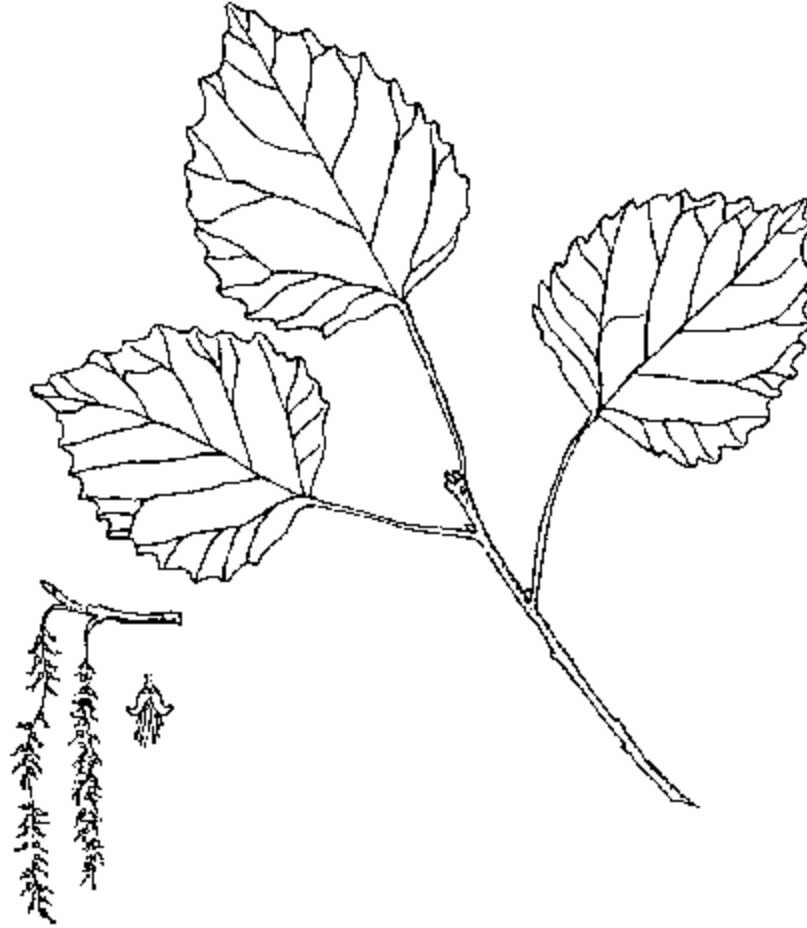
LEAVES are 8 to 12 inches long, usually with 7 oblong leaflets, 3 to 5 inches long, and 1½ to 3 inches wide, with smooth or finely toothed leaf edges. Underside of leaflets is pale or whitish and stems are slender. Leaves are opposite each other on the stem. Fall foliage is purplish. FLOWERS are purplish, in clusters, opening before or with the leaves. FRUIT is a winged seed, 1 or 2 inches long and ¼ -inch wide, which hangs in clusters and may remain on the tree for several months after ripening in autumn. BARK is gray-brown. Diamond-shaped fissures separate the ridges. This is the most common ash in the state.



**AMERICAN MOUNTAIN ASH**  
(*Sorbus americana*)

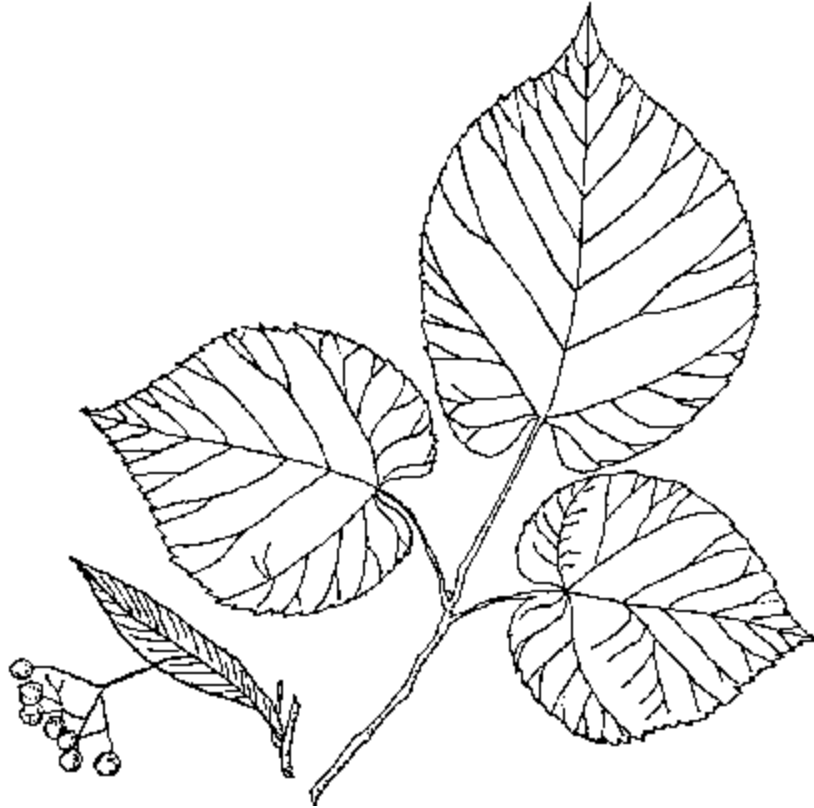
LEAVES are 6 to 8 inches long, with 13 to 17 toothed leaflets 2 to 4 inches long and up to 1 inch wide. Leaves turn yellow in fall. FLOWERS are small, white, and in flat-topped clusters that bloom after the leaves appear. FRUIT is small, apple-like, brilliant red and in clusters, often remaining on the tree until late winter and is eaten by birds. BARK is light gray-brown, smooth to scaly. Height is to 30 feet. It grows at higher elevations and is usually a tree with a short trunk and slender spreading branches.





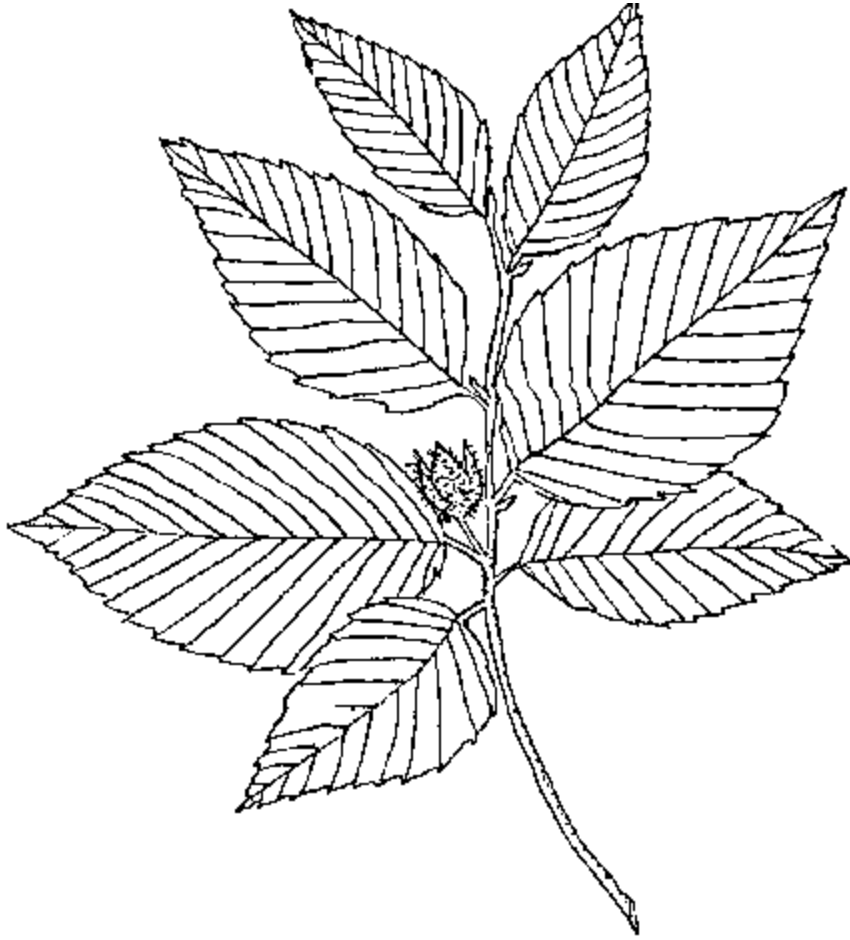
**BIGTOOTH ASPEN**  
(*Populus grandidentata*)

LEAVES are oval, 3 to 4 inches long, with 5 to 15 pairs of large leaf teeth. Leaves are dark green above, lighter below. Leaf stems are flattened near the leaf-base. FLOWERS are in catkins (scaly spikes). FRUIT is a hairy capsule 1/8-inch long, cone-shaped. Small seeds are brown with long white hairs. BARK tends to be yellowish on upper limbs, gray and somewhat rough on older trunks. It occurs at various places throughout the state.



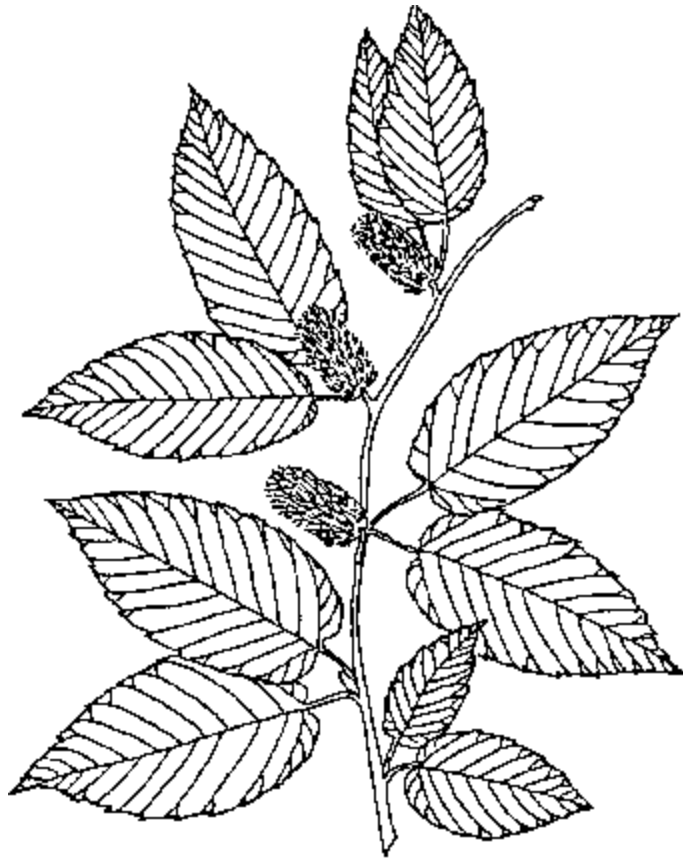
**AMERICAN BASSWOOD**  
(*Tilia americana*)

LEAVES are somewhat heart-shaped, sharply pointed at the tip, 5 to 6 inches long, and coarsely toothed. Stems are 1 to 3 inches long. FLOWERS, appearing in June, are pale yellow, in clusters 3 inches wide and fragrant. Nectar in the flowers makes excellent honey. FRUIT is nut-like, ripening in October, and is attached to a 5-inch long bract (leaf-like structure). BARK is gray to brown and deeply furrowed in older trees. It is more common in the northern part of the state.



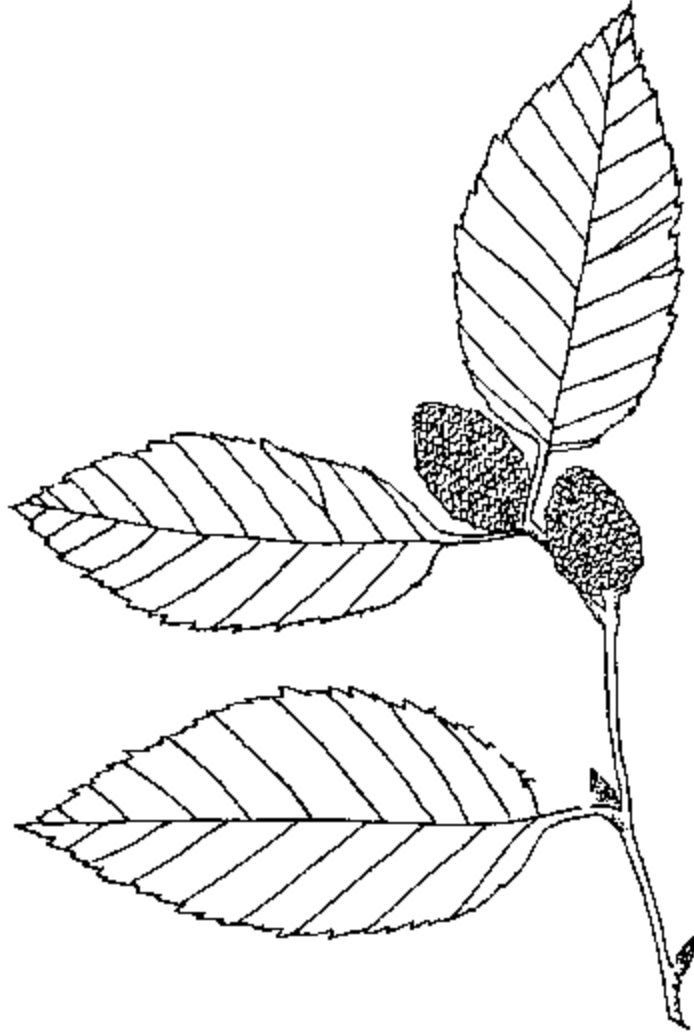
**AMERICAN BEECH** (*Fagus grandifolia*)

LEAVES are oblong, 2 to 5 inches long, 1 to 2½ inches wide, with prominent inwardly curving teeth on the leaf edge, and prominent leaf veins. Leaves are dark green in summer and golden-bronze in fall. FLOWERS are yellow-green, appearing with the leaves, and are in long-stemmed globe-like heads. FRUIT is an edible nut, encased in a prickly husk. Ruffed grouse, raccoon, and other wildlife eat beechnuts. BARK is smooth and gray. Beech is common throughout most of the state.



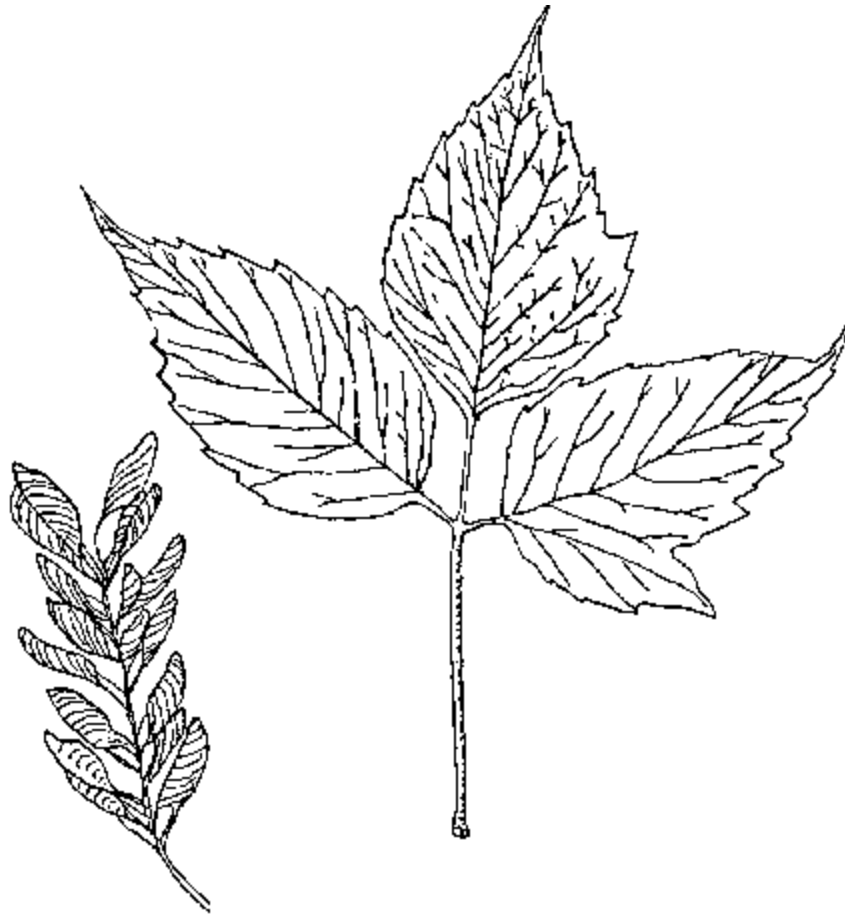
**SWEET or BLACK BIRCH** (*Betula lenta*)

LEAVES are oblong, 2 to 5 inches long, with toothed edges and prominent veins. Fall foliage is yellow. If crushed, twigs have a strong wintergreen flavor and scent. FLOWERS are in catkins (scaly spikes). Male catkins are tassel-like and 1 to 4 inches long. Cone-like strobiles are 1½-inch long, and disintegrate when ripe. FRUIT is a small nutlet. BARK on aging trees is black or dark red, with horizontal lenticels (corky spots). On older trees bark is in scaly plates. Scattered throughout the state, black birch can grow on dry, rocky areas, but prefers rich, slightly acid soils.



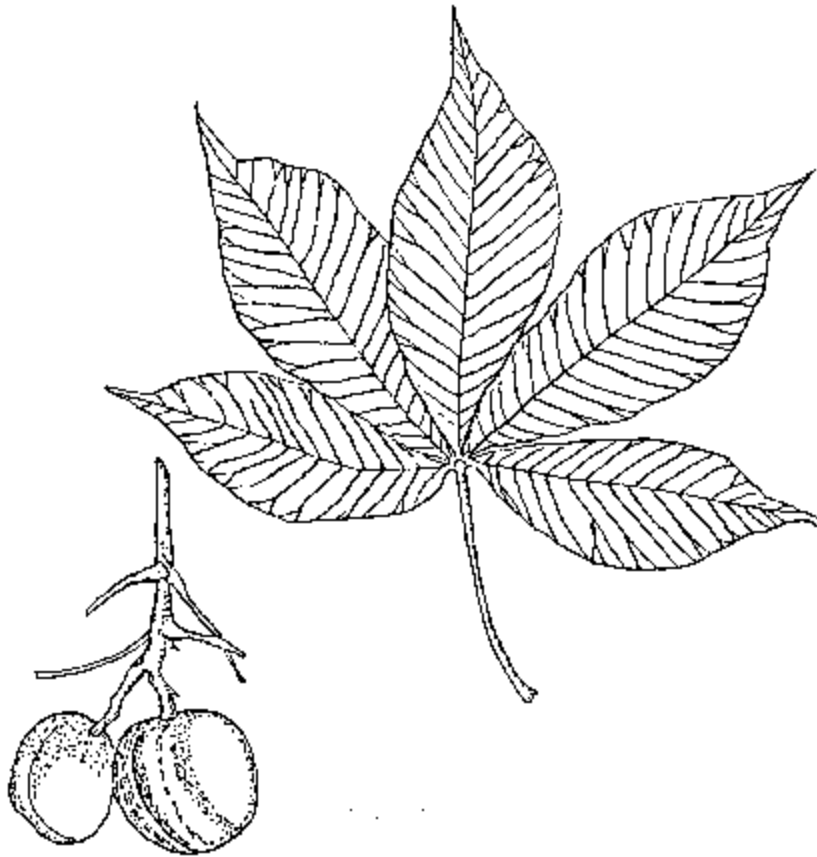
**YELLOW BIRCH** (*Betula lutea*)

LEAVES are 3 to 5 inches long, dark green with a heart-shaped base and toothed edges. FLOWERS are in catkins. Strobiles (cone-like structures) are 1 inch long, oval, erect and shed their scales slowly. BARK is yellow to bronze and peels in narrow curved strips. Wood is brown-yellow; twigs are slightly aromatic. Height is to 100 feet. Yellow birch grows most frequently in higher mountain areas, often growing with red spruce and hemlock.



