**Quercus acutissima**

Sawtooth Oak  
Fagaceae

**BEST ID:**  Long narrow leaf and acorn with a frilly cap

**LEAF:**  Alternate, simple, 3-7” long, 1-2” wide, oblong, serrate with bristle-like teeth

**PROBLEMS:**  None serious

**SOIL PREFERENCE:**  Well-drained; adapted to most soil conditions

**NOTES:**  May be chlorotic at high pH.

**NATIVE HABITAT:**  China

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<td>80</td>
<td>5</td>
<td>A</td>
<td>M</td>
<td>F</td>
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</table>
**Quercus macrocarpa**

**Bur Oak**  
**Fagaceae**

**BEST ID:**  
Acorn very large and with frills at edge of cap

**LEAF:**  
Alternate, simple, 4-10” long, 2-5” wide

**PROBLEMS:**  
Anthracnose, bacterial leaf scorch, cankers, powdery mildew, twig blights, various galls, scales, oakleaf caterpillar, oak skeletonizer, two-lined chestnut borer, oak lace bug

**SOIL PREFERENCE:**  
Adapted to most soil conditions

**NOTES:**  

**NATIVE HABITAT:**  
US

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<td>80</td>
<td>3</td>
<td>A</td>
<td>M</td>
<td>F</td>
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</tbody>
</table>
**Quercus nigra**

Water Oak  
Fagaceae

**BEST ID:** Two different leaf forms on the same tree

**LEAF:** Alternate, simple, size and shape may vary, 2-4” long, 1/2-2” wide

**PROBLEMS:** Trunk rot, borers, leaf blister

**SOIL PREFERENCE:** Adapted to most soil conditions

**NOTES:** Weaker-wooded than most oaks; iron chlorosis at high pH

**NATIVE HABITAT:** N. America

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<td>6</td>
<td>A</td>
<td>W</td>
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</table>
**Quercus palustris**

*Pin Oak*  
**Fagaceae**

**BEST ID:** Bottom branches descending, middle branches horizontal, upper branches upright

**LEAF:** Alternate, simple, 3-6” long, 5-7 lobes, often chlorotic on high pH soils

**PROBLEMS:** Galls

**SOIL PREFERENCE:** Well-drained, rich

**NOTES:** Iron chlorosis at high pH; tolerates wet soil; fast growth rate

**NATIVE HABITAT:** N. America

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</table>
Quercus robur

English Oak  Fagaceae

BEST ID:  Auriculate leaf base; acorn, 1” long and pedunculate, narrow

LEAF:  Alternate, simple, 2-5” long, obovate to obovate-oblong

PROBLEMS:  Powdery mildew, oak wilt, anthracnose, cankers, mites

SOIL PREFERENCE:  Well-drained

NOTES:  pH tolerant; brown leaves hang on for much of the winter

NATIVE HABITAT:  Europe

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<td>80</td>
<td>4</td>
<td>A</td>
<td>M</td>
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</table>
Quercus rubra

Northern Red Oak  Fagaceae

BEST ID: Large acorn with flat, imbricate, cap like a French beret.

LEAF: Alternate, simple, oval or obovate, 4-9” long, 3-6” wide, 7-11 lobes

PROBLEMS: Oak wilt, bacterial leaf scorch

SOIL PREFERENCE: Well-drained, sandy loam

NOTES: Chlorotic in high pH soils

NATIVE HABITAT: E US

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<td>80</td>
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</table>
Quercus virginiana

Live Oak

Fagaceae

BEST ID: Acorns long stalked; dark bark resembling an alligator’s hide

LEAF: Simple, alternate, evergreen, elliptic-obovate, 1-5” long, 1” wide, entire or spiny

PROBLEMS: Bacterial leaf scorch, oak wilt, galls, root rot in coastal areas

SOIL PREFERENCE: Adapted to most soil conditions

NOTES: Tolerant of compaction and salt spray

NATIVE HABITAT: N. America

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<td>80</td>
<td>7</td>
<td>A</td>
<td>M</td>
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</table>
**Rhododendron catawbiense**

Catawba Rhododendron | Ericaceae

**BEST ID:**

**LEAF:** Simple, alternate, evergreen, 3-6” long, 1-2” wide, elliptic to oblong

**PROBLEMS:** Botryosphaeria canker, leaf spot, crown rot, dieback, azalea petal blight, leaf scorch, lacebug, powdery mildew, rust, root rot, rhododendron aphid, Japanese beetle, azalea stem borer, asiatic garden beetle

**SOIL PREFERENCE:** Well-drained

**NOTES:** Chlorosis in high pH

**NATIVE HABITAT:** China

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<td>4</td>
<td>A</td>
<td>M</td>
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**Rosa sp.**

**Rose**

**Rosaceae**

**BEST ID:** Shrub with compound leaves and many thorns.

**LEAF:** Alternate, pinnately compound, 5-13 leaflets, elliptic to obovate-oblong, each leaflet 1-2” long

**PROBLEMS:** Thrips, Japanese beetle, aphid, scale, mites, leafhopper, canker, rust, black spot, powdery mildew

**SOIL PREFERENCE:** Well-drained; adapted to most soil conditions

**NOTES:** Over 200 new cultivars introduced every year

**NATIVE HABITAT:** N. America

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<tr>
<td>5</td>
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<td>10</td>
<td>4</td>
<td>N</td>
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</table>
Salix x sepulcralis var. chrysocoma
Weeping Willow

