
WILDFLOWERS

The Bulletin of the Botanical Society of Western Pennsylvania • January 2000

Next Meeting is January 10th

The next meeting will be Monday, January 10, at 8:00 p.m., at the Kresge Theater at Carlow College, 3333 Fifth Avenue, Pittsburgh, PA (Oakland). Kresge Theater is on the top floor of Grace Library.

Member and vice president **Phyllis Monk** will present "Wildflowers of Our National Parks." Come to see some beautiful slide photographs and learn about the wildflowers of these magnificent natural areas.

Dues reminder

The Botanical Society is now collecting annual dues; rates are \$10 individual and \$15 family. Students pay half-rate.

Renewals should be sent to Walt Gardill, PO Box 226, 9775 Grosick Road, Ingomar, PA 15127. New members should forward dues to the newsletter editor, Loree Speedy, 5837 Nicholson Street, Pittsburgh, PA 15217.

Back to Basics

Continued from last month. The first step towards plant identification is learning the 'botanical language'.

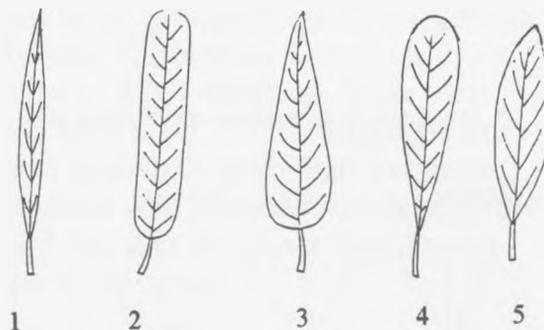
Leaf venation describes the pattern of primary veins in a leaf. Parallel venation describes primary veins that run parallel, approximately equal distance apart, for the length of the leaf. This is seen in most monocots. Pinnate venation describes many secondary veins

diverging from one central primary vein. Leaves of oak (*Quercus*) species show pinnate venation.

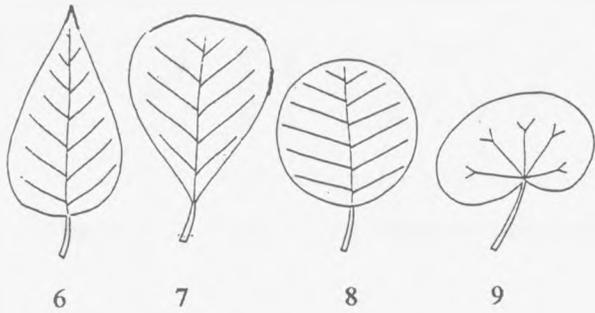
A palmately veined leaf has three or more primary veins originating at one point near the blade base and each diverges from this point throughout the blade. Maple (*Acer*) species show palmate venation.

Reticulate venation describes the obvious netted appearance of the smallest veins found in a leaf. This character comes in handy because some species have very pronounced reticulation when their leaves are held up to the light, and in other species this is very hard to see. This little trick is useful when studying basal leaves of Asters and Solidagos in the early summer months.

Leaf blade shapes are one of the most obvious characters used when describing plants. Everyone should know the blade shapes illustrated below. Warning: Always observe as many leaves as possible on a single plant, because variation among leaves is very common, even on the same branch.



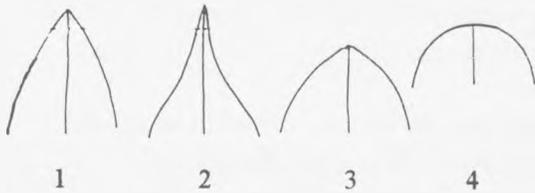
1. Linear 2. Oblong 3. Lanceolate 4. Oblanceolate and 5. Elliptic Leaf Blade Shapes



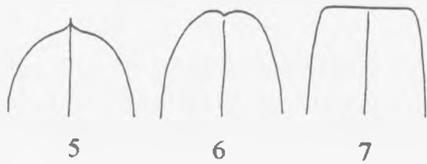
6. Ovate 7. Obovate 8. Orbicular and 9. Reniform Leaf Blade Shapes

Leaf apices, leaf bases, leaf margins and leaf vestitures (surfaces) are very helpful in leaf identification but often overlooked when describing a plant. Here are some basic leaf characters taken from the third edition of "Vascular Plant Taxonomy" by Walters and Keil.

