


Cercidiphyllum japonicum (CERCIDIPHYLLACEAE) Katsura tree


China, Japan

	Leaves	Flowers	Fruit	Other
	<p>Simple, on spurs Opposite on delicate-looking shoots Cordate or rounded 2-4 in. long Palmately veined Crenate-serrate margin Heart-shaped leaves</p>	<p>Dioecious Flws developing from spurs before the leaves No perianth 4 small bracts Males 15-20 stamen Females 4 (6) carpels w/red stigma</p>	<p>A small follicle, clustered in leaf axil. Oblong shaped, ~ ¾ inch long w/ small winged seeds.</p>	<p>Deciduous tree to 30 ft, fast growing and sensitive to drought Slender, divided near base into several upright branches Yellow or red fall color Bark deeply furrowed and peeling in long strips Distinctive smell (especially in autumn, a lot like cotton candy or brown sugar) 'Cercis' is another genus, 'phyllum' = leaf - means that the leaf looks like <i>Cercis</i> (Redbud – leaf arrangement is opposite, not alternate)</p>

Chaenomeles (ROSACEAE)

Japanese or flowering quince


China, Japan

	Leaves	Flowers	Fruit	Other
	<p>Alternate/clustered and simple Serrate margin Dark green Stipules large, rounded, and conspicuous on current season's growth</p>	<p>Stalkless umbels w/2-4 flowers or solitary. Perfect, Radial Pink, red or orange. Sepals 5, fused. Petals 5, waxy. Stamens many. Styles 5. Inferior ovary</p>	<p>Pome Yellowish to red Shaped like a pear Edible – unpleasant when raw (hard and astringent), much tastier after it has been “bled”</p>	<p>Trees to 45 ft or shrubs Deciduous Often has spines Smooth bark Flowers before leaves Good on slopes Chaeno=split, mele=apple - but fruit is not split Made into liquor and marmalade High in pectin and Vitamin C</p>

Nandina domestica (BERBERIDACEAE)

heavenly bamboo

India, China, Japan

	Leaves	Flowers	Fruit	Other
	Alternate Tri-pinnately compound Leaflets sessile Entire	Infl – divided upright panicles, up to 1 ft long 3-merous, white Anthers huge, yellow	Globose Bright red or white	Suckering shrub to 5 ft Stems glabrous Compact, cut-leaf, reddish cultivars available Nandina is a Latinized form of the Japanese name, domestica = domesticated NOT BAMBOO Naturalized in SE U.S.A. – commonly called Nandina Megalomania or Hitler Bamboo


Euonymus (CELASTRACEAE)

Asia


	Leaves	Flowers	Fruit	Other
	Usually opposite and simple Glabrous	In bunches in leaf axils. Perfect, small Green Sepals, none. Petals 4 – 5. Stamens 4-5, (sometimes no filaments). Carpels 3 w/1 style.	Red, spherical, 3-5 lobed or winged. Seeds covered in fleshy aril, red or orange.	Trees to 30 ft and shrubs, and some climbers. Evergreen or deciduous. Deciduous spp. have nice red fall color Branchlets often 4-angled Euonymus is the Greek name

Euonymus fortunei (CELASTRACEAE)


Cultivars of garden origin

	Leaves	Flowers	Fruit	Other
	Opposite Obtusely serrate ~ leathery Cuneate base Margins crenate/serrate Upper – distinct veins Lower – veins slightly raised	Infl – cyme w/few flws 4-merous Pale green	Globose 5-6 mm across	Evergreen Climber, often creeping on ground, will get woody Branchlets green, round in cross-section, warty Invasive to Eastern U.S.A.

Prunus serrulata ‘Sekiyama’ (ROSACEAE) Japanese flowering cherry Japan
 (FORMERLY *P. serrulata* ‘Kwanzan’ or ‘Kanzan’)

	Leaves	Flowers	Fruit	Other
	Alternate, Simple Obovate to obovate-elliptic Apex long acuminate Leaves up to 5-6 in. No hair on leaves Coarsely serrate or doubly serrate Pair of glands near top of petiole - large and noticeable Leaves have bronze tinge when new	Infl – Corymb (flat or round topped racemes) Usually double corymbs Fls. bell shaped calyx tube Pink Flowers double Flower appear as the leaves unfold Not fragrant	Purple-black drupe	Tree to 75 ft Deciduous Most common cv of <i>P. serrulata</i> Difficult to tell cultivars apart by leaves. Other <i>P. serrulata</i> cvs: cv. Shirotae – Mt. Fuji – horizontal branches, semi-double, white when open, early cv. Ukon – flws pale green, midseason serrulata=small saw, refers to leaf margin