**BOXELDER or ASH-LEAVED MAPLE**  
(*Acer negundo*)

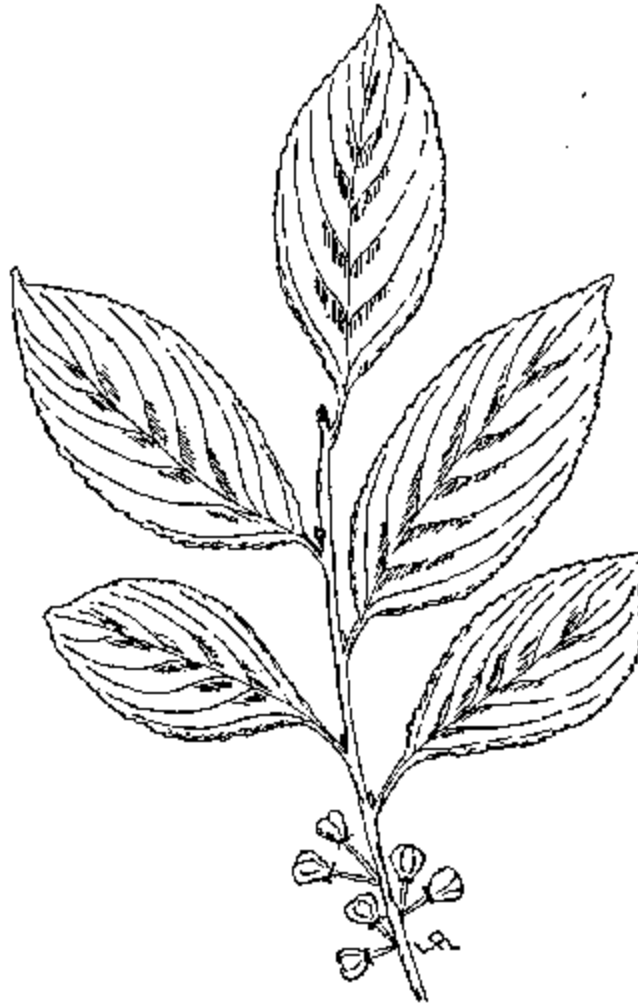
LEAVES are 6 to 15 inches long, with 3 to 7 leaflets. Leaflets may be slightly 3-lobed and are coarsely toothed. Twigs are green and stems may be reddish. FLOWERS are small, yellow-green, and appear in April. FRUIT is a V-shaped winged seed (samara) growing in clusters that may remain throughout winter. BARK is gray-brown, with close ridges, heavily furrowed on older trees. Height is to 75 feet. Boxelder grows rapidly but is short-lived. This tree has the widest distribution of any North American maple and is scattered throughout the state.



**YELLOW or SWEET BUCKEYE**

*(Aesculus octandra)*

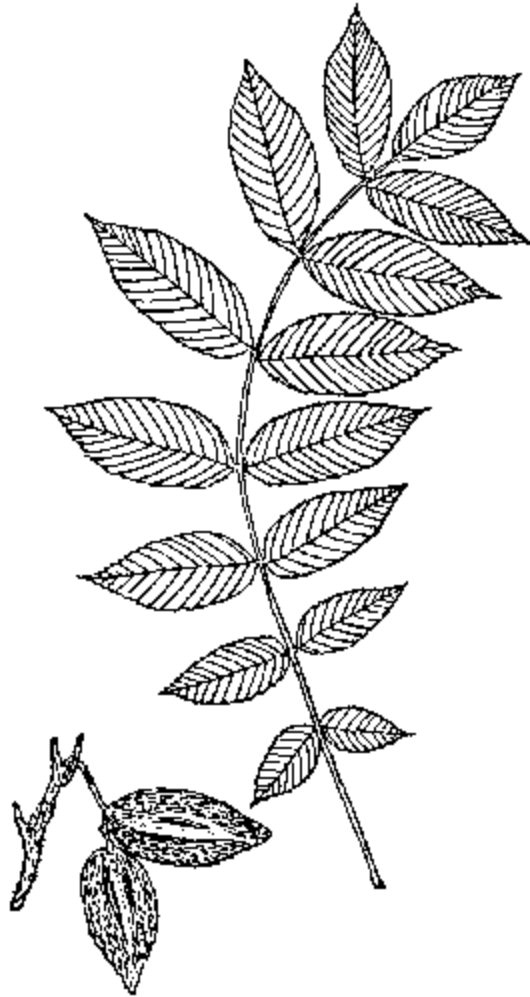
LEAVES are shaped like a hand, with 5 to 7 (usually 5) leaflets 4 to 16 inches long. FLOWERS are yellow, bell-shaped, appearing May to June. FRUIT is a glossy brown nut 1 inch in diameter enclosed in a husk with a smooth surface. BARK is brown, fissured, and scaly. Height is to 90 feet. Color of wood is yellowish. One of the first trees to leaf out in spring, it is found along streams and occasionally on drier ground.



**ALDER-LEAVED BUCKTHORN**  
(*Rhamnus alnifolia*)

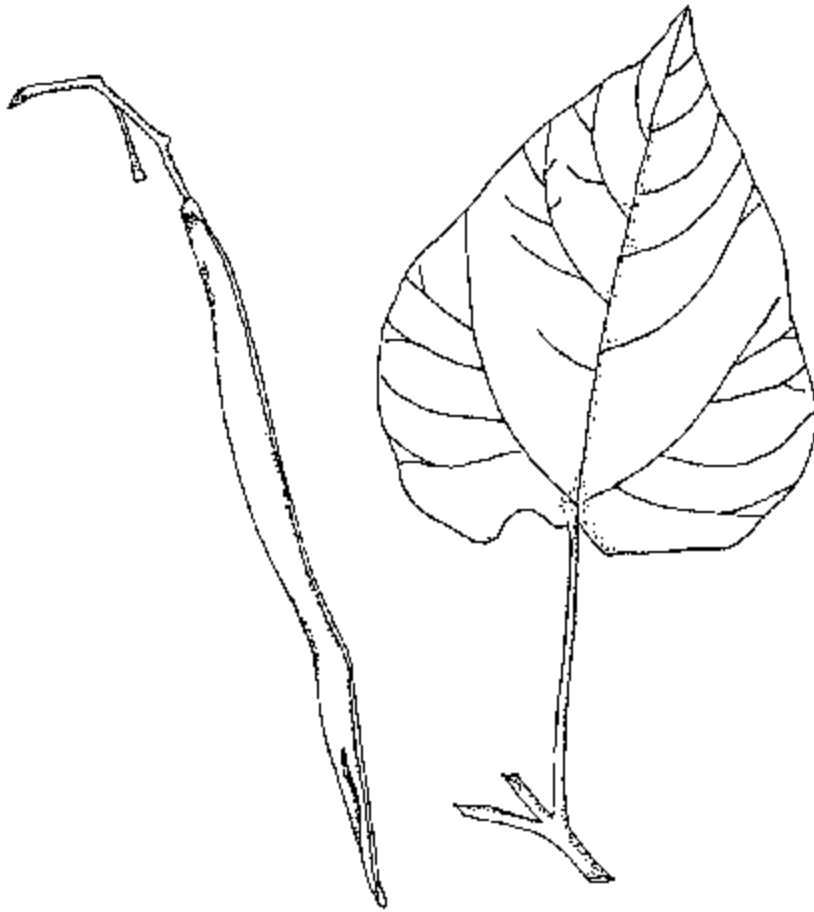
LEAVES are 2 to 6 inches long, and elliptic. Leaves have small teeth, and leaf veins tend to follow the leaf edges, a noticeable characteristic. FLOWERS are small, in the leaf axils, and appear May to July. FRUIT is black, small, and fleshy. This species of buckthorn is not common but occurs at higher elevations in the state including Canaan Valley.





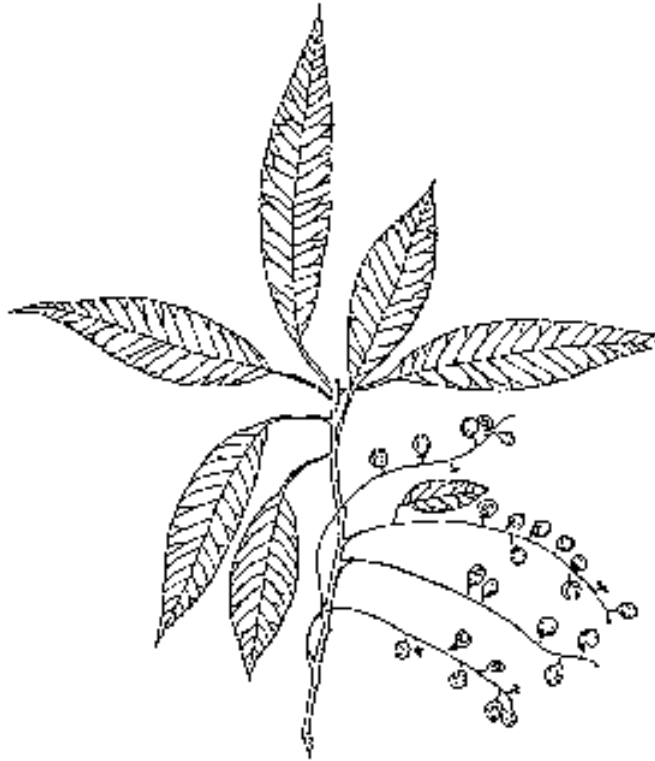
**BUTTERNUT or WHITE WALNUT**  
(*Juglans cinerea*)

LEAVES are up to 30 inches long, with 11 to 17 leaflets, 2 to 5 inches long, which are oblong and pointed. Leaflets are downy on the underside. FRUIT is a nut, enclosed in a green-brown husk with a sticky surface. The husk contains a yellowish dye. The oval nut has many creases on the surface and the nutmeat is sweet. BARK on older trees is gray and furrowed, also used for a yellow dye. Butternut twigs have chocolate-colored chambered pith. Butternut is found throughout the state.



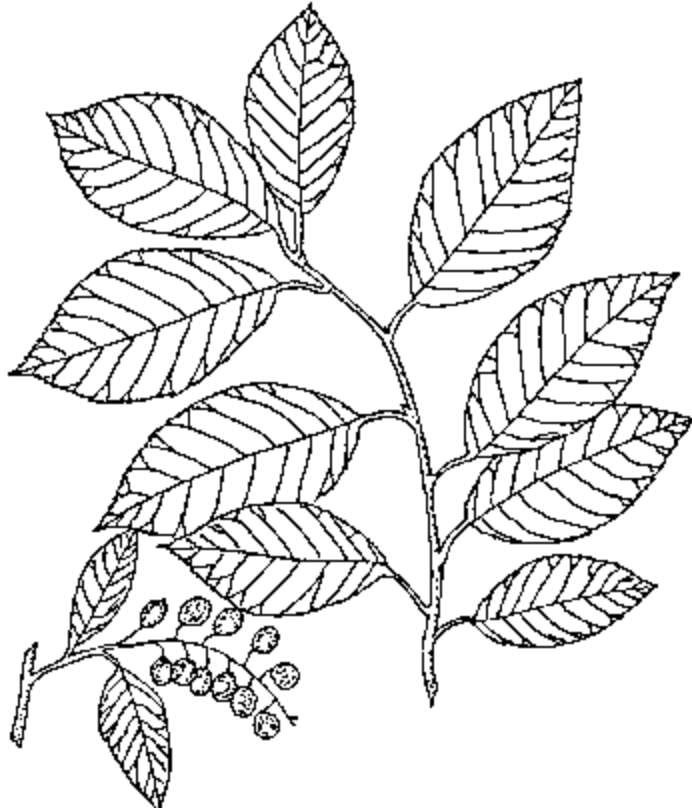
**CATALPA or INDIAN-CIGAR TREE**  
(*Catalpa speciosa*)

LEAVES are heart-shaped, 6 to 12 inches long and 8 inches wide, with long stems, arranged on the branch in pairs or in whorls (like spokes of a wheel) of 3 around the branch. FLOWERS appear in June and are white, marked with purple and yellow, tubular shaped, 2 inches long. FRUIT is a distinctive brown cigar-shaped capsule, 4 to 20 inches long, containing many fringed seeds. BARK is brown and scaly. Not native, Catalpa has been planted throughout the state.



**BLACK CHERRY** (*Prunus serotina*)

LEAVES are oval to oblong, 2 to 6 inches long, pointed, with small leaf teeth. FLOWERS are white, in spike-like clusters, and bloom when the leaves are half-grown, May to June. FRUIT is a berry, hanging in clusters, which is black with dark purple flesh when ripened. Cherries are bitter, but edible and eaten by grouse, bear, raccoon. BARK on trunk is red-brown, scaly on large trees, and smooth on younger trees, with lenticels (raised, warty places). Twigs have a foul-smelling odor. Black cherry grows on many kinds of sites but must have full sunlight, and is common in most parts of the state.



**COMMON CHOKECHERRY**  
(*Prunus virginiana*)

LEAVES are alternate, oval, pointed at the tip, 2 to 4 inches long, with leaf edges sharply toothed. FLOWERS are white, in spikes 3 to 6 inches long, appearing from May to June. FRUIT is in clusters and the dark red cherries are very bitter, although used for jellies and pies and also eaten by wildlife. BARK on young trees is smooth and shiny, with lenticels, but later becomes scaly. Inner bark has an unpleasant odor. This is a small tree growing to 30 feet and is fairly common at higher elevations.



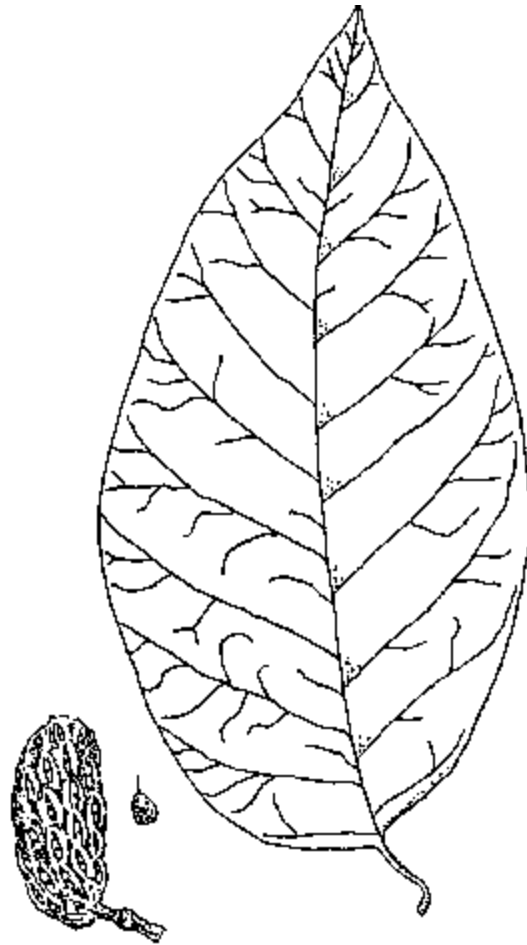
**AMERICAN CHESTNUT** (*Castanea dentata*)

LEAVES are long, 5 to 10 inches in length. The leaf edge has coarse teeth and each tooth has a slender spine. FLOWERS are in catkins to 8 inches long. Catkins, conspicuous in spring, are near the ends of the branches. FRUIT is a nut, contained in a prickly husk. American chestnut was destroyed by chestnut blight, an introduced fungus disease, but stump sprouts occur and are found throughout West Virginia's forests. (The fungus destroys the sprouts once they are past a certain size.)



**CRABAPPLE** (*Malus coronaria*)

LEAVES are oval-shaped, 3 to 4 inches long, with sharply pointed ends and toothed edges. FLOWERS are pinkish-white, about 2 inches across, in clusters of 3 to 8, and are very fragrant. FRUIT is apple-like, 1 1/2 inches in diameter, yellow-green, and bitter. BARK is rough, with scaly ridges. Height is to 25 feet, with a short trunk and stubby thorn-like branches, and may grow in thickets in moist areas. It is common in most counties.



**CUCUMBER TREE** (*Magnolia acuminata*)

LEAVES are oblong, and large, 6 to 12 inches long, and 3 to 5 inches wide, pointed at the tip. Leaf edge may be wavy, and undersides are pale and slightly fuzzy. FLOWERS are bell-shaped, yellow-green, 3 inches long, with 6 petals. FRUIT is 3 inches long, bright red when young and turning brown when mature. There are crimson seeds in each section of the fruit. BARK is dark brown, furrowed and scaly. Found locally throughout the state.



**FLOWERING DOGWOOD** (*Cornus florida*)

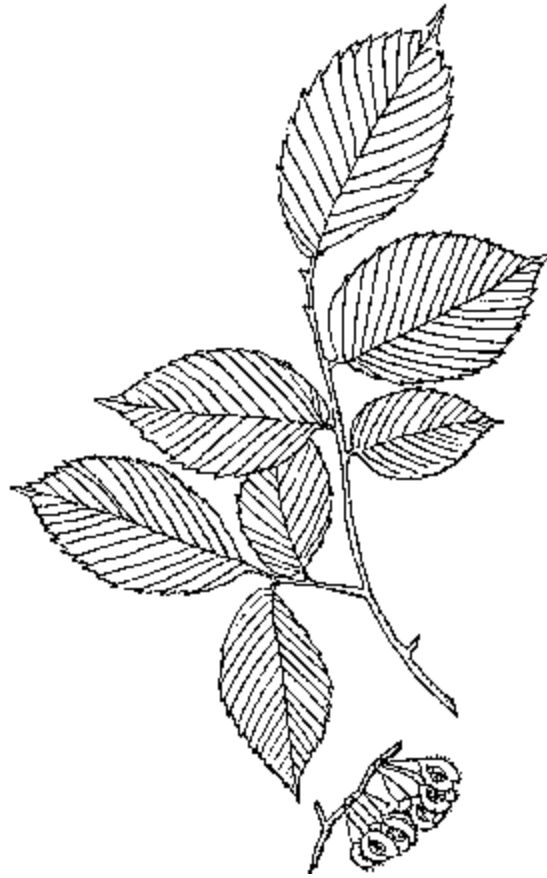
LEAVES are opposite each other on the stem, 3 to 5 inches long, pointed at the tip. Leaf veins are in pairs. FLOWERS appear before the leaves and are in heads surrounded by white to pinkish petal-like bracts. FRUIT is a bright scarlet berry eaten by birds and other wildlife. BARK is red-brown to black, broken into scaly blocks. Growing to 30 feet high, dogwood is common in all parts of the state.





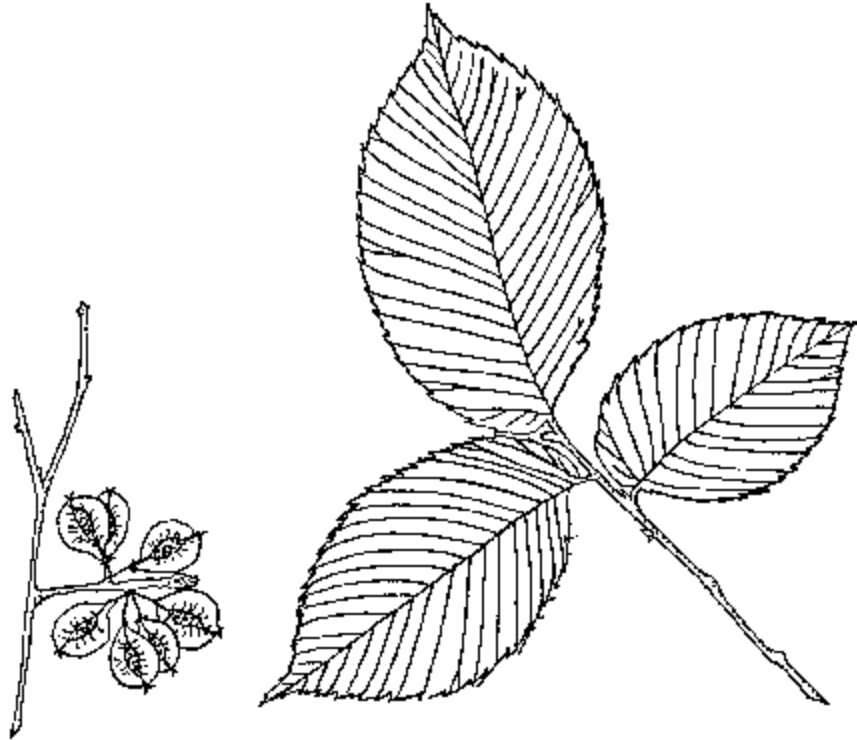
**ELDERBERRY** (*Sambucus canadensis*)

LEAVES have 5 to 11 leaflets, 4 to 11 inches long. FLOWERS are in flat-topped clusters, June to July. Twigs are stout, with large white pith. FRUITS are small, juicy and purple-black, August to October. Fruits are used in pies, jelly, and wine, and eaten by birds. This shrub grows to 13 feet high, and is distributed throughout the state.



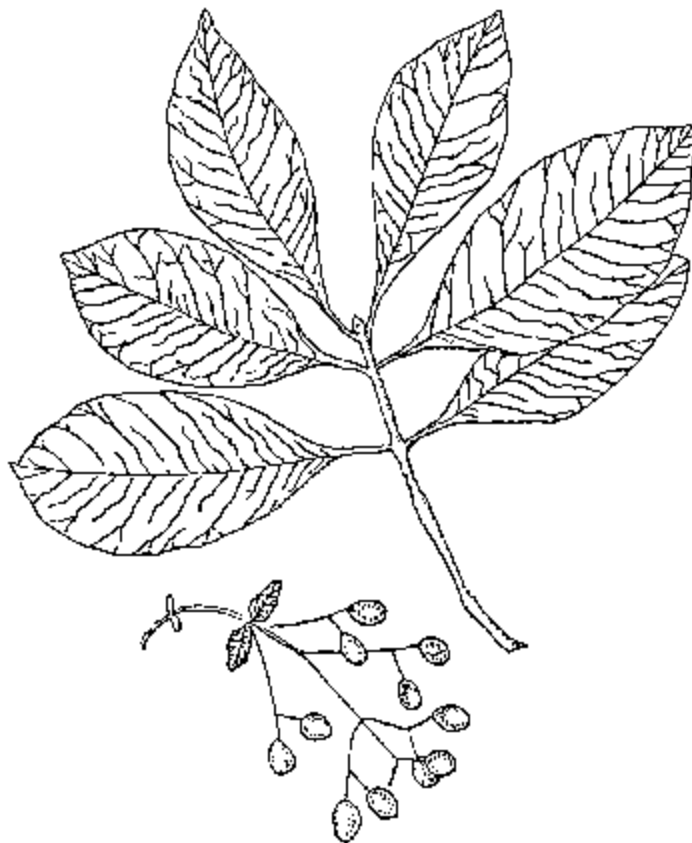
**AMERICAN ELM** (*Ulmus Americana*)

LEAVES are oblong, 4 to 6 inches long, with sharply toothed leaf edges. The rough-textured leaves are unequal at the leaf base, with one side longer than the other. FLOWERS are greenish, in clusters, on slender stems, appearing before the leaves in early spring. FRUIT is a small seed encased in a long stemmed oblong papery covering (samara) with a notch at the tip and hairy edges. BARK is dark gray and rough. Tree silhouette is "urn" shaped. Dutch elm disease, an introduced fungus spread by a bark beetle, has destroyed many trees.



