GLOSSARY.

Abnormal. Differing from the normal or | -androus. In composition, having stamens nanal structure.

Abortion. Imperfect development or nondevelopment of an organ.

Abortive. Defective or barren.

Acquiescent. Stemless or apparently so. Accumbent (cotyledon). Having the edges against the radicle.

Acerb. Sour and astringent.

Achene. A small, dry and hard, 1-celled, 1seeded, indehiscent fruit.

Achlamydeous. Without calyx or corolla. Acicular. Slender needle-shaped.

Acrogenous. Growing from the apex by a terminal bud or by the apical cell only.

Aculeate. Prickly; beset with prickles. Aculeolate. Beset with diminutive prickles. Acuminate. Tapering at the end.

Acute. Terminating with a sharp or welldefined angle.

Estivation. The arrangement of the parts of the perianth in the bud.

Adnate. United, as the inferior ovary with the calvx-tube. Adnate anther, one attached for its whole length to the inner or outer face of the filament.

Adventive. Recently or imperfectly naturalized.

Alate. Winged.

Albumen. Any deposit of nutritive material accompanying the embryo.

Albuminous. Having albumen.

Alliaceous. Having the smell or taste of garlic.

Alternate. Not opposite to each other, as sepals and petals, or as leaves upon a stem. Alveolate. Honeycombed; having angular depressions separated by thin partitions.

Ament. A catkin, or peculiar scaly unisexual

Amphitropous (ovule or seed). Half-inverted and straight, with the hilum lateral. Amplexicaul. Clasping the stem.

Anastomosing. Connecting by cross-veins and forming a network.

Anatropous (ovule). Inverted and straight, with the micropyle next the hilum and the radicle consequently inferior.

Androgynous (inflorescence). Composed of both staminate and pistillate flowers.

Angiospermous. Having the seeds borne within a pericarp.

Annual. Of only one year's duration. Winter annual, a plant from autumn-sown seed which blooms and fruits in the following spring.

Annular. In the form of a ring.

Anterior. On the front side of a flower and next the bract, remote from the axis of inflorescence; equivalent to inferior and (less properly) exterior.

Anther. The polliniferous part of a stamen. Antheridium. In Cryptogams, the organ corresponding to an anther.

Antheriferous. Anther-bearing.

Antherizoid. One of the minute organs developed in an antheridium, corresponding to pollen-grains.

Anthesis. The time of expansion of a flower. Apetalous. Having no petals.

Apical. Situated at the apex or tip. Apiculate. Ending in a short pointed tip Appressed. Lying close and flat against.

Aquatic. Growing in water.

Arachnoid. Cobwebby; of slender entan gled hairs.

Archegonium. The organ corresponding to a pistil in the higher Cryptogams.

Arcuate. Moderately curved. Areolate. Marked out into small spaces;

reticulate Aril. An appendage growing at or about the hilum of a seed.

Arillate. Having an aril.

Articulate. Jointed; having a node or joint. Ascending. Rising somewhat obliquely, or curving upward. Ascending ovule, one that is attached above the base of the ovary and is directed upward.

Assurgent. Ascending.

Attenuate. Slenderly tapering; becoming very narrow.

Auricle. An ear-shaped appendage. Auriculate. Furnished with auricles.

Awl-shaped. Narrowed upward from the base to a slender or rigid point.

Awn. A bristle-shaped appendage. Axil. The angle formed by a leaf or branch

Axile. Situated in the axis. Axillary. Situated in an axil. Axis. The central line of any organ or support of a group of organs; a stem, etc.

Baccate, Berry-like; pulpy throughout. Barbed. Furnished with rigid points or short bristles, usually reflexed like the barb of a fish-hook.

Barbellate. Finely barbed. Barbulate. Finely bearded.

Basal, Basilar. At or pertaining to the

Basifixed. Attached by the base.

Beaked. Ending in a beak or prolonged tip. Bearded. Bearing a long awn, or furnished with long or stiff hairs,

Berry. A fruit the whole pericarp of which

is fleshy or pulpy.

Bi- or Bis-. A Latin prefix signifying two, twice, or doubly.

Bidentate. Having two teeth.

Biennial. Of two years' duration. Bifid. Two-cleft.

Bilabiate. Two-lipped.

Bilocellate. Having two secondary cells. Bilocular, Two-celled.

Riserval. Having both stamens and pistils.

Bladdery. Thin and inflated. Blade. The limb or expanded portion of a

leaf, etc.

Bract. A more or less modified leaf subtending a flower or belonging to an inflorescence, or sometimes cauline.

Bracteate. Having bracts.

Bracteolate. Having bractlets.

Bracteose. With numerous or conspicuous bracts.

Bractlet. A secondary bract, as one upon the pedicel of a flower.

Bristle. A stiff hair or any similar outgrowth. Bud. The rudimentary state of a stem or branch : an unexpanded flower.

Bulb. A subterranean leaf-bud with fieshy scales or coats.

Bulbiferous. Bearing bulbs.