Leaf Apices (Leaf Tips)

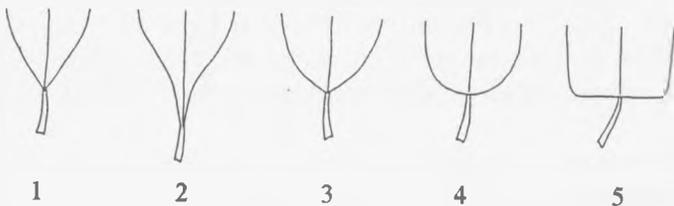


1. Acute 2. Acuminate 3. Obtuse and 4. Rounded

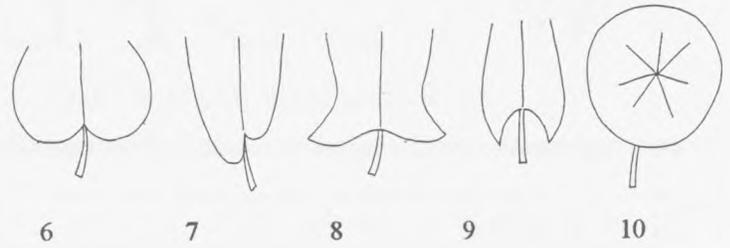


5. Mucronate 6. Emarginate and 7. Truncate

Leaf Bases

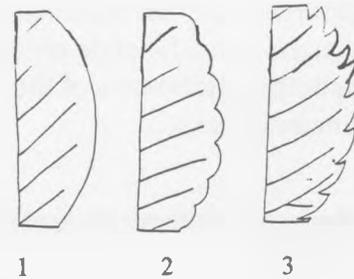


1. Acute 2. Acuminate 3. Obtuse 4. Rounded 5. Truncate

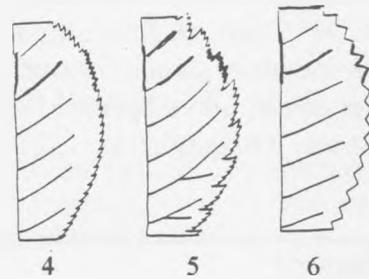


6. Cordate 7. Oblique 8. Hastate 9. Sagittate 10. Peltate

Leaf Margins

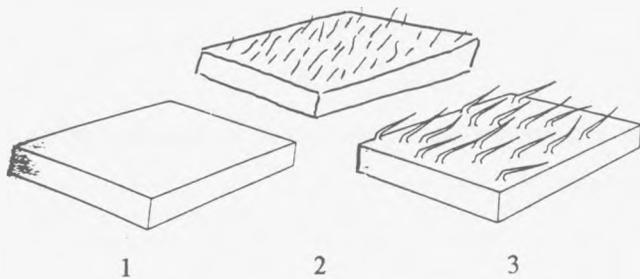


1. Entire (smooth, unbroken outline)
2. Crenate (regular, rounded teeth)
3. Serrate (saw tooth teeth bent toward leaf tip)

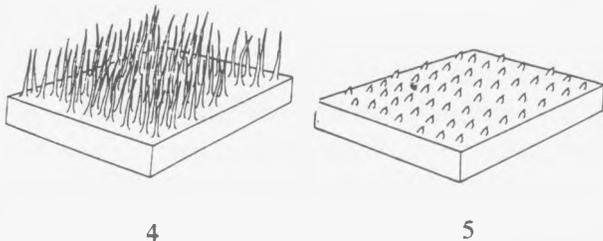


4. Serrulate (small saw teeth bent toward tip)
5. Doubly serrate (saw-like teeth of two sizes bent toward leaf tip)
6. Dentate (sharp teeth perpendicular to leaf margin)