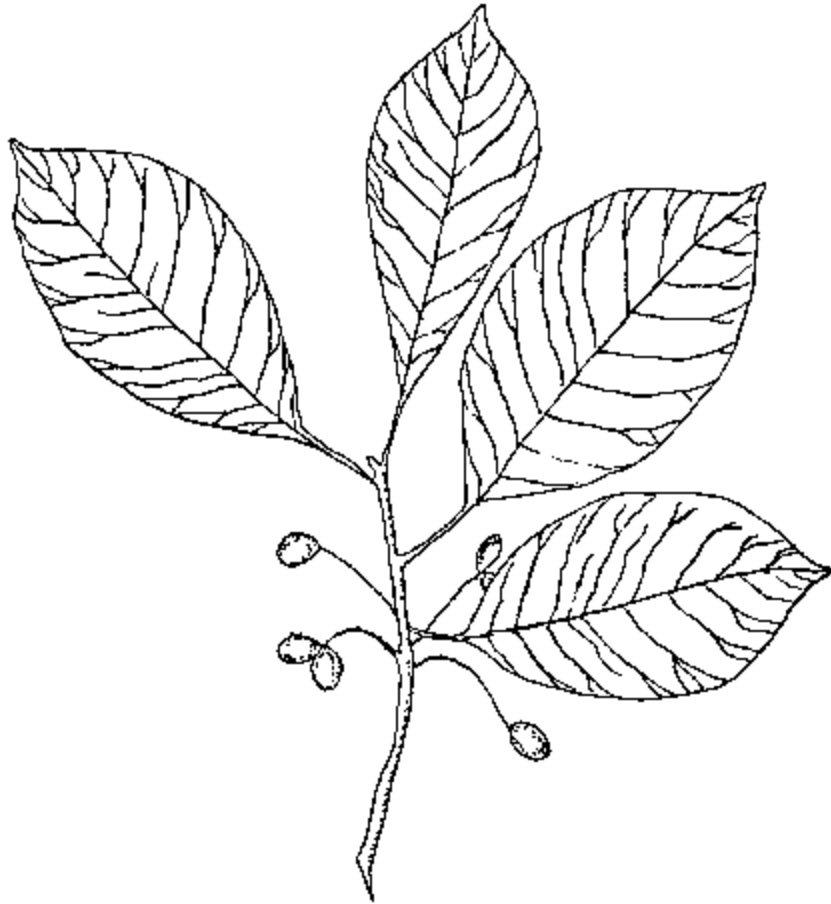
**SLIPPERY ELM** (*Ulmus rubra*)

LEAVES are similar to American elm, but are rougher textured and larger, 5 to 7 inches long. FLOWERS are greenish, on short stems, appearing before the leaves. FRUIT is similar to American elm with the seed in a papery covering, with hairs around the seed cavity. The twigs are coarse and rough. BARK is brown, divided by fissures. Inner bark is slippery and fragrant. Height is to 80 feet. This tree is common locally.



**FRINGE TREE** (*Chionanthus virginicus*)

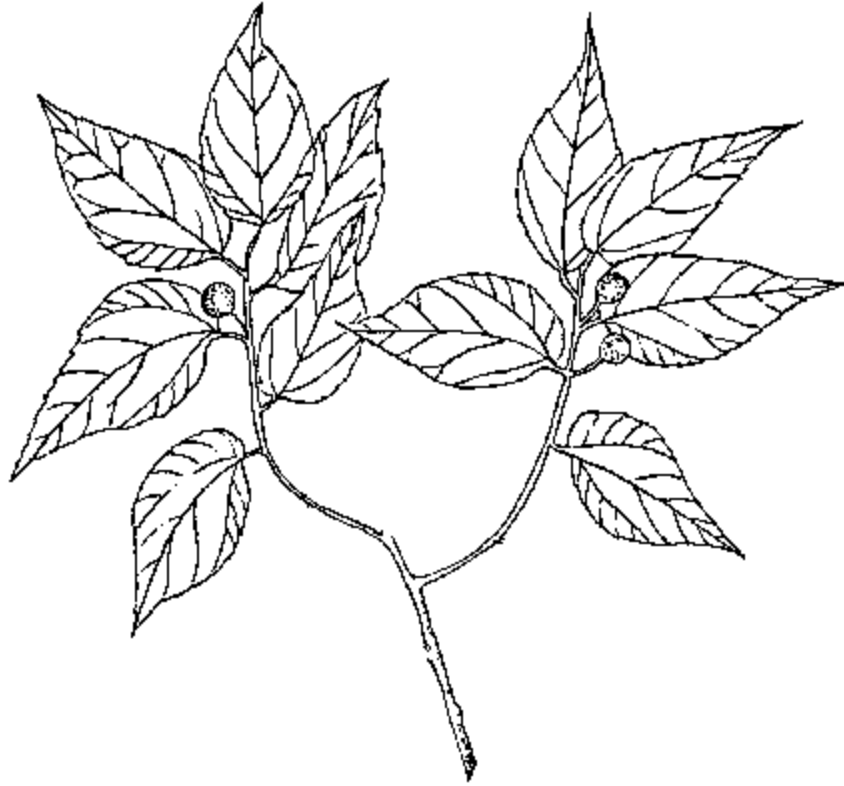
LEAVES are opposite, oval to oblong, 4 to 8 inches long, with smooth edges. FLOWERS are fragrant, and have 4 to 6 narrow, white petals, 1 inch long, that are in clusters 6 inches long that give a fringe effect. FRUIT when mature is dark, purple, olive-like (this tree is in the olive family), 1 inch long, and may be covered with a whitish powder. BARK is brown and scaly. Height is to 30 feet. Not common, this tree is scattered through the southern and eastern parts of the state.



## **BLACK GUM or BLACK TUPELO**

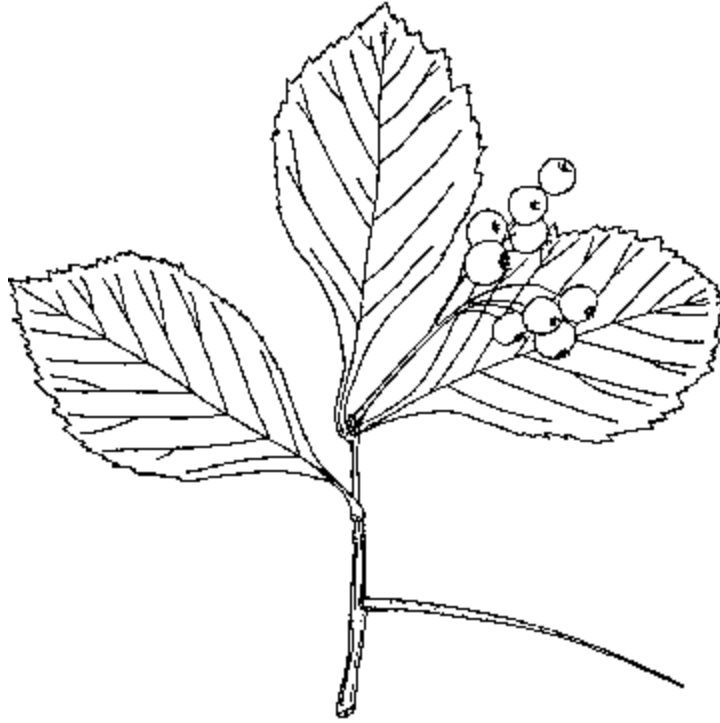
*(Nyssa sylvatica)*

LEAVES are oval, dark green and glossy, 2 to 5 inches long, with smooth edges. Fall foliage is brilliant red. (A characteristic of this tree is that branches generally come off the main trunk at right angles.) FLOWERS are small, green, on long stems. FRUIT is a dark blue oval berry that has a hard-shelled seed. BARK on mature trees is blackish and deeply furrowed. Black gum grows on many types of soils and conditions and is common in most parts of the state.



**HACKBERRY** (*Celtis occidentalis*)

LEAVES are oval, 2 to 4 inches long, tapered and slightly curved. Leaf-bases are uneven and leaf edges are slightly toothed. FLOWERS are inconspicuous and creamy-green. FRUIT is berry-like, dark red to purple, 1/2 inch long, on a long stem. BARK is gray, warty and ridged, and is a distinctive identification feature. Common in some places in the eastern and northern part of the state, it is scarcer in southern West Virginia.



**HAWTHORN or THORN APPLE**  
(*Crataegus spp.*)

Hawthorns as a group are easy to recognize, but the many species are difficult to tell apart. LEAVES are noticeably toothed, or lobed. FLOWERS are white, pink, or red; up to 1 inch in diameter. FRUIT is apple-like, but small, usually red or orange, sometimes yellow, blue, or black. BARK becomes scaly with age. Long, sharp thorns are very conspicuous. Hawthorns are common throughout the state.



**HERCULES' CLUB or DEVIL'S  
WALKINGSTICK (*Aralia spinosa*)**

LEAVES are 2 to 4 feet long and 2 to 3 feet wide. Individual leaflets are oval, pointed, 2 to 4 inches long. FLOWERS are white, small, in clusters up to 4 feet across blooming June to July. FRUIT is berry-like, black, and juicy, eaten by birds. BARK is smooth, roughened on older trees, and inner bark is yellow. Twigs and branches have stout prickly spines. This is a small tree, growing to a height of 30 feet, preferring moist soils at higher elevations, found west of the Allegheny Mountains.



## HICKORIES

Hickories have compound leaves.  
Flowers are in 3-branched catkins.  
Fruit is a nut.



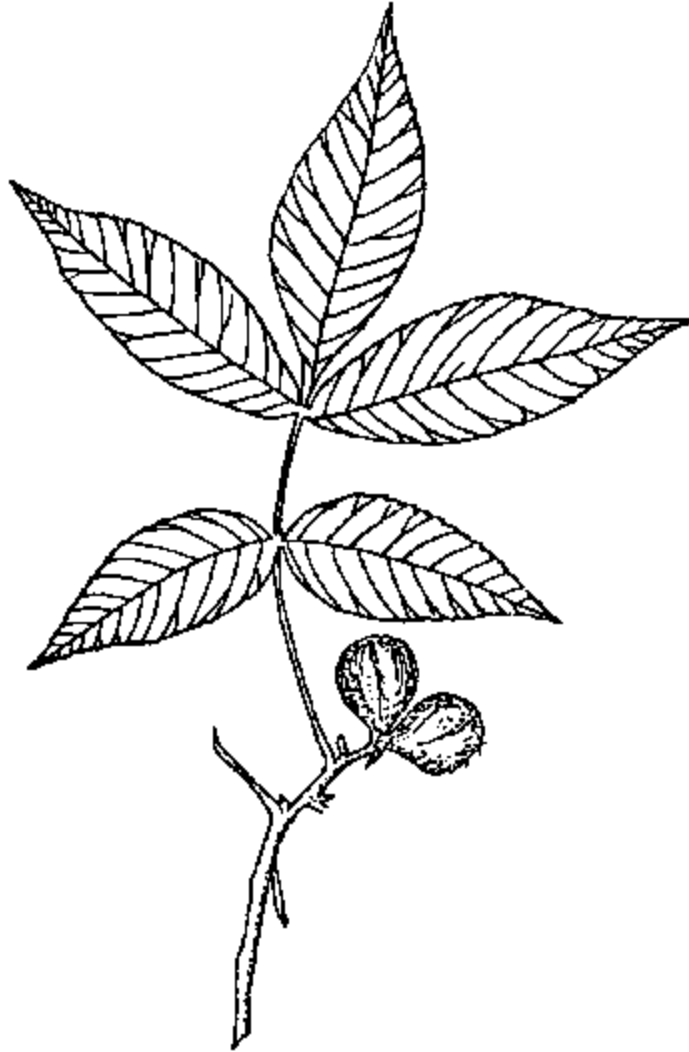
### **BITTERNUT HICKORY** (*Carya cordiformis*)

LEAVES are 6 to 9 inches long, with 7 to 11 leaflets that are yellow-green above and paler below. Buds on twigs are yellow; this tree is also called sulfur-bud hickory. Nut is bitter, thin-shelled, and 4 ribbed, enclosed in a thin husk covered with yellowish scales. BARK is smooth and gray, but is in plates on larger trees. This hickory is common throughout the state.



**MOCKERNUT HICKORY** (*Carya tomentosa*)

LEAVES are 8 to 12 inches long, with 7 to 9 dark green, thin, small-toothed leaflets. Underside of the leaflet is hairy orange-brown. Leaves are fragrant. The nut is 2 inches long, and has a red-brown husk that splits almost to the base when ripe. The nut is sweet, but hard to extract. BARK is gray, deeply ridged or cross-ridged. This hickory is common in many places in the state.



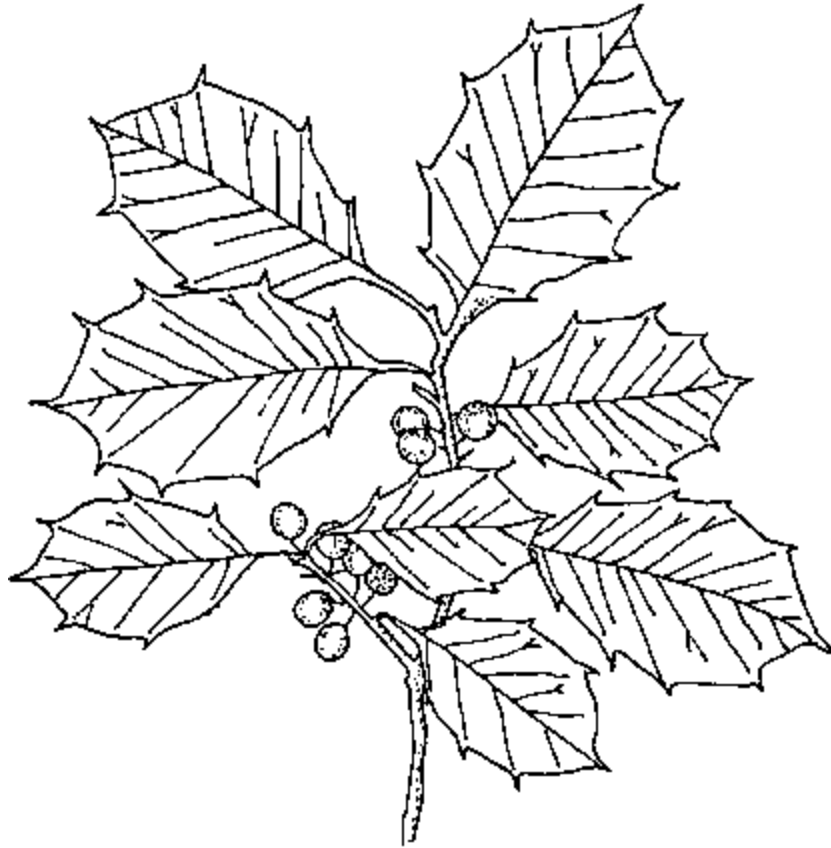
**PIGNUT HICKORY** (*Carya glabra*)

LEAVES are 8 to 12 inches long with 5 (sometimes 7) small-toothed sharply pointed leaflets. The nut is pear-shaped, encased in a husk that stays closed or only opens part way down the nut. The nut is small and sweet. BARK on mature trees develops deep furrows and scaly ridges in diamond-shaped patterns. Pignut hickory occurs throughout most of the state.



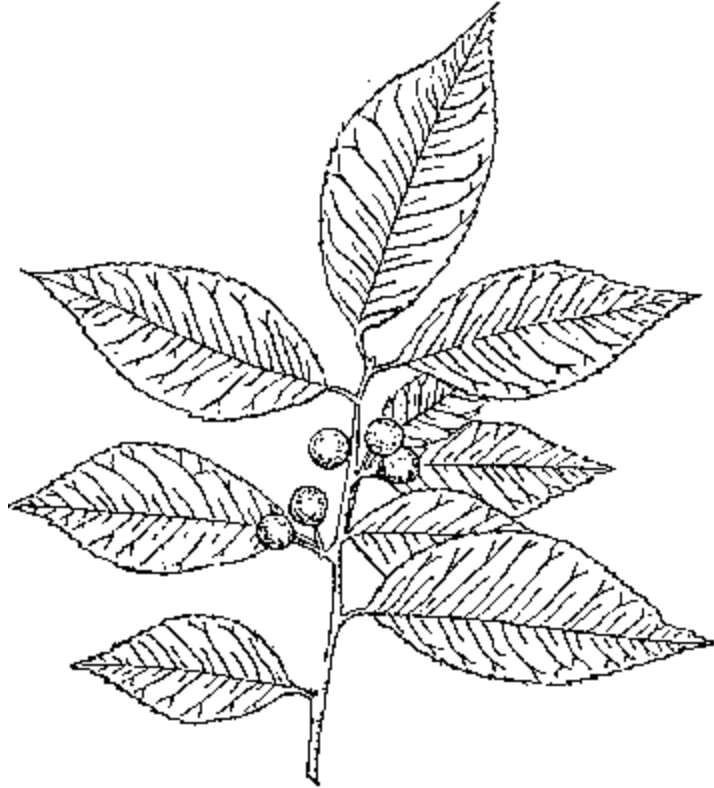
**SHAGBARK HICKORY** (*Carya ovata*)

LEAVES are 8 to 14 inches long, with 5 (some- times more) fine-toothed leaflets. Nut is up to 2 ½ inches long, contained in a thick husk that splits to the base when ripe. The nut is sweet. BARK for which the tree is named is light gray and separates into plates 1 foot or more long that curl outward. This tree grows on a variety of sites and soils throughout the state.



**AMERICAN HOLLY (*Ilex opaca*)**

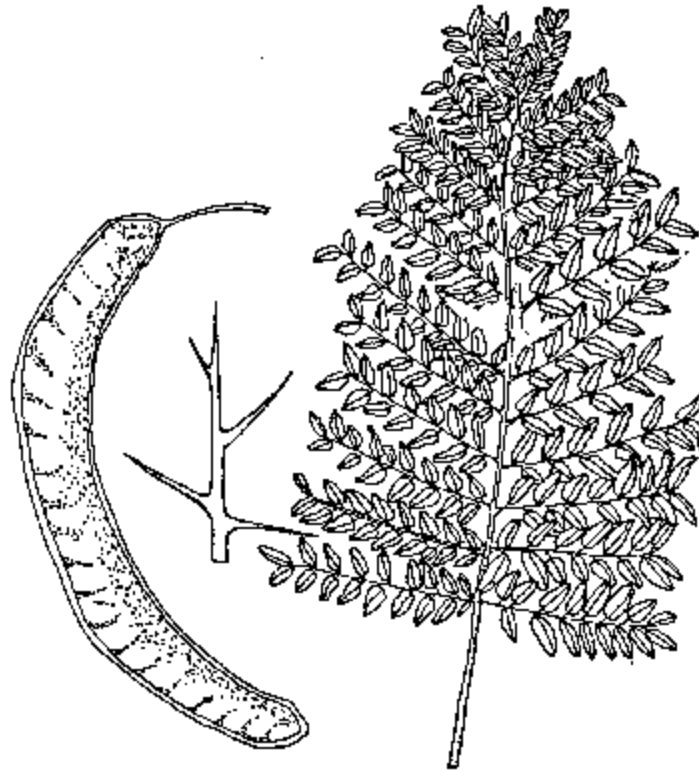
LEAVES are leathery, evergreen, 2 to 4 inches long, with a sharply pointed tip and prickles along the leaf edge. FLOWERS are greenish white, with staminate (male) and pistillate (female) flowers on separate trees. FRUIT is berry-like, scarlet, with several nutlets. Fruit remains on the branches over the winter. BARK is thin and gray, sometimes warty. This is a small tree growing to about 50 feet, and is more common in the southern part of the state.



**MOUNTAIN HOLLY or WINTERBERRY**

*(Ilex montana)*

LEAVES are 4 to 5 inches long, toothed on the leaf edges and (unlike American Holly) do not have prickles, and do not remain on the tree over the winter. FLOWERS are white, clustered, and similar to American Holly. FRUIT is a round bright scarlet berry, very conspicuous in winter months. BARK is thin, but warty on old trees. Reaching a height of 25 feet tall, this tree grows at higher elevations.



