

Jul #
10452

Rec 6-18-71
2020-5
Sheep = 945 50¢
last Inv 19626
6/20/91 HW

Plant Identification Illustrated Glossary

Plant identification keys and descriptions use certain terms that are very specific in their meaning. These unfamiliar words may make these keys appear more difficult than they really are. No one masters a trade without learning the names of the tools. Ligule, sheath, and collar are words no more difficult to learn than are sparkplug, windshield, or mainspring.

Botanical terms are used for the same reason that names are given to different parts of an auto-

mobile; the terms are simpler and more exact than long descriptive phrases. It is simpler to say *sparkplug* than it is to say "the little porcelain thing that screws into an engine block," and it is simpler to say *ligule* than to say "the little thin scale attached to the inside of the bottom of a grass blade."

The following terms are used commonly in plant descriptions and plant keys. The list does not include *all* the terms necessary to make a career as a botanist, but it is a good introduction.

General Terms

Acute—Ending sharply and abruptly in an angle of less than 90°.

Annual—A plant that completes its life cycle from seed germination to seed production and death within a single year or growing season.

Axis—The main stem of a flower or panicle.

Biennial—A plant that germinates and remains vegetative the first year then flowers, fruits, and dies the second year.

Compound leaf—A leaf divided into two or more parts, or leaflets.

Entire—Without teeth, lobes, divisions, or any marginal cutting; having a smooth and uninterrupted, flowing outline.

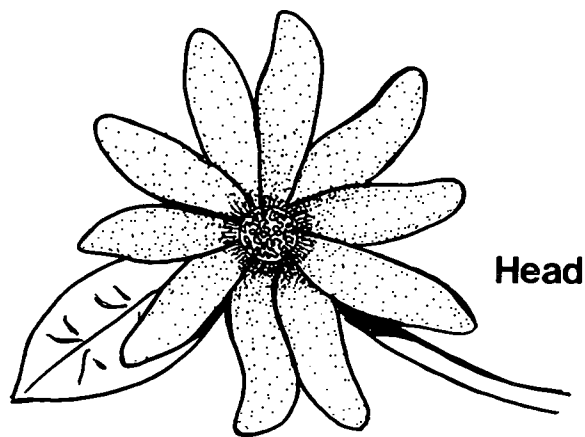
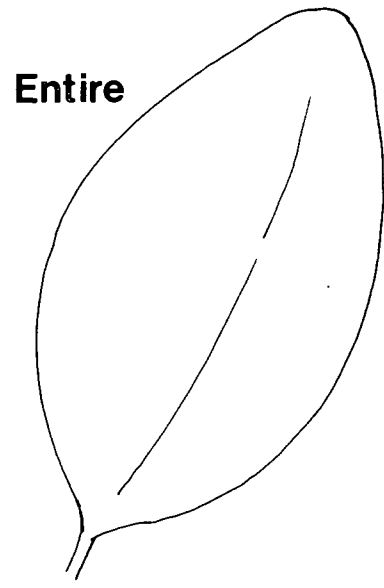
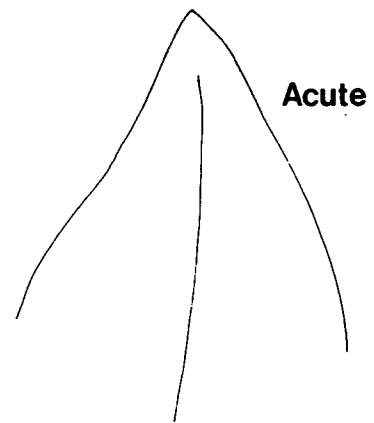
Head—A dense roundish cluster of sessile or nearly sessile flowers on a very short or flattened floral branch, as in red clover or sunflowers.

Inflorescence—The flowering part of the plant.

Internode—The part of a plant stem between the joints or nodes.

Leaflet—A single division of a compound leaf.

Node—The enlarged, solid portion of the stem or culm forming the joints; point of attachment for leaves and branches.



Reprinted July 1991

4-H 1006



OREGON STATE UNIVERSITY EXTENSION SERVICE

Ovate—Egg-shaped, the broader end near the petiole or stalk.

Panicle—Inflorescence with a main stem (axis) and sub-divided branches. In grasses the panicle may be compact and spike-like (timothy) or open (orchardgrass).

Pedicle—The stem of an individual flower.

