

Glossary of Botanical Terms

Adventitious	Arising from organ other than root; usually lateral
Aerating/Knee root	Vertical or horizontal above ground roots
Aerial roots	Fibrous, adventitious roots, frequently with an adhesive disk; a crampon
Aerial stem	An erect stem arising from a horizontal rhizome
Androdioecious	Some plants with staminate flowers and some with perfect flowers
Andromonoecious	Plant with staminate and perfect flowers
Anther	Pollen-bearing portion of stamen
Apical/Terminal	Growth region at the apex of the structure
Arborescent	Treelike in appearance and size
Aril	An outgrowth from the stem forming a fleshy covering of the seed or rudimentary at base of the fleshy seed
Ascending	Inclined upward
Asymmetric	Without regularity in any dimension
Bark	Tissues of plant outside wood or xylem
Basal	Growth region at the base of a blade as in grasses
Berry	Fleshy fruit with succulent pericarp
Bipinnate	Twice pinnate
Bract	Modified leaf found in the inflorescence
Bud primordium	Meristematic tissue that gives rise to a lateral buds
Bud	Immature vegetative or floral shoot or both, often covered by scales
Bulb	A short, erect, underground stem surrounded by fleshy leaves
Bulbil	A small bulb or bulblike body produced on above ground parts
Bulblet	A small bulb, irrespective of origin
Buttress root	Roots with boardlike or planklike growth on upper side, presumably a supporting structure
Calyx	The lowermost whorl of modified leaves; sepals
Capsule/Indehiscent	Dry fruit divided from a two or more loculed ovary
Carpel	The female sporophyll within flowers; floral organ that bears ovules in angiosperms; unit of compound pistil
Carpophore	floral axis extension between adjacent carpels
Caryopsis/Grain	A one seeded dry, indehiscent fruit with the seed coat adnate to the fruit wall, derived from a one-loculed superior ovary
Catkin	A unisexual spike or elongate axis with simple dichasia that falls as a unit after flowering or fruiting
Climbing	Growing upward by means of tendrils, petioles or adventitious roots
Coleoptile	Protective sheath around epicotyl in grasses
Coleorhiza	Protective sheath around radicle in grasses
Columnar	Erect with a stout main stem or trunk
Complete leaf	Leaf with blade, petiole and stipules

Compound leaf	With leaf divided into two or more leaflets
Connective	Filament extension between thecae
Corm	The enlarged, solid, fleshy base of a stem with scales; an upright underground storage stem
Cormel	Small corm produced at base of parent corm
Corolla	The whorl of petals located above the sepals
Cotyledon	Embryonic leaf or leaves in seed
Culm	Flowering and fruiting stems of grasses and sedges
Decumbent	Reclining or lying on the ground with tips ascending
Decurrent	Elongate, extending downward
Determinate	Growth of plant parts, the size of which is limited by cessation of meristematic activity during the year
Diadelphous	With two groups of stamens connate by their filaments
Dioecious	Plant with all flowers imperfect but staminate and pistillate on separate plants
Drupe	A fleshy fruit with a stony endocarp
Embryo	Young sporophyte consisting of epicotyls, hypocotyle, radical and one or more cotyledons
Endocarp	Innermost differentiated layer of pericarp
Endosperm	Food reserve tissue in seed derived from fertilized polar nuclei or food reserve derived from megametophyte in gymnosperms
Epetiolate	Without petiole, leaf sessile
Epicalyx	A whorl of bracts below but resembling a true calyx
Epicotyl	Apical end of embryo axis that gives rise to shoot system
Epigeous	With the cotyledons emergent from seed; usually appearing above ground
Erect	Upright
Exstipulate	Without stipules
Fibrous root	With fine, threadlike or slender roots
Filament	Stamen stalk
Fleshy root	Succulent roots
Flower primordium	Meristematic tissue that gives rise to a flower
Flower	Reproductive structure of flowering plants with or without protective envelopes, the calyx and/or corolla; short shoot with sporophylls and with or without sterile protective leaves, the calyx and corolla
Follicle	A dry, dehiscent fruit derived from one carpel that splits along one suture
Fruit	Matured ovary of flowering plants with or without accessory parts
Glume	Bract, usually occurring in pairs at the base of the grass spikelet
Gynodioecious	Some plants with perfect flowers and some with pistillate
Gynomonoecious	Plant with pistillate and perfect flowers
Half-inferior	Other floral organs attached around ovary with hypanthium adnate to lower half of ovary