**HONEY LOCUST (*Gleditsia triacanthos*)**

LEAVES are 7 to 8 inches long, with 18 to 28 leaflets. Leaflets are oval, dark shiny green above, 1 inch long. Edges of leaflets are usually smooth. FLOWERS are greenish-white, in clusters. FRUIT is in a flat, brown, large pod, 12 to 18 inches long, much larger than pods of black locust. The pods twist into curved shapes. Seeds are oval. BARK is gray-brown, divided into ridges that are flattened. Bark is very distinctive. Branches and trunks are armed with sharp, branched spikes up to 3 inches long. This tree is scattered in many parts of the state.



**JAPANESE HONEYSUCKLE**  
(*Lonicera japonica*)

LEAVES are 1½ to 3½ inches long, green, hairy, and mostly evergreen. Upper leaves have smooth edges, but lower leaf edges may be wavy. FLOWERS are 1 inch long, white or yellow, with long stamens. They are very fragrant and appear April to July. FRUIT is a black berry. This aggressive, imported plant forms dense tangles over open ground and climbs over shrubs and underbrush. Birds and other wildlife eat the berries and use the tangles for cover, although Japanese honeysuckle is usually considered a weed. It is common in the state.





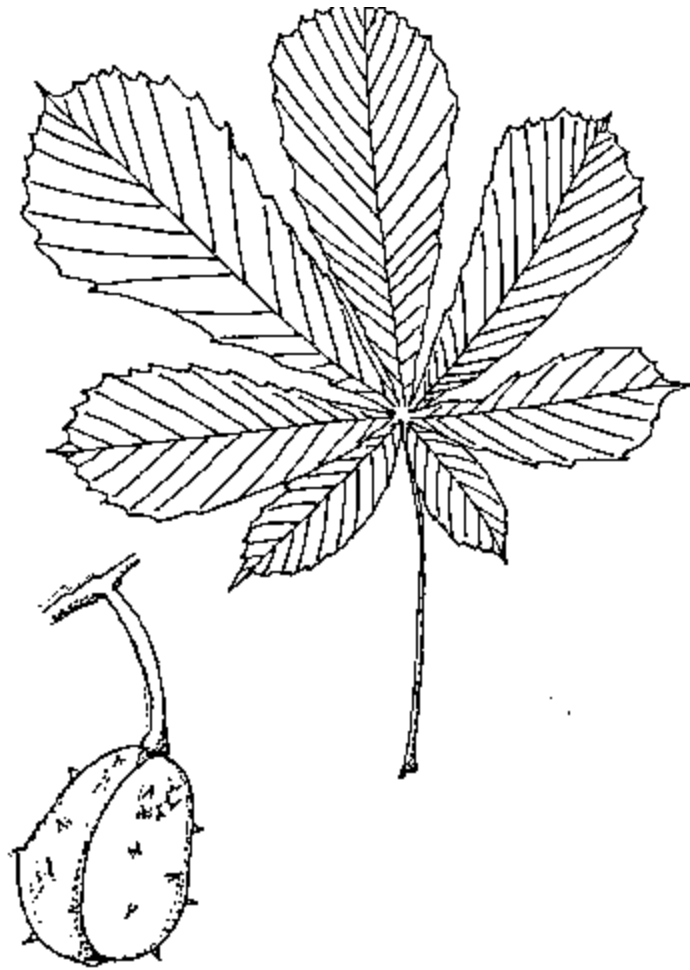
**AMERICAN HORNBEAM or MUSCLE TREE**  
(*Carpinus caroliniana*)

LEAVES are elliptical, 2 to 4 inches long, with doubly toothed edges. FLOWERS are in light green clusters of catkins and are conspicuous in spring. FRUIT consists of clusters of bracts (a bract is a modified leaf) 3 to 6 inches long that contain the seeds. These clusters are conspicuous in late spring. BARK is smooth, blue-gray, and twisted or "muscle," and is a good identification feature. This small tree grows to 40 feet and is most common in moist soils bordering streams or wet areas. It occurs throughout the state.



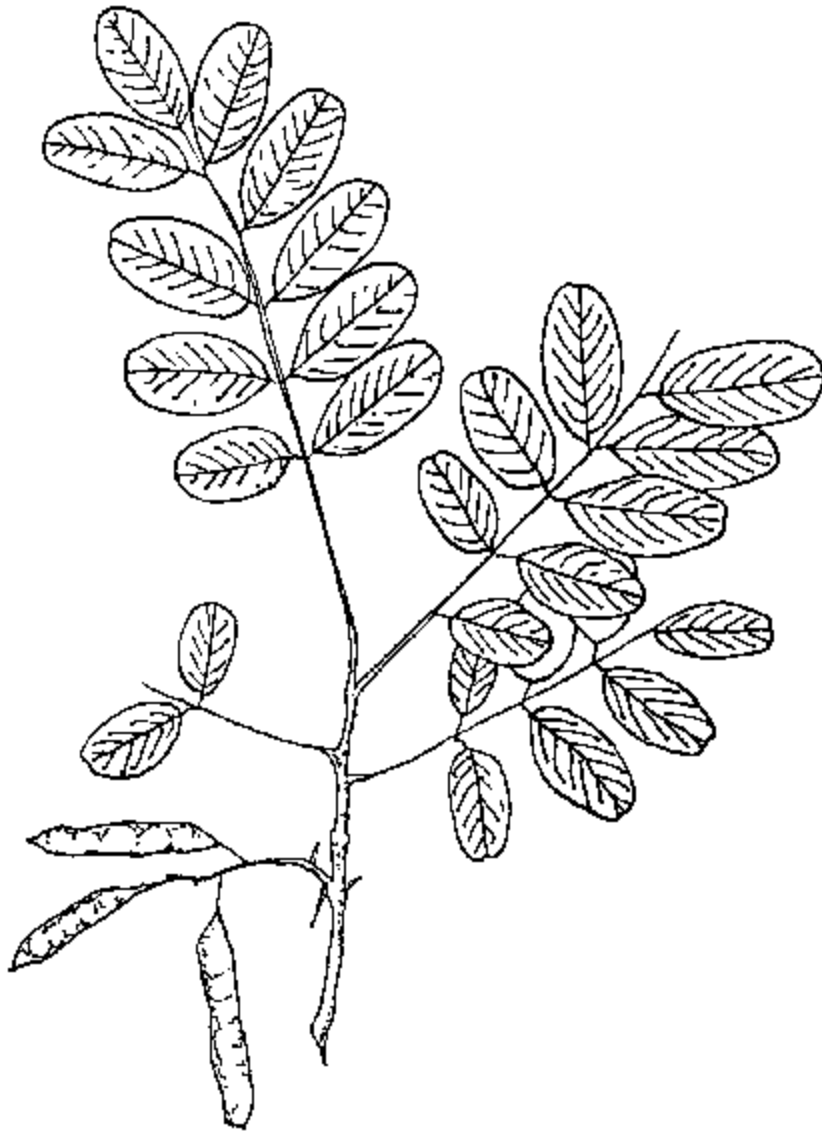
**EASTERN HOP HORNBEAM**  
or **IRONWOOD** (*Ostrya virginiana*)

LEAVES are oblong, 3 to 5 inches long, narrowing to a slender point, with doubly toothed leaf edges. FLOWERS are in catkins. FRUIT resembles that of the hop vine and consists of leafy bracts 2 inches long that have several nutlets. BARK on trunk is shaggy, and is a good identification feature. The wood is very tough. A small tree, it rarely grows to 50 feet, and is locally distributed throughout the state.



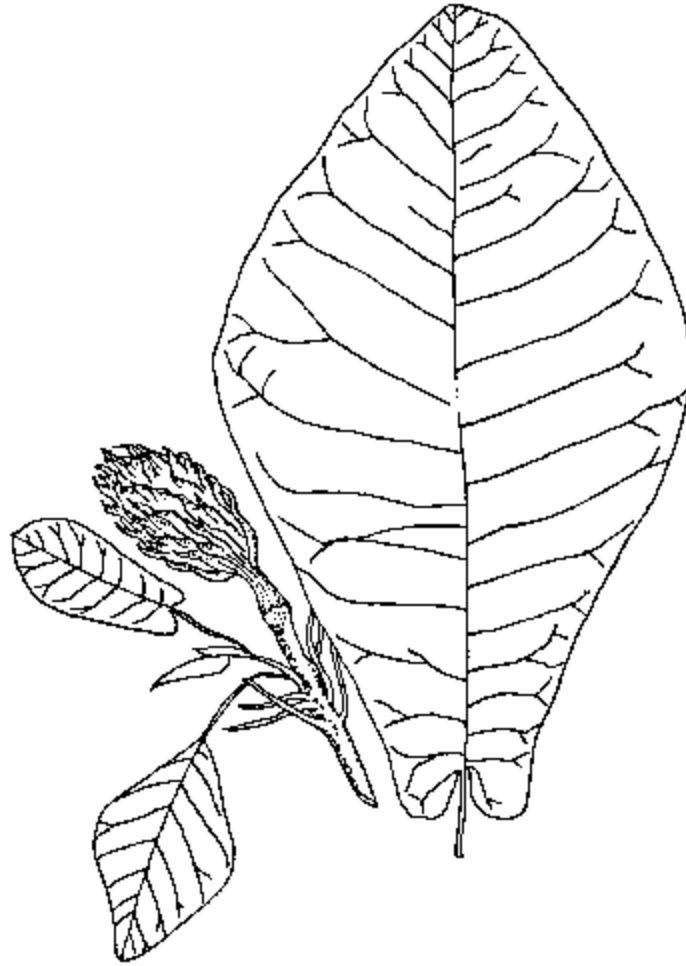
**HORSE CHESTNUT** (*Aesculus hippocastanum*)

LEAVES have 5 to 7 leaflets, each leaflet 4 to 10 inches long, with pointed tips. Leaves are palmately compound, (fan-shaped). FLOWERS are white, marked with red or yellow, and are in spike-like clusters 8 to 12 inches long. FRUIT is a nut, enclosed in a spiny capsule. BARK is smooth, or broken into plates. The end bud of a horse chestnut is sticky. Horse chestnut is native to Asia, often planted as an ornamental.



**BLACK LOCUST** (*Robinia pseudo-acacia*)

LEAVES are 8 to 14 inches long, with 7 to 19 leaflets each 1 to 2 inches long. Leaflets are oval with smooth edges. FLOWERS are in May, 5 inches long, white, in drooping clusters, and very fragrant. FRUIT is in a flat, brown pod, 2 to 4 inches long. Pods split open in winter, dispersing seeds. Twigs have sharp spines. BARK is black, in ridges. Black locust will grow on poor soils and is common in most parts of the state.

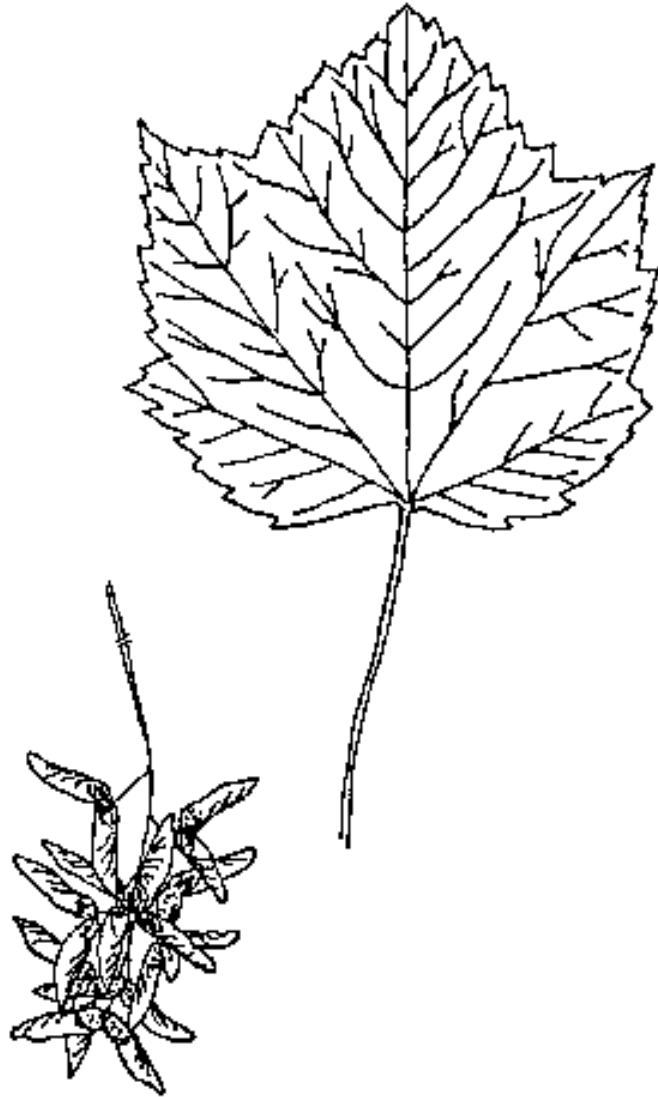


**MOUNTAIN MAGNOLIA** (*Magnolia fraseri*)

LEAVES are large, 10 to 20 inches long, oblong, and "eared" at the base, pointed at the tips. Leaf edges are smooth and leaves are often crowded at the end of the twigs. FLOWERS are in May, white, fragrant, 8 to 10 inches wide. FRUIT is red when mature, 4 to 5 inches long, with many scarlet seeds. BARK is smooth, gray-brown. Winter buds are smooth, purple, 2 inches long. A small tree growing to 40 feet tall, it is most common in rich soil in mountain counties.

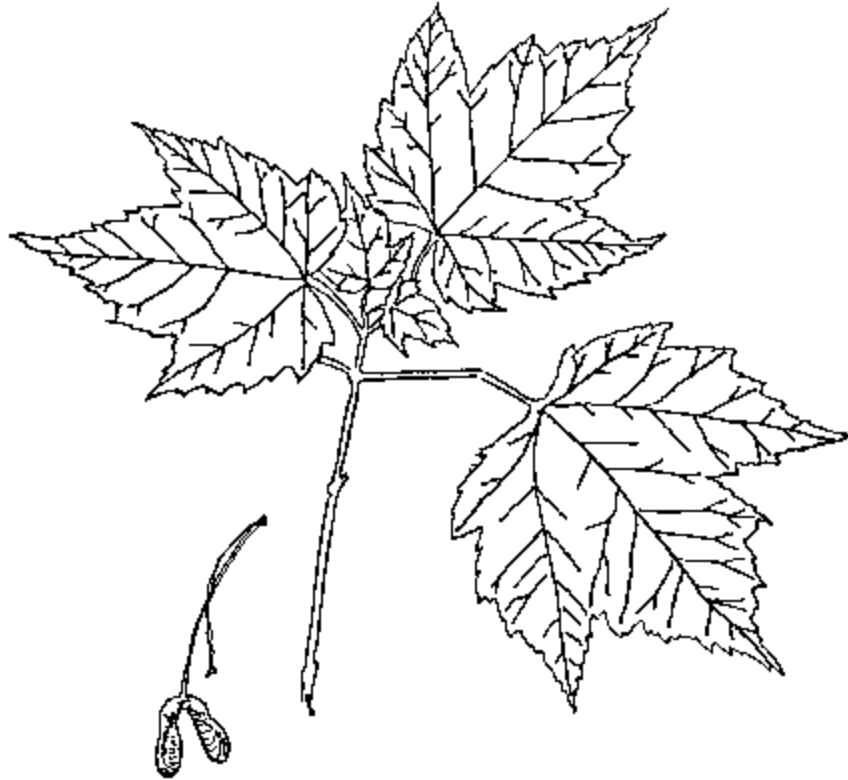
## Maples

Maples are characterized by leaves opposite each other on the stem and by winged seeds called samaras.



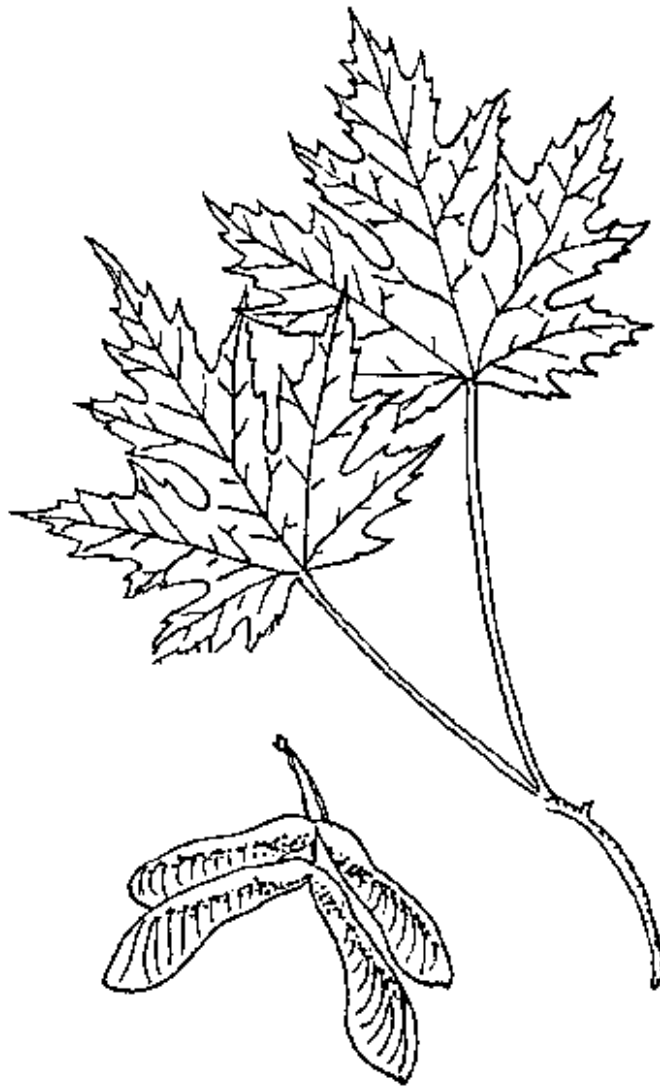
### **MOUNTAIN MAPLE (*Acer spicatum*)**

LEAVES are 4 to 5 inches long, with 3 (occasionally 5) lobes. Leaf edges are coarsely toothed. FLOWERS are yellowish in upright spikes, and appear after the leaves. FRUIT is a samara with the wings wide apart. Samaras are paired, red when young, brown at maturity. BARK is thin and reddish-brown. A small tree, mountain maple grows to 30 feet tall and is more common at cooler and higher elevations, preferring deep mountain forests and shaded locations.



**RED MAPLE** (*Acer rubrum*)

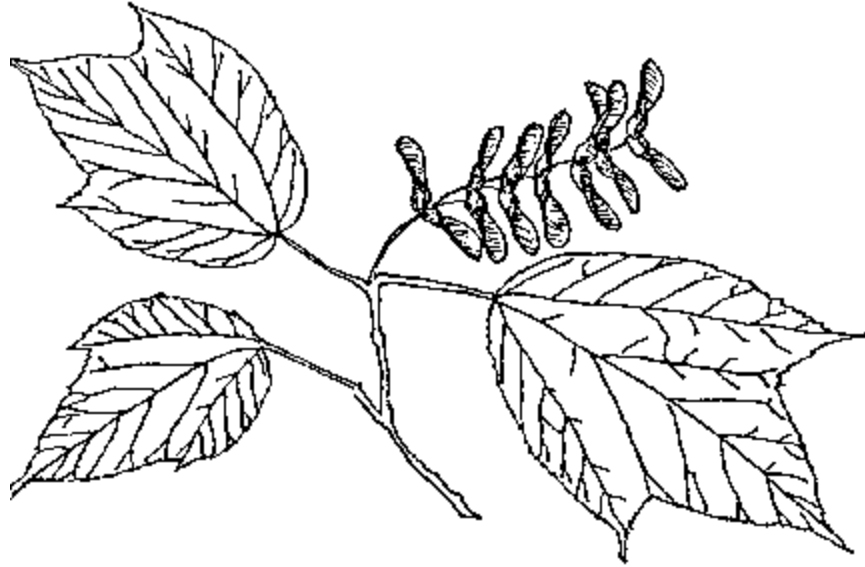
LEAVES are 3 to 4 inches long, with usually 3 lobes and leaf edges are coarsely toothed. Leaf stems are often red. Fall foliage is bright scarlet, orange, and bright yellow. FLOWERS are red- orange, appearing before the leaves. FRUIT is a winged samara. Twigs are reddish, with blunt reddish buds. BARK is smooth light gray, developing scaly plates with age. On old trunks bark is thick, dark gray, with plate-like scales. Squirrels eat buds and scales and samaras in late winter and deer browse on the sprouts. Red maple is abundant in all parts of the state.



**SILVER MAPLE** (*Acer saccharinum*)

LEAVES are 6 to 7 inches across, with 5 lobes that cut deeply into the leaf. The center lobe may have 3 small lobes. Fall foliage is yellow, not as bright as some other maples. FLOWERS are greenish-yellow, in clusters, and appear before the leaves. FRUIT is a samara in the shape of a wide V. BARK on young trees is smooth and light gray, but on older trees the bark is furrowed with a ragged appearance. Silver maple prefers moist areas, and is found along most of the larger rivers in the state and is planted as an ornamental.