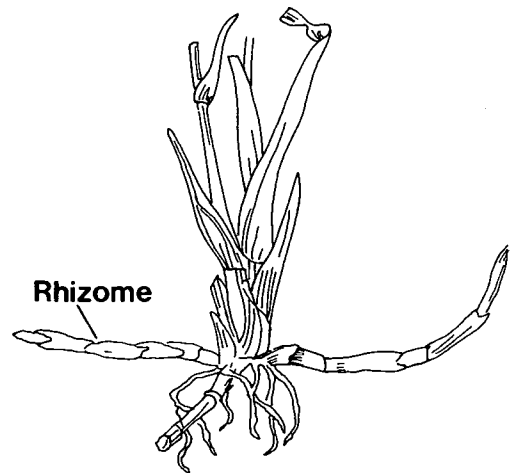
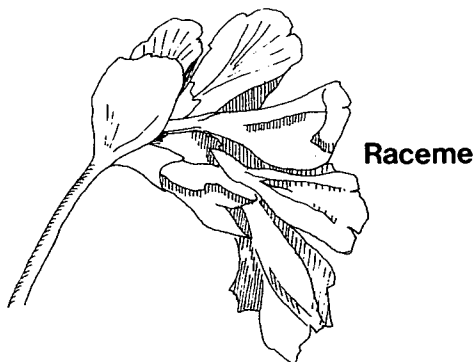
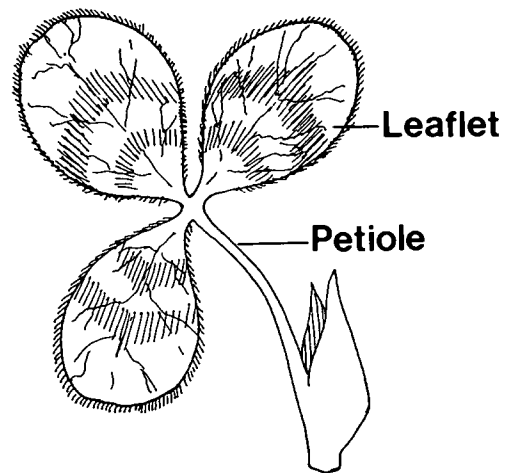
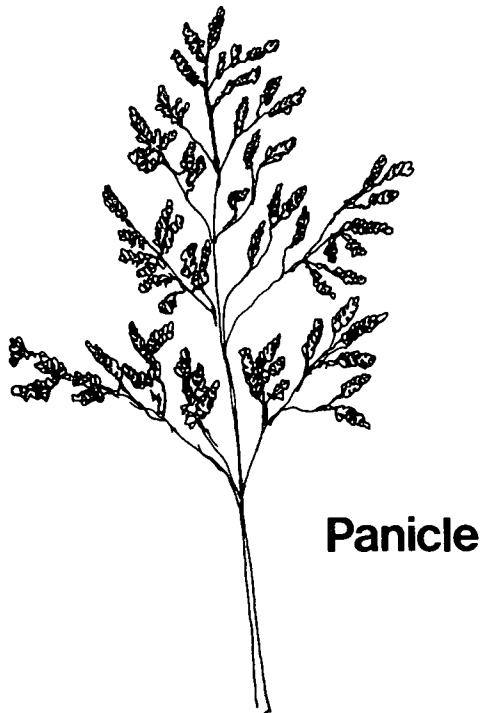
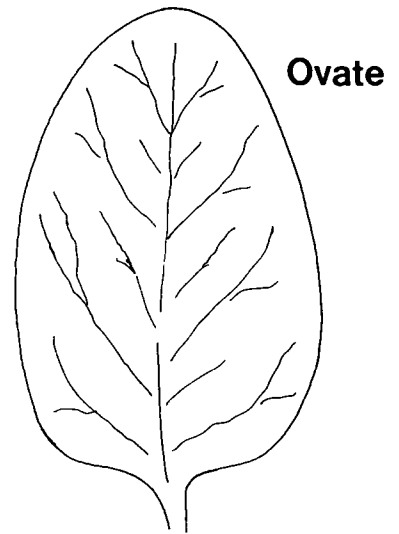
Perennial—A plant that lives for 3 or more years.

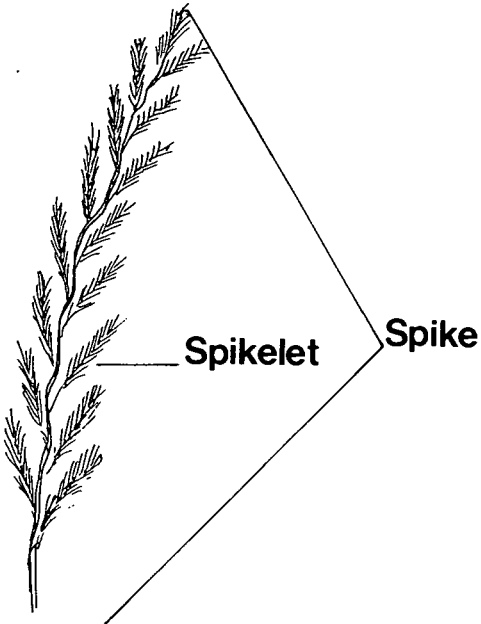
Petiole—Stalk by which a leaf blade is attached to the plant stem.