Bulblet. A small bulb, especially one borne upon the stem.

Bulbous. Having the character of a bulb.

Caducous. Falling off very early.

Calcarate. Produced into or having a spur. Callus. A hard protuberance or callosity. Calyculate. Having bracts around the calyx imitating an outer calyx.

Caluptra. The membranous hood or covering of the capsule in Hepaticæ and Mosses. Calyx. The outer perianth of the flower.

Campanulate. Bell-shaped; cup-shaped with a broad base.

Campulospermous. Having seeds with longitudinally involute margins, as in some

Campulotropous (ovule or seed). So curved

as to bring the apex and base nearly to-

Canaliculate. Longitudinally channelled. Canescent. Hoary with gray pubescence.

Capitate. Shaped like a head : collected into a head or dense cluster.

Capitellate. Collected into a small head Capsular. Belonging to or of the nature of a capsule.

Capsule. A dry dehiscent fruit composed of more than one carpel; the spore-case of Hepaticae, etc.

Capsuliferous. Capsule-bearing.

Carinate. Having a keel or a projecting longitudinal medial line on the lower surface. Carpel. A simple pistil, or one member of a compound pistil.

Cartilaginous. Of the texture of cartilage: firm and tough.

Caruncle. An excrescence or appendage at or about the hilum of a seed.

Carunculate. Having a caruncle.

Carnopsis. A grain, as of grasses; a seedlike fruit with a thin pericarp adnate to the contained seed.

Castaneous. Of a chestnut color; brown. Catkin. An ament.

Caudate. Having a slender tail-like ap-

Caudex. The persistent base of an otherwise annual herbaceous stem.

Caulescent. Having a manifest stem.

Cauline. Belonging to the stem. Cavernous Hollow; full of air-cavities.

Cell. One of the minute vesicles, of very various forms, of which plants are formed. Any structure containing a cavity, as the cells of an anther, ovary, etc.

Cellular (tissue). Composed of short transparent thin-walled cells, in distinction from fibrous or vascular

Cespitose. Growing in tufts; forming mats or turf.

Chaff. A small thin scale or bract, becoming dry and membranous.

Chaffy. Having or resembling chaff. Channelled. Deeply grooved longitudinally, like a gutter.

Chartaceous. Having the texture of writingpaper.
Chlorophyll. The green grains within the

cells of plants. Chlorophyllose. Containing chlorophyll. Ciliate. Marginally fringed with hairs,

Ciliolate. Minutely ciliate. Cinereous Ash-color.

Circinate. Coiled from the top downward, as the young frond of a fern.

Circumscissile. Dehiscing by a regular transverse circular line of division.

Clavate. Club-shaped; gradually thickened upward.

Cleistogamous. Fertilized in the bud, with-out the opening of the flower.

Cleft. Cut about to the middle. Climbing. Ascending by laying hold of sur-

rounding objects for support. Cluster. Any assemblage of flowers on a plant.

Clustered. Collected in a bunch of any sort. Coalescence. The union of parts or organs of the same kind.

Coccus (pl. Cocci). One of the parts into which a lobed fruit with 1-seeded cells splits. Cochleate. Spiral, like a snail-shell.

Cohesion. The union of one organ with another.

Columella. The persistent axis of some capsules, spore-cases, etc.

Columnar. Like a column.

Commissure. The surface by which one carpel joins another, as in the Umbelliferæ. Comose. Furnished with a coma or tuft of

Complicate. Folded upon itself.

Compound. Composed of 2 or more similar parts united into one whole. Compound leaf, one divided into separate leaflets. Compressed. Flattened laterally.

Concentacle. In some Cryptogams a case or receptacle containing the organs of fruc-

Conduplicate. Folded together lengthwise. Confluent. Running into each other; blended into one.

Coniferous. Cone-bearing.

Connate. United congenitally. Connective. The portion of a stamen which connects the two cells of the anther.

Connivent. Coming into contact; converging.

Conoidal. Nearly conical.

Convergent. Approaching each other. Convolute. Rolled up longitudinally.

Cordate. Heart-shaped with the point upward.

Coriaceous. Leathery in texture.

Corm. The enlarged fleshy base of a stem, bulb-like but solid.

Corolla. The inner perianth, of distinct or connate petals.

Coroniform. Shaped like a crown.

Corrugate. Wrinkled or in folds.

Corumb. A flat-topped or convex open flowercluster, in the stricter use of the word equivalent to a contracted raceme and progressing in its flowering from the margin inward.

Corymbose. In corymbs, or corymb-like. Cosmopolite. Found in most parts of the globe (of plants).

Costa. A rib; a midrib or mid-nerve.

Costate. Ribbed; having one or more longitudinal ribs or nerves.

Cotuledons. The foliar portion or first leaves (one, two, or more) of the embryo as found

Crateriform. In the shape of a saucer or cup, hemispherical or more shallow.

Creeping. Running along or under the ground and rooting.

Crenate. Dentate with the teeth much rounded

Crenulate. Finely crenate.