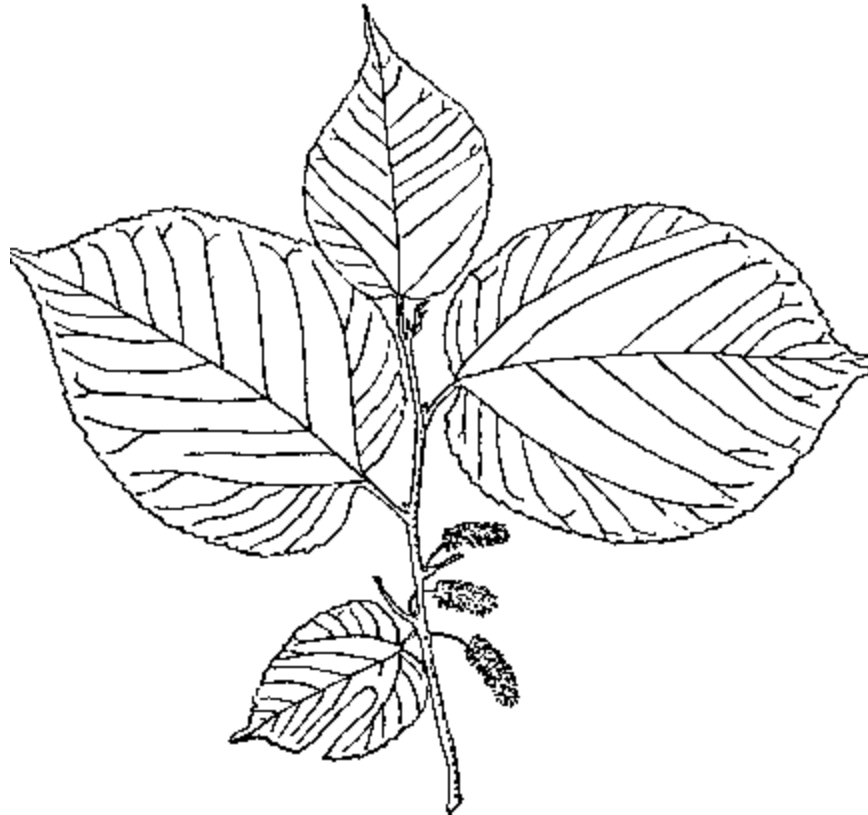
**STRIPED MAPLE** (*Acer pensylvanicum*)

LEAVES are 5 to 6 inches long, with 3 lobes, toothed leaf edges, and a heart-shaped base. Fall foliage is yellow. FLOWERS are yellow, in long drooping spikes 4 to 6 inches long, appearing after the leaves are out. FRUIT is a paired samara with widely separated wings. Buds are reddish. BARK is green, with whitish lengthwise stripes, a good identification feature. A small tree growing to 40 feet tall, it prefers cool moist places at higher elevations.



**SUGAR MAPLE** (*Acer saccharum*)

LEAVES are 3 to 5 inches across, with 5 lobes separated by shallow sinuses. Leaf edges are smooth. Fall foliage is brilliant red and yellow. FLOWERS are yellow, with long stems, in clusters up to 3 inches long, appearing with the leaves. FRUIT is a winged samara, in pairs. BARK on mature trees is thick and gray. Sugar maple will grow in shaded conditions, and is found throughout the state. Sap is used to make maple syrup and sugar. It can take up to 40 gallons of sap to make a gallon of syrup.

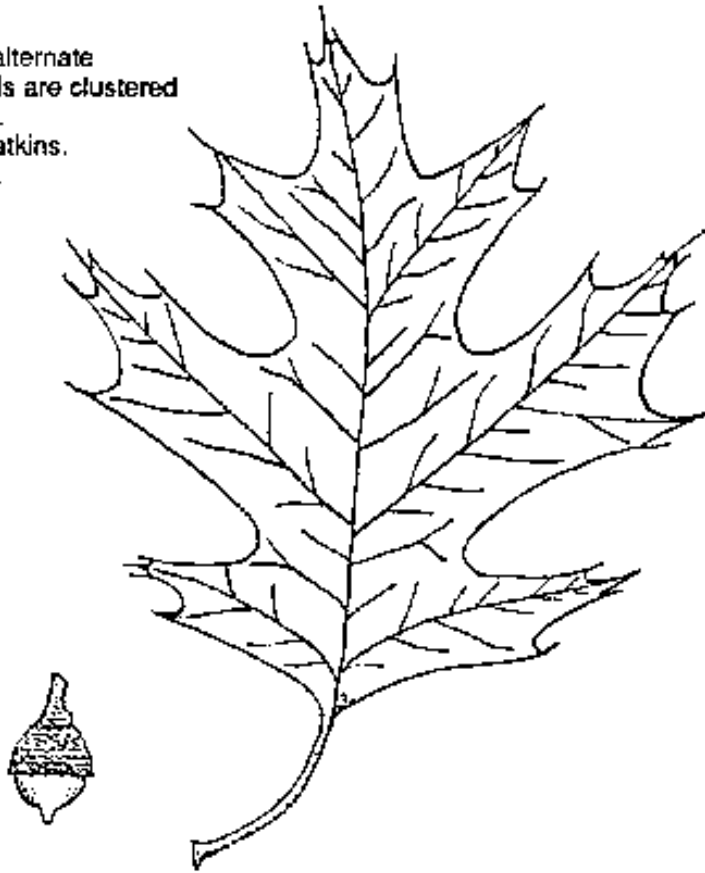


**WHITE MULBERRY** (*Morus alba*)

LEAVES are 3 to 4 inches long, hairless, and may have 2 or 3 lobes. Leaf edges have coarse teeth. Male and female flowers may be on separate trees. FRUIT is 1 inch long, whitish, and somewhat tasteless. BARK is yellow-brown. This small tree is planted as an ornamental and has escaped from cultivation. (Red mulberry has dark tasty berries, however this tree is rare in West Virginia.)

## OAKS

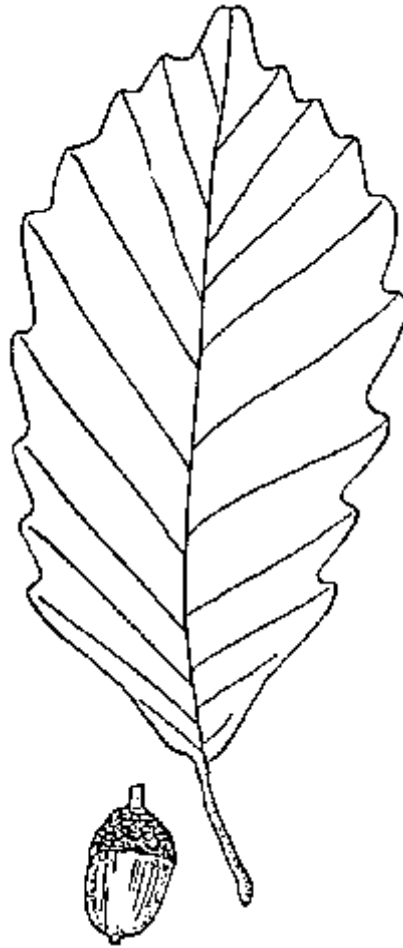
Oak leaves are alternate on the stem; buds are clustered on the twig ends. Flowers are in catkins. Fruit is an acorn.



### **BLACK OAK** (*Quercus velutina*)

LEAVES are 5 to 10 inches long, variable in shape, with 5 to 7 lobes, sometimes divided almost to the middle of the leaf by rounded sinuses. Lobes have prickly teeth. (Leaves on young trees or low limbs may have rounded lobes.) In early spring, unfolding leaves are deep red. Acorn is oval or round, enclosed for half its length in a deep scaly cup. BARK on older trees is thick, black, with deep ridges. Inner bark is yellow. Black oak is common in most parts of the state.

Oaks are separated into 2 groups: red oaks and white oaks. Red oaks usually have lobes that are pointed and often tipped with a spiny bristle. Acorns of red oaks generally take 2 years to mature, and are bitter. White oak leaves usually have rounded lobes, with no bristles, acorns mature in 1 season, and are not bitter.



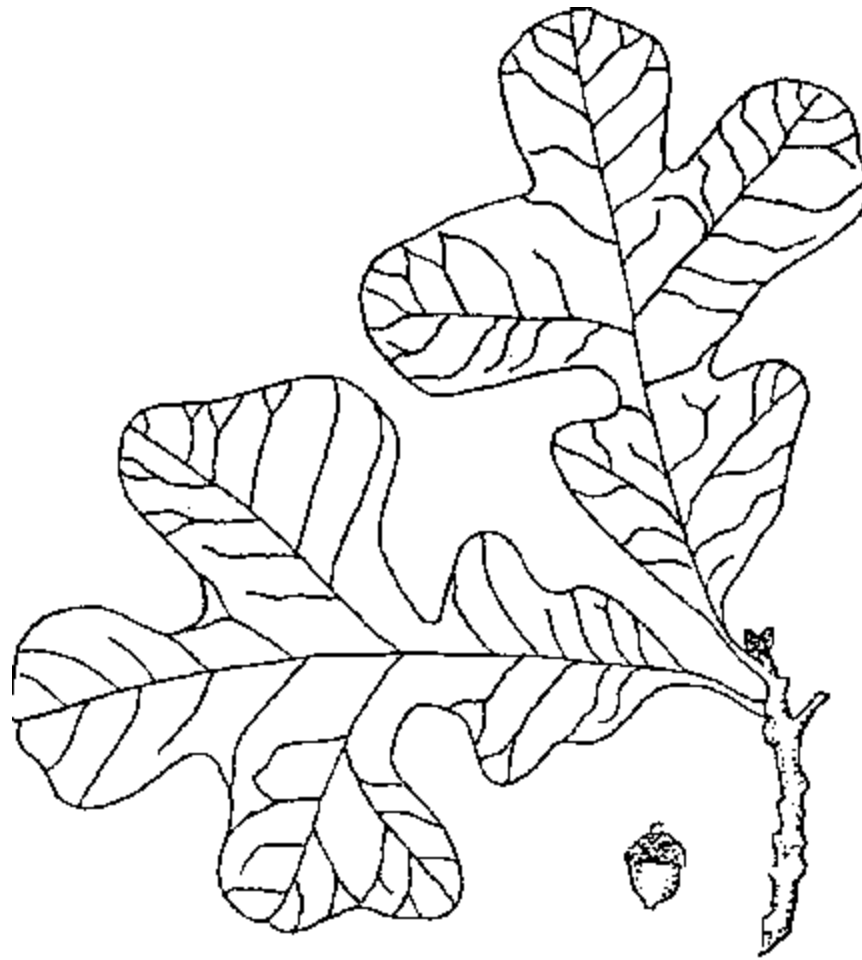
**CHESTNUT OAK** (*Quercus prinus*)

LEAVES are 4 to 8 inches long. Leaf edges have large, rounded teeth. Acorns are oval, shiny, and the cup extends a third of the way up the nut. BARK is blackish, and is deeply ridged and furrowed. This tree will grow on dry, rocky sites, and is common except at higher elevations.



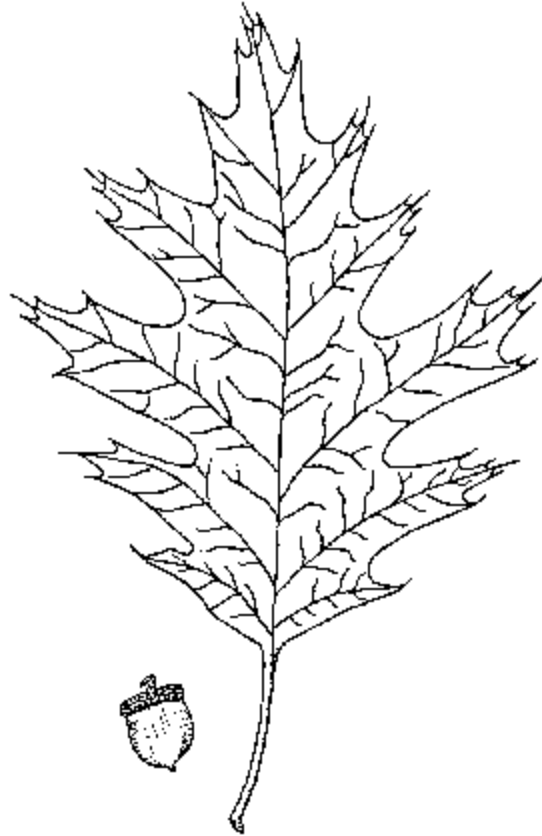
**PIN OAK** (*Quercus palustris*)

LEAVES have 5 to 9 lobes that are toothed and sharply pointed. Sinuses are round and extend almost to the leaf midrib. Leaves turn red or scarlet in fall. Acorn is round, with a thin, scaly saucer-shaped cup. BARK is light gray-brown. Lower boughs droop downward, a good identification mark. This oak prefers moist, rich soils, but will grow in drier areas, and is scattered throughout the state.



**POST OAK** (*Quercus stellata*)

LEAVES are 4 to 6 inches long, with 5 lobes. The central and side lobes are squarish. Leaves are thick and leathery. The acorn is oval, about one third covered by the saucer-shaped scaly cup. BARK is gray, and scaly. Crown may have a twisted and gnarled appearance. Post oak is scattered throughout the state.



**NORTHERN RED OAK** (*Quercus rubra*)

LEAVES are 5 to 9 inches long with 7 to 11 lobes. Each lobe usually has 3 sharply pointed teeth, each with a bristle. Fall foliage is bright red. Acorn is 1 inch long, with a flat saucer-like cup extending one quarter up the acorn. BARK is dark brown to black, and furrowed. Crown is rounded. Red oak is common throughout the state.





**SCARLET OAK** (*Quercus coccinea*)

LEAVES are 5 to 8 inches long with 5 to 9 narrow, toothed pointed lobes. Sinuses are deep, round, extending almost to the midrib. In fall, foliage turns scarlet. Acorns are oval, with a scaly cup, which may have circular lines on the top. BARK on older trees is ridged. This oak is common throughout most of the state.



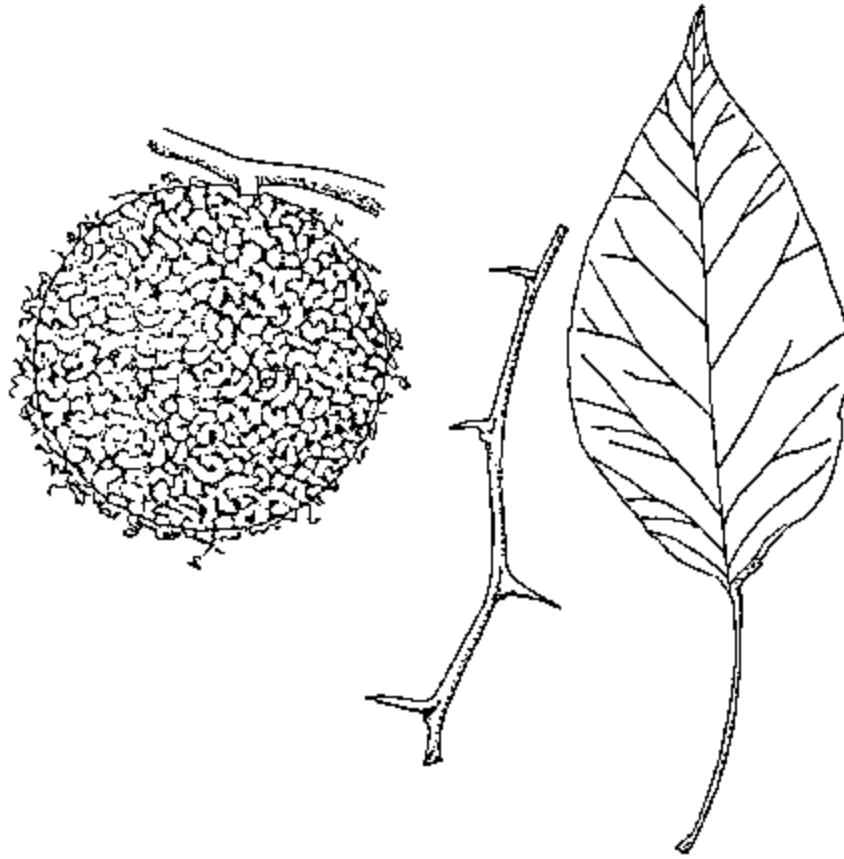
**SCRUB or BEAR OAK** (*Quercus ilicifolia*)

LEAVES are 2 to 5 inches long, usually with 5 lobes, with bristles at the tip. Sinuses are shallow. Leaves are leathery, dark green, and lustrous above. Underside of the leaf is coated with dense white hairs. Acorn is oval, surrounded on the lower half by a scaly cup. A small tree, it reaches 20 feet tall, and may grow in dense thickets. It prefers dry soils. Nut is wildlife food especially for black bears and turkeys. This tree is common in the Allegheny Mountains and the Eastern Panhandle.



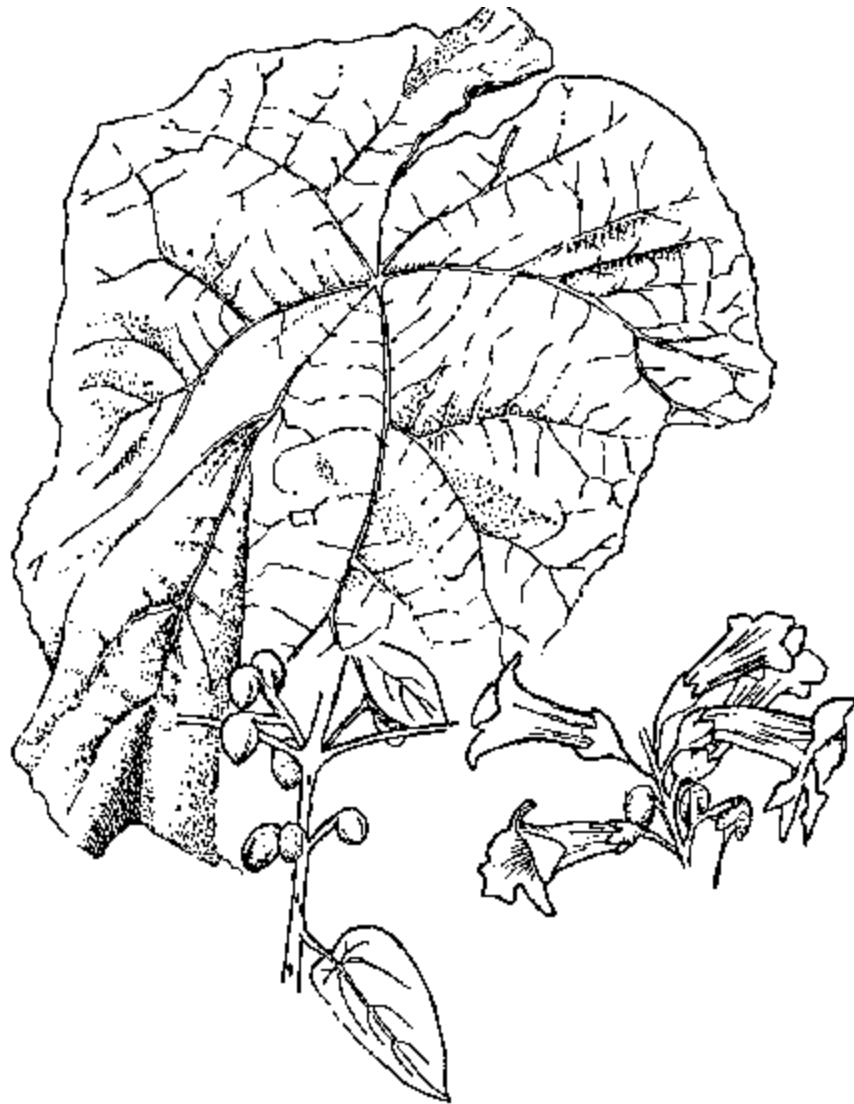
**WHITE OAK** (*Quercus alba*)

LEAVES are 5 to 9 inches long, with 7 to 9 rounded lobes, which almost reach the midrib. Base of leaf is narrow. Acorn has a cup covered with warty scales. BARK is gray with vertical blocks of scaly plates. Acorn is light chestnut brown, and cup extends one quarter up the nut. White oak has a rounded, spreading crown, and prefers deep, well-drained soils. It is common in the state except at very high elevations.