Pubescent—A general term meaning hairy; specifically, however, the term means downy haired; covered with fine, soft, short hairs (pubescence).

Raceme—An unbranched inflorescence in which the individual flowers are borne on stems (pedicels) along a central axis.

Rhizome—An underground stem, usually horizontal in position. Distinguished from a root by the presence of nodes and internodes. Capable of producing new shoots and roots at the nodes.





Serrated—Saw-toothed; having sharp, forward- or upward-pointed teeth.

Sessile—Without a stalk or pedicel.

Spike—An unbranched inflorescence in which the individual flowers are attached directly to the central axis, such as wheat and barley. Resembles a raceme except that the flowers are sessile.

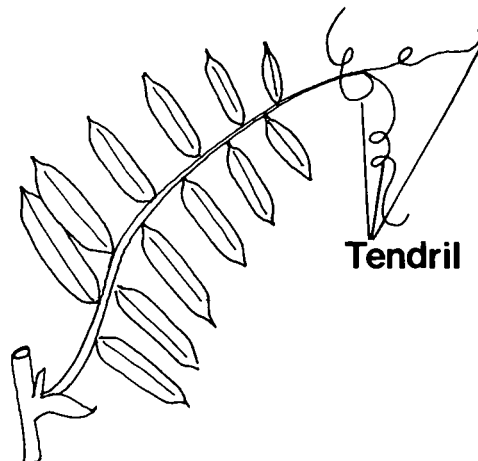
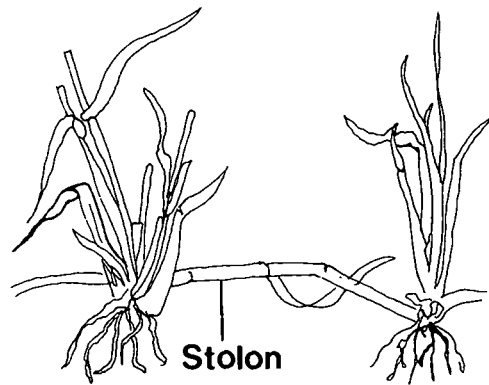
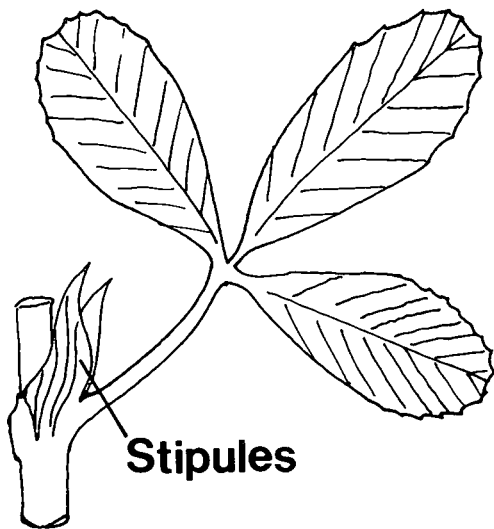
Stipule—A leaf-like appendage at the base of the petioles of some species of plants; often united.

Stolon—A prostrate or creeping stem, generally above ground, capable of rooting and sending up new shoots at the nodes. May be called a runner, as in strawberries.

Tendrils—A leaflet or stem modified for climbing or anchorage, as in the pea.

Trifoliolate—Having three leaflets; the leaves three-divided, as in clover and alfalfa.

Veins—The ribs or vascular bundles which form part of the framework (skeleton) of a leaf; so called because of a resemblance to human veins.



Plants closely related in physical characteristics are grouped together in families. These families have particular terms that are used to identify various parts of the plants. The following terms are necessary to describe plants within the grass family.

Grass Family (*Gramineae*) Terms

Auricle—Small claw or ear-like outgrowths at the junction of the leaf blade and sheath of some grasses; presence or absence varies with the species.

Awn—A slender bristle-like projection extending from the back or tip of the lemma of a grass flower; presence or absence varies with the species and the variety.

Bunchgrass—A grass that grows in clumps. It has no prominent stolons or rhizomes.

