

A close-up photograph of a green plant stem, likely a weed, showing numerous small, dark, irregular spots (possibly fungal lesions or insect damage) scattered across its surface. The stem is the central focus, with other stems and leaves visible in the blurred background. The lighting is bright, highlighting the texture of the stem.

GLOSSARY

Many technical terms are used to describe weed morphology. It is important to know the definition of these terms for accurate weed identification.

GLOSSARY

Achene- A dry, one-seeded fruit that does not open or split.

Alternate- Leaves spaced singly along a stem, with one leaf at each node.

Annual- A plant that completes its life cycle during a single growing season.

Auricle- A claw-like or clasping appendage at the base of a grass leaf blade where it meets the sheath (near the collar).

Awn- A narrow, stiff bristle occurring at the end or edge of a plant organ.

Axil- The area where the stem and leaf meet.

Axillary- Positioned in or rising from an axil (for example, axillary buds).

Basal- Positioned at or near the base of a structure.

Biennial- A plant that requires two years to complete its life cycle.

Blade- The elongated, extended and flattened part of a leaf.

Bolt- To produce a stem from a basal rosette by rapid elongation.

Bract- A reduced leaf or leaf-like structure at the base of a flower or flower cluster.

Bristle- A short, stiff hair or hair-like structure.

Bulb- An underground stem with fleshy, thick storage leaves or scales.

Calyx- The outermost whorl of flower parts, usually green sepals that cover other flower parts in the bud.

Collar- The area of a grass leaf at the junction of the blade and sheath.

Compound- Consisting of two or more parts united in a single structure. For example, a compound leaf is divided into two or more distinct leaflets.

Cotyledon- The first leaf or leaves of a newly emerging plant, also called seed leaves.

Creeping perennial- A perennial that can reproduce and spread vegetatively.

Decumbent- Horizontal or laying flat for most of the length with only the tip ascending.

Disk (flower)- Tubular flowers in the center of a flower head, characteristic of the sunflower family.

Elliptic- Oval-shaped, but tapering at both ends.

Entire- A continuous, untoothed margin.

Hypocotyl- The stem of a young seedling below the cotyledon(s).

Inflorescence- A cluster of flowers.

Integrated weed management- Combines different management strategies such as cultural, mechanical and chemical methods to adjust to changing weed problems and weed population shifts.

Internode- The area of a stem between successive nodes.

Lanceolate- A long, narrow shape that is widest at the base and tapers to a tip.

Leaflet- One part of a compound leaf.

Ligule- In grasses, a thin membrane or ring of hairs at the junction of the leaf sheath and blade on the inside of the leaf collar.

Linear- Long and narrow with parallel sides.

Lobe- A rounded segment of a plant part.

Margin- The edge or border of a plant part.

Mealy- Covered with material that resembles meal in texture.

Midrib or midvein- The central vein of a leaf.

Nodding- Drooping or bending over and downward.

Node- Joint in a stem where leaves and branches emerge.

Noxious weed- Weeds classified under the Iowa Weed Law. The law gives each county the authority to order the destruction of weeds classified as noxious by the state.

Oblong- Having an elongated, rounded shape, like a rectangle with rounded corners.

Ocrea- A papery sheath that encloses the stem at the nodes, characteristic of the smartweed family.

Opposite- Leaves growing in pairs, two at each node on the stem.

Ovate- Having an oval outline; egg-shaped.

Palmate- Lobed, divided or veined from a common point like the fingers of a hand.

Panicle- Seedhead with a main axis and subdivided branches; may be compact or open.

Pappus- A cluster of hairs, bristles or scales that crown the top of achenes and aid wind dispersion of seeds of some species in the sunflower family.

Pedicel- The stalk of a spikelet or individual flower in an inflorescence.

Perennial- A plant that lives for more than two years.

Petiole- The stalk between the leaf blade and the stem.

Pinnate- A compound leaf arrangement with leaflets occurring on opposite sides of an elongated axis.

Prostrate- Lying on the ground.

Raceme- An inflorescence where the spikelets or flowers are on stalks coming off a central axis or stem.

Ray (flower)- Strap-shaped flowers of some members of the sunflower family.

Rhizome- A creeping, underground stem that can vegetatively generate new growth.

Rosette- A circular cluster of leaves radiating from a stem where the internodes have not elongated. A rosette appears as a circular fan of leaves on the ground.

Sepal- A portion of the calyx; usually green but may look like petals.

Sessile- A leaf or flower attached directly to another structure; without a petiole or pedicel.

Sheath- Lowest part of the leaf that encloses the stem of grass plants; a structure that surrounds another plant structure.

GLOSSARY

Shoot- New plant growth that can include stems, flower buds and leaves.

Simple- A single plant structure that is unbranched or undivided.

Simple perennial- A perennial that reproduces only by seed.

Spike- An elongated, unbranched seedhead.

Spikelet- A small or secondary spike composed of one to several flowers, characteristic of grasses and sedges.

Stipules- Small, often leaf-like appendages arising from the petiole near the leaf base in some plants; may be modified to spines.

Stolon- An aboveground, modified stem that roots at the nodes giving rise to new plants.

Succulent- Soft or fleshy.

Summer annual- A plant that germinates in the spring or summer and completes its life cycle before winter.

Taproot- The main root, growing almost vertically downward, from which small, lateral roots spread out.

Tendrils- A slender, cylindrical modified leaf or stem that twists or coils around a supporting structure.

Terminal- The tip or end of a stem or leaf.

Tiller- A shoot arising from a bud at the base of the plant.

Toothed- A projecting or divided part of a plant; jagged row on the edge of a leaf or flower.

Tuber- A short, thickened portion of an underground stem; provides food storage for the plant.

Tubercle- A small projection or bump on the surface of a plant structure.

Umbel- A flat-topped or rounded inflorescence with branches that come out from a common point.

Wavy- Having undulating and wavelike curves.

Whorl- A ring of three or more structures at a single node.

Winter annual- A plant that germinates in the early fall to early spring, flowers, produces seed in mid-to late spring, then dies.