LAB 10 – ON CAMPUS – PINEYWOODS NATIVE PLANT CENTER

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wax mallow Malvaceae Malvaviscus arboreus

Leaf:Alternate, simple, deciduous; often 3-lobed and distinctly palmately veined.

Flower: Distinct with 5 fused petals forming a rounded red corolla with a single column of stamens extending beyond.

Fruit: Red 5-carpeled fruit is edible, mealy in taste.

Twig:Green-brown and pubescent.

Form: A shrub reaching 5 feet in height.

* Not a VT Fact Sheet. Photos © Jeremy Stovall.



pawpaw Annonaceae Asimina triloba

Leaf:Alternate, simple, obovate to oblong, 5 to 11 inches long, 2 to 3 inches wide, green above and below. Green pepper odor when crushed.

Flower: Monoecious; purplish-brown, broad bell shape, 6 petals, 1 to 1 1/2 inch across; appearing with or slightly before the leaves.

Fruit: Very unique in that they resemble a short, fat banana, 2 1/2 to 4 inches long, at first green then tuning yellowish then brown as they ripen in the fall; very fleshy and tastes much like a banana.

Twig:Moderately stout, red-brown; buds purplish brown, fuzzy, naked bud which is flattened and often curved, terminal bud 1/4 to 1/2 inch long. Bark:Smooth, brown, splotched with wart-like lenticels, often with light gray patches.

Form: A small tree up to 40 feet tall, 12 inches in diameter, often found in growing in small clusters.



bigleaf magnolia Magnoliaceae Magnolia macrophylla

Leaf:Alternate, simple, very large, 20 to 30 inches long, with wavy edges and "ear-lobes" at the base, green and shiny above, lower surface with whitish hairs.

Flower: Monoecious; large (10 to 14 inches) and showy, with several long creamy white petals, very fragrant.

Fruit: Cone-like, nearly round, 2 to 3 inches long, rose colored.

Twig:Stout, with a large leaf scar, stipule scar circles the twig; bud is large (1 inch) and covered with silvery pubescence.

Bark:Thin, smooth and gray-brown, may develop small platy patches.

Form: Small tree reaching heights to 40 feet, generally a straight trunk.



Notes:

witch-hazel Hamamelidaceae Hamamelis virginiana

Leaf:Alternate, simple, broadly ovate to obovate, 3 to 6 inches long, inequilateral, wavy margin (nearly dentate), petiole pubescent, dark green above and paler below.

Flower: Monoecious; bright yellow, with 4, 1/2 to 3/4 inch long, very slender petals (look like yellow spiders on plant), appearing in mid to late fall. Fruit: Woody, brown capsule, 1/2 inch long and nearly as wide, containing two shiny black seeds, 1/4 inch long, seeds are forcibly discharged when capsule splits open. Maturing in late summer and old capsules are persistent.

Twig:Slender, light brown, fine pubescence; light brown vegetative buds (1/3 inch) are stalked and lack scales (resemble a deer foot, they are actually a tiny folded leaf); flower buds are small, round and occur in tight clusters from short stalks.

Bark: Smooth, gray to gray-brown even on very old stems.

Form: A small tree or shrub with arching branches, usually growing in dense multi-stemmed clumps reaching up to 20 feet tall.



yellow-poplar Magnoliaceae Liriodendron tulipifera

Leaf:Alternate, simple, palmately veined, orbicular, 4-lobed with an entire margin, 4 to 8 inches long, notched to flat top. Somewhat shaped like a tulip, light green to green.

Flower:Monoecious; perfect, showy, resembling a large tulip, but high in the tree, 2 1/2 inches long, with yellow-green petals and an orange corolla, appearing in late spring to early summer.

Fruit:An oblong (cone-like) aggregate of samaras (2 inches long), deciduous at maturity; each samara is 1-winged, 1 1/2 inches long, and curved upwards at seed cavity (resembling the front keel of a boat); maturing August to October and disseminating through late fall and winter; base whorls of samaras persist on fruit into following spring and resemble wooden flowers high in the tree.

Twig:Red-brown in color, often with a shiny appearance or a waxy bloom. Stipules are large and encircle the twig; buds are elongated and valvate, resembling a "duck bill". Twigs have a sweet, spicy odor when broken.

Bark:Light gray-green and smooth when young, later developing flat-topped ridges and conspicuous white colored furrows in diamond shaped patterns. On older trees sapsucker holes are common.

Form: In a forest, a large tree with a long, straight limb-free bole very often reaching over 100 feet tall. Open-grown trees have a pyramidal crown when young, becoming oval in shape with time.



Notes:

Virginia sweetspire Grossulariaceae Itea virginica

Leaf:Alternate, simple, elliptical, finely serrated, 2 to 4 inches long, 1 to 1 1/2 inches wide, green above and slightly paler below.

