Summer

Key for Pennsylvania

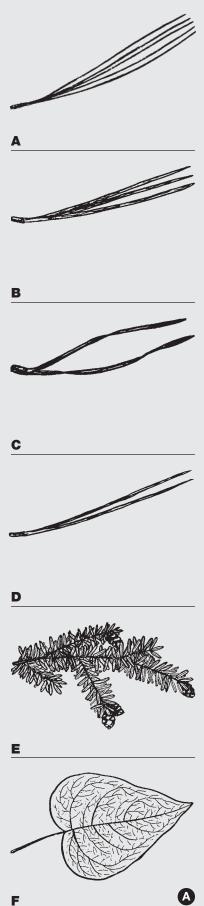
Trees



PENN<u>State</u>

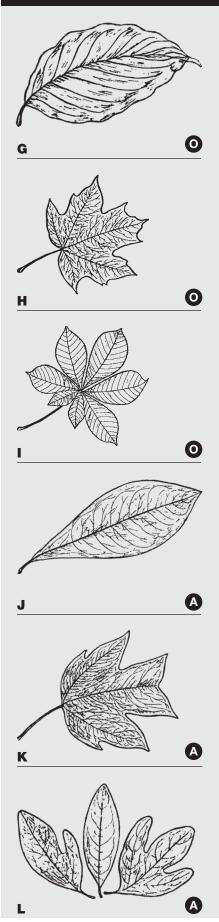


## Some trees to be identified by their leaves



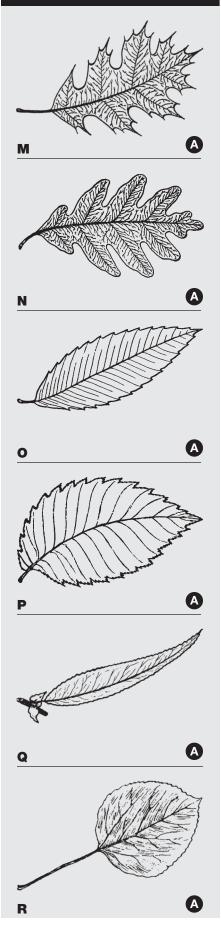
lí	f the tree has	go to
1a.	Leaves needle or scale-like	2
1b.	Leaves broad and flat	12
	2a. Leaves scale-like	3
	2b. Leaves needles	4
3a.	Scales pointed, twigs not flat	redcedar
3b.	Scales blunt, twigs flat	white cedar
	4a. Needles (leaves) single on twigs	5
	4b. Needles (leaves) in bundles, tufts, or rosettes	7
5a.	Needles flat, blunt	6
5b.	Needles four-sided and sharp-pointed	spruce
	6a. Needles with small stalks	
	(attaches needle to twig)	hemlock
	6b. Needles without stalks	fir
7a.	Needles in bundles with sheaths at base	8
7b.	Needles in tufts or rosettes	larch
	8a. Needles in bundles of 5	white pine
	8b. Needles not in bundles of 5	9
9a.	Needles in bundles of 3	pitch pine
9b.	Needles in bundles of 2	10
	10a. Needles about 4 inches long	11
11.	10b. Needles 1.5 to 3 inches long	Virginia pine
	Needles sharp-pointed and flexible	Austrian pine
11b.	Needles stiff, snap apart when bent	red pine
	12a. Leaves opposite or whorled on stem	13
12.	12b. Leaves alternate on stem	18
	Leaves opposite on stem Leaves whorled on stem	14
130.		catalpa 15
	14a. Leaves simple	16
150	14b. Leaves compound (leaf made up of leaflets) Margins entire	dogwood
	Margins lobed	maples
170.	16a. Pinnately-compound	17
	16b. Palmately-compound	horse chestnut
172	Leaf divided into 3 to 5 leaflets	box-elder
	Leaf divided into 7 leaflets	ash
1/0.	18a. Leaves simple	19
	18b. Leaves compound (leaf made up of leaflets)	39
	100. Leaves compound (lear made up or leanets)	57

# Some trees to be identified by their leaves



If the tree has	go to
19a. Margins entire	20
19b. Margins deeply cut, lobed, or toothed	22
20a. Leaf base heart-shaped	redbud
20b. Leaf base tapering	21
21a. Leaves 2 to 5 inches long, leathery	black gum
21b. Leaves 5 to 10 inches long, thin	cucumber
22a. Margins deeply cut or lobed	23
22b. Margins coarsely or finely toothed	28
23a. Leaves with five deeply cut lobes, star-shaped leaf	sweet gum
23b. Leaves not star-shaped	24
24a. Leaves square or notched at top	tulip poplar
24b. Leaves not square or notched	25
25a. Leaves from same tree may be entire,	
or with one or two lobes; aromatic	sassafras
25b. Leaves with more than two lobes	26
26a. Leaf veins pinnate	27
26b. Leaf veins fan-like	mulberry
27a. Lobes rounded	white oak group
27b. Lobes sharp-pointed with a hair-like bristle on end of each lobe	red oak group
28a. Teeth coarse, one at end of each lateral vein	29
28b. Teeth fine, several for each main lateral vein	30
29a. Leaves slender, 3 times as long as broad	chestnut
29b. Leaves not more than 2 times as long as wide	beech
30a. Leaves very narrow, 4 or 5 times as long as wide	willow
30b. Leaves broad	31
31a. Leaves not over 1.5 times as long as broad	32
31b. Leaves about twice as long as broad	33
32a. Unequal heart-shaped leaf base, round stem	basswood
32b. Leaf base not heart-shaped, sides equal at base, stem tends to be flattened	aspen
33a. Leaves smooth, single serrate, fine teeth	34
33b. Leaves rough or hairy	35
34a. Leaf stalk with one or two glands (small bumps on stem); has a sour odor when twig is broken	cherry
34b. Leaf stalk without glands (serviceberry)	juneberry