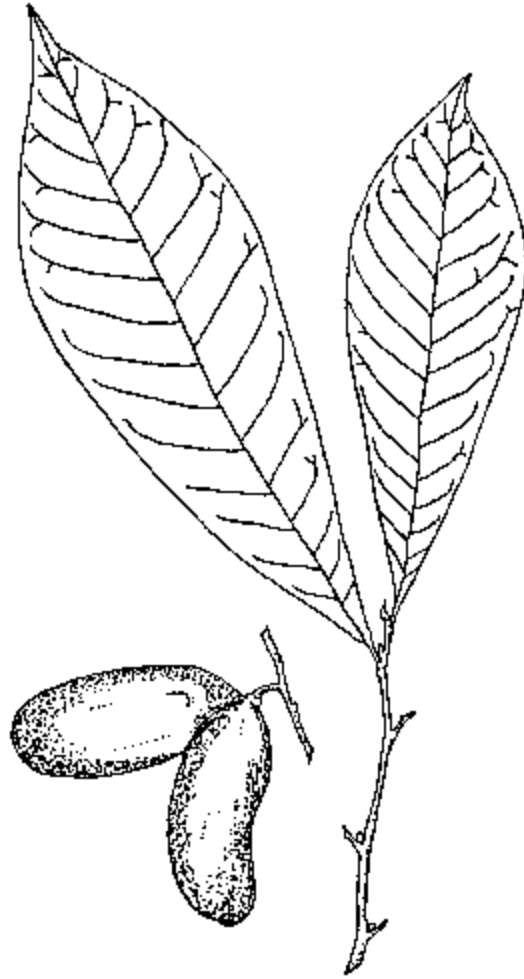
**OSAGE ORANGE** (*Maclura pomifera*)

LEAVES are 3 to 5 inches long, with smooth leaf edges, and veins that curve inward near the margins. FLOWERS are in the leaf axils, very small, greenish, and are on separate trees. FRUIT is conspicuous, ball-shaped, 4 to 5 inches in diameter, greenish-yellow, with a rough surface, and if bruised exudes a thick milky juice. Fruit is not edible. BARK is dark orange, deeply ridged on older trees. Twigs may have thorns. This species is often planted in hedges, and may grow to 60 feet tall. Wood is strong and attractive, and can be used to make woodenware and was used as a source of dye.



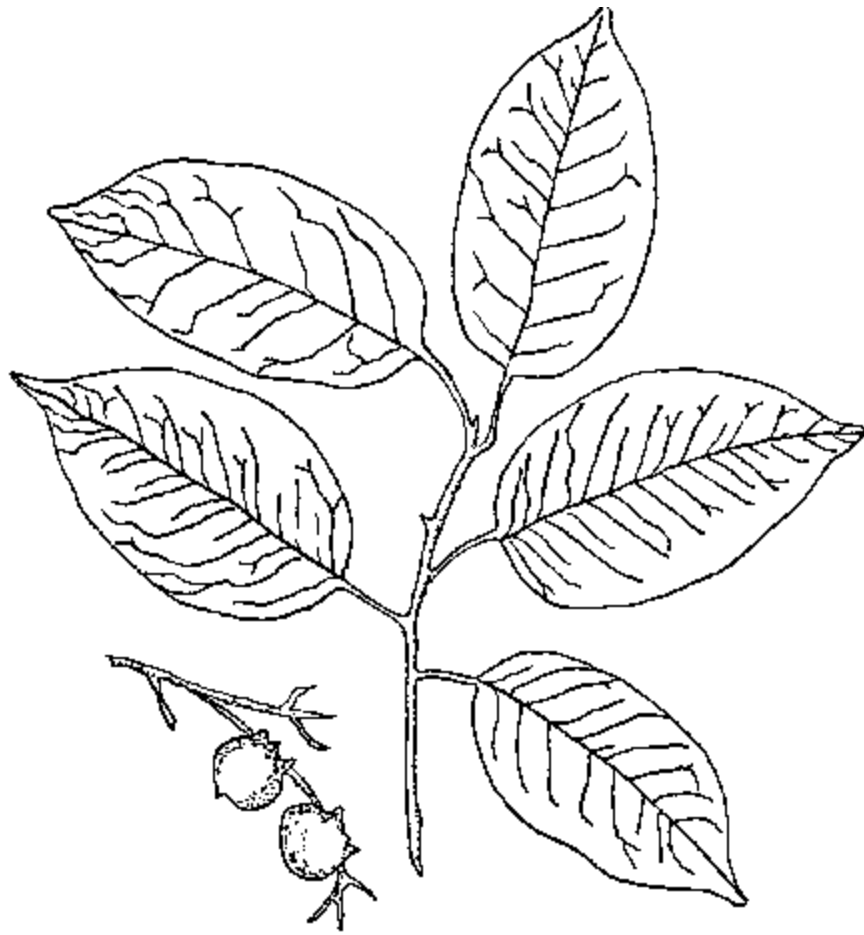
**ROYAL PAULOWNIA** (*Paulownia tomentosa*)

LEAVES are heart-shaped, 5 to 10 inches long and wide, dark green and "wooly" on the underside, and opposite each other. FLOWERS are pale violet, with yellow stripes inside, 2 inches long, blooming March to April. Flowers are showy, in clusters 8 to 12 inches long. FRUIT is a light brown round capsule and has many small winged seeds. A native of China, it is often planted as an ornamental, and can grow as much as 10 feet in a year.



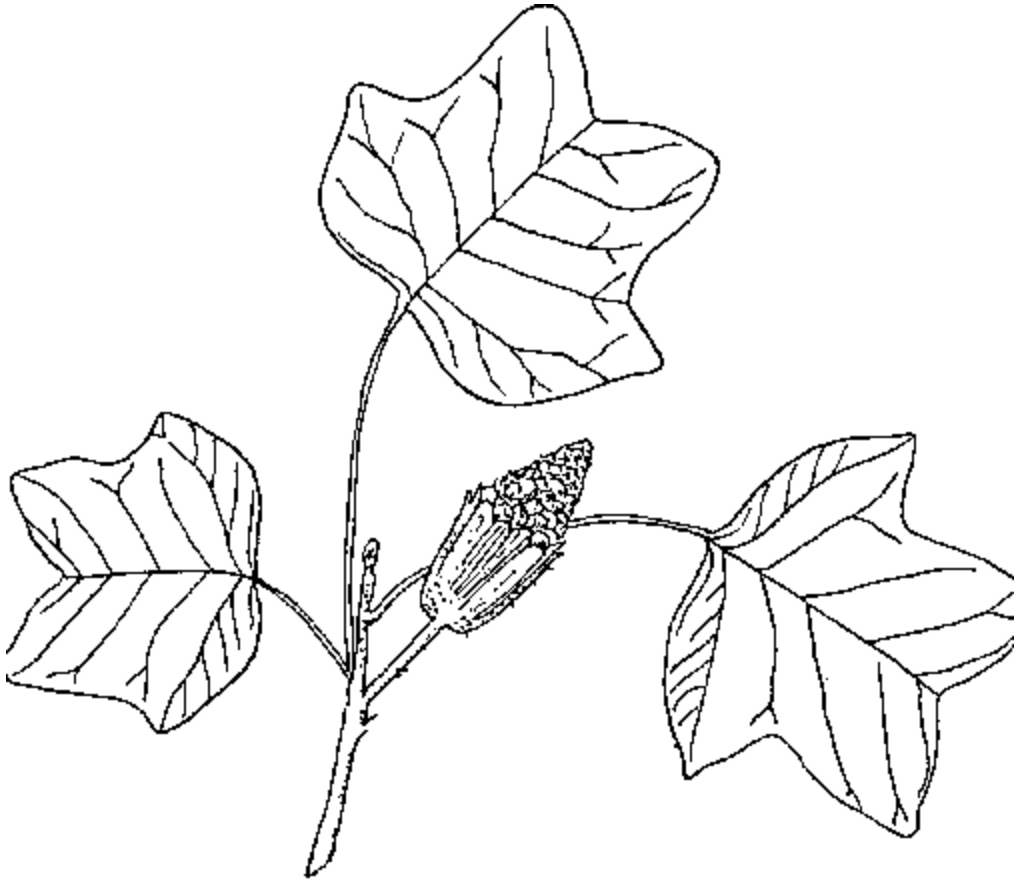
**PAWPAW** (*Asimina triloba*)

LEAVES are 10 to 12 inches long, widest above the middle, and pointed at the tip. Leaf edges are smooth. When crushed, leaves have an unpleasant odor. FLOWERS are 2 inches in diameter, with purple petals. FRUIT is oblong, about 5 inches long, with a yellow-brown rind enclosing yellowish pulp and brown seeds. When ripe the fruit is edible. BARK is gray-brown, thin and smooth to warty. A small tree, pawpaw grows to 30 feet high, often in clusters, and tolerates shade. It is locally distributed throughout the state.



**PERSIMMON** (*Diospyros virginiana*)

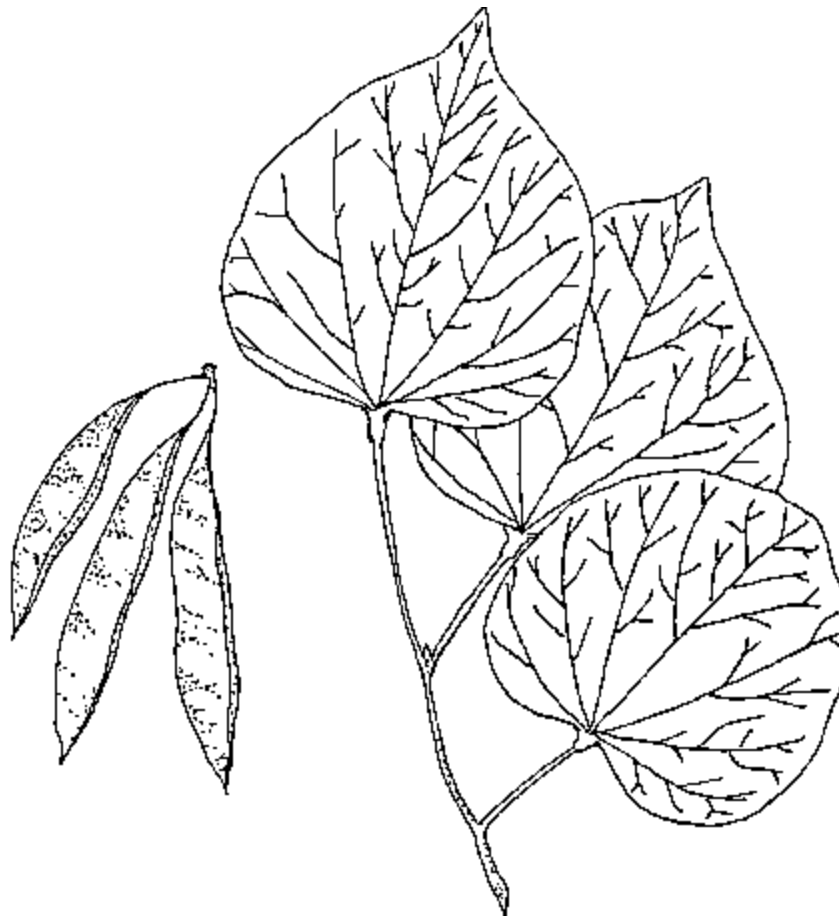
LEAVES are 4 to 6 inches long, shiny dark green, with smooth edges. FLOWERS are creamy colored, bell-shaped, pistillate (female) and staminate (male) on separate trees. FRUIT is orangish, 1 1/2 inch in diameter, with pulpy flesh that contains flattened seeds. Fruit is astringent when green, but is edible when ripe. BARK is black, broken into small blocks. Persimmon is found throughout the state.



**YELLOW POPLAR or TULIP TREE**  
(*Liriodendron tulipifera*)

LEAVES are 4 to 6 inches long, with 4 lobes, with a tulip-like outline. Fall foliage is yellow. FLOWERS are tulip-shaped, 2 inches in diameter, with 6 yellow-green petals with orange at the base. Flowers appear after the leaves have developed. FRUIT consists of numerous samaras 2 to 3 inches long and are aggregated in a conspicuous cone-like structure. BARK on mature trees is ridged and furrowed. One of the largest of the eastern hardwoods, it can reach 150 feet tall, and is common in the state.





**EASTERN REDBUD** (*Cercis canadensis*)

LEAVES are heart-shaped, 3 to 5 inches wide, with a pointed tip and smooth edges. FLOWERS are rosy-pink, 1/2 inch long. The clusters appear before the leaves, and are very conspicuous. FRUIT is a 3½ inch flattened pod, which contains several seeds. BARK is red-brown and scaly. Redbud is a small tree growing to 50 feet high, common in the state except at high elevations.



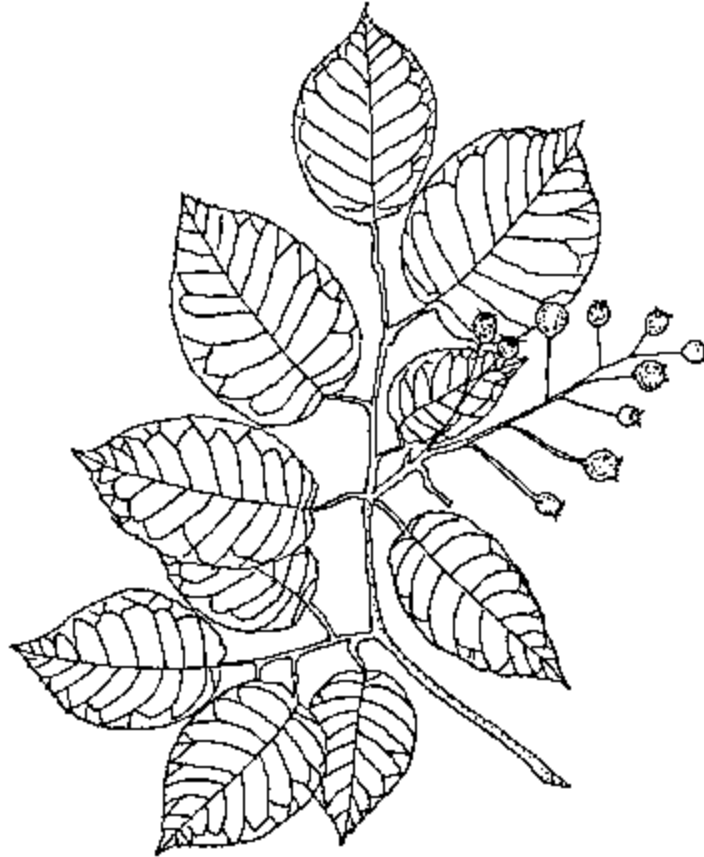
**RHODODENDRON** (*Rhododendron maximum*)

LEAVES are 4 to 10 inches long, 1½ to 2½ inches wide, evergreen, very thick, and smooth. FLOWERS are pale rose to white; upper petals have yellow-green dots. FRUITS are slim, sticky, red-brown, ½ inch long, with long styles (female flower parts). This shrub forms dense thickets, and occurs throughout the state. (Catawba rhododendron has broader leaves and light-purple flowers.)



**SASSAFRAS** (*Sassafras albidum*)

LEAVES are 4 to 6 inches long, and may have 1 lobe ("mitten-shaped") or 2 lobes. Fall foliage is red to gold. Twigs are bright green. FLOWERS are small, and yellow, appearing April to May. FRUIT is blue, 1/3 inch long, with a hard seed. BARK, leaves, roots, and twigs are aromatic. Boiling roots or bark makes sassafras tea. A small tree, sassafras rarely grows over 50 feet tall, and often grows in clumps. It is common in almost all of the state.



**SERVICEBERRY or SHADBUSH or  
SARVIS** (*Amelanchier canadensis*)

LEAVES are oval, pointed at the tip, with toothed leaf edges. FLOWERS are white, in clusters. It is the first forest tree to bloom in the spring and is very conspicuous on otherwise brown hillsides. FRUIT is berry-like, purple, and edible. It ripens in July and is eaten by birds. BARK is light gray, smooth, sometimes with ridges on older trees; and often there are multiple trunks. This is common in most parts of the state.



**CAROLINA SILVERBELL**  
(*Halesia Carolina*)

LEAVES are 4 to 6 inches long, thin, with small teeth on the edge. FLOWERS appear with the leaves and are bell-shaped, 2 inches long, white, or tinged with pink. FRUIT is nut-like, with corky ridges. Wood is cherry-colored, with white streaks. A small tree, usually not over 40 feet high, this is found along the Kanawha and New rivers.



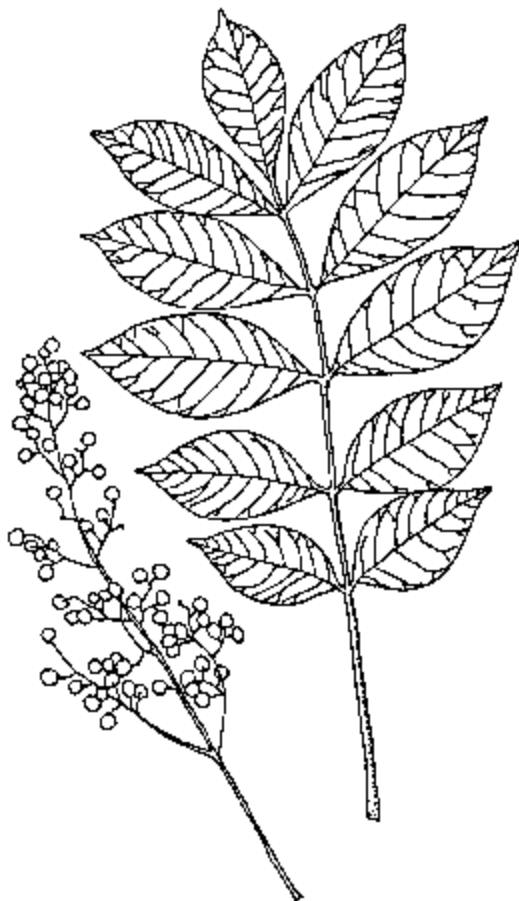
**SOURWOOD** (*Oxydendrum arboreum*)

LEAVES are elliptical, 5 to 7 inches long, lustrous dark green above, with small teeth on the leaf edges. Fall foliage is scarlet. The stems may be red. FLOWERS are white, fragrant, urn-shaped, in drooping clusters to 10 inches long. Flowers are in June and July. FRUIT is a capsule (dry fruit that splits open when ripe), in long clusters that are conspicuous and may last into winter, turning brown. BARK is gray, tinged with red, scaly at the base. Usually a small tree, it may grow to 60 feet tall. It is fairly common in the state.



**SPICEBUSH** (*Lindera benzoin*)

LEAVES are 3 to 5 inches long, oval, with smooth edges, and alternate each other on the stem. FLOWERS are small, yellowish, with a distinctive aromatic fragrance, appearing in March to April. FRUIT is berry-like, usually bright red, and aromatic if crushed. Twigs are spicy when crushed and can be used to brew spicebush tea. A common shrub in the state, deer, rabbit, opossum, ruffed grouse and songbirds eat twigs or fruits. It is common in every county.

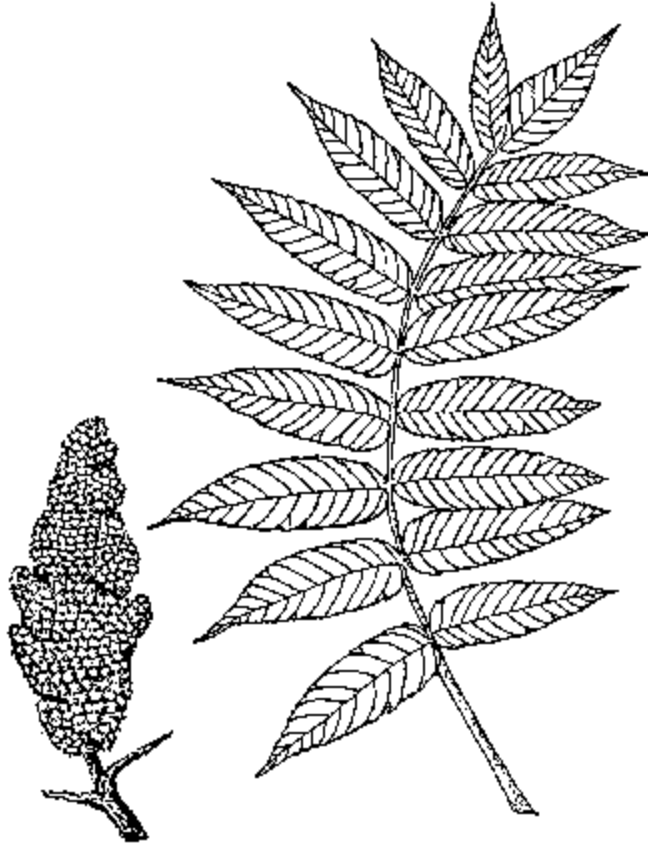


## **POISON SUMAC**

*(Toxicodendron [Rhus] vemix)*

LEAVES are 7 to 15 inches long, and leaflets are 4 inches long, with smooth edges. FLOWERS are green-yellow. FRUIT is berry-like, ivory white, in clusters about 1/2 inch in diameter, sometimes lasting into winter. BARK is gray-brown and smooth. This plant has poisonous oil, as does poison ivy, and should not be touched. Poison sumac occurs in swamps and bogs at various places in the state and is not common.