Head/Capitulum	A determinate or indeterminate crowded group of sessile or subsessile flowers on a compound receptacle or torus
Herb	A usually low, soft or coarse plant with annual aboveground stems
Hermaphroditic/Monoclinous:	Plant with all flowers perfect; bisexual
Hesperidium	A thick-skinned septate berry with the bulk of the fruit derived from glandular hairs
Hilum	Funicular scar on seed coat
Hypanthium	The fused or coalesced basal portion of floral parts (sepals, petals, stamens) around the ovary
Hypanthodium	An inflorescence with flowers on a wall of a concave capitulum
Hypocotyl	Embryonic stem in seed, located below cotyledons
Hypogeous	With the cotyledons remaining inside the seed; seed usually remaining below ground
Imparipinnate	Pinnate with a conform terminal leaflet
Imperfect/Unisexual flower:	With stamens or carpels absent in the flower
Incomplete leaf	Leaf without one or more parts: blade, petiole, stipules
Indeterminate/Evergrowing:	Continual growth of plant parts, not limited by a cessation of meristematic activity
Inferior	Other floral organs attached above ovary with hypanthium adnate to ovary
Internode	A section or region of stem between nodes
Irregular	Without floral parts within a whorl dissimilar in shape and/or size
Keel	The two united petals of a papilionaceous flower; any structure ridged like the bottom of a boat
Leaf primordium	Meristematic tissue that gives rise to a leaf
Leaf scar	A mark indicating former place of attachment of petiole or leaf base
Leaf	A photosynthetic and transpiring organ, usually developed from leaf primordium in the bud; an expanded, usually green, organ borne on the stem of a plant
Leaflet	A distinct and separate segment of a leaf
Legume	A usually dry, dehiscent fruit derived from one carpel that splits along two sutures
Lemma	Outer scale subtending grass floret
Ligule	An outgrowth or projection from the top of the sheath
Lip/Labellum	Either of two variously shaped parts into which a corolla or calyx is divided usually into an upper and lower lip
Lobe	Any usually rounded segment or part of the perianth
Locule	Compartment of an anther; ovary cavity
Lodicule	Scale like perianth part in the Poaceae
Male/Staminate	Plant with staminate flowers only
Megaspore	A spore that gives rise to a female gametophyte
Mesocarp	Middle layer of pericarp
Micropyle	Hole through seed coat
Microspore	A spore that gives rise to a male gametophyte
Midrib	The central conducting and supporting structure of the blade of a simple leaf
Monoecious	Plant with all flowers imperfect but staminate and pistillate flowers on same plant

Monopodial	Branching with a main axis and reduced or missing laterals
Neuter	Without sex; sexual organs abortive
Node	Region of stem from which a leaf, leaves or branches arise
Nut	A one seeded, dry, indehiscent fruit with a hard pericarp, usually derived from a one-loculed ovary
Obdiplostemonous	With stamens in two whorls, outer opposite petals, inner opposite the sepals
Ovary	Ovule-bearing part of pistil
Ovule	Embryonic seed consisting of integument(s) and nucellus
Palea	Inner scale subtending grass floret
Palmate	Radiately lobed or divided
Palmately compound leaf :	With leaflets from one point at end of petiole
Palmate-pinnate leaf:	With first-order leaflets palmately arranged, second order pinnately arranged
Panicle	Branched inflorescence with a pedicelled flowers
Pedicel	Individual flower stalk
Peduncle	Main stalk for entire inflorescence
Pepo	A berry with a leathery nonseptate rind derived from an inferior ovary
Perfect/Bisexual flower :	With both stamens and carpels or pistils in the flower
Perianth	An aggregation of tepals or combined calyx and corolla
Pericarp	Fruit wall
Perisperm	Food reserve in seed derived from diploid nucellus or integuments
Petal	A corolla member or segment; a unit of the corolla
Petaloid	Petal like stamen without distinct anther and filament but with marginal microsporangia
Petiolate	With a petiole
Petiole	Leaf stalk
Petiolule	Leaflet stalk
Pinnate	Compound with the leaflets arranged on both sides of a common axis
Pinnately compound leaf:	With leaflets arranged oppositely or alternately along a common axis, the rachis
Pistillate/Carpellate/Female flower:	With pistils or carpels only in the flower
Pith	Centermost tissue of stem, usually soft
Placenta	Region of attachment of seeds on inner fruit wall
Plumule	Embryonic leaves in seed derived from epicotyl
Pneumatophorous	With spongy, aerating roots, usually found in marsh plants
Pollen sac	Male sporangium
Polygamous	Plant with perfect and imperfect flowers
Pouch/Sac	A bag shaped structure
Prickle	A sharp-pointed outgrowth from the epidermis or cortex of any organ
Primary	From radicle of embryo; tip of main axis
Procumbent/Prostrate/Reclining:	Trailing or lying flat, not rooting at the nodes
Prop/Stilt	Adventitious, supporting roots usually arising at lower nodes
Pulvinus	The swollen base of a petiole or petiolule