Crataegus monogyna (ROSACEAE) common hawthorn Europe

	Leaves	Flowers	Fruit	Other
	Alternate Simple Ovate to diamond-shaped 3-7 lobed, w/veins extending to the points of lobes as well as sinuses Sinuses go most of the way to the midvein Stipules Good in salads	Infl – corymb Radial, perfect, white Sepals 5, fused at base. Petals 5. Stamens many, often with purple pollen. Carpels 1 Styles 1. Ovary inferior. Insect pollinated (bees).	Pome (also called a haw) w/ one hard-shelled seed, red Medicinally – used to treat heart and circulatory problems Other uses – wine, jelly, brandy. In China – dried fruits are sugared up and eaten as candy	Deciduous tree or shrub to about 30 ft, commonly used as a hedge plant A specimen in the UK is reported to be over 700 years old Branchlets ~ spiny Birds like fruit Kratos=strength, refers to hardness of wood Monogyna=one seed Folklore – in Serbia, deadly to vampires; in Gaelic is the symbol as the entrance to the otherworld and is associated with fairies. It is not to be cut down when flowering or you will be cursed

Sarcococca (BUXACEAE)

Sweet Box


Asia

	Leaves	Flowers	Fruit	Other
	Usually alternate and simple. Narrowly lanceolate with an acuminate apex. Margin entire. Glossy and leathery.	Monoecious. Short racemes in leaf axils. Small, white. Flower clusters can be either sex or mixed, with females below males. Male flowers: sepals 4, petals none, stamens 4. Female flowers: sepals 4-6, petals none, styles 2-3.	Drupe-like berry. Fleshy and subglobose. Red, purple or black. 1-3 seeds.	Small shrubs to 4 ft Evergreen. Some species may forms large patches by suckering. Small fragrantly scented flowers. Sarkos=greek for flesh, kokkos=a berry Refers to fleshy fruits Low Maintenance

Elaeagnus pungens (ELAEAGNACEAE)

Silverthorn


Japan

	Leaves	Flowers	Fruit	Other
	Alternate Short-petioled Elliptic oblong, 2-4 in long Strongly undulate margin Lower covered with silvery scales and dotted w/brown scales	Short-stalked Calyx 4 lobed Slender funnel shaped No corolla White Scaly Usually 3 flowers in leaf axils Fragrant, flowers in fall/winter	Drupelike ellipsoid, brownish-red, has scales	Shrub to 12 ft with arching branches Hummingbirds like flowers Evergreen Branchlets brown Some thorns/spines Brchlt covered by silvery or brown scales Pungens=sharp pointed

Cunninghamia lanceolata (CUPRESSACEAE, formerly TAXODIACEAE)

China fir


China, Taiwan, North Vietnam

	Leaves		Cones	Other
	<p>Spirally arranged 2-ranked Decurrent (base extending downward along branch) Linear-lanceolate, ~2" long Serrulate margin Sharply pointed 2 broad stomatal bands below May get a red-bronze color in harsh winters</p>	<p>Leaves are softly spined, leathery, stiff, green-blue green that spiral around stem in an upward arch.</p>	<p>Cones subglobose 1.5-2 in Pointed, irregularly serrate scales</p>	<p>Tree to 100 ft, Evergreen Often multi-trunked, drooping branches Bark brownish-reddish inner bark), scaling off in irregular plates 'Glauca' is a bluish cultivar Cunninghamia after James Cunningham, a doctor in China in the late 1600s Lanceolata=lance-shaped, refers to leaves Can sucker at the base Import timber tree in China – used for coffins and temples where scent is valued</p>

Araucaria araucana (ARAUCARIACEAE)

monkey puzzle tree


Chile, Argentina

	Leaves		Cones	Other
	<p>Spirally arranged Triangular, stiff, closely overlapping Spiny pointed Parallel veined Persist for ~10 years</p>		<p>Dioecious Male 3-5 in, oblong Female 4-7 in, globose, upright Deciduous Can have around 200 seeds per cone, edible (like pine-nuts) Can be an important crop, but will take 30-40 years to produce seeds but will live over 1,000 years</p>	<p>Tree to 130 ft. Branches symmetrically whorled Young tree covered by leaves Names refer to the indigenous people in the part of Chile in which it is native (national tree of Chile) Living fossil – spines evolved to protect cones from grazing dinosaurs</p>

Pinus coulteri (PINACEAE)

Coulter Pine/Big Cone Pine


California, Mexico

	Leaves		Cones	Other
	<p>Needles (linear leaves) Spirally arranged 3 per fascicle Very long (12 in) Dark bluish green</p>		<p>Woody cone Very large (14 in.) Cone very spiny Large seeds, rodent dispersed It is advised to wear hardhats when working under these trees</p>	<p>Tree to 75 ft Evergreen Bark dark brown to black, deeply fissured Soft and weak wood that has no real value as timber</p>

Sequoia sempervirens (CUPRESSACEAE)
formerly TAXODIACEAE

redwood


Coastal California and Oregon (Klamath Mntn)

