


Pinus mugo (PINACEAE)

Mugo or Swiss mountain pine


C. Europe (Pyrenees and Alps)

	Leaves		Cones	Other
	<p>Needles (linear leaves) 2 per fascicle, curved Crowded on branches 1-3 in long Medium to dark green Margins finely toothed Stomatal bands on both sides</p>		<p>Monoecious Cones upright, sessile or short-stalked Solitary or 2-4 together Ovoid, 1-3" long</p>	<p>Low, often prostrate shrub, broad spreading ~ tree to 40 ft. Branchlets brownish Bark brownish-gray, scaly Slow growing Used in rock gardens and borders</p>

Cordyline australis (LAXMANNIACEAE)


cabbage tree

New Zealand

	Leaves	Flowers	Fruit	Other
	<p>Sword shaped Very long (2-3 ft), narrow Leaves in tufts on ends of trunk</p>	<p>Small flowers on large, upright, branching inflorescence Sepals & petals similar, 6, fused at base White, waxy</p>	<p>Small, fleshy, white berries with multiple seeds Seeds edible and used to be a major source of carbohydrates to the Kiwis</p>	<p>Tree with single trunk to 30 ft Looks something like a palm tree with skinny leaves Also red cultivars, which may be less hardy Cordyline translates to "club-like" - refers to fleshy roots Branches can be stripped to make strong cordage, fibre, clothes, rope, footwear Susceptible to Sudden Decline</p>

Viburnum davidii (ADOXACEAE)


W. China

	Leaves	Flowers	Fruit	Other
	Opposite, Simple Elliptic to oval 2-6” long, 1-2½” wide Distinctly 3-nerved Secondary veins like ladder between primary veins Toothed towards apex Dark-bluish green above Paler below Leathery	Infl – Flat umbel-like, 2-3” wide No sterile outer flowers Radial (actinomorphic) Corolla - 5 lobed Stamens 5 White to pinkish	Drupe – blue	Small shrub to 3 ft Evergreen Warty branchlets

Liriodendron tulipifera (MAGNOLIACEAE)


tulip tree

E. North America

	Leaves	Flowers	Fruit	Other
	Alternate, simple, entire Palmately lobed, but with a broad truncate apex Note that fully formed leaves and nested within the buds, which additional leaves inside additional buds (like a set of Russian nesting dolls)	Fls bell-shaped or tulip shaped – Large & upright 1.5 – 2” long Sepals 3, greenish Petals 6, greenish with broad orange band at base Blooms usually high in tree Stamens, many, whorled with short stamens Styles 60-100	Cone-like fruit – aggregate of samaras, spirally arranged Seeds are wind dispersed, can travel 4-5 times the height of the tree, seeds are viable for 4-7 years	Tree to 150 ft. Very straight trunk & fast growing (important timber tree in the SE US), short life span Branches thin and come from the trunk (excurrent growth habit) Deciduous, good yellow fall color "leirion" means lily, dendron means tree, "tulipifera" means tulip bearing State Tree of IN, TN, and KY

Cephalotaxus drupacea (CEPHALOTAXACEAE) Japanese plum-yew


Japan, C. and W. China

	Leaves		Cone	Other
	<p>Linear, flat 2-ranked on horizontal branches Spirally arranged on erect stem and branches 1-1.5” long Abruptly pointed Dark green above 2 grayish bands below Lvs form distinct V-shaped trough</p>		<p>Dioecious, can change sexes Male cones in clusters of small rounded heads enclosed in bract on previous seasons growth on underside of branches in axils (Compare <i>Cunninghamia lanceolata</i> with male cones at ends of shoots) Female cones drupe-like, fleshy aril, about 1.5 in long on long peduncle on underside of stem Olive to red-brown when mature in the fall (Compare <i>Cunninghamia lanceolata</i> where female cones like artichoke at ends of shoots)</p>	<p>Small tree to 40 ft., slow growing Evergreen Gray-brown to red-brown bark, fissured and peeling "Cephalo" means head, "taxus" refers to the similarity to <i>Taxus</i>, "drupacea" refers to the drupe-like fruit</p>

Cryptomeria japonica (CUPRESSACEAE)

