


Landscape Plant Recognition

Plant Descriptions – Field Day #8

Ginkgo biloba (GINKGOACEAE)

ginkgo


S. China

	Leaves		Cones	Other
	<p>Alternate (~ clusters of 3-5 on spurs) Fan shaped w/parallel veins Incised (bifid lobes – “biloba”) Bright yellow in fall Maidenhair fern has a similar leaf shape</p>	<p>Gynosperm – seeds are not protected by an ovary wall</p>	<p>Dioecious Male – catkin-like Female cone – small, stalked seed with fleshy aril – looks like silver plum Smelly pulp – high in butanic acid, smells like rancid butter Edible</p>	<p>Deciduous tree to 130 ft., can live 2500 years (slow to evolve, only 2 species have ever been known Mainly use for specimen/focal points. Certain varieties being used as street trees; pollution tolerant, insect resistant, disease resistant, can form aerial roots in old specimens. Tenacious plant – 4 trees survived the Hiroshima Bomb in 1945 and still live to this day Popular in bonsai.</p>

Acer circinatum (ACERACEAE)

vine maple

North America

	Leaves	Flowers	Fruit	Other
	<p>Opposite, Simple Palmately lobed (7-11 lobes) Lobes not deep, pointed Sinues v shaped Lobes irregular Doubly Serrate</p>	<p>Sometimes monoecious or dioecious Infl – Coymb w/6-20 flws Sepals, petals 5 Stamens 2 Styles 2</p>	<p>Schizocarp (double Samara) Angle almost 180° – 2 samara connected to form almost straight line No hairs (compare <i>A. macrophyllum</i> w/hairs & 90 angle)</p>	<p>Shrub/ small tree to 30 ft Slender branches "circinatum" means coiled Grows in an arching form</p>


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Arbutus menziesii (ERICACEAE)


Pacific madrona

British Columbia to California

	Leaves	Flowers	Fruit	Other
	<p>Alternate, Simple Elliptic ~6” long, 3” wide Young – serrate Old – entire Upper – dark green Lower – whitish No hairs</p>	<p>Infl- upright panicles, < 4” long Corolla white urn shaped Calyx 5-lobed Stamens 10</p>	<p>Berry-like drupe, warty red (purple-blue when overripe) smaller than <i>A. unedo</i> Native Americans chewed berries and made into cider Important to wildlife</p>	<p>Evergreen tree to 60 ft Bark reddish brown & peeling (cool to the touch) Archibald Menzies – Scottish surgeon/naturalist who accompanied Vancouver on his voyage through the PNW Drought tolerant and fast growing Difficult to transplant Southern distribution is in jeopardy due lack of fires Susceptible to many diseases</p>

Zelkova serrata (ULMACEAE)


Japan, Taiwan, S. Korea

	Leaves	Flowers	Fruit	Other
	<p>Alternate, Simple Oblong-ovate 2-5” long ¾ - 2” wide Leaves coarsely serrate (margins of teeth outcurved) 8-14 vein pairs - pinnate Acuminate tip Great autumn color</p>	<p>Monecious Small, inconspicuous flowers, no petals - calyx fused Females axillary and solitary, 1 carpel Males in bunches at base of twig w/ stamens 4-5 Wind pollinated.</p>	<p>Kidney shaped drupe, green, with no stalk and a rigid surface.</p>	<p>Tree to 90 ft. can live upto 1000 years Deciduous Smooth (sometimes flakey) bark Flowers just as leaves start to come out. Ascending branches – Japanese character for <i>Zelkova</i> translates to “big tree that grows like a raised hand” Popular in bonsai</p>


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Juniperus (CUPRESSACEAE) juniper Northern Hemisphere southward to tropical Africa

	Leaves		Cones	Other
	Needle-like, whorled and spreading or scale-like in 4 ranks. Sometimes both leaf types on same plant.	Medicinally – Native Americans used to treat urinary tract infections and as a female contraceptive. Added to <i>Berberis</i> bark to treat diabetes (triggers insulin production and stabilizes blood sugar level)	Diocious. Males small, catkin-like. Wind pollinated. Female cones 3-8 scaled, that fuse and become round and fleshy (berry-like) when ripe – covered with wax. Purple/blue or black or occasionally red. Usually less than 1/2" across. 1-3 seeds per scale. Bird dispersed seeds.	Trees to up to 90 ft (usually smaller) or prostrate shrubs. Evergreen. Cones are used to flavor gin and smell like gin when crushed Prehistoric people are thought to have lived in <i>Juniper</i> forest, could provide food, fuel, shelter, tools Popular in bonsai.