Raceme	Unbranched, indeterminate, elongate inflorescence with pedicelled flowers
Rachilla	Central axis of a grass or sedge spikelet; Secondary axis of compound leaf
Rachis	Major axis within an inflorescence; pinnately compound leaf
Radicle	Basal end of embryo axis that gives rise to root system
Ramose	Branched
Regular	With floral parts within a whorl similar in shape and size
Rhizome	A horizontal underground stem
Root cap	Parenchymatous, protective apex of root
Root hair	Lateral, absorbing outgrowth of the epidermal cell
Root	An absorbing and anchoring organ, usually developed from the radicle and growing downward
Rootstock	A term applied to miscellaneous types of underground stems or parts
Runner/Stolon	An indeterminate, elongate, aboveground propagative stem with long internodes rooting at the tip forming new plants
Saccate	Pouch like
Scale	Small, nongreen leaf on bud or modified stem
Scale leaf	Small, usually appressed and imbricate
Secondary	From pericycle within the primary or secondary root; lateral
Secondary root	Lateral root with root cap and hairs, derived from the pericycle
Seed coat	Outer protective covering of seed
Seed	Matured ovule of seed plants
Sepal	A calyx member or segment; a unit of the calyx
Sessile/Absent	Without petiole or petiolule
Sheath	Any more or less tubular portion of the leaf surrounding the stem or culm
Shrub	A much-branched woody perennial plant, usually without a single trunk
Silicle	A dry, dehiscent fruit derived from two or more carpels that that dehisce along two sutures and that has a persistent partition after dehiscence and is as broad as or broader than long
Silique	A silicle-type fruit that is longer than broad
Simple leaf	With leaf not divided into leaflets
Solitary flower	One flowered, not an inflorescence
Sorosis	Fruit on a common axis that are usually coalesced and derived from the ovaries of several flowers
Spadix	Unbranched, indeterminate, elongate inflorescence with flowers embedded in the rachis
Spathe	An enlarged bract enclosing an inflorescence
Spherical	With multidimensional radial symmetry
Spike	Unbranched, indeterminate, elongate inflorescence with sessile flowers
Spikelet	A small spike; the basic inflorescence unit in grasses and sedges
Sporangium	A spore case
Spur	A short shoot on which flowers and fruits or leaves are borne

Stamen	Male sporophyll within the flower; floral organ that bears pollen in angiosperms
Staminate/Male flower:	With stamens only in the flower
Staminodium	Sterile stamen, may be modified as a nectar or petaloid structure
Standard/Banner/Vexillum:	The upper, usually wide petal in a papilionaceous corolla
Stem	A supporting and conducting organ usually developed initially from the epicotyl and growing upward
Stigma	Pollen receptive portion of carpel
Stipels	Paired scales, spines or glands at the base of petiolule
Stipulate	With stipules
Stipules	Paired scales, spines, glands or bladelike structures at the base of a petiole
Stoloniferous	With loosely clumped shoots rooting at the tip producing new plants; bearing stolons
Style	Attenuated, nonovule-bearing portion of pistil between stigma and ovary
Sucker	A short arising below ground or from an old stem usually fast growing and adventitious
Superior	Other floral organs attached below ovary
Sympodial	Branching without a main axis but with many more or less equal laterals
Syncarpous	With stigmas, styles and ovaries completely fused
Tap root	Persistent, well developed primary root
Tendrils	Long, slender, coiling branch, adapted for climbing
Tepal	A perianth member or segment; term used for perianth parts undifferentiated into distinctive sepals and petals
Thorn	A sharp pointed branch
Tiller	A grass shoot produced from the base of the stem
Trailing	Sprawling on ground, usually with adventitious roots
Tree	A tall, woody perennial plant usually with a single trunk
Trifoliolate	With three leaflets, pinnately compound with terminal petiolule longer than lateral; or palmately compound with petiolules equal in length
Tuber	A thick storage stem, usually not upright
Tuberous root	Fleshy roots resembling stem tubers
Tubular	Cylindrical
Twining	Coiling around an object
Umbel	A determinate or indeterminate flat-topped or convex inflorescence with the pedicels arising at a common point
Vine/Liana	An elongate, weak-stemmed, often climbing annual or perennial plant, with herbaceous or woody texture
Whorl	A cyclic or acyclic group of sepals or petals or stamens or carpels
Wing	Lateral petals as in the Fabaceae; a flattened extension, appendage or projection from a perianth part
Winged	With flattened bladelike margins
Wood	Xylem consisting of vessels and/or tracheids, fibers and parenchyma cells
Zygomorphic/Bilateral :	With floral parts in two symmetrical halves