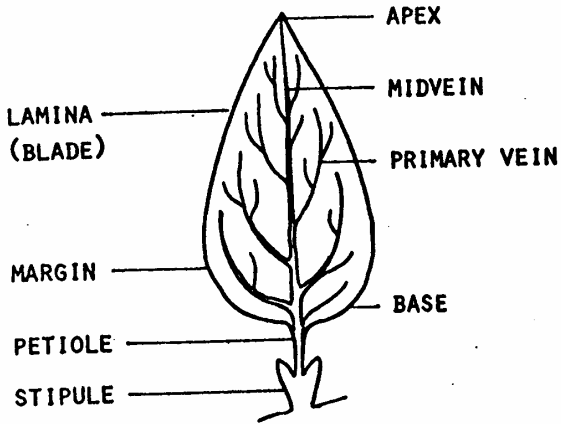


## A KEY TO SOME COMMON DECIDUOUS TREES

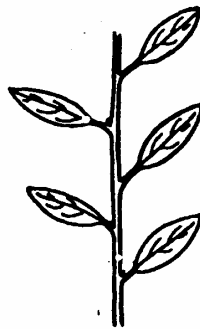
1. Pinnately compound leaves with 3 or more leaflets.....2  
Simple leaves .....11
2. Leaves opposite on stem .....3  
Leaves alternate on stem.....4
3. Leaflets 3 or 5, rarely 7, in number, coarsely toothed, often 3-lobed at base (Maple)..Box-elder  
Leaflets 7 to 11 in number, toothed or without teeth; leaflet stalk 1/8" to 1/4" long...Green Ash
4. Leaflets with edges entire, lacking teeth...(Locusts) .....5  
Leaflets with toothed edges.....6
5. Leaves once compound with 7-15 leaflets on short stalks about 1/8" long.....Black Locust  
Leaves once or twice compound with more than 14 leaflets on exceedingly short stalks less than 1/16" long.....Honey Locust
6. Leaves 1 1/2' to 4' long with 13 to 41 leaflets; edges of leaflets with only 1 or 2 coarse teeth at the base of each bearing dark glands.....Ailanthus or Tree-of-Heaven  
Leaves less than 2' long with 5 to 23 leaflets; edges of leaflets coarsely or finely toothed...(Hickories, Walnut) .....7
7. Leaves with 5 to 7 leaflets; terminal bud large, brown, ovate.....Shagbark Hickory  
Leaves with 7 to 23 leaflets.....9
9. Leaves hairy below, 11 to 23 leaflets; leaves 1' to 2' long; pith chambered.....10  
Leaves lacking hairs below, 7 to 11 leaflets; leaves 6" to 10" long; pith not chambered, terminal bud long, yellow.....Bitternut Hickory
10. Leaflets 11 to 17, sticky-hairy; (a pad of hairs above each leaf scar).....Butternut  
Leaflets 15 to 23, hairy but not sticky; (no hair pad above the leaf scars).....Black Walnut
11. Leaf edge entire, (lacking saw teeth or lobing), leaves opposite on the twig, elliptical in shape, veins running back in toward the tip of leaf...(Dogwoods) .....Gray Dogwood  
Leaf edge saw-toothed, wavy or lobed.....12
12. Leaves opposite on stem, venation palmate...(Maples) .....13  
Leaves alternate on stem, venation pinnate, or palmate in sycamore.....15
13. Base of 5 lobes of the leaf narrower than outer part of the lobes, appearing pinched-in, underside silvery. ....Silver Maple  
Base of leaves not narrowed or pinched-in, underside not silvery .....14
14. Leaves 5 to 7-lobed, sap of leaf stalks milky.....Norway Maple  
Leaves 3 to 5-lobed, sap of leaf stalk watery.....Sugar Maple
15. Leaves palmately lobed.....Sycamore  
Leaves simple or pinnately lobed.....6
16. Leaves pinnately lobed...(Oaks).....17  
Leaves not pinnately lobed .....20
17. Tips of lobes sharp and bristle-pointed .....18  
Tips of lobes rounded, not bristle-pointed.....19