Salicaceae

**BEST ID:** Long, pendulous yellow stems

**LEAF:** Alternate, simple, lanceolate, 1-4” long, 1/4-5/8” wide, serrate

**PROBLEMS:** Cankers, leaf spots, leaf blight, bacterial twig blight, crown gall, anthracnose, rust, tar spot, nematodes, aphids, willow leaf beetle, willow scurfy scale

**SOIL PREFERENCE:** Adapted to many soil conditions except chalky; often found around water

**NOTES:** pH adaptable; fast growing, weak wooded

**NATIVE HABITAT:** S Europe, C Asia, and W Siberia

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<tr>
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<td>75</td>
<td>2</td>
<td>N</td>
<td>W</td>
<td>F</td>
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</table>
**Taxodium distichum**

Bald Cypress  

Cupressaceae

**BEST ID:** Pistillate cones subglobose, like little green soccer balls

**LEAF:** Deciduous, flattened, needle-like, 1/3-3/4” long, arranged in two rows on branchlets

**PROBLEMS:** Twig blight, wood decay, canker, cypress moth, spider mites but usually problem free

**SOIL PREFERENCE:** Well-drained, deep, sandy loam

**NOTES:** May be chlorotic at high pH. Excellent drought and flood tolerant tree.

**NATIVE HABITAT:** N. America

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<tr>
<td>9</td>
<td>Conical</td>
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<td>120</td>
<td>4</td>
<td>A</td>
<td>M</td>
<td>F</td>
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</tbody>
</table>
**Taxus cuspidata**

Japanese Yew

**BEST ID:** Lanceolate leaves with wide bands on back

**LEAF:** Two-ranked, upright and irregularly V-shaped, straight or slightly curved, 3/4” long, apex sharp-pointed, yellowish-green bands beneath

**PROBLEMS:** None serious

**SOIL PREFERENCE:** Well-drained; sandy loam

**NOTES:** Poisonous to livestock; does not do well in the south

**NATIVE HABITAT:** Japan

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<tr>
<td>11</td>
<td>Upright</td>
<td>40</td>
<td>50</td>
<td>5</td>
<td>N</td>
<td>M</td>
<td>P</td>
</tr>
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</table>
Tilia cordata

Littleleaf Linden  Tiliaceae

**BEST ID:** Fruit a globose nutlet hanging from a leaf-like bract

**LEAF:** Alternate, simple, cordate, 1 1/2-4” long, serrate

**PROBLEMS:** Aphids, Japanese beetle, anthracnose, leaf blight, leaf spot, canker, powdery mildew, caterpillars, thrips, galls, scale, European linden bark borer, lace bug

**SOIL PREFERENCE:** Well-drained; adapted to most soil conditions

**NOTES:** Can withstand high pH; good street tree

**NATIVE HABITAT:** Europe

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<tr>
<td></td>
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<td>90</td>
<td>3</td>
<td>N</td>
<td>M</td>
<td>F</td>
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</table>
**Ulmus americana**

American Elm  
Ulmaceae

**BEST ID:** Leaf, one of the largest of all the elms, unequal at the base, doubly serrate

**LEAF:** Alternate, simple, ovate-oblong, 3-6” long, 1-3” wide, unequal at base, doubly serrate

**PROBLEMS:** Dutch elm disease, cankers, phloem necrosis, bark beetle, elm borer, yellows, leaf miner, leaf beetle, gypsy moth

**SOIL PREFERENCE:** Rich, fertile, well-drained

**NOTES:** Tolerant of a wide range of soil conditions, pH tolerant

**NATIVE HABITAT:** N. America

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<tr>
<td>3</td>
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<td>120</td>
<td>3</td>
<td>N</td>
<td>M</td>
<td>F</td>
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**Ulmus parvifolia**

Lacebark Elm  

**BEST ID:** Unequal leaf base, much smaller than American elm leaf, serrate. Samara formed in the fall.

**LEAF:** Alternate, simple, 3/4-2 1/2” long, unequal at base, serrate

**PROBLEMS:** None serious

**SOIL PREFERENCE:** Well-drained, fertile; adapted to most soil conditions

**NOTES:** Resistant to Dutch elm disease and elm leaf beetle; medium to fast growth rate; pH adaptable; good choice for urban areas

**NATIVE HABITAT:** China

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<tr>
<td>3</td>
<td>Globose</td>
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<td>70</td>
<td>4</td>
<td>N</td>
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<td>F</td>
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**Vinca minor**

Common Periwinkle  Apocynaceae

**BEST ID:** Elliptic, opposite, simple leaves exude a milky substance when broken; 1” wide lilac blue flower

**LEAF:** Simple, opposite, elliptic or elliptic-ovate, 1/2-1 1/2” long, 1/2-3/4” wide

**PROBLEMS:** Canker, blight, leaf spot, stem lesions, cucumber mosaic virus, root rot

**SOIL PREFERENCE:** Well-drained

**NOTES:** Prostate, low-growing evergreen

**NATIVE HABITAT:** Europe

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Yucca filamentosa
Adam's Needle Yucca Agavaceae

BEST ID: Filaments along the lanceolate leaves

LEAF: Sword-like, 1-3’ long with thread-like filaments along margins, narrow at apex where margins are usually infolded

PROBLEMS: None serious

SOIL PREFERENCE: Adapted to most soil conditions

NOTES:

NATIVE HABITAT: N. America

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<td>4</td>
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