	Leaves		Cones	Other
	<p>Mostly linear, alternate Have petiole 2-ranked (flat plane) Lvs shorter at base and tip of branchlet Some scale-like leaves Upper - dark green Lower – white stomatal bands and visible mid-rib</p>	<p>Can reproduce asexually:</p> <ul style="list-style-type: none"> • Layering – big tree falls and suckers grow from tree, this is why redwood forests are laid out in straight lines • Burls – lignotuber, growth at the base of tree can produce shoots <p>~50 albino redwoods exist (do not manufacture chlorophyll), they are only about 70 feet tall. Survive as parasites, grafting their root system to normal growing trees.</p>	<p>Woody female cone Ovoid ~ 1” long 15-20 thick wrinkled scales, peltate, spirally arranged Begin bearing fruit at 10-15 years, low viability (~15%), and very chaffy</p>	<p>Evergreen tree to 425 ft (taller than Sequoiadendron, but not as big around) Fast growing (65 feet in 20 years) and can live up to 2,200 years Bark thick, reddish-brown, fibrous, deeply furrowed Stump sprouts Sequoia was a Native American name for a Cherokee leader Found in valleys with much precipitation and fog High resistance to decay, used in all sorts of timber production Semper=always, virens-green</p>

Kerria japonica (ROSACEAE)

kerria

Asia

	Leaves	Flowers	Fruit	Other
	Alternate, Simple Ovate to narrowly ovate Toothed	Solitary Orange-yellow Sepals 5, joined at base Petals 5 to numerous Stamens many Styles 5-8	Achene, ovate-globose Green Surrounded by persistent sepals Usually 5 achenes/flower	Deciduous shrub to 10 ft Green twigs Small, narrow stipules 'Pleniflora' is double flowered form – most common form grown, can be more aggressive spreader than species Weak, arching stems

Abies (PINACEAE)


fir

	Leaves		Cones	Other
	Needle-like, flat, ¾ - 2" long, with white stomatal bands, usually on lower surface. Leaves have no petiole and are spirally arranged or 2-ranked.		Male cones small, densely clustered on shoots in axils. Often red, blue, purple. Wind pollinated. Female cones upright, deciduous, and large, up to 10 in. tall. Scales are rounded with pointed bracts that extend beyond the scale. Female cones green, sometimes purple. Seeds have wings.	Trees to 100 ft or more. Usually pyramidal in form. Evergreen. Young stems often have fragrant resin blisters. When leaves fall off there is a circular scar on branch (but no pegs as in <i>Picea</i>). "Sharp spruce, fine fir" Buds rounded, ~ covered with wax, resin or curved needles. Buds near ends of twigs often grow in clusters of 3 - "cruciform buds" - lead to very regular branching pattern

Abies lasiocarpa (PINACEAE)

subalpine fir


Western United States

	Leaves		Cones	Other
	<p>Needles (linear leaves) Leaves flat Radially spreading, turn up on twig – u-shaped Most needles under 1½” and tightly spaced on twig Lvs grayish or bluish green Lvs mostly straight Young twigs greenish Stomatal bands on both sides of lvs Circular scar when lvs fall</p>		<p>Woody cones Upright Deciduous Purple cone 2-4” long</p>	<p>Tree, Evergreen < 100’ tall, 2’ diameter Bark gray; smooth or ridged ‘Spire-like’ crown (very tall and thin) Grows at treeline (between 2700’ – 11,000’) Lasi=wooly, carpa=fruit Popular Christmas tree</p>

Calocedrus decurrens (CUPRESSACEAE)

incense-cedar


Oregon, California, Nevada, Utah

	Leaves		Cones	Other
	<p>Scale-like Whorled set of 4 lvs, much longer than wide Little or no white underneath Laterals almost covering facials</p>		<p>Cones oblong (duck’s bill when closed) 1 - 1.5 in long Scales 3-lobed and flat Scales not shield shaped Not very common here</p>	<p>Tree to 150 ft, evergreen Bark-flakey when young; reddish-brown and furrowed when mature Young trees growing in open have perfect pyramid shape Branchlets are horizontal and vertical - "fluffy" appearance Good ornamental or wind-break tree, fast growing, and drought tolerant Calo=beautiful, cedrus=cedar Decurrens = running down stem Primary wood for pencils b/c it is soft and sharpens easy without splintering</p>

Cupressus sempervirens (CUPRESSACEAE)

Italian cypress

Eastern Mediterranean

	Leaves		Cones	Other
	<p>Scale-like ~ 0.1-0.4 in long Not flattened</p>		<p>Woody cones Oblong (1 1/2" long) Grayish brown 4-6 paired scales Scales flattened</p>	<p>Tree to 75 ft., evergreen, can grow to be 1,000 years old Fastigate crown – narrow to very narrow and often < a tenth as wide as the tree is tall Bark thick and fibrous; furrowed with age, durable wood (used as the doors at St. Peter's Basilica in the Vatican), was also used in distilleries before stainless steel Some cv with lemon-scented leaves Not native to Italy Cupressus from the Latin name for the plants, semper=always, virens=green</p>