Cornus florida (CORNACEAE) flowering dogwood E. North America

	Leaves	Flowers	Fruit	Other
	Opposite, simple Oval to ovate 3-6" long, 1 1/2-3" wide Abruptly acuminate tip Base broadly cuneate Usually pubescent on the veins Dark green above (lighter than <i>C. kousa</i>) 6-7 vein pairs - arcuate Petiole 1/4- 3/4" long	4 bracts, white, obovate, 2" long, often indented at tips Bracts greenish yellow for species, 1/2- 3/4" wide. Most common pink form var. rubra, many pink cvs Persistent calyx	Formed in dense clusters of "football" shaped drupe, glossy red Used to sweeten tea in Mexico	Up to 30+ ft & wide spread, usually somewhat gnarled Deciduous Bark broken with small squares & rectangles, gray to blackish ("alligator back pattern") Fall color reddish-purple Likes shadier spots Anthracnose is killing many city dogwoods


Staphylea pinnata (STAPHYLEACEAE) European bladdernut Eurasia

	Leaves	Flowers	Fruit	Other
	Opposite Pinnately compound (3) 5-7 leaflets Serrate margins & acuminate tips	Infl – drooping panicles, 2-5" long Perfect, 5-merous Styles 2-3 Petals form tube but are separate, not fused White w/greenish bases	Inflated capsules, 2-3 lobed Bladder-like Seed edible – tastes like a pistachio	Spreading small tree or shrub Deciduous Not common here but worth growing if there is room

Abies grandis (PINACEAE)

grand fir

Western N. America

	Leaves		Cones	Other
	<p>Needles flat, ¾ - 1 inch long (~ up to 2 inches). Needles are of different lengths. Needles on branches are in two-ranked (rather than curving upwards like <i>A. lasiocarpa</i>). Leaves are medium dark-green above and white below</p>		<p>Female cones upright, deciduous, 3-4 inches tall.</p>	<p>Evergreen tree, tall and thin, over 200 ft. Very regular branching pattern results from “cruciform” buds Gray bark Popular Christmas tree Soft wood – paper and cheap construction materials</p>

SALICACEAE

	Leaves	Flowers	Fruit	Other
	<p>Alternate, simple Often long petioles</p>	<p>Dioecious - Separate catkins Catkins silky or hairy No perianth (sepals or petals) Ovary superior Carpels 2-4 fused, many ovules Wind-pollinated</p>	<p>Small capsular seeds, clumped together</p>	<p>Trees or shrubs Often suckering</p>

Populus (SALICACEAE)


poplar, aspen, cottonwood

	Leaves	Flowers	Fruit	Other
	<p>Alternate and simple with long petioles. Often heart or triangular shaped - broad (rarely linear). Often whitish on lower surface. Some species have petioles that are flattened on the sides.</p>	<p>Dioecious. Hanging catkins of male or female flowers. Male flowers: thin, toothed or fringed scale and many stamens with red tips. Female flowers in small cups, Style 1 with 2-4 stigmas. Wind pollinated.</p>	<p>Capsules. Flask shaped and small. Seeds have cotton-like hairs to add in dispersal. Wind dispersed seeds.</p>	<p>Trees to 160 ft and shrubs. Deciduous. Very fast growing in wetlands or riparian areas. Frequently forms suckers. Flowers before leaves. Used to make snowboards (flexible) Mona Lisa is painted on <i>Poplar</i> Used in biofuels</p>

Populus balsamifera ssp. *trichocarpa* (SALICACEAE)


black cottonwood

W. North America

	Leaves	Flowers	Fruit	Other
	<p>Alternate, Simple Broadly ovate (highly variable) (young different than adult) Lvs paler below (but see Other) Round petioles (genera trait is flat petioles)</p>		<p>Pubescent capsule – seeds released in spring and may look like snow in spring</p>	<p>Tree to 90 ft, live up to 200 years Deciduous Branchlets angled, ~ brown pubescent Leaves have reddish resinous buds with a strong cinnamon scent – when leaves push through they pick up some of the resin and the leaf underside may appear to have orange blotches, esp. in spring and early summer Used in book and magazine paper Can be used as a windbreak Invasive roots can damage foundations or pipes Only tree specie to be fully sequenced, model specie:</p> <ul style="list-style-type: none"> • Rapid growth • 4-6 years to mature • Economic value • Diverse genus