Crested, Cristate. Bearing an elevated appendage resembling a crest.

Crown. An inner appendage to a petal, or to the throat of a corolla

Cruciate. Cross-shaped.

Crustaceous. Of hard and brittle texture. Cucullate. Hooded or hood-shaped; cowled. Culm. The peculiar stem of sedges and grasses.

Cuneate. Wedge-shaped; triangular with the acute angle downward.

Cuspidate. Tipped with a cusp, or sharp and rigid point.

Cylindraceous. Somewhat or nearly cylindrical

Cyme. A usually broad and flattish determinate inflorescence, i. e. with its central or terminal flowers blooming earliest. Cymose. Bearing cymes or cyme-like.

Deciduous. Not persistent; not evergreen. Decompound. More than once compound or divided

Decumbent. Reclining, but with the summit ascending.

Decurrent (leaf). Extending down the stem below the insertion.

Decurved. Curved downward. Decussate. Alternating in pairs at right

angles, or in threes. Definite. Of a constant number, not ex-

ceeding twenty. Deflexed. Bent or turned abruptly downward

Dehiscent. Opening regularly by valves, slits, etc , as a capsule or anther.

Deltoid. Shaped like the Greek letter A. Dentate. Toothed, usually with the teeth directed outward.

Denticulate. Minutely dentate.

Depressed. Somewhat flattened from above. Di-, Dis-. A Greek prefix signifying two or

Diadelphous (stamens). Combined in two

Diandrous. Having two stamens. Dicarpellary. Composed of two carpels.

Dichotomous. Forking regularly by pairs. Dicotuledonous. Having two cotyledons.

Didymous. Twin; found in pairs. Didynamous (stamens). In two pairs of unequal length.

Diffuse. Widely or loosely spreading.

Digitate. Compound, with the members borne in a whorl at the apex of the support. Dimerous (flower). Having all the parts in

Dimidiate. In halves, as if one half were wanting. The se staves sweeten year

Dimorphous. Occurring in two forms. Diacious. Unisexual, with the two kinds of flowers on separate plants.

Discoid. Resembling a disk. Discoid head. in Compositæ, one without ray-flowers.

Disk. A development of the receptacle at or around the base of the pistil. In Compositee, the tubular flowers of the head as distinct from the ray.

Dissected. Cut or divided into numerous segments.

Dissepiment. A partition in an ovary or frmit.

Distichous. In two vertical ranks.

Distinct. Separate; not united; evident, Divaricate. Widely divergent.

Divergent. Inclined away from each other. Divided. Lobed to the base.

Dorsal. Upon or relating to the back or outer surface of an organ.

Drupaceous. Resembling or of the nature of a drupe.

Drupe. A fleshy or pulpy fruit with the inner portion of the pericarp (1-celled and 1seeded, or sometimes several-celled) hard or stony.

Drupelet. A diminutive drupe.

E- or Ex-. A Latin prefix having often a privative signification, as ebracteate, without bracts.

Echinate. Beset with prickles.

Effuse. Very loosely spreading.

Elater. A usually spirally marked thread found in the cansules of most Henaticae. Ellipsoidal. Nearly elliptical; of solids, el-

liptical in outline. Elliptical. In the form of an ellipse; oval. Emarginate. Having a shallow notch at the

extremity. Embryo. The rudimentary plantlet within

the seed. Endocarp. The inner layer of a pericarp.

Endogenous. Growing throughout the substance of the stem, instead of by superficial lavers

Entire. Without toothing or division. Ephemeral. Lasting only for one day.

Epidermis. The cuticle or thin membrane covering the outer surface

Epigynous. Growing on the summit of the ovary, or apparently so.

Epiphyte. A plant growing attached to another plant, but not parasitic; an air-plant. Eporose. Without pores.

Equitant. Astride, used of conduplicate leaves which enfold each other in two ranks, as in Iris.

Erect. Vertical; upright as respects the plane of the base.

Erose. As if gnawed.

Exalbuminous. Without albumen. Excurrent. Running out, as a nerve of a leaf projecting beyond the margin.

Exfoliating. Cleaving off in thin layers. Exogenous. Growing by annular layers near the surface; belonging to the Exogens. Exserted. Projecting beyond an envelope, as stamens from a corolla. Extrorse. Facing outward.

Falcate. Scythe-shaped; curved and flat, tapering gradually.

Farinaceous. Containing starch; starch-

Farinose. Covered with a meal-like powder. Fascicle A close hundle or cluster

Fastigiate (branches). Erect and near together.

Ferruginous. Rust-color.

Fertile. Capable of producing fruit, or productive, as a flower having a pistil, or an anther with pollen.

Fibrillose. Furnished or abounding with fine fibres

Fibrous. Composed of or resembling fibres. Fibrous tissue, a tissue formed of elongated thick-walled cells.

Fibro-vascular. Composed of woody fibres and ducts.

Filament. The part of a stamen which supports the anther; any thread-like body. Filamentous. Composed of threads.

