

## LAB 2 – ON CAMPUS – SURVEY HILL

Family	Genus	Species	Common Name	Order	Page
Ulmaceae	Ulmus	americana	American elm	1	2
Oleaceae	Ligustrum	lucidum	glossy privet	2	2
Oleaceae	Ligustrum	sinense	Chinese privet	3	3
Caprifoliaceae	Lonicera	maackii	Amur honeysuckle	4	3
Euphorbiaceae	Triadica	sebifera	Chinese tallowtree	5	4
Simaroubaceae	Ailanthus	altissima	tree of heaven	6	4
Rosaceae	Prunus	caroliniana	Carolina laurelcherry	7	5
Aquifoliaceae	Ilex	decidua	possumhaw	8	5
Aquifoliaceae	Ilex	vomitorea	yaupon	9	6
Moraceae	Maclura	pomifera	Osage-orange	10	6
Moraceae	Morus	rubra	red mulberry	11	7
Anacardiaceae	Rhus	glabra	smooth sumac	12	7
Meliaceae	Melia	azedarach	Chinaberrytree	13	8
Caprifoliaceae	Lonicera	japonica	Japanese honeysuckle	14	8
Bignoniaceae	Campsis	radicans	trumpet creeper	15	9

### American elm Ulmaceae *Ulmus americana*

**Leaf:** Alternate, simple, ovate to oblong, 3 to 5 inches long, 1 to 3 inches wide, margin coarsely and sharply doubly serrate, base conspicuously inequilateral, upper surface green and glabrous or slightly scabrous, paler and downy beneath.

**Flower:** Monoecious; small, in drooping clusters of 3 to 5, appear in early spring before leaf buds open.

**Fruit:** Rounded, flat, papery, wafer-like samaras, 3/8 to 1/2 inch across, deeply notched at apex, hairless except for margin; ripen in spring.

**Twig:** Slender, glabrous, slightly zigzag, reddish brown; buds ovate, over 1/4 inch long, reddish brown with darker edged scales, often placed a little to one side of the twig.

**Bark:** Dark, ashy gray, flat-topped ridges separated by diamond-shaped fissures; outer bark when sectioned shows distinct, alternating, buff colored and reddish brown patches. When young it is often quite spongy.

**Form:** In the open, the trunk is usually divided into several large, ascending and arching limbs, ending in a maze of graceful drooping branchlets.



**Notes:**

### glossy privet Oleaceae *Ligustrum lucidum*

**Leaf:** Opposite, evergreen, simple, elliptical, 2 to 3 inches long, entire margin, thick and leathery; shiny, waxy, dark green above, considerably paler below.

**Flower:** Perfect, occurring in an upright, terminal panicle (2 to 4 inches long) of small creamy, white flowers, fragrant, appearing in early summer on new growth.

**Fruit:** Dark blue, round to oblong drupe in clusters, 1/4 inch diameter, ripen in early fall.

**Twig:** Slender, somewhat square, light brown with numerous white, corky lenticels; buds small and light brown.

**Bark:** Smooth, gray-brown, numerous lighter lenticels.

**Form:** Large, upright shrub or small tree, up to 20 feet with a dense crown.



**Notes:**

### Chinese privet *Oleaceae Ligustrum sinense*

**Leaf:** Small (1-2 inch) opposite oval leaves, apparent main veins; tops dark green and lustrous, lighter below.

**Flower:** Fragrant white flowers on panicles in spring.

**Fruit:** A small (BB sized) initially green turning blue-black drupe.

**Twig:** Slender, grey-brown and pubescent.

**Bark:** Smooth, grey to brown, with sporadic light-colored lenticels.

**Form:** Shrub to small tree, up to 20 feet tall. Trunks often clustered and at an angle.

\*Not a VT Fact sheet; Source: Trees of East Texas by Robert Vines ISBN: 0292780176; Photos Jeremy Stovall



**Notes:**

### Amur honeysuckle *Caprifoliaceae Lonicera maackii*

**Leaf:** Opposite, simple, ovate, 2 to 3 inches long, entire margin, acuminate tip; green above, paler and slightly fuzzy below.

**Flower:** Monoecious; white changing to yellow, 3/4 to 1 inch in length, 4 upper petal lobes fused, very fragrant, appearing in late spring.

**Fruit:** Juicy red berry, 1/4 inch in diameter, appearing in late summer often in great abundance, persists into the winter.

**Twig:** Slender, glabrous, grayish brown, hollow pith but solid brown at the nodes; opposite, small pointed, light brown buds.

**Bark:** Develops long, deep fissures, somewhat scaly ridges, grayish brown.

**Form:** An erect shrub, multi-stemmed, branches often arching, up to 20 feet tall, 15 foot spread.



**Notes:**

### Chinese tallowtree Euphorbiaceae *Triadica sebifera*

**Leaf:** Alternate, simple, ovate to orbicular in shape, long pointed tip, wedge shaped base, entire margins, 2 to 3 1/2 inches long, green above, slightly paler below, smooth on both surfaces.