Flower: White, 1/4 inch across, occurring in terminal arching rachemes, usually quite abundant, appearing in late spring to early summer.

Fruit:Small (1/4 inch) elongated, woody capsules occurring in rachemes, appearing in mid-summer and persisting into winter.

Twig:Slender, arching, green turning red in fall; buds small, triangular, leaf scar with 3 bundle scars, chambered pith.

Bark: Smooth, developing splits and turning brown.

Form: Arching, loose shrub, reaching 6 to 8 feet.



red buckeye Hippocastanaceae Aesculus pavia

Leaf:Opposite, palmately compound, usually 5, elliptical, serrated leaflets, each 4 to 6 inches long, dark green and glabrous above.

Flower: Beautiful, upright cluster of dark-red tubular flowers, each cluster 4 to 7 inches long, appearing spring.

Fruit: Three-parted smooth husk containing 1 to 3 shiny brown fruits, mature in fall.

Twig:Stout, light-brown with raised lenticels, large opposite shield-shaped leaf scars, large pointed orange-brown buds are often paired at the ends of twigs.

Bark: Splotchy gray-brown, initially smooth but with size will develop scaly patches.

Form: Small, often multi-stemmed tree reaches heights of 15 to 25 feet.



Notes:

American snowbell Styracaceae Styrax americanus

Leaf:Alternate, simple, elliptical, 1 to 3 inches long, entire or with a few shallow teeth, star-shaped hairs on petiole (may occur on leaf blade as well), green above, paler below.

Flower: Attractive, bell-shaped, 1/2 inch long, 5 white, reflexed (with age) petals, hanging clusters of 1 to 4 flowers from leaf axils, appearing in mid to

Fruit: Egg shaped, hairy, dry drupe, 1/4 inch to 1/2 inch in diameter, turns a gray-brown when ripe in early fall.

Twig:Slender, gray-brown, zigzag, initially pubescent but becomes glabrous; leaf scar with 1 bundle scar; naked buds, small, blunt and scruffy.

Bark: Smooth, thin, dark gray-brown, when older develops very shallow fissures.

Form: Shrub to small tree with a spreading, open crown reaching up to 10 feet











Notes:

arrowwood viburnum Caprifoliaceae Viburnum dentatum

Leaf:Opposite, simple, oval to elliptical, coarsely serrated margins, 1 1/2 to 3 1/2 inches long, shiny dark green above, paler below.

Flower: Small, white in flat topped clusters, 2 to 4 inches across, yellow stamens, appearing in late spring.

Fruit: Bluish black, oval drupes, 1/3 inch long, occurring in clusters, ripening in early fall.

Twig:Slender, ridged and angled, glabrous or slightly velvety, buds 1/4 inch, green to brown, several scales present.

Bark: Gray to grayish brown, smooth getting finely scaly with size.

Form: Many branching shrubs to 10 feet, arching branches forming an overall rounded crown.



Notes:

swamp titi Cyrillaceae Cyrilla racemiflora

Leaf:Alternate, simple, evergreen or tardily deciduous, leathery, entire margins, obovate or oblong, 2 to 3 1/2 inches long, shiny green above, paler helow.

Flower: Small, white occurring in narrow, elongated clusters, 3 to 6 inches long, appearing in early summer.

Fruit:Dry, 2-celled capsule, 1/8 inch long, matures in early fall and persist well into the winter.

 $\textbf{Twig:} \textbf{Slender to moderate, smooth, grayish brown, very small buds, and shield-shaped leaf scar with \textbf{1} bundle scar.}$

Bark:Initially smooth and gray-brown, on large stems it can become ridged and spongy.

Form: Small tree up to 30 feet tall, spreading crown, often forming dense, impenetrable thickets.



waxmyrtle Myricaceae Morella cerifera

Leaf:Alternate, evergreen, simple, fragrant, spatulate in shape with a tapered base, 3 inches long, 5/8 inch wide, toothed, dark green and waxy-shiny above, pale green below, yellow resin dots on both surfaces.

Flower: Dioecious; both male and female flowers are small (1/2 inch), appearing as catkins in the leaf axils in spring.

Fruit:Round, waxy bluish-white drupes (1/8 inch in diameter), appearing in clusters on short stalks.

Twig:Slender and brittle, covered with brown pubescence, becoming smooth and gray-brown with age.

Bark: Thin and smooth, gray-brown.

Form: Small tree or large shrub, often multi-stemmed and growing in clusters, generally rounded or irregular in shape, with a crooked or twisting bole.



Notes:

coral honeysuckle Caprifoliaceae Lonicera sempervirens

Leaf:Opposite, simple, ovate to oval, 1 to 2 inches long, entire margin, tardily deciduous, last few pairs joined around stem, white and waxy below.