Filiferous, Thread-bearing.

Filiform. Thread-shaped; long, slender, and terete.

Fimbriate. Fringed.

Fimbrillate. Having a minute fringe.

Fingered. Digitate.

Fistular. Hollow and cylindrical.

Flaccid. Without rigidity; lax and weak. Fleshy. Succulent; juicy; of the consist-

ence of flesh. Flexuous. Zigzag; bending alternately in opposite directions.

Floccose. Clothed with locks of soft hair or

Foliaceous. Leaf-like in texture or appearance.

-foliate. Having leaves.

foliolate. Having leaflets.

Follicle. A fruit consisting of a single carpel, dehiscing by the ventral suture. Follicular. Like a follicle.

Forked. Divided into nearly equal branches. Fornicate. Arched over, as the corona of some Borraginaceæ, closing the throat.

Free. Not adnate to other organs. Friable. Easily crumbled.

Frond. The leaf of Ferns and some other Cryptogams; also in some Phænogams, as in Lemnaceæ, where it serves for stem as well as foliage.

Fruit. The seed-bearing product of a plant, simple, compound, or aggregated, of whatever form.

Fugacious. Falling or fading very early. Funicle. The free stalk of an ovule or seed Fuscous. Gravish-brown. Fusiform. Spindle-shaped; swollen in the middle and narrowing toward each end.

Galea. A hooded or helmet-shaped portion of a perianth, as the upper sepal of Aconitum, and the upper lip of some bilabiate

Galeate. Helmet-shaped; having a galea. Gamopetalous. Having the petals of the corolla more or less united.

Gamonhullous. Composed of coalescent leaves, sepals, or petals. Gemma. A bud cr body analogous to a bud

by which a plant propagates itself.

Gemmiparous. Producing gemmæ. Geniculate. Bent abruptly, like a knee. Gibbous. Protuberant or swollen on one

Glabrate. Somewhat glabrous, or becoming glabrous.

Glabrous. Smooth; not rough, pubescent, or hairy.

Gland. A secreting surface or structure; any protuberance or appendage having the appearance of such an organ.

Glandular. Bearing glands or of the nature of a gland.

Glaucous. Covered or whitened with a bloom.

Globose, Globular. Spherical or nearly so. Glochidiate. Barbed at the tip. Glomerate. Compactly clustered.

Glumaceous. Furnished with or resembling

Glume. One of the chaffy bracts of the inflorescence of Grasses. Granular. Composed of small grains.

Gregarious. Growing in groups or clusters. Gymnospermous. Bearing naked seeds, without an ovary.

Gunandrous. Having the stamens borne upon the pistil, as in Orchidaceæ. Gunobase. An enlargement or prolongation

of the receptacle bearing the ovary.

Habit. The general appearance of a plant. Halberd-shaped. The same as Hastate. Hastate. Like an arrow-head, but with the basal lobes pointing outward nearly at right

Head. A dense cluster of sessile or nearly sessile flowers on a very short axis or re-

Heart-shaped. Ovate with a sinus at base. Herb. A plant with no persistent woody stem above ground.

Herbaceous. Having the characters of an herb; leaf-like in color and texture.

Heterocarpous. Producing more than one kind of fruit.

Heterogamous. Bearing two kinds of

Hilum. The sear or point of attachment of

Hirsute. Pubescent with rather coarse or stiff hairs.

Hispid. Beset with rigid or bristly hairs or with bristles.

Hispidulous. Minutely hispid.

Hoary. Grayish-white with a fine close pubescence.

Homogamous. Bearing but one kind of flowers.

Hooded. Shaped like a hood or cowl. Hualine. Transparent or translucent. Hubrid. A cross-breed of two species.

Hypogynous. Situated on the receptacle beneath the ovary and free from it and from the calyx; having the petals and stamens so situated.

Imbricate. Overlapping, either vertically or spirally, where the lower piece covers the base of the next higher, or laterally, as in the æstivation of a calyx or corolla, where at least one piece must be wholly external and one internal.

Immersed. Growing wholly under water: wholly covered by the involucral leaves, as sometimes the capsule in Hepaticæ.

Incised. Cut sharply and irregularly, more or less deeply.

Included. Not at all protruded from the surrounding envelope.

Incubous (leaf). Having the tip or upper margin overlapping the lower margin of the leaf above.

Incumbent (cotyledons). Lying with the back of one against the radicle. Indefinite (stamens). Inconstant in number

or very numerous. Indehiscent. Not opening by valves, etc.;

remaining persistently closed. Indigenous. Native and original to the country.

Indurated, Hardened.

Indusium. The proper (often shield-shaped) covering of the sorus or fruit-dot in Ferns. Inequilateral. Unequal-sided.

Inferior. Lower or below: outer or anterior. Inferior ovary, one that is adnate to the calyx.

Inflated. Bladdery.