**Flower:** Occur in a long (2 to 3 inches) slender yellow-green catkins, female flowers appear at the base of the cluster, appearing in late spring to early summer.

**Fruit:** Nearly round 3-lobed brown capsules, 1/2 inch in diameter, when mature the outer part splits revealing 3 white waxy seeds, matures in late summer to early fall.

**Twig:** Slender, green, turning a light brown, speckled with lenticels, buds and leaf scars small.

**Bark:** Light reddish-brown to gray-brown, fissured with flat-topped ridges.

**Form:** Medium sized tree to 50 feet, with a broad pyramidal, open crown.



**Notes:**

### tree of heaven Simaroubaceae *Ailanthus altissima*

**Leaf:** Alternate, pinnately compound, 1 to 3 feet long, with 11 to 41 leaflets, leaflets are 2 to 6 inches long, pointed at the tip with large, glandular teeth near the base, green above and below.

**Flower:** Dioecious; small yellow-green, in long (6 to 12 inches) clusters, males have a disagreeable odor, appearing in late spring to early summer.

**Fruit:** An oblong, twisted samara, 1 to 1 1/2 inches long with the seed in the center, hanging in long clusters, ripens in late summer and disperse through the winter.

**Twig:** Stout, yellow to red-brown, with fine velvety hairs when young, easily broken with a large reddish brown pith; buds are relatively small and half-spherical sitting above large, heart-shaped leaf scars; terminal bud is absent. Strong odor (some are reminded of peanut butter) when broken.

**Bark:** Thin, light brown to gray, resembles the skin of a cantaloupe when young, later turning darker gray and rough.

**Form:** A short to medium sized tree to 70 feet with heavy, open branches. Lower branches on larger trees tend to droop. Often grows in clumps.



**Notes:**

### Carolina laurelcherry Rosaceae *Prunus caroliniana*

**Leaf:** Alternate, simple, evergreen, entire margin or a few teeth, lanceolate, 2 1/2 to 5 inches long, dark shiny green above, much paler below.

**Flower:** Small, creamy white, 5 petals, occur in elongated clusters (2 to 3 inches long), appearing in early spring.

**Fruit:** Drupe, 1/2 inch in diameter, shiny black when ripe in late summer.

**Twig:** Slender, reddish brown, developing gray patches with age, strong cherry odor when broken, buds reddish brown and small.

**Bark:** Smooth, gray, reddish brown, numerous lenticels, develops some splits and fissures with age.

**Form:** Small tree to 40 feet.



**Notes:**

### possumhaw OR deciduous holly Aquifoliaceae *Ilex decidua*

**Leaf:** Alternate, simple, deciduous, 2 to 3 inches long, margin shallowly blunt toothed and often revolute, narrowly obovate (variable), tips rounded or broadly wedge-shaped, glabrous and dull green above, paler below.

**Flower:** Dioecious; both male and females are short-stalked and greenish white with 4 petals, usually in small clusters, appear in spring.

**Fruit:** Round drupes on short stalks, 1/3 inch in diameter, reddish-orange to red in clusters of 2 to 4, ripening in fall but may persist through the winter, seeds grooved and larger (3/16 inch) than *Ilex verticillata*.

**Twig:** Slender, gray to green-brown, with scattered light lenticels, buds and leaf scars are small, one vascular bundle scar, stiff spur shoots common.

**Bark:** Thin, smooth (may be warty) and grayish brown, with lenticels.

**Form:** Upright shrub with multiple stems, branches stiff and often appearing thorny, reaches heights of 20 feet.



**Notes:**

**yaupon** Aquifoliaceae *Ilex vomitoria*

**Leaf:** Alternate, simple, evergreen, margin with rounded teeth, 1/2 to 1 1/2 inch long, shiny dark green above, pale below.

**Flower:** Dioecious; small greenish white, males numerous and in clusters, female solitary or in small clusters, appear in late spring.

**Fruit:** Berry-like drupe, dark orange to red, 1/4 to 1/3 inch in diameter, ripen in late summer, persistent and usually numerous.

**Twig:** Slender, stiff, initially purplish brown, velvety, but turning light gray and glabrous, buds very small and dark.

**Bark:** Thin, smooth and light gray, may be come a bit scaly.

**Form:** Evergreen shrub forming thickets with numerous stems and branches, reaches up to 20 feet.



**Notes:**

**Osage-orange** Moraceae *Maclura pomifera*

**Leaf:** Alternate, simple, pinnately veined, 2 to 5 inches long, oblong to ovate with an acuminate tip, margins entire, upper surface shiny.

**Flower:** Dioecious; not showy. Female is borne in dense, round, clusters. Male borne in subglobose racemes. Appearing late spring to early summer.

**Fruit:** A large, round multiple of drupes 4 to 5 inches in diameter, with a very distinctive citrus smell; the outer surface looks like "brains"; when crushed, a white, milky juice is exuded, maturing in early fall.