Flower: Fragrant, 1/2 to 1 inch long, pink to red long petals forming a tube, appearing in late spring.

Fruit:Small (1/4 inch diameter), red berry, with golden seeds, ripens in late summer and persists into early fall.

Twig:Slender, initially pubescent, light brown in color developing scaly, thin bark.

 ${\bf Bark:} Smooth \ to \ finely \ hairy, \ often \ purple \ on \ new \ growth.$

Form: A scrambling, twisting vine with no tendrils or aerial roots, trailing or climbing up to about 15 feet.

*Modified from VT Fact Sheet for Lonicera japonica based on Miller and Miller's Forest Plants of the Southeast ISBN: 0967314003 Photos ©Jeremy Stovall.



northern catalpa Bignoniaceae Catalpa speciosa

Leaf:Whorled (or opposite, when whorled one of the three leaves is often smaller), cordate, 5 to 12 inches long, pinnately veined, entire margins, overall soft and flexible feeling, light green to green above and soft pubescence on the underside.

Flower: Monoecious; very showy, white (yellow and purple spots on insides), 5 fuzzed petals form an overall bell shape, 1 inch long; appear in open, branched, upright terminal cluster (8 to 12 inches long) in late spring.

Fruit:Long (10 to 18 inches) bean-like, hanging capsules, round in cross section, very stiff; each capsule contains numerous flattened seeds with 2-papery, fringed wings; the seeds mature in autumn, but the capsule may remain attached over winter.

Twig:Stout, green, and later reddish brown in color, numerous lighter lenticels; terminal bud is absent, lateral buds are small and covered with red-brown scales; leaf scars very unique elliptical or round sunken saucers, light in color.

Bark: Gray to reddish brown, separated into irregular shallow fissures and scaly ridges.

Form: A medium sized tree to 80 feet with spreading, crooked branches and an irregular crown. The bole may be straight but is generally crooked.



Notes:

bitternut hickory Juglandaceae Carya cordiformis

Leaf:Alternate, pinnately compound, 7 to 10 inches long, with 7 to 11 leaflets, leaflets are lanceolate and serrate, rachis is slender and pubescent, dark green above, paler below.

Flower:Monoecious; males are yellow-green, drooping catkins with 3 hanging from one stalk, 3 to 4 inches long; females are short, 4-angled, on a terminal spike, appearing in spring.

Fruit: Nearly globose but slightly flattened, 1 inch long, partially dehiscent from the middle to the sharp-pointed tip; husk is thin and 4-winged above the middle, often dusty-yellow looking; maturing in fall.

Twig:Moderately stout to slender (when compared to other hickories), leaf scars are 3-lobed; terminal bud is valvate, 4-angled and sulfur-yellow to brown in color.

Bark:Thin, tight and hard; initially smooth and silvery gray, much later gray with shallow furrows and interlacing ridges.

Form: A medium to large tree capable of reaching over 100 feet tall with an open, rounded top.



pecan Juglandaceae Carya illinoinensis

Leaf:Alternate, pinnately compound with 9 to 15 finely serrate and often curved leaflets, 12 to 18 inches long.

Flower: Monecious; male flowers in hanging, yellow-green catkins, often in pairs of three (4 to 5 inches long); females are small and yellowish green, 4-angled.

Fruit:Large, oblong, brown, splotched with black, thin shelled nuts, 1 1/2 to 2 inches long, husks are thin, usually occur in clusters on trees, mature in fall. Twig:Moderately stout, light brown, fuzzy (particularly when young); leaf scars large and three lobed; buds are yellowish brown to brown, hairy, with terminal buds 1/4 to 1/2 inch long.

Bark: Smooth when young, becoming narrowly fissured into thin broken strips, often scaly.

Form: A large tree (can reach heights well over 100 feet) with spreading crown when in the open.



Notes

water hickory Juglandaceae Carya aquatica

Leaf:Alternate, pinnately compound, 8 to 16 inches long, 7 to 15 curved, lance shaped, serrated leaflets, green above, lower surface paler and may be hairy.

Flower: Monoecious; male flowers occur in hanging slender yellow-green catkins, 2 to 3 inches long, females are very small, yellow-green and angled. Fruit: Husks are thin and 4 winged where they split; nut brown, 1 to 11/2 inches long, oval to egg-shaped, conspicuously flattened.

Twig:Slender to moderate, greenish brown to gray-brown, often with scruffy fuzz; buds flattened, pointed and often curved, covered with scruffy yellow-brown fuzz, leaf scar shallowly three lobed.

Bark:Smooth a light gray when young, light gray-brown, splits into narrow, loose shaggy scales.

 $\textbf{Form:} A \ \text{large tree reaching heights over 100 feet and several feet in diameter}.$