Japanese cedar

Japan

	Leaves		Cones	Other
	<p>Lvs spirally arranged in 5 ranks Awl shaped, 4 angled ¼-¾” long, curving inward Decurrent Slightly flattened laterally Stomatal bands on both sides Entire margins Apex blunt pointed Shiny dark green, stiff and spreading</p>	<p>Similar to <i>Sequoia giganteum</i> but <i>C. japonica</i> has longer leaves, smaller cones, and harder bark.</p>	<p>Monoecious Male cones catkin-like, axillary, sessile, oblong, many stamens, near tips of hanging twigs Female cones w/20-30 scales terminal on short scaly branches</p>	<p>Evergreen tree to 230 ft. Fast growing ~ buttressed roots Bark reddish-brown and stringy "crypto" means hidden, "meria" - a part - all reproductive parts are concealed. 'Elegans' is a cultivar with soft juvenile foliage, turns bronze when cold Common cause of hay fever National Tree of Japan</p>

Fagus (FAGACEAE)


beech

	Leaves	Flowers	Fruit	Other
	Alternate, simple Pinnately veined Dentate or ~ entire sometimes white silky hairs	Monoecious Male flowers, many in hanging short catkins in leaf axils 4-7 sepals, no petals Stamens 8-16 Females, short-stalked ~ paired 3 styles	Nuts ovoid, enveloped by a 4-lobed spiny or scaly involucre (whorl of bracts below a flower) (husk) 2-3 seeds w/3 sides Only one fertile	Deciduous tree up to 120 ft. Smooth gray bark Twigs with long pointed buds Wind pollinated Grow huge, but good shade tress

Fagus sylvatica (FAGACEAE)


European or common beech

C. Europe to Caucasus

	Leaves	Flowers	Fruit	Other
	alternate, simple Ovate 2-4" long, 1 1/2 - 2 1/2" wide Broadly cuneate at base ~ dentate (ciliate when young) to entire 5-9 pairs of veins Undulating	Monoecious Male flowers in short, erect catkins Female flowers in 2-4 flwd spikes Surrounded by soft-spiny involucre Will flower when 30-80 years old	Nuts triangular-shaped in 1" long hard woody 4-lobed husk	Tree to 100 ft. Smooth, gray bark "elephant hide" look to older trees Branches to the ground Lvs russet & golden-bronze in fall Lvs emerge late in spring (May) Strong mychorrizal assoc

Fagus sylvatica 'Atropunicea' (FAGACEAE)


Garden origin

	Leaves	Flowers	Fruit	Other
	Young lvs deep black-red, changing to purple-green when older			Same as above, only leaves are purple

Prunus lusitanica (ROSACEAE)


Portugese laurel

S. W. Europe

	Leaves	Flowers	Fruit	Other
	Alternate, Simple Lvs oblong-ovate 2½-5” long, 1¼-2” wide Acuminate tip Rounded base Shallowly serrate (compare w/serrate on upper portion in <i>P. laurocerasus</i>). Dark shiny green above Paler under Petioles ¾-1” long	Infl – slender raceme 6-10” long, 1-1 ¼” wide Fls white, ~ 1 in across Calyx tube cup-shaped	Fruits conical, dark purple drupe	Evergreen shrub to small tree (45 ft) Petioles and young stems red Invasive in WA Common hedge plant

Chamaecyparis pisifera 'Filifera' (CUPRESSACEAE)


Garden origin

	Leaves		Cones	Other
	Tip of leaves blunt Drooping branches with branchlets very thin and stringy at the ends		Round cone	Evergreen tree to ~ 8 ft Bark reddish and peeling "pisifera" means pea-bearing, refers to the small <i>Chamaecyparis</i> cones, "filifera" means thread-bearing - refers to the filament-like branchlets

Picea polita (PINACEAE)

Tiger Tail Spruce


Japan

	Leaves		Cones	Other
	<p>Stiff lustrous green leaves bear a sharp point at their tips Pumpkin colored newer branches Leaves stiff, hard, linear, quadrangular, ridged, 15-20 mm long, ca. 2.5 mm across, sharp-pointed, deep green, with a stomatal band on each side</p>	<p>Monoecious Male cones red & resembling strawberries when young</p>	<p>Cones cylindrical, purplish</p>	<p>Evergreen tree to 100 ft. Grayish-brown bark & deeply fissured often peeling off Horizontal branches often pendulous Found on volcanic soils</p>

Picea orientalis (PINACEAE)

Oriental spruce

Caucasus, N. E. Turkey

	Leaves		Cones	Other
	<p>Leaves stout, straight Leaves shortest of the Picea genus (1/4 – 1/2" long) Lustrous dark green Crowded and flattened toward branchlets Peg-like stalks on branchlets Blunt or rounded apex - so not as sharp as most Piceas</p>	<p>Monoecious Male cones red & resembling strawberries when young</p>	<p>Cones cylindrical, pendulous 3-4" long Violet before mature Scales rounded and entire Thin "papery" scales</p>	<p>Evergreen tree to 150 ft. Bark brown & scaly Horizontal branches often pendulous</p>