**Twig:** Moderately slender, zigzag, green changing to buff or orange-brown. Twigs are armed with stout, unbranched thorns at each leaf scar. A milky sap is exuded when cut.

**Bark:** Orange-brown, developing scaly ridges with irregular furrows.

**Form:** A medium sized tree with a short trunk. The crown is irregular, with stiff, spiny branches.



**Notes:**

### red mulberry *Moraceae Morus rubra*

**Leaf:** Alternate, simple, broadly ovate to roughly orbicular, 3 to 5 inches long, serrate margin, highly variable in that they may have no lobes or be highly dissected into lobes; green above with a rough scabrous texture, paler and fuzzy below.

**Flower:** Species is usually dioecious; small, pale green; male flowers are hanging catkins, 1 to 2 inches long; females are 1 inch long catkins, both appearing in late spring.

**Fruit:** Resembling blackberries, cylindrical, 1 to 1 1/4 inches long, fleshy multiples of drupes, each containing a small seed, maturing in summer.

**Twig:** Slender, zigzag, green changing to red-brown, sometimes pubescent; buds are covered with brown-margined overlapping scales; leaf scars shield-shaped and somewhat sunken; silvery-white filaments present when broken.

**Bark:** Gray-brown and quite irregular with long, scaly ridges. Younger trees are often orangish, especially when wet.

**Form:** A small tree to 60 feet in height, with a short trunk that typically branches low.



**Notes:**

### smooth sumac *Anacardiaceae Rhus glabra*

**Leaf:** Alternate, pinnately compound, 12 to 18 inches long, 11 to 31 lanceolate leaflets per leaf, each 2 to 4 inches long with a serrated margin, dark green above, paler and finely hairy below.

**Flower:** Dioecious; small, with pale yellow petals, borne in a dense upright cluster up to 8 inches long, appearing in mid to late summer.

**Fruit:** A small (1/8 inch) reddish, round, finely hairy drupe borne in dense upright cluster. The panicles typically droop when mature in the fall and persist into winter.

**Twig:** Stout, lacking hairs and often with a bluish glaucous bloom; buds are small, rounded and covered with light brown hairs, nearly encircled by leaf scar.

**Bark:** Brown-gray and smooth, with numerous lenticels, developing scaly ridges with age.

**Form:** A shrub or small tree up to 10 feet with a short or multi-stemmed trunk and wide spreading, open crown.



**Notes:**

### Chinaberrytree Meliaceae *Melia azedarach*

**Leaf:** Alternate, single to doubly compound, 10 to 22 inches long, leaflets coarsely toothed or lobed, 1 to 2 inches long, shiny green above and smooth on both surfaces.

**Flower:** Purple, in a loose long cluster, each flower 1/2 to 1 inch across, appearing after the leaves.

**Fruit:** Yellow-brown drupe, up to 3/4 inch in diameter in hanging clusters, ripen in the fall and persist all winter.

**Twig:** Very stout, olive-brown to brown with numerous lighter lenticels, three lobed large leaf scar, pith continuous and white, buds are small, round and fuzzy light brown (nearly white).

**Bark:** Brown to slightly reddish brown, splitting into slightly criss-crossing furrows.

**Form:** Small tree, 20 to 40 feet tall with a spreading crown.



**Notes:**

### Japanese honeysuckle Caprifoliaceae *Lonicera japonica*

**Leaf:** Opposite, simple, ovate to oval, 1 to 2 inches long, entire margin, sometimes lobed, semi-evergreen, light green and somewhat pubescent.

**Flower:** Fragrant, 1/2 to 1 inch long, white or yellowish-white long petals, appearing in late spring.

**Fruit:** Small (1/4 inch diameter), black berry, often in pairs, ripen in fall and persist into early winter.

**Twig:** Slender, initially pubescent, light brown in color developing scaly, thin bark, hollow pith; buds small.

**Bark:** Long, shreddy peeling strips, light red-brown to straw-colored.

**Form:** A scrambling, twisting vine with no tendrils or aerial roots, forms dense thickets in bushes and trees and sprawls along the ground.



**Notes:**

**trumpet creeper** Bignoniaceae *Campsis radicans*

**Leaf:** Opposite, pinnately compound, 5 to 13 inches long, 7 to 11 coarsely serrated leaflets, individual leaflets 1 to 3 inches long, shiny dark green above.

**Flower:** Very pretty, 2 to 3 inch long tubular, orange to red flowers, in clusters, appearing in late summer.

**Fruit:** Dry pod 3 to 6 inches long, 1 inch wide, each containing large numbers of winged seeds, ripens in early fall.

**Twig:** Light brown, solid pith, glabrous, leaf scar sunken, small buds, aerial roots in rows.

**Bark:** Large vines will develop pale brown scaly bark.

**Form:** Scrambling, climbing vine that develops tangles along fencerows and shrubs. It can climb quite high.



**Notes:**