# Some trees to be identified by their leaves



lí	the tree has	go to
35a	Rough leaves	36
	Soft, hairy leaves	37
	36a. Leaf margins double-serrate from base, pinnately veined	elm
	36b. Leaf margins single-serrate from above base, tips long-pointed, fan-veined	hackberry
37a.	Leaf margins double-serrate, base blunt to slightly heart-shaped, some aromatic	birch
37b.	Leaf margins double-serrate, base tapered or rounded	38
	38a. Leaves nearly as broad as long	alder
	38b. Leaves narrow and pointed	hop hornbeam (ironwood)
39a.	Sap milky (in stems)	sumac
39b.	Sap not milky	40
	40a. Terminal leaflet usually larger than other leaflets	hickories
	40b. Terminal leaflet as large or smaller than other leaflets, or it may be lacking	41
41a.	Leaflet round-tipped	black locust
41b.	Leaflet pointed	42
	42a. Leaves smooth	43
	42b. Leaves hairy	44
43a.	Leaves not over 7 inches long	mountain ash
43b.	Leaves over 12 inches long	ailanthus
	44a. Terminal leaflet as large as other leaflets	butternut
	44b. Terminal leaflet small or lacking	black walnut

## Answers

- A. white pine
- B. pitch pine
- C. Virginia pine
- D. red pine
- E. hemlock
- F. catalpa
- G. dogwood
- H. maple
- I. horse chestnut
- J. black gum
- K. tulip poplar
- L. sassafras

M. red oak

- N. white oak
- O. beech
- P. elm
- Q. willow
- R. aspen
- S. cherry
- T. birch
- U. hickory
- V. black locust
- W. black walnut

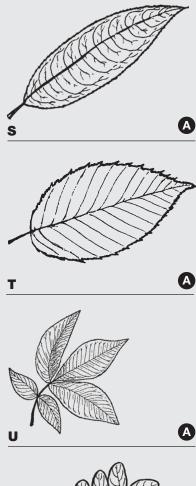
Alternate

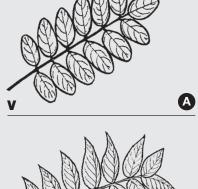
A

0

Opposite

### Some trees to be identified by their leaves

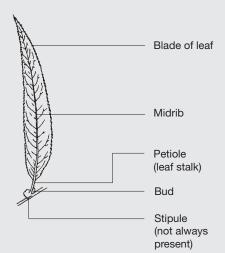




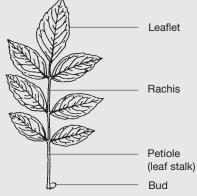
A

#### Leaf Structures

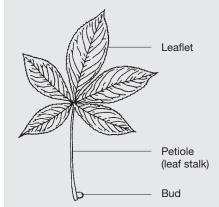
### A simple leaf



## **Compound leaves**



**Pinnately compound** 



Palmately compound

#### Leaf types



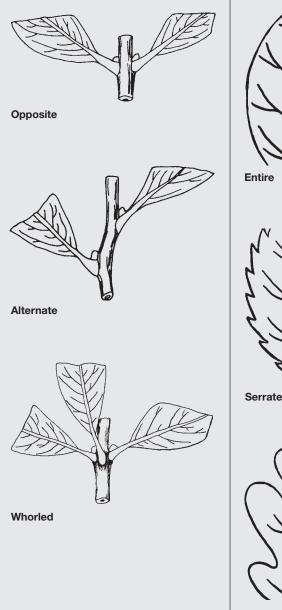
Needles



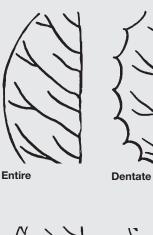
Broad and flat

#### Leaf Structures

#### Leaf arrangement



#### Leaf margins





**Double serrate** 

е



Key revised by Sanford S. Smith, natural resources and youth extension specialist, and Paul Brohn, extension forester, from the key originally written by Terry D. Rader, former state extension specialist, and James J. Grippo, extension agent.

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Penn State College of Agricultural Sciences research, extension, and resident education programs are funded in part by Pennsylvania counties, the Commonwealth of Pennsylvania, and the U.S. Department of Agriculture.

This publication is available from the Publications Distribution Center, The Pennsylvania State University, 112 Agricultural Administration Building, University Park, PA 16802. For information telephone 814-865-6713.

Issued in furtherance of Cooperative Extension Work, Acts of Congress May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture and the Pennsylvania Legislature. T. R. Alter, Director of Cooperative Extension, The Pennsylvania State University.

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