

# A Glossary of Botanical Terminology

## Great War Project: Botanists in Training

Term	K – 6 definition	7 – 12 definition
Biology	The study of living things.	The branch of science dealing with the study of the growth and processes of living things.
Botany	The study of plants.	A branch of biology dealing with the study of plant life.
Botanist	A person who studies plants.	A scientist who studies plants.
Branch	The arm of a woody plant, such as a tree or shrub.	A woody structure connected to the trunk of a tree or shrub. Large branches are known as boughs and small branches are known as twigs.
Bract	A small leaf that can look like a brown scale. It is usually found on the flowers of a plant.	A small scale-like leaf associated with a flower cluster.
Bud	The small growth on a stem which develops into a leaf or flower.	An underdeveloped leafy stem, flower or flower cluster protected by scales.
Calyx	The green 'leaf' like parts of the flower under the petals.	The outermost part of the flower, usually green and composed of sepals that are fused or free.
Catkins	A small cluster of male or female flowers. Catkins can be found on willow, birch and alder.	A scaly-bracted cluster or spike of flowers usually having a flower of only one sex.
Dichotomous key	A chart that helps identify a plant by giving two options at a time.	A sequence in biology used to categorize species using logical choices. Two sentences that are mutually exclusive are called a couplet or a lead. These alternatives lead to a further couplet until the species is identified.
Flower	The part of the plant that has petals and that makes fruit and seeds; a blossom. Flowers often have a pleasant smell and are often white or colourful.	The reproductive structure found in flowering plants. They consist of a calyx (sepals), corolla (petals), androecium (male parts) and gynoecium (female parts).
Fruit	A part of a plant that may be edible that contains seeds. Fruit is usually sweet and can be eaten raw.	Botanists use the term fruit to describe both edible parts (oranges, apples, strawberries) and inedible fruit (acorns, maple tree seeds).

Genus	A group of closely related species (living creatures).	A group of closely related species which is the first word in a scientific name for a living organism. This word is always capitalized. Plural: genera. In Newfoundland we have the mountain alder ( <i>Alnus crispa</i> ) and the speckled alder ( <i>Alnus rugosa</i> ). Both are from the same genus ( <i>Alnus</i> ), but are different species ( <i>crispa</i> and <i>rugosa</i> ).
Herb	A plant that isn't woody and has many uses for people, such as to flavour food, produce medicine, etc.	A herbaceous plant (non-woody) which is valued for its medicinal properties, flavours, scents or other uses.
Herbaceous	A plant that isn't woody. It usually dies back each fall and reappears each spring.	A non-woody plant that lives for one or two years and dies back to the ground over winter.
Introduced or non-native plant	Plants that weren't originally from their current location.	A plant species growing outside of its natural distribution; usually caused by human activity.
Lateral buds	A bud that is on the side of the twig instead of the end (terminal bud).	A bud that is on the side or length of the twig instead of the end (terminal bud).
Leaf (Leaves)	Usually green and found on branches, leaves are how the plant collects energy from the sun to make food to grow.	Leaves are the site of photosynthesis in which the plant uses light energy to convert carbon dioxide to sugar and oxygen. They can come in many shapes including needle, compound, simple and toothed.
Leaf margin	The edge of the leaf.	The outer edge of the leaf, which could be smooth, toothed, lobed etc. The structure is used in identifying different types of plants.
Leaf scar	A mark left on a twig from a leaf that has fallen off. It is usually crescent moon shaped.	A mark left on a twig at the point of attachment of a fallen leaf, often crescent shaped.
Native plant	Plants that are growing in an area that has been recorded as their home for thousands of years.	Plants that are indigenous (endemic) to a given area in geological time.
Petiole	A leaf stem.	The stalk or stem of a leaf, which connects it to the plant. Celery is an example of a petiole.
Pioneer species	The first plants to appear. When land has been cleared of plants after a fire or construction, the first plants to start growing are called pioneers.	Plant species which colonize previously un-colonized land, usually leading to ecological succession.
Rhizome	An underground stem.	A horizontal, underground stem capable of producing the shoot and root systems needed for vegetative-reproduction.

Roots	The usually underground part of a plant that absorbs food and water in order for the plant to grow. They also hold the plant into the ground.	The part of the plant that lies beneath the surface of the soil, although some roots can be aerial (growing above the ground). It doesn't have leaves but it does have root hairs that enable the plant to absorb water and nutrients from the soil in order to grow. Roots also hold the plant in the soil and hold the soil intact.
Seed	A baby plant which can grow into a new plant.	An embryonic plant enclosed in a covering called a seed coat. If given the proper light, water, and nutrients, a seed will grow into a new plant.
Seedling	A young plant that is grown from a seed.	A young plant that had developed out of an embryo from a seed.
Shrub	A woody plant that has more than one stem and is short in height.	A woody plant that has multiple stems, opposed to a tree that has one main trunk. They are usually short in height, but this can differ depending on environmental conditions.
Species	A group of living creatures that are similar and will easily mate.	Living organisms belonging to a group which have common characteristics and can usually interbreed in natural conditions. The species name is usually listed second after genus and is not capitalized. The abbreviation for one species is "sp." or plural as "spp." In Newfoundland we have the mountain alder ( <i>Alnus crispa</i> ) and the speckled alder ( <i>Alnus rugosa</i> ). Both are from the same genus ( <i>Alnus</i> ), but are different species ( <i>crispa</i> and <i>rugosa</i> ).
Stem	The main part of a plant that grows up from the ground and supports the branches, leaves, flowers and fruit. Stems can be green and soft or woody and hard.	Above ground structures that support branches, leaves, flowers and fruit. Some plants do have underground stems. They function to move nutrients and water up and down the plant from the soil. Stems can be green and soft or woody and hard.
Stolon	A slender stem growing above the ground which can produce roots and branches; often called a 'runner' with strawberries.	A specialized, slender horizontal branch which serves to propagate an organism, such as a strawberry runner. Roots and aerial branches are produced at specialized nodes.
Succession	Steps in time where a field can change into a forest.	A process where an ecological community transforms itself until a stable community is formed.
Terminal bud	Growth found at the tip of a branch.	A young flower or leaf covered by scales found at the tip of a branch.
Tree	A woody plant with one trunk, many branches and usually grows tall.	A woody plant that has a long main trunk, many branches and usually grows tall.
Trunk	The main woody stem of a tree which comes up from the ground.	The main woody stem of a tree which supports all the branches of the tree.