Collar—The area on the outer side of the leaf at the junction of the leaf sheath and the blade.

Culm—The stem or stalk of grasses. These stems are jointed and hollow or pithy.

Glume—One of the pair of empty chaffy bracts or husks at the base of the flower (spikelet) of grasses.

Internode—The part of a plant stem between the joints or nodes.

Leaf blade—The expanded or broader portion of the leaf which is above the sheath and usually extends outward from the stem.

Leaf sheath—The lower part of the leaf that encloses or surrounds the stem. Sometimes called the "boot."

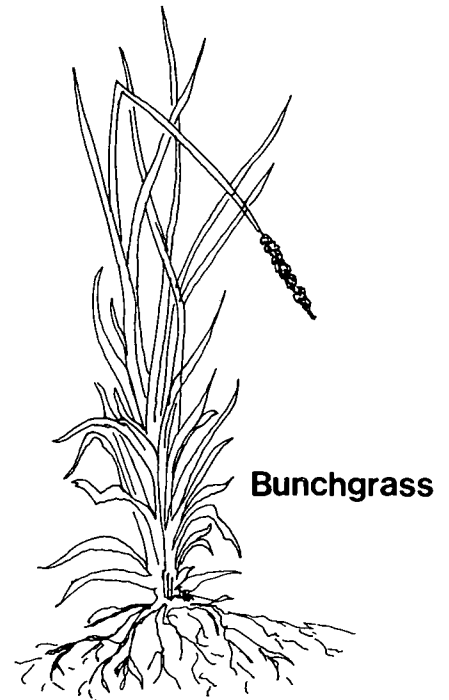
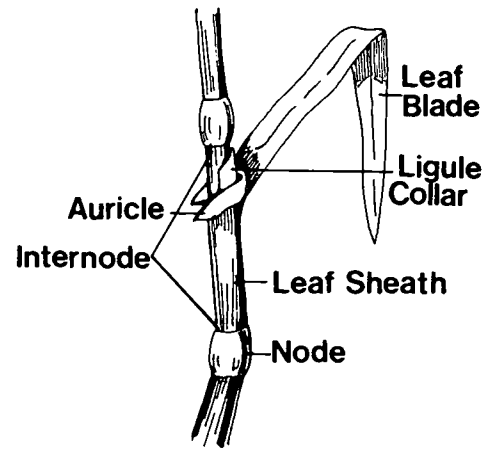
Lemma—The lower (and larger) of the two bracts enclosing the flower (spikelet) of grasses.

Ligule—The projecting outgrowth on the inside of the leaf where the sheath and blade join; often membranous or occasionally a ring of hairs.

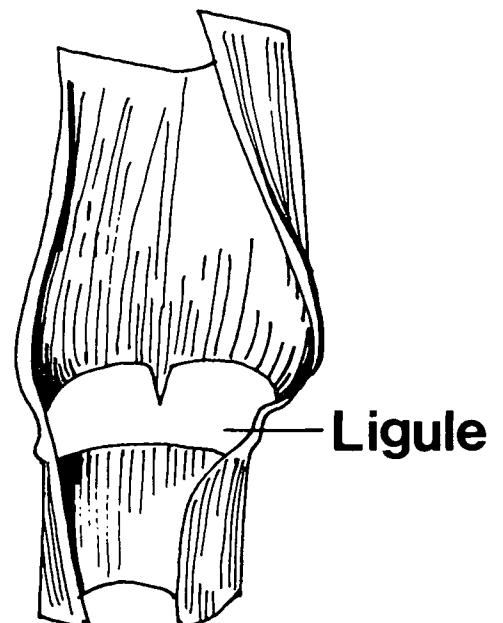
Node—The enlarged, solid portion of the stem or culm forming the joints; point of attachment for leaves and branches.

Spikelet—The unit of the grass flower-head or inflorescence generally composed of two glumes and one or more flowers.

Prepared by La Rea Dennis Johnston, senior instructor of botany; Richard Lawson, former graduate assistant in crop science; Lester Vough, former Extension agronomist; and Harold Youngberg, Extension agronomist.



Bunchgrass



Extension Service, Oregon State University, Corvallis, O.E. Smith, director. This publication was produced and distributed in furtherance of the Acts of Congress of May 8 and June 30, 1914. Extension work is a cooperative program of Oregon State University, the U.S. Department of Agriculture, and Oregon counties.

Oregon State University Extension Service offers educational programs, activities, and materials without regard to race, color, national origin, sex, or disability as required by Title VI of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, and Section 504 of the Rehabilitation Act of 1973. Oregon State University Extension Service is an Equal Opportunity Employer.