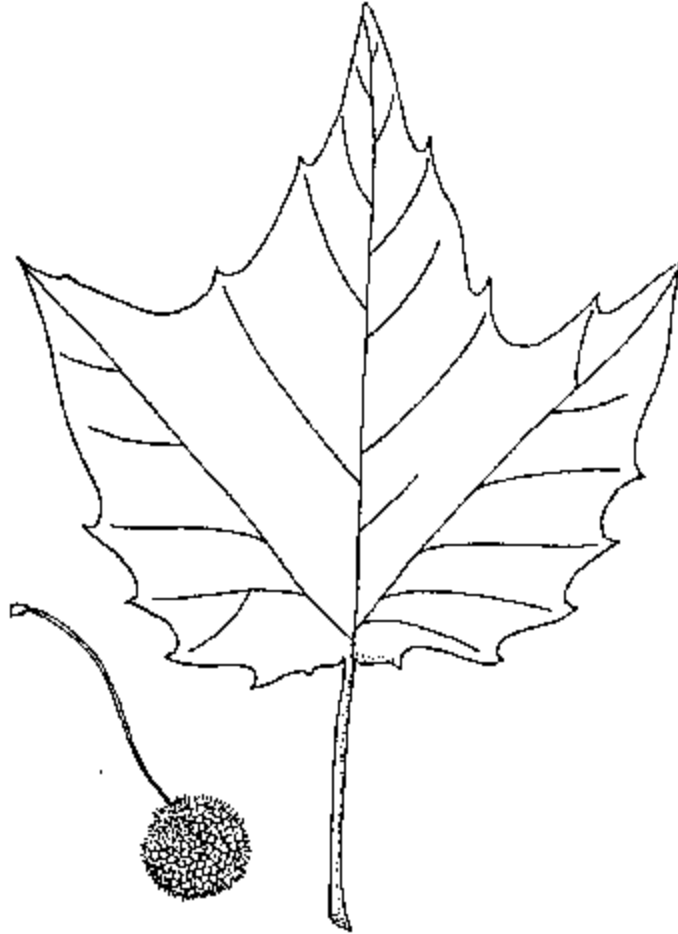
**STAGHORN SUMAC** (*Rhus typhina*)

LEAVES are 12 to 24 inches long, with 11 to 31 lance-shaped leaflets 2 to 5 inches long. Leaflet edges are toothed. Fall foliage is bright scarlet. FLOWERS are greenish; male and female flowers are on separate shrubs. FRUITS are dry, red, and hairy, aggregated on an elongated spike that lasts through winter. Fruit is eaten by birds and is not poisonous. Lemonade can be made from the berries. Twigs are stout and are covered with velvety hairs (like a deer's antlers in velvet) and the fuzzy twigs are an excellent identification feature. Staghorn sumac can grow to 35 feet tall, and is common throughout the state.



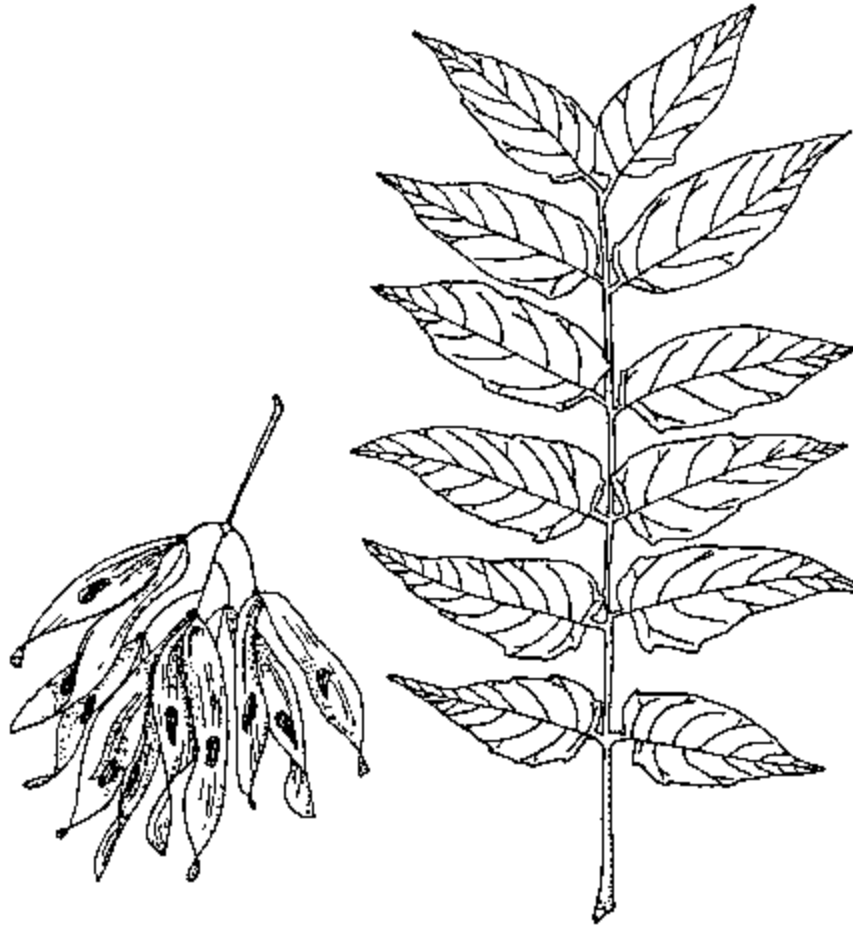
**SWEET GUM** (*Liquidambar styraciflua*)

LEAVES are bright green, star-shaped, 5 to 7 inches wide, with 5 to 7 pointed lobes, and toothed edges. Foliage turns red and gold in fall. FLOWERS are in clusters. FRUIT is woody, like a bur, and contains small seeds. Twigs may have corky structures. BARK is brown, ridged, and furrowed. Not common, it occurs in scattered locations in the state and is planted as an ornamental.



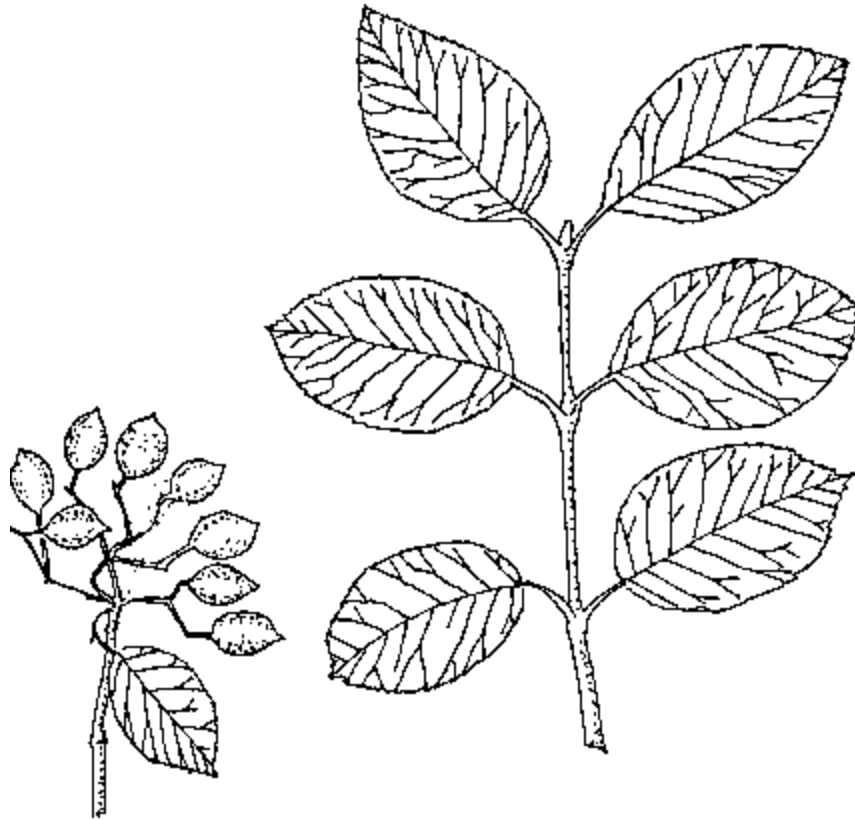
**SYCAMORE** (*Platanus occidentalis*)

LEAVES are 4 to 8 inches wide, with 3 to 5 shallow lobes; lobes have large, rounded teeth. Twigs are zigzag in shape. FLOWERS are inconspicuous, in globe-shaped heads. FRUIT is conspicuous, called buttonballs, consisting of many elongated seeds that have hairs at the base. BARK peels in irregular patches that give the trunk a mottled white-brown appearance. Fruit and bark are good identification features of sycamore. It typically grows in moist sites along streams and rivers but tolerates drier areas, and is found throughout the state.



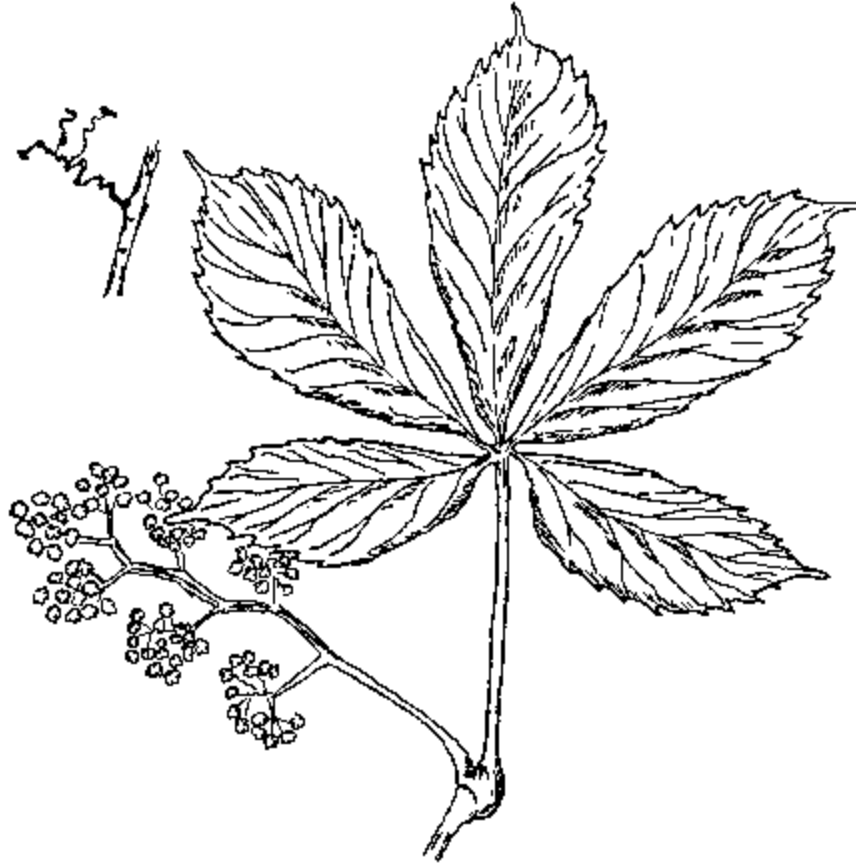
**TREE-OF-HEAVEN** (*Ailanthus altissima*)

LEAVES are 1 to 3 feet long, with 11 to 41 leaflets 5 inches long. Leaflets have a tooth at the base and have an unpleasant odor when crushed. Twigs are stout. FLOWERS are small and greenish, on separate trees. FRUIT is a samara, with the seed in the middle of the wing. Samaras are in clusters that stay on the tree in winter. BARK is thin, dark gray, and somewhat rough. Tree-of-heaven will grow in poor soil, produces suckers, and is often a weed tree. A native of China, it has become established in every county.



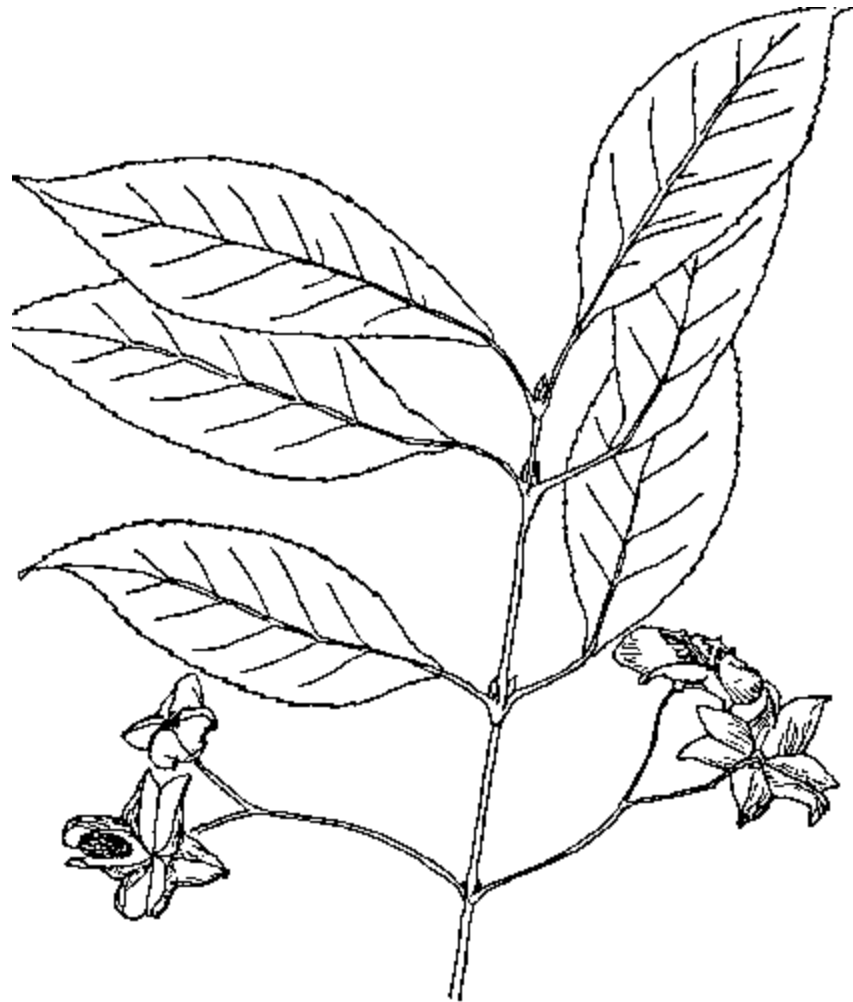
**BLACKHAW VIBURNUM**  
(*Viburnum prunifolium*)

LEAVES are 1 to 3 inches long, opposite each other, oval, slightly pointed, with small teeth. Fall foliage is purplish. FLOWERS are white, in clusters at the end of the branch. FRUIT is dark blue, in clusters, on reddish stalks. Fruit is edible and is eaten by birds and other wildlife. A small tree, it may grow to 30 feet tall. This is common in many places in the state.



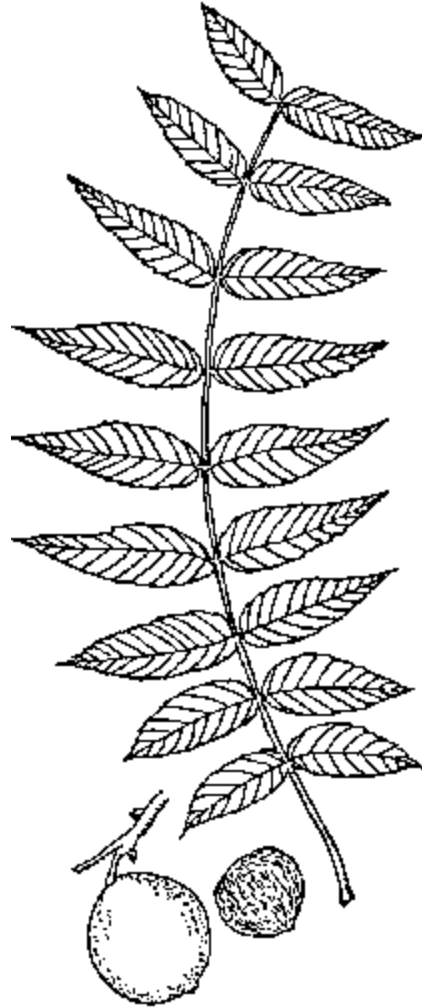
**VIRGINIA CREEPER**  
(*Parthenocissus quinquefolia*)

**LEAVES:** This common vine has 5 (sometimes 3 or 7) leaflets 3 to 8 inches long, in a fan-shaped arrangement. This vine climbs by means of tendrils, which are long, slender, branching, and disk-tipped. **FLOWERS** are greenish, small, and clustered, in June to August. **FRUIT** is a small blue berry, eaten by birds and wildlife including skunks, chipmunks, and mice. Virginia creeper is often confused with poison ivy that has 3 leaflets, white berries, and hairy vines. In the fall, Virginia creeper leaflets turn bright orange-red. This vine is common throughout the state.



**WAHOO or BURNING BUSH**  
(*Euonymus atropurpureus*)

LEAVES are opposite each other on the stem, 2 to 5 inches long, with small teeth on the leaf edges. Fall foliage is brilliant scarlet. FLOWERS are 1/2 inch wide, with 4 purple petals, in clusters of 7 to 15. FRUIT is distinctive, a 4-sided purple-red capsule with red seeds. BARK is thin, gray, and scaly. A shrub growing to 25 feet, found in rich soil on hillsides and riverbanks, it occurs throughout the state but is not always common.



**BLACK WALNUT** (*Juglans nigra*)

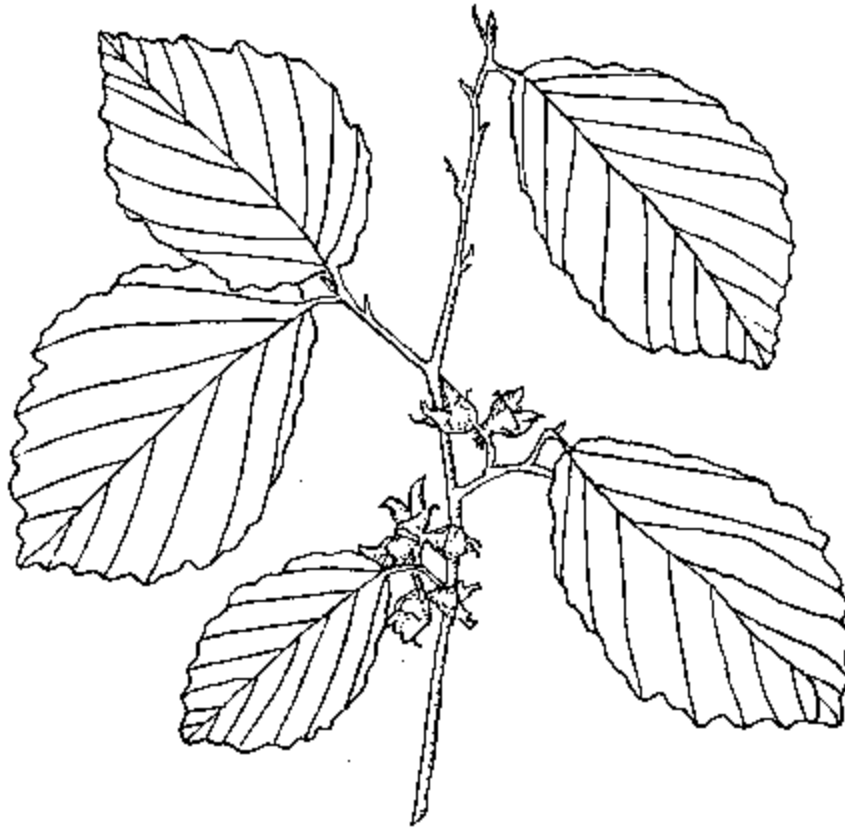
LEAVES are 1 to 2 feet long, with 15 to 23 almost stem-less leaflets about 3 inches long, tapered at the tips, with small teeth on the edges. (A terminal leaflet may be present.) FLOWERS are in catkins. FRUIT is a nut enclosed in a solid green husk. The husk, which turns blackish with age, contains a dark brown dye. The edible nut is black with a thick, woody, corrugated shell. BARK on mature trees is black, and furrowed. This is common in most parts of the state.





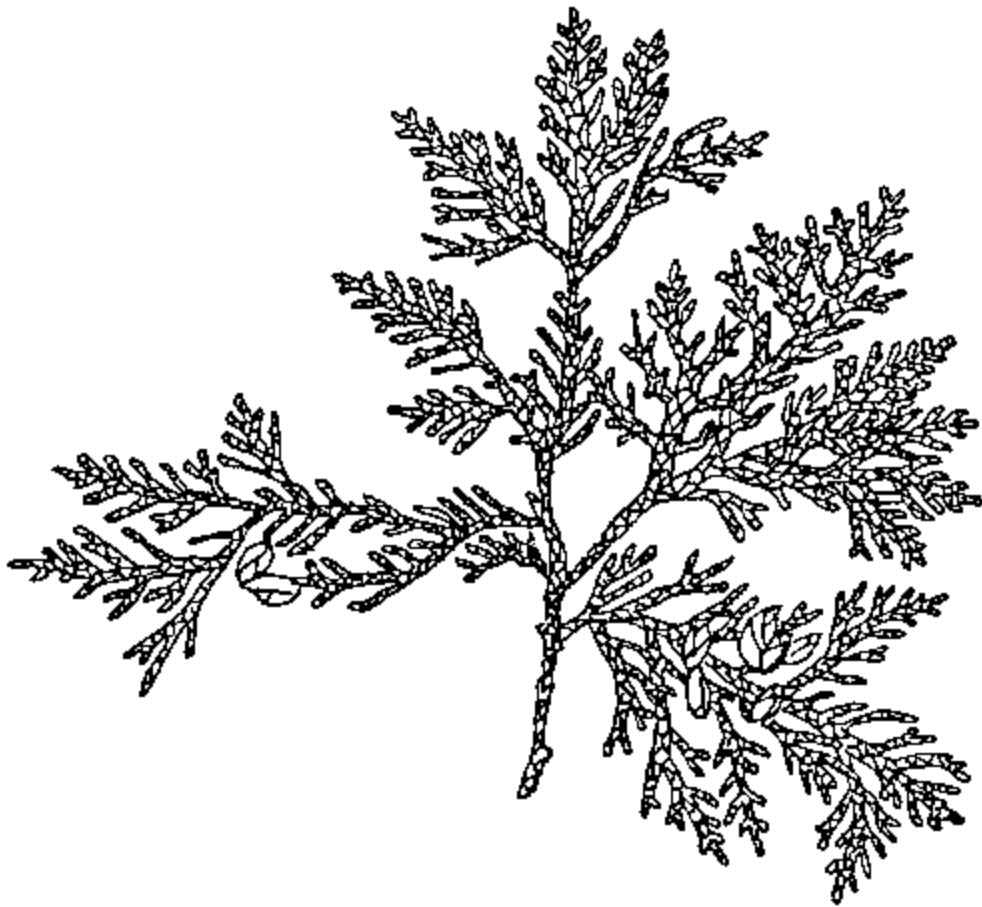
**BLACK WILLOW** (*Salix nigra*)

LEAVES are 3 to 6 inches in length, slender and elongated, with small teeth on the leaf edges. FLOWERS are in long catkins. FRUIT is a capsule that contains many small hairy seeds. Buds are pressed close to the stem. BARK on large trees is black and deeply ridged. This is the largest willow in West Virginia and grows well in moist soils, and is common along streams in all places in the state.