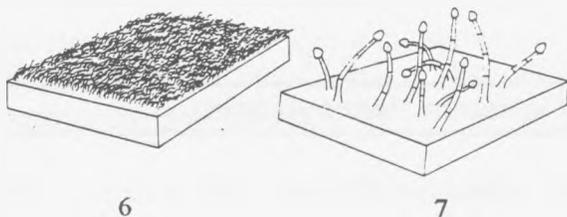
Leaf Vestiture (Appearance of Leaf Surface)



1. Glabrous (no hairs present)
2. Pubescent (surface with short, straight, soft hairs)
3. Strigose (short hairs lie flat against surface)



4. Hirsute (rough, course hairs)
5. Scabrous (short, stout, sandpaperly to touch)



6. Tomentose (wooly, curly, matted hairs)
7. Glandular (pubescent with glandular hairs)

With these descriptive vegetative terms we can now describe the leaf found on that little unknown 'weed' growing between our sidewalk. I leave (not leaf) you with a vegetative description of an unknown weed we probably all have growing in our yards. Describing vegetative parts only, this plant is an evergreen perennial herb found in waste places. The plant's habit is a low, creeping (prostrate) stem often rooting at the nodes. Cauline leaves are simple (1/2" to 1 1/2" wide, never much larger) and alternate, with mostly palmate venation, and long petioles.

Leaf shape is reniform with cordate base, rounded tip, and crenate margins. Leaves and petioles are hirsute-pubescent but can sometimes be glabrous. This plant does have square stems, and never smells like garlic.

What is the name of this species?

Jeff Polonoli

A Western Pennsylvania Mushroom Association has formed

The recently formed Western Pennsylvania Mushroom Association will be meeting Tuesday, January 18, 2000, at 6:30 p.m., at the Beechwood Farms Nature Reserve. The group will be discussing poisonous mushrooms. All are welcome.

For additional information, call Mary Woehrel at (412) 828-3266 or e-mail her at marigold@sgi.net.

Field Trip Schedule

Registration is not required. Everyone is welcome, including non-members.

Saturday, January 29, 2000

North Park Arboretum

Time: 1:00 p.m.

Leader: Esther Allen (412) 366-0786

Directions: From Pittsburgh, cross the Allegheny River and take Route 28 to the Route 8 exit at Etna. Travel Route 8 north for about seven miles to Wildwood Road. Make a left onto Wildwood Road. Follow Wildwood Road for about 3 miles to the park. Park just before the intersection of Wildwood Road and Babcock Boulevard, just after you pass a Tasty Freeze restaurant on the right.

This trip could be cancelled due to bad driving conditions or unpleasant walking conditions. Call (412) 521-9425 the morning of the hike for a cancellation message.

Botanical Society of Western Pennsylvania – January 2000

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WILDFLOWERS is published monthly by the Botanical Society of Western Pennsylvania. We welcome short articles of botanical interest, drawings, letters to the editor, and notices of botanical events and group activities. Send to the editor at the above address. Deadline for submissions is the 20th of the previous month.

The Botanical Society of Western Pennsylvania - Membership Information

The object of the Society shall be to bring together those who are interested in Botany and to encourage the study of this science and a knowledge of plants. Our members include both amateurs and professionals. Annual dues are \$10.00 for individual and \$15.00 for family. Students can join at half-rate. To join, mail your name, your address, and check payable to "Botanical Soc. of W PA" to Loree Speedy, 5837 Nicholson Street, Pittsburgh, PA 15217. Your membership includes a subscription to the monthly bulletin WILDFLOWERS.

The Society meets the second Monday of each month, September through June, at 8 p.m. sharp, at Trinity Hall or Kresge Theater, Carlow College, 3333 Fifth Avenue, Oakland. All are welcome. An informative program follows the business meeting. Visit the Botanical Society Homepage at <http://home.kiski.net/~speedy/b1.html>.