

A key to some trees and shrubs of the Radford University Campus

- | | |
|---|---|
| <p>1. Leaves broad and flat (11)</p> <p>1. Leaves needle-like or awl-like (2)</p> <p>2. Leaves long and narrow, like a needle (3)</p> <p>2. Leaves pressed against stem and not easily differentiated from stem (10)</p> <p>3. Needles, in clusters of 2-5, attached to each other at their base (4)</p> <p>3. Needles not in clusters (6)</p> <p>4. Clusters contain five needles <i>Pinus strobus</i></p> <p>4. Clusters contain two needles (5)</p> <p>5. Trees ; needles longer than 8 cm <i>Pinus resinosa</i></p> <p>5. Low Shrubs; needles 5 cm or less <i>Pinus mugo</i></p> <p>6. Cross section of needle flat (7)</p> <p>6. Cross section of needles angular or round (9)</p> <p>7. Two yellow lines on bottom of needles; seeds surrounded by a fleshy red aril . . . <i>Taxus</i> sp.</p> <p>7. Two white lines on bottom of needles; seeds borne in cones (8)</p> <p>8. Cones 5 cm long; needles 2 cm long <i>Pseudotsuga mentziesii</i></p> <p>8. Cones 1.5 cm long; needles 1 cm long <i>Tsuga canadensis</i></p> <p>9. Scales falling off mature cones; cones upright on branches <i>Cedrus deodara</i></p> <p>9. Scales attached to mature cones, cones hanging from branches <i>Picea</i> sp.</p> <p>10. Foliage sharp and prickly <i>Juniperus</i> sp.</p> <p>10. Foliage not sharp and prickly; branches flattened <i>Thuja occidentalis</i></p> <p>11. Leaves relatively hard and tough, evergreen in winter (12)</p> <p>11. Leaves not relatively hard and tough (14)</p> <p>12. Plants not prickly; Margin of leaves entire; leaves longer than 15 cm <i>Magnolia grandiflora</i></p> <p>12. Plants prickly; Margin of leaves lobed or serrated; leaves less than 10 cm (13)</p> <p>13. Thorns on stems; leaves serrated . . . <i>Pyracantha</i> sp.</p> <p>13. Thorns not present on stems; leaves lobed with spiny margins. . . <i>Ilex</i> sp.</p> <p>14. Leaves compound (15)</p> <p>14. Leaves simple (18)</p> <p>15. Leaves palmately compound <i>Aesculus</i> sp.</p> <p>15. Leaves pinnately compound (16)</p> <p>16. Leaves opposite <i>Fraxinus</i> sp.</p> <p>16. Leaves alternate (17)</p> <p>17. 5-7 leaflets per leaf <i>Cladrastis kentuckea</i></p> <p>17. Dozens of leaflets per leaf <i>Sorbus americana</i></p> | <p>18. Leaves opposite (19)</p> <p>18. Leaves alternate (23)</p> <p>19. Leaves entire (20)</p> <p>19. Leaves palmately lobed (21)</p> <p>20. Leaves taper gradually to a long, narrow point; Fruits fused into a sphere <i>Cornus kousa</i></p> <p>20. Leaf tip not tapered to a long, narrow point; Fruits clustered but spreading . . <i>Cornus florida</i></p> <p>21. Lobes numerous and narrow <i>Acer palmatum</i></p> <p>21. Lobes 3 to 5, about as broad as long (22)</p> <p>22. Indentations between lobes angular . . <i>Acer rubrum</i></p> <p>22. Indentations between lobes rounded. . . <i>Acer saccharum</i></p> <p>23. Leaves wedge-shaped to semi-circular with a notch in the end of the leaf . . . <i>Gingko biloba</i></p> <p>23. Leaves not as above (24)</p> <p>24. Margins entire (25)</p> <p>24. Margins lobed or serrated, not entire (27)</p> <p>25. Leaves distinctly heart-shaped . . . <i>Cercis canadensis</i></p> <p>25. Leaves not heart shaped (26)</p> <p>26. Leaves more than 10 cm long . . <i>Maclura pomifera</i></p> <p>26. Leaves less than 10 cm long . . . <i>Quercus phellos</i></p> <p>27. Leaves lobed (28)</p> <p>27. Leaves not lobed (32)</p> <p>28. Leaves palmately lobed (29)</p> <p>28. Leaves pinnately lobed (30)</p> <p>29. Leaf margins with many teeth . . <i>Platanus occidentalis</i></p> <p>29. Leaf margins untoothed <i>Liriodendron tulipifera</i></p> <p>30. Lobes rounded at tips <i>Quercus alba</i></p> <p>30. Lobes pointed at tips (31)</p> <p>31. Indentations between lobes deep, i.e. 2/3 of the way to midvein <i>Quercus palustris</i></p> <p>31. Indentations between lobes shallow, i.e. about 1/3 of the way to midvein . . . <i>Quercus rubra</i></p> <p>32. Base of leaf, next to petiole, uneven on some leaves; leaves mostly longer than 15 cm . . . <i>Tilia heterophylla</i></p> <p>32. Base of leaves even; leaves less than 15 cm long (33)</p> <p>33. Leaves mostly 10 cm or more long, with a jagged toothed margin . . . <i>Crataegus</i> sp.</p> <p>33. Leaves mostly 7 cm or less long, with a finely toothed margin (34)</p> <p>34. Upper leaf surface waxy, shiny . . . <i>Pyrus calleryana</i></p> <p>34. Upper leaf surface not shiny (35)</p> <p>35. Leaves purple <i>Prunus cerasifera</i></p> <p>35. Leaves green <i>Malus</i> sp.</p> |
|---|---|

Illustrated Glossary of Terms Used in Dichotomous Key

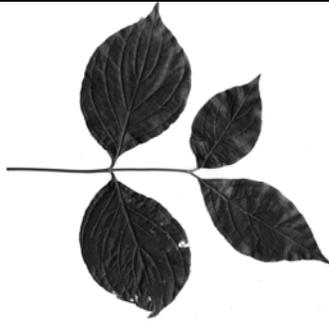


Figure 1 : Opposite leaves
Two leaves are attached at one node
(Flowering Dogwood, *Cornus florida*)



Figure 2 : Alternate leaves,
Only one leaf is attached at each node
(Wild Black Cherry, *Prunus serotina*)



Figure 3 : Palmately compound leaf,
Each of the five leaflets are attached at a point
(Yellow Buckeye, *Aesculus flava*)



Figure 4 : Pinnately compound leaf,
Each of the leaflets is attached to an axis
(Black Locust, *Robinia pseudoacacia*)



Figure 5: Palmately lobed leaf,
Lobes extend from a central point
(Sugar Maple, *Acer saccharum*)



Figure 6 : Pinnately lobed leaf,
Lobes extend from a central axis
(White Oak, *Quercus alba*)

—
This line is 10 cm long

—
This line is 1 cm long