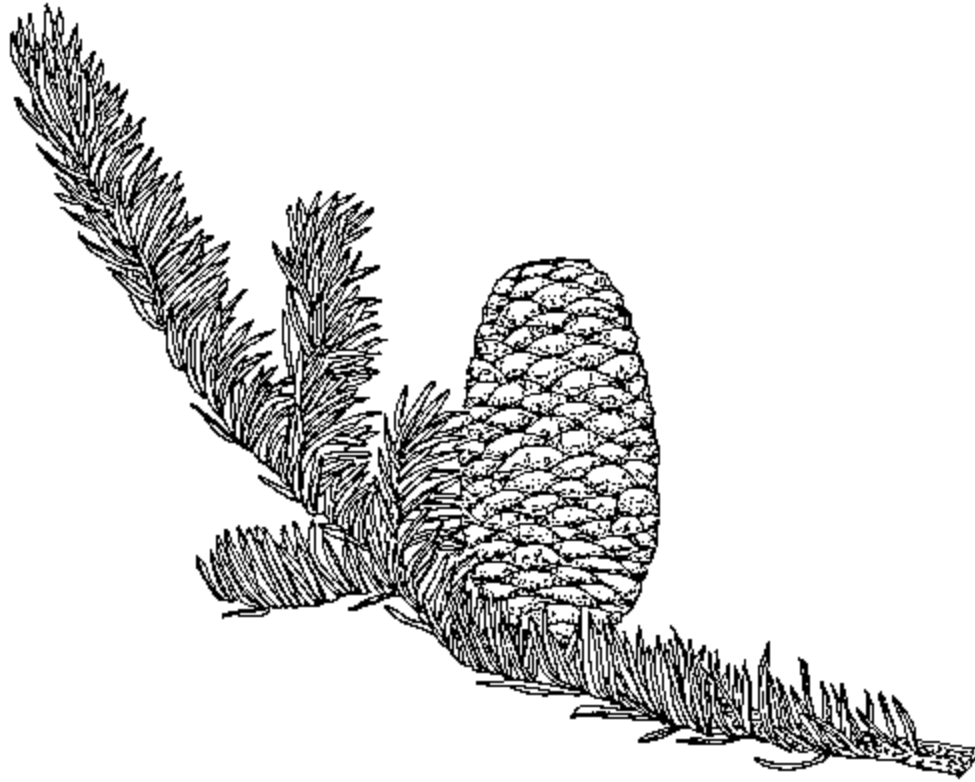
**WITCH HAZEL** (*Hamamelis virginiana*)

LEAVES are 4 to 6 inches long, round at the tip, with wavy edges. FLOWERS are yellow, and have 4 slender yellow petals. A fall blooming shrub, witch hazel blooms in October through November. Blossoms may last after the snow falls. FRUIT is a woody nut-like pod, 1/2 inch long, which has black seeds. FRUIT ripens in autumn from flowers of the previous year. BARK is smooth or scaly, thin, and blotched. Witch hazel may grow to 25 feet high, and is common in the state.



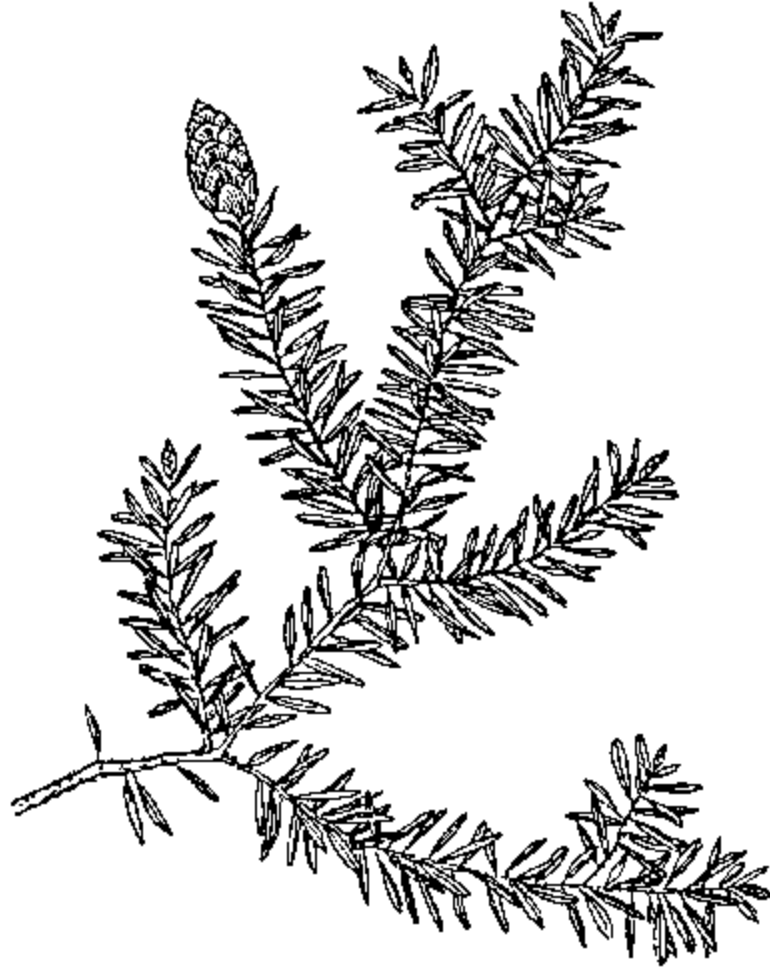
**ARBORVITAE or NORTHERN WHITE  
CEDAR (*Thuja occidentalis*)**

LEAVES are flattened, and scale-like, yellow-green, and when crushed are aromatic. Tea can be made from the leaves. CONES, 1/2 inch long, are upright on the branches. BARK is reddish-brown and furrowed. Arborvitae prefers boggy or moist areas, limestone soils, and may grow to 50 feet tall. In West Virginia it is often planted as an ornamental.



**BALSAM FIR** (*Abies balsamea*)

NEEDLES are 1½ inch long, flat, linear, usually blunt at the tip, and sometimes notched. Needles are fragrant when crushed. CONES are cylindrical, purplish, 2½ inches long, and are upright on the branch. BARK on older trees is red-brown in scaly plates. There may be resin blisters on young trees. A lovely ornamental, balsam fir prefers moist soil and is found at higher elevations including Canaan Valley.



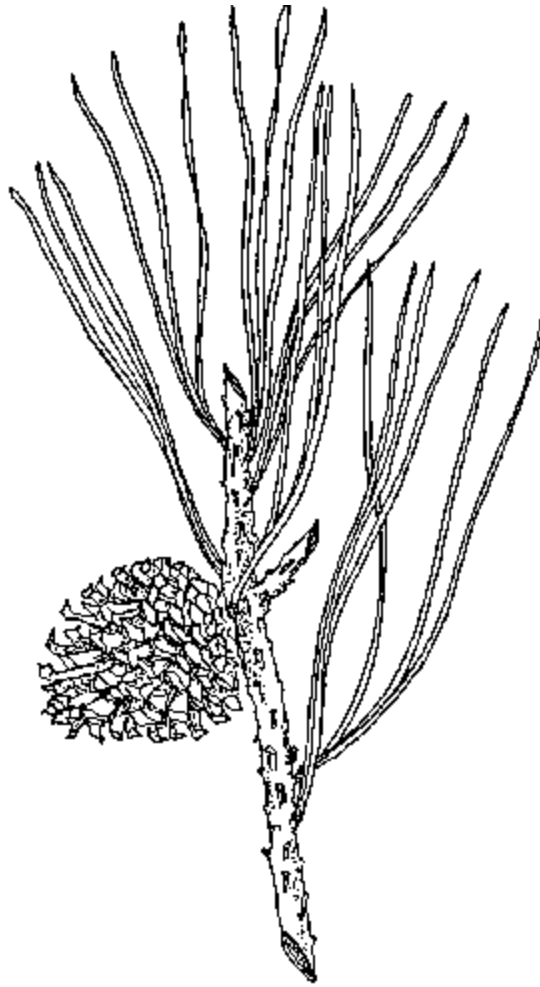
**EASTERN HEMLOCK** (*Tsuga canadensis*)

NEEDLES are linear, to about 2/3 of an inch long, dark green above, 2-ranked, with 2 whitish bands beneath. Buds are small, and egg-shaped. CONES are small, an inch long. BARK on mature trees is scaly, furrowed, dark purple brown. Eastern hemlock is one of the few conifers that will grow in shaded conditions. It occurs throughout the state especially near streams and cool slopes.



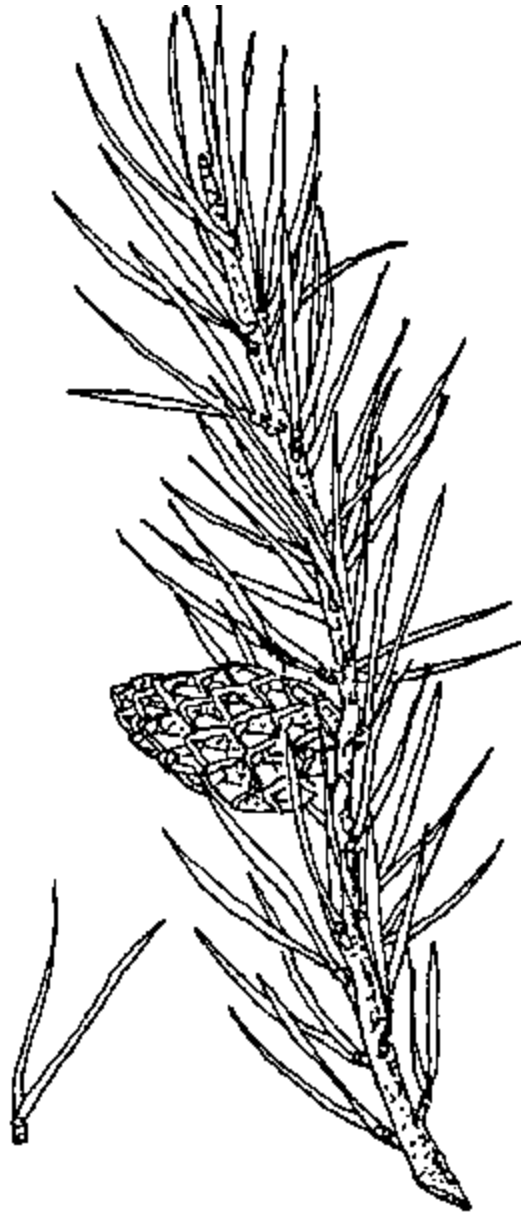
**EASTERN LARCH or TAMARACK**  
(*Larix laricina*)

NEEDLES are about 1 1/2 - inches long, flat, growing in dense brush-like clusters at the ends of short twigs. Unlike most conifers, larches are deciduous their needles fall off during the winter season. CONES are 3/4 inches long, growing up- right, and may remain for several years on the tree. BARK is reddish-brown to gray, thin and scaly. A few of these trees grow at Cranesville Swamp, the southernmost known location for this species. Eastern larch prefers wet areas.



**PITCH PINE** (*Pinus rigida*)

NEEDLES are in bundles of 3. Needles are 3 to 5 inches long, stiff, ridged, and somewhat twisted, and dark yellow-green. CONES are 1 to 3 inches long and have stiff prickles. BARK is dark gray or red-brown, divided into flat plates. Pitch pine can grow on poor soil and occurs throughout the state.



**SCOTCH PINE** (*Pinus sylvestris*)

NEEDLES are in clusters of 2, 1 to 3 inches long, and are slightly twisted and sharp pointed. CONES are 2½ inches long, and have small prickles. BARK is a good identification feature: orangish, it stays this color until the tree is mature, when the bark becomes dark and furrowed. Trunks of Scotch pine are sometimes twisted. Scotch pine has been planted at many places in the state.





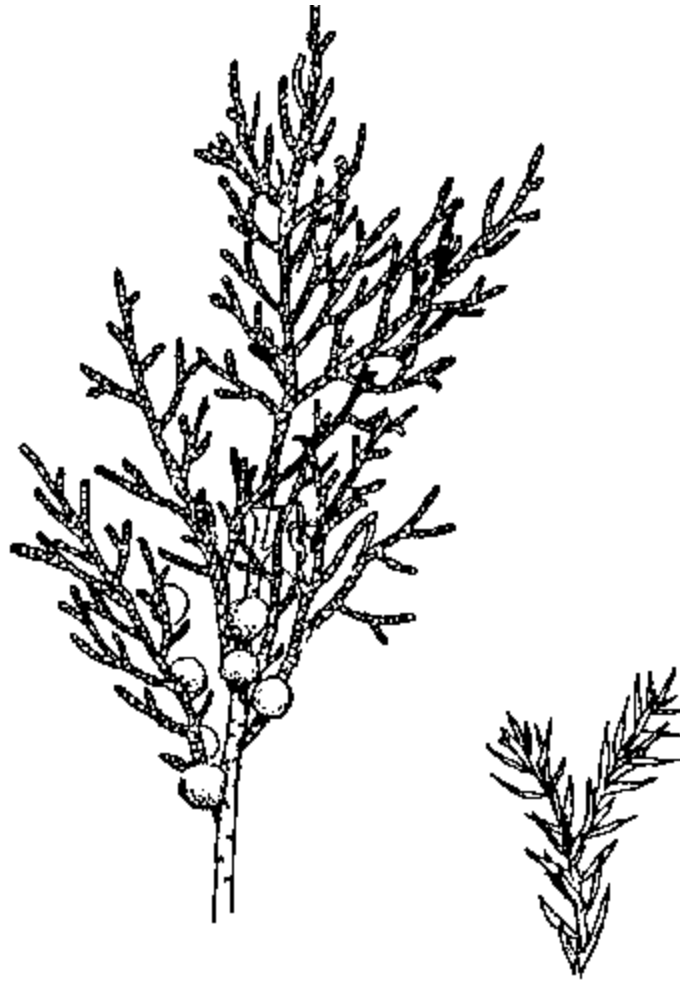
**SCRUB or VIRGINIA PINE**  
(*Pinus virginiana*)

NEEDLES are in clusters of 2, length to 3 inches long, twisted, sharp-pointed, and gray-green. CONES are 2 inches long, with small prickles, and may stay on the tree for several years. BARK is thin, red-brown. This pine is fairly common in the state and prefers sandy, rocky soils.



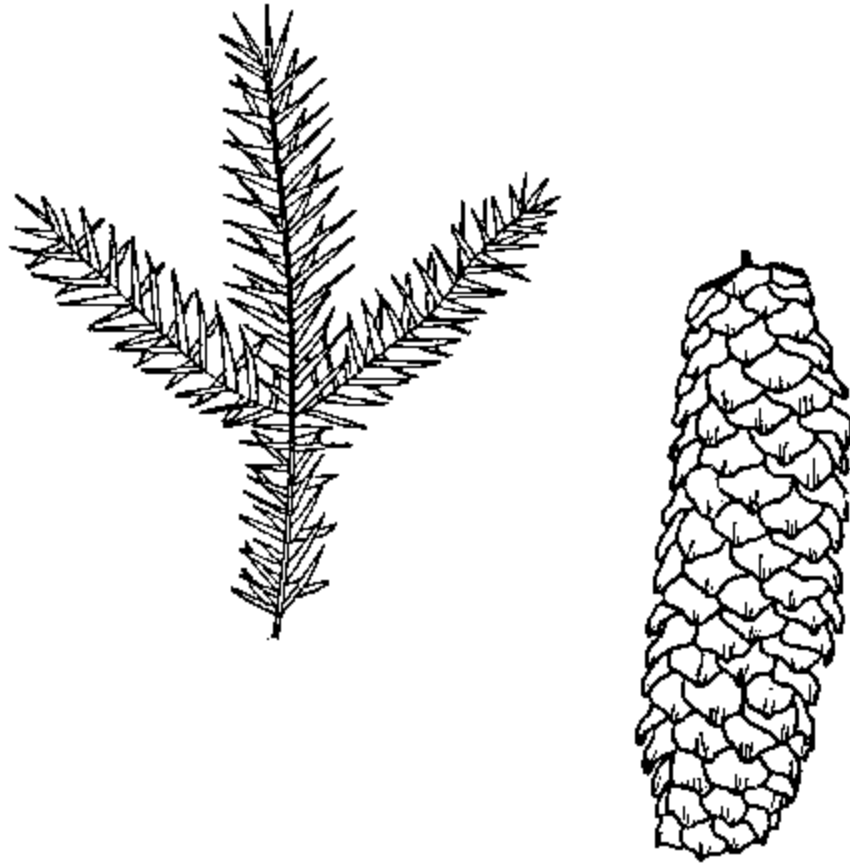
**WHITE PINE** (*Pinus strobus*)

NEEDLES are in clusters of 5, 3 to 5 inches long, blue-green on the upper side and whitish beneath. CONES are 4 to 6 inches long, cylindrical, and drooping. The cone has small seeds that mature after 2 seasons; cones may have a whitish resin. Branches extend from the main trunk horizontally, and are arranged in whorls, or circles, around the trunk, a good identification feature. Whorls show successive years of upward growth. Bark on older trees is furrowed. White pine is scattered throughout the state.



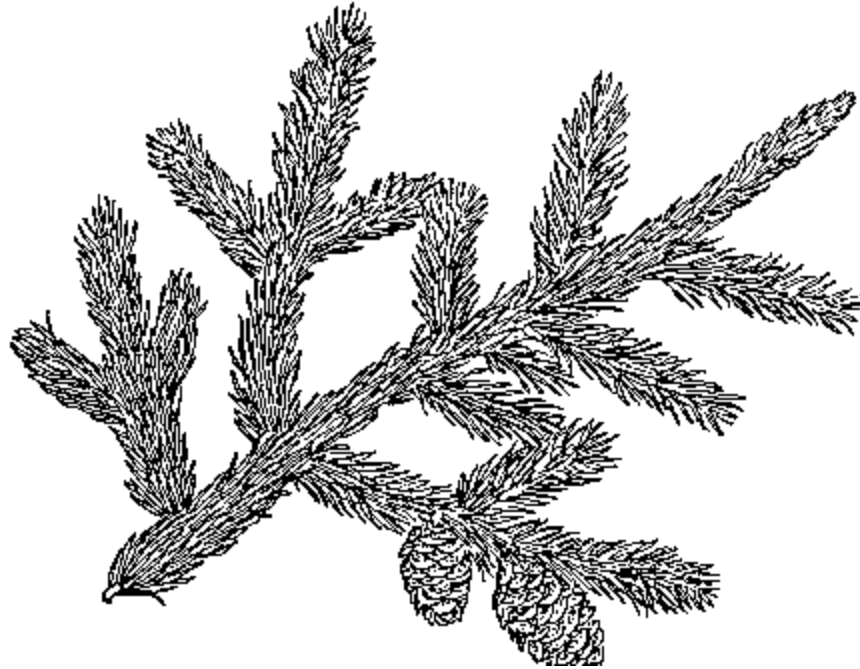
**EASTERN RED CEDAR or JUNIPER**  
(*Juniperus virginiana*)

LEAVES are of 2 kinds: those that are dark green and scale-like, and younger leaves which are awl-shaped, sharp-pointed and prickly. FRUIT is berry-like, pale blue, 1/4 inch in diameter. BARK is reddish-brown, and peels in long strips. This tree prefers limestone soils and dry hillsides, and is distributed in most places in the state.



**NORWAY SPRUCE** (*Picea abies*)

NEEDLES grow singly, to 1 inch long, and are stiff, pointed, and dark yellow-green. CONES are 4 to 7 inches long, light brown, with thin paper- like scales. Larger trees have gracefully sweeping lower branches that curve upward. In silhouette this is a good identification feature. This spruce has been planted throughout the state.



**RED SPRUCE** (*Picea rubens*)

NEEDLES grow singly, and are 1/2 inch long, sharply pointed, glossy, and dark yellow-green. They are crowded and grow from all sides of the twig. CONES are 2 inches long and hang downward from the branches. The only native spruce in the State, this once important tree has been largely cut out for lumber. Today red spruce grows in Canaan Valley and other high elevation areas.

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