Taxus (TAXACEAE)


yew

	Leaves		Cones	Other
	<p>Alternate. Linear and flat. Decurrent (leaf base extends down the stem). ~ 0.1" wide. Dark green on the upper surface and 2 broad pale yellowish bands on the lower surface. 2-ranked, uneven.</p>	<p>Symbol of sadness, common in graveyards Medicinally used as a chemotherapeutic drug in breast and lung cancer</p>	<p>Dioecious. Male cones small, globular and yellow, solitary in leaf axil. Wind pollinated. Female flowers are small and green, near shoot tips, with a single seed (poisonous) w/ fleshy red aril (edible, modified scale).</p>	<p>Trees to 85 ft. Twigs stay green for two or more years Bark reddish to reddish brown, often scaly. Wide-spreading, springy branches. <i>Taxus baccata</i> (English yew) most common in horticulture <i>Taxus brevifolia</i> (Pacific yew) is native here, used to make bows</p>

Larix (PINACEAE)

larch


Northern Hemisphere

	Leaves		Cones	Other
	<p>Needle-like leaves, Deciduous. 1-2” long in dense shoot shoots. White stomatal bands on lower surface.</p>	<p>Used as a running gag in Monty Python’s “How to Recognize Different Types of Trees from Quite a Long Way Away”</p>	<p>Monoecious. Male cones small, oblong, solitary and terminal and often yellow, with many spirally arranged anthers. Stalked or sessile. Female cones subglobose, solitary and terminal, w/wounded scales. Scales persistent. New cones are often red (or green). Wind pollinated.</p>	<p>Trees to 210 ft. Pyramidal form when young. Bark often scaly. Good fall color of yellow to orange. Short shoots resemble Cedrus but is deciduous, so leaves are soft Wood used in boats due to its waterproofness Young larch branches can be used in salads Popular in bonsai</p>

Pseudolarix amabilis (PINACEAE)

golden larch

S. and E. China

	Leaves		Cones	Other
	<p>Linear, 1-2 in long, wide & flattened (much wider than Larix) Bright green Spirally arranged and scattered on the long shoots Fascicled on the lateral spurs ~ along one plane</p>	<p>More related to Abies and Cedrus than Larix</p>	<p>Monoecious Male cones cactin-like, long at end of spurs Female cones ovoid, reddish-brown, leathery, deciduous Upright & open (looks like artichoke with pointy scales) Scales cordate at base Have not seen fruits here</p>	<p>Deciduous trees to 120 ft Horizontally whorled branches Bark reddish brown Lvs bright yellow in fall Only one species in the genus Prefers areas of warm, wet summers Popular in Chinese herbology</p>


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Chamaecyparis obtusa (CUPRESSACEAE)

Hinoki false cypress


Japan

	Leaves		Cones	Other
	<p>Scales closely appressed, of 2 sizes Lateral pair much larger 1/12" long Blunt at apex White Y markings below</p>		<p>Monoecious Males yellow Females solitary Short stalked, globose cones 1/3 – 3/8" across 8 (10) scales</p>	<p>Ultimately 50-75' tall, 10-20' spread, but usually smaller forms here, slow growing Bark reddish brown, shedding in strips Branchlets are rounded at the end (obtuse) instead of coming to a point as in Thuja or Chamaecyparis High quality, lemon-scented timber (temples, palaces, shrines) Major cause of hay fever Popular in bonsai</p>

Berberis julianae (BERBERIDACEAE)

winter-green barberry

China

	Leaves	Flowers	Fruit	Other
	<p>Alternate (looks whorled) Simple, margin spiny Lanceolate to oblanceolate 2-3" long, 1/3 – 3/4" wide 3 spines (less than 1 in long) Dark green above Pale & indistinctly veined below ~ 5 leaves at lobe</p>	<p>Flws fascicled 3 parted Yellow</p>	<p>Bluish black drupe</p>	<p>Evergreen shrub to 6 ft. Branchlets slightly grooved and angled and yellowish when young</p>