18. Leaves dull above, 7-11 lobes..... Red Oak  
 Leaves lustrous above, 5-7 lobes..... Black Oak
19. Underside white-hairy, tip lobe the largest, leaf usually with a narrow waist..... Burr Oak  
 Underside light but not white-hairy, middle lobes of leaf the largest..... White Oak
20. Leaves doubly serrate (finer teeth upon the coarser teeth)..... 2 1  
 Leaves singly serrate..... 2 3
21. Veins of leaves thick all the way to the margins, base usually conspicuously asymmetrical. .... 2 2  
 Veins of leaves tapering to a very fine size or breaking up into a fine network before reaching margins, base usually symmetrical; leaf stalks glandular-hairy, leaves ovate in shape, bark shreddy..... Hop Hornbeam or Ironwood
22. Both sides of leaves rough-hairy; bark cinnamon in x-section, 1 year old twigs hairy, buds usually hairy ..... Slippery Elm  
 Upper side of leaf rough, lower side smooth, or both sides smooth; bark layers of white and brown in x-section, new twigs and buds smooth..... American Elm
23. Leaves usually with dark glands at juncture between the stalk & the blade, twigs and leaves with strong cherry flavor..... 2 4  
 Leaves lacking dark glands at juncture between stalk and blade, twigs and leaves not strongly cherry-flavored ..... 2 5
24. Upper surface dull, leaves broadest toward outer end, tip abrupt, lacking stiff hairs to each side of base mid- mid-rib. .... Choke Cherry  
 Upper surface shining, leaves broadest toward the center, tip long-tapering, often with a row of stiff hairs on each side of base mid-rib..... Black Cherry
25. Leaves with flattened stalks...(Poplars) ..... 6  
 Leaf stalks rounded in section..... 2 8
26. Leaves rhombic (diamond shaped) or triangular in general outline. .... 2 7  
 Leaves rounded or oval in outline ..... Quaking Aspen
27. Leaves diamond-shaped, base tapering, tree columnar in shape ..... Lombardy Poplar  
 Leaves triangular in outline, base straight across to heart- shaped, tree broad-topped Cottonwood
28. Leaves broadly heart-shaped, coarsely toothed..... Basswood  
 Leaves long and narrow or oval in outline, not broadly heart- shaped..... 2 9
29. Leaves with three main veins branching from base of the blade, broadest at base and tapering toward tip, base heart-shaped. .... Hackberry  
 Leaves with one main vein from base of blade, blade broadest toward center. .... 3 0
30. Leaves long and narrow, lance shaped..... Willows  
 Leaves short and broad, oval in outline. .... 3 1
31. Leaves sometimes lobed with rounded teeth, persistently hairy below, mostly rounded at base ..... Apple  
 Leaves with fine sharp teeth, branches with thorns..... Wild Plum

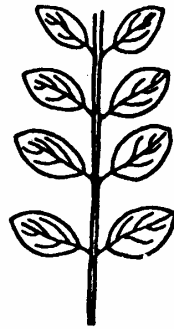
LEAF MORPHOLOGY



PARTS OF THE LEAF



ALTERNATE



OPPOSITE

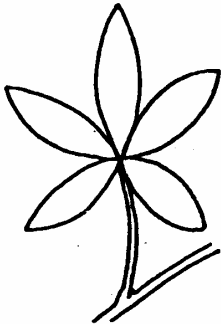


WHORLED

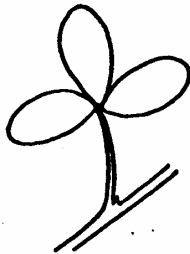
PHYLLOTAXY



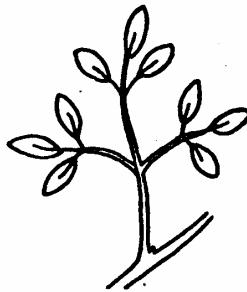
SIMPLE



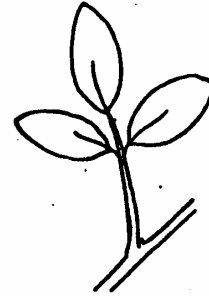
PALMATELY COMPOUND



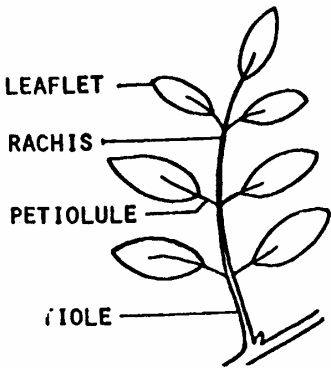
PINNATELY TRIFOLIOLATE (TERNATE)



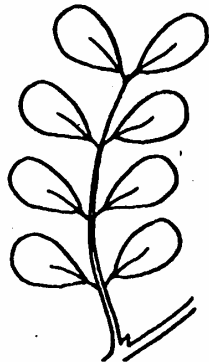
BITERNATE



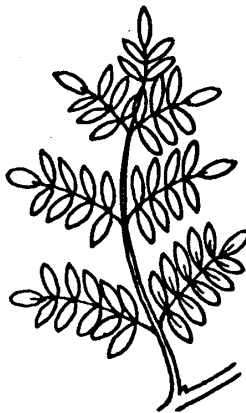
PINNATELY TRIFOLIOLATE



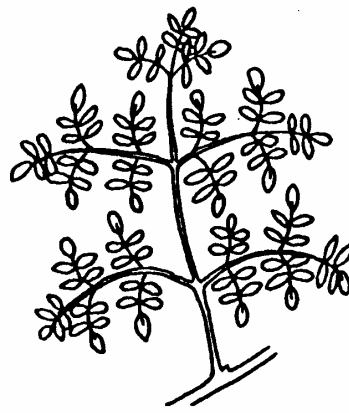
ODD-PINNATE



EVEN-PINNATE



TWO TIMES PINNATELY COMPOUND (BI PINNATE)



THREE TIMES PINNATELY COMPOUND (TRIPINNATE)