Inflorescence. The flowering part of a plant, and especially the mode of its arrangement, Infra-. In composition, below; as infra-

axillary, below the axil. Innovation. An offshoot from the stem. Inserted. Attached to or growing out of. Inter- or intra-. In composition, between,

Interfoliaceous. Between the leaves of a pair, as the stipules of many Rubiaceæ. Internode. The portion of a stem between

two nodes. Intramarginal, Within and near the margin.

Introrse. Turned inward or toward the axis. Involucel. A secondary involucre, as that of an umbellet in Umbelliferæ.

Involucellate. Having an involucel. Involucral. Belonging to an involucre. Involucrate. Having an involucre.

Involucre. A circle or collection of bracts surrounding a flower cluster or head, or a single flower.

Involute. Rolled inward.

Irregular (flower). Showing inequality in the size, form, or union of its similar parts.

Julaceous. Resembling a catkin in appearance.

Keel. A central dorsal ridge, like the keel of a boat; the two anterior united petals of a papilionaceous flower.

Kidney-shaped. Crescentic with the ends broad and rounded: reniform.

Labiate. Lipped; belonging to the Labiatee. Lacerate. Irregularly cleft as if torn. Laciniate. Slashed; cut into narrow pointed

lohes Lamella. A thin flat plate or laterally flattened ridge.

Lanceolate. Shaped like a lance-head. broadest above the base and narrowed to the apex.

Lateral. Belonging to or borne on the side. Lax Loose and slender

Leaflet. A single division of a compound

Legume. The fruit of the Leguminosæ, formed of a simple pistil and usually dehiscent by both sutures

Leguminous. Pertaining to a legume or to the Leguminosa.

Lenticular, Lentil-shaped; of the shape of a double-convex lens.

Lepidote. Beset with small scurfy scales. Ligulate. Furnished with a ligule.

Ligule. A strap-shaped corolla, as in the ray-flowers of Compositæ; a thin scarious projection from the summit of the sheath in Grasses.

Liliaceous. Lily-like; belonging to the Liliaceæ.

Limb. The expanded portion of a gamopetalous corolla, above the throat; the expanded portion of any petal, or of a leaf. Linear. Long and narrow, with parallel margins.

Lip. Each of the upper and lower divisions of a bilabiate corolla or calyx; the peculiar upper petal in Orchids.

Lobe. Any segment of an organ, especially if rounded.

Lobed. Divided into or bearing lobes. -levelar. In composition, having cells. Localicidal. Dehiscent into the cavity of a cell through the dorsal suture

Lunate. Of the shape of a half-moon or

Lunulate. Diminutive of Lunate Lyrate. Pinnatifid with a large and rounded terminal lobe, and the lower lobes small.

Macrospore. The larger kind of spore in Selaginellaceæ, etc.

Marcescent. Withering but persistent. Marginal. Along or near the edge.

Marginate. Furnished with a border peculiar in texture or appearance.

Mealy. Farinaceous,

Membranaceous, Membranous. Thin and rather soft and more or less translucent. Meniscoid. Concavo-convex.

Mericarp. One of the achene-like carpels of Umbelliferæ.

-merous. In composition, having parts, as 2-merous, having two parts of each kind. Micropyle. The point upon the seed at

which was the orifice of the ovule. Microspore. The smaller kind of spore in Selaginellaceæ, etc.

Midrib. The central or main rib of a leaf. Mitriform. Shaped like a mitre or cap.

Monadelphous (stamens). United by their filaments into a tube or column. Moniliform. Resembling a string of beads;

cylindrical with contractions at intervals. Monocotyledonous. Having but one cotyledon.

Monacious. With stamens and pistils in separate flowers on the same plant. Mucilaginous. Slimy; containing mucilage. Mucro. A short and small abrupt tip.

Mucronate. Tipped with a mucro. Multifid. Cleft into many lobes or segments. Muricate. Rough with short hard points. Muriculate. Very finely muricate.

Naked. Bare; without the usual covering or appendages

Nectary. Any place or organ where nectar is secreted. Nectariferous. Producing nectar.

Nerve. A simple or unbranched vein or slender rib.

Node. The place upon a stem which normally bears a leaf or whorl of leaves. Nodose. Knotty or knobby.

Nucleus. The germ-cell of the oyule, which by fertilization becomes the seed; the kernel of a seed.

Numerous. Indefinite in number.

Nut. A hard indehiscent 1-celled and 1seeded fruit, though usually resulting from a compound ovary.

Nutlet. A diminutive nut.

Ob-. A Latin prefix, usually carrying the idea of inversion. Obcompressed. Compressed dorso ventrally instead of laterally.

Obconically. Inversely conical, having the attachment at the apex. Obcordate. Inverted heart-shaped.

Oblanceolate. Lanceolate with the broadest part toward the apex.

Oblique. Unequal-sided or slanting.
Oblong. Considerably longer than broad and with nearly parallel sides.

Obovate. Inverted ovate.

Obovoid. Having the form of an inverted egg. Obsolete. Not evident; rudimentary. Obtuse. Blunt or rounded at the end.

Ocrea. A leggin-shaped or tubular stipule. Ocreate. Having sheathing stipules. Ochroleucous. Yellowish-white.

Officinal. Of the shops; used in medicine or the arts.

Ossnore. The fertilized nucleus or germ-cell of the archegonium in Cryptogams, from which the new plant is directly developed. Opaque. Dull; not smooth and shining.

Operculate. Furnished with a lid.

Operculum. A lid; the upper portion of a circumscissile cansule. Orbicular. Circular.

Orthotropous (ovule or seed). Erect, with the orifice or micropyle at the apex. Oval. Broadly elliptical.

Ovary. The part of the pistil that contains

Ovate. Egg-shaped; having an outline like that of an egg, with the broader end down-

Ovoid. A solid with an oval outline. Ovule. The body which after fertilization becomes the seed.

Ovuliferous. Bearing ovules.

Palate. A rounded projection of the lower lip of a personate corolla, closing the throat. Paleaceous. Chaffy.

Palet. The upper thin chaffy or hyaline bract which with the glume encloses the flower in Grasses.

Palmate (leaf). Radiately lobed or divided. Palmately. In a palmate manner,

Panicle. A loose irregularly compound inflorescence with pedicellate flowers.

Panicled, Paniculate. Borne in a panicle; resembling a panicle.

Papilionaceous (corolla). Having a standard, wings, and keel, as in the peculiar corolla of many Leguminosa.

Papillose. Bearing minute nipple-shaped projections.

Pappus. The modified calyx-limb in Compositæ, forming a crown of very various character at the summit of the achene

Parasitic. Growing on and deriving nourishment from another plant.

Parietal. Borne on or pertaining to the wall or inner surface of a cansule

Parted. Cleft nearly but not quite to the

Partial. Of secondary rank.

Pectinate. Pinnatifid with narrow closely set segments; comb-like.

Pedate. Palmately divided or parted, with the lateral segments 2-cleft.

Pedicel. The support of a single flower. Pedicellate. Borne on a pedicel.

Peduncle. A primary flower-stalk, supporting either a cluster or a solitary flower.

Pedunculate. Borne upon a peduncle.

Peltate. Shield-formed and attached to the support by the lower surface.

Pendulous. More or less hanging or declined. Pendulous ovule, one that hangs from the side of the cell.

Perennial. Lasting year after year. Perfect (flower). Having both pistil and stamens

Perfoliate (leaf). Having the stem apparently passing through it.

Perianth. The floral envelope, consisting of the calvx and corolla (when present), whatever their form; in Hepaticæ, the inner usually sac-like involucre of the archegonium. Pericarp. The matured ovary.

Perigunium. The inflated sac which encloses the ovary in Carex.

Perigynous. Adnate to the perianth, and therefore around the ovary and not at its

Persistent. Long-continuous, as a calyx upon the fruit, leaves through winter, etc. Personate (corolla). Bilabiate, and the throat closed by a prominent palate. Petal. A division of the corolla.

Petaloid. Colored and resembling a petal.

Petiolate. Having a petiole. Petiole. The footstalk of a leaf.

Phænogamous. Having flowers with stamens and pistils and producing seeds.

Phyllodium. A somewhat dilated petiole having the form of and serving as a leafblade.

Pilose. Hairy, especially with soft hairs. Pinna (pl. Pinnæ). One of the primary divisions of a pinnate or compoundly pinnate frond or leaf

Pinnate (leaf). Compound, with the leaflets arranged on each side of a common petiole Pinnatifid. Pinnately cleft.

Pinnule. A secondary pinna; one of the pin nately disposed divisions of a pinna.

Pistil. The seed-bearing organ of the flower, consisting of the ovary, stigma, and style when present.

Pistillate. Provided with pistils, and, in its more proper sense, without stamens.

Pitted, Marked with small depressions or

Placenta. Any part of the interior of the ovary which bears ovules.

Plane. Flat; with a flat surface or surfaces. Plicate. Folded into plaits, usually lengthPlumose. Having fine hairs on each side, like the plume of a feather, as the pappusbristles of Thistles.

Plumule. The bud or growing point of the

Pod. Any dry and dehiscent fruit. Pointed. Acuminate.

Pollen. The fecundating grains contained in the anther.

Polliniferous. Bearing pollen.

Pollinium (pl. Pollinia). A mass of waxv pollen or of coherent pollen-grains, as in Asclepias and Orchids.

Polypetalous. Having separate petals. Pome. A kind of fleshy fruit of which the apple is the type.

Porose. Pierced with small holes or nores. Posterior. In an axillary flower, on the side nearest to the axis of inflorescence.

Posticous. On the posterior side; extrorse, Præmorse. Appearing as if bitten off.

Prickle. A small spine or more or less slender sharp outgrowth from the bark or rind. Prismatic. Of the shape of a prism, angular. with flat sides, and of nearly uniform size

throughout. Procumbent. Lying on the ground. Proliferous. Producing offshoots.

Prostrate. Lying flat upon the ground. Proterogunous. Having the stigma ripe for the pollen before the maturity of the anthers of the same flower.

Prothallus. A cellular usually flat and thallus-like growth, resulting from the germination of a spore, upon which are developed sexual organs or new plants.

Pseudaxillary. Terminal but becoming apparently axillary by the growth of a lateral branch.

Pseudo-costate. Falso-ribbed, as where a marginal vein or rib is formed by the confluence of the true veins.

Pteridophytes. Fern-plants: Ferns and their allies.

Puberulent. Minutely pubescent. Pubescent. Covered with hairs, especially

if short, soft and downy. Punctate. Dotted with depressions or with

translucent internal glands or colored dots. Puncticulate. Minutely punctate.
Pungent. Terminating in a rigid sharp point; acrid.

Putamen. The shell of a nut; the bony part of a stone-fruit.

Quadrate. Nearly square in form.

Raceme. A simple inflorescence of pedicelled flowers upon a common more or less elongated axis.

Racemose. In racemes; or resembling a

Radiate. Spreading from or arranged around a common centre; bearing ray-flowers.

Radical. Belonging to or proceeding from the root or base of the stem near the ground. Radicle. The portion of the embryo below the cotyledons, more properly called the candicle

Radiculose. Bearing rootlets. Rameal. Belonging to a branch.

Ray. The branch of an umbel; the marginal flowers of an inflorescence when distinct from the disk

Receptacle. The more or less expanded or produced portion of an axis which bears the organs of a flower (the torus) or the collected flowers of a head ; any similar structure in Cryptogams.

Recurved. Curved downward or backward. Reflexed. Abruptly bent or turned down-

Regular. Uniform in shape or structure. Reniform, Kidney-shaped

Repand. With a slightly uneven and somewhat sinuate margin.

Resiniferous. Producing resin. Reticulate. In the form of network; netveined

Retrorse. Directed back or downward. Retuse. With a shallow notch at a rounded

Revolute. Rolled backward from the mar-

gins or apex. Rhachis. The axis of a spike or of a comnound leaf

Rhaphe. The ridge or adnate funicle which in an anatropous ovule connects the two ends.

Rhizome. Any prostrate or subterranean stem, usually rooting at the nodes and becoming erect at the apex. Very variable in character, and including morphologically the tuber, corm, bulb, etc.

Rhombic, Rhomboidal. Somewhat lozengeshaped; obliquely four-sided.

Rib. A primary or prominent vein of a leaf. Ringent. Gaping, as the mouth of an open bilabiate corolla.

Root. The underground part of a plant which supplies it with nourishment.

Rootstock. Same as Rhizome. Rostrate. Having a beak or spur.

Rosulate. In the form of a rosette. Rotate (corolla). Wheel-shaped; flat and

circular in outline. Rotund. Rounded in outline. Rudiment. A very partially developed or-

gan; a vestige. Rudimentary. But slightly developed.

Rufous. Reddish brown.

Rugose. Wrinkled.

Runcinate. Sharply incised, with the segments directed backward.

Runner. A filiform or very slender stolon-

Saccate. Sac-shaped. Sagittate. Shaped like an arrow-head, the basal lobes directed downward. Salver-shaped (corolla). Having a slender tube abruptly expanded into a flat limb. Samara. An indehiscent winged fruit. Scabrous. Rough to the touch. Scalariform (vessels). Having transverse markings like the rounds of a ladder. Scape. A peduncle rising from the ground, naked or without proper foliage. Scapose. Bearing or resembling a scape. Scarious. Thin, dry, and membranaceous, not green. Scorpioid (inflorescence). Circinately coiled while in bud. Scurf. Small bran-like scales on the epi-Scumitar-shaped (leaf). Curved with a flattriangular section, the straighter edge the thickest. Seed. The ripened ovule, consisting of the embryo and its proper coats. Segment. One of the parts of a leaf or other like organ that is cleft or divided. Sepal. A division of a calvx. Septicidal (capsule). Dehiscing through the partitions and between the cells. Septum. Any kind of partition. Serrate. Having teeth pointing forward. Serrulate. Finely serrate. Sessile. Without footstalk of any kind. Setaceous. Bristle-like. Setose. Beset with bristles. Setulose. Having minute bristles. Sheath. A tubular envelope, as the lower part of the leaf in Grasses. Sheathing. Enclosing as by a sheath. Shrub. A woody perennial, smaller than a Silicle. A short silique. Silique. The peculiar pod of Cruciferæ. Silky. Covered with close-pressed soft and straight pubescence. Simple. Of one piece : not compound. Sinuate. With the outline of the margin strongly wavy. Sinus. The cleft or recess between two lohes Smooth. Without roughness or pubescence. Sorus (pl. Sori). A heap or cluster, applied to the fruit-dots of Ferns. Spadix. A spike with a fleshy axis. Spathe. A large bract or pair of bracts enclosing an inflorescence. Spatulate. Gradually narrowed downward from a rounded summit. Spicate. Arranged in or resembling a spike. Spiciform. Spike-like. Spike. A form of simple inflorescence with the flowers sessile or nearly so upon a more or less elongated common axis.

Spikelet. A small or secondary spike.

Spindle-shaped. Same as Fusiform.

Spine. A sharp woody or rigid outgrowth from the stem. Spinose. Spine-like, or having spines, Sporangium, A spore-case. Spore. The reproductive organ in Cryptogams which corresponds to a seed. Sporocarp. The fruit-cases of certain Cryptogams containing sporangia or spores. Spur. A hollow sac-like or tubular extension of some part of a blossom, usually nectariferous Squamula. A reduced scale, as the hypogynous scales in Grasses. Squarrose. Having spreading and projecting processes, such as the tips of involucral Squarrulose. Diminutively squarrose. Stamen. One of the pollen-bearing or fertilizing organs of the flower. Staminodium. A sterile stamen, or any structure without anther corresponding to a stamen. Standard. The upper dilated petal of a papilionaceous corolla. Stellate, Stelliform. Star-shaped. Stem. The main ascending axis of a plant. Sterile. Unproductive, as a flower without pistil, or stamen without an anther. Stigma. That part of a pistil through which fertilization by the pollen is effected. Stigmatic. Belonging to or characteristic of the stigma. Stipe. The stalk-like support of a pistil: the leaf-stalk of a Fern. Stipitate. Having a stipe. Stipular. Belonging to stipules. Stipulate. Having stipules. Stipule. An appendage at the base of a petiole or on each side of its insertion. Stolon. A runner, or any basal branch that is disposed to root. Stoloniferous. Producing stolons. Stoma (pl. Stomata). An orifice in the epidermis of a leaf communicating with internal air-cavities Striate. Marked with fine longitudinal lines or ridges. Strict. Very straight and upright. Strigose. Beset with appressed sharp straight and stiff hairs. Strobile. An inflorescence marked by imbricated bracts or scales, as in the Hop and Pine-cone. Strophiole. An appendage at the hilum of certain seeds Style. The usually attenuated portion of the pistil connecting the stigma and ovary. Stylopodium. A disk-like expansion at the base of a style, as in Umbelliferæ. Sub-. A Latin prefix, usually signifying somewhat or slightly. Subulate. Awl-shaped. Succubous (leaves). Having the upper mar-

Turbinate. Top-shaped; inversely conical. gin of a leaf covered by the base of the one Twining. Winding spirally about a support. above. Succulent. Juicy; fleshy. Suffrutescent. Slightly or obscurely Umbel. An inflorescence in which a cluster shrubby. of peduncles or pedicels spring from the Suffruticose. Very low and woody; diminsame point. utively shrubby. Umbellate. In or like an umbel. Sulcate. Grooved or furrowed. Umbellet. A secondary umbel. Superior (ovary). Free from the calyx. Suspended (ovule). Hanging from the apex Umbonate. Bearing a stout projection in the centre; bossed. of the cell. Underleaves. The small accessory leaves or Suture. A line of dehiscence stipules on the under side of the stem in Symmetrical (flower). Regular as to the Henatica. number of its parts; having the same num-Undulate. With a wavy surface; repand. Unquiculate. Contracted at base into a ber of parts in each circle. Synonym. A superseded or unused name. claw. Uni-. In composition, one. Tail. Any slender terminal prolongation. Unisexual. Of one sex, either staminate or Terete Having a circular transverse section. pistillate only. Terminul. At or belonging to the apex. Urceolate. Hollow and cylindrical or ovoid, Ternary. Consisting of three. and contracted at or below the mouth, like Ternate. In threes. Tetradynamous. Having four long and two Utricle. A small bladdery 1-seeded fruit; shorter stamens. any small bladder-like body. Tetragona'. Four-angled. Thalamiflorous. Having the parts of the Valvate. Opening by valves, as a capsule; flower hypogynous. in astivation, meeting by the edges without Thalloid, Thallose. Resembling a thallus. overlapping. Thallus. In Cryptogams, a cellular expan-Valve. One of the pieces into which a capsion taking the place of stem and foliage. sule splits. Throat. The orifice of a gamopetalous co-Vascular. Furnished with vessels or ducts, rolla or calyx; the part between the proper Veins. Threads of fibro-vascular tissue in a tube and the limb. leaf or other organ, especially those which Thurse. A contracted or ovate and usually branch (as distinguished from nerves). compact panicle. Ventral. Belonging to the anterior or inner Thursoid. Resembling a thyrse. face of an organ; the opposite of dorsal. Tomentose. Densely pubescent with matted Ventricose. Swelling unequally, or inflated on one side. Tooth. Any small marginal lobe. Vernation. The arrangement of leaves in Torose. Cylindrical with contractions at inthe bud. tervals. Verrucose. Covered with wart-like eleva-Torulose. Diminutive of Torose. Torus. The receptacle of a flower. Versatile (anther). Attached near the mid Transverse. Across; in a right and left dle and turning freely on its support. direction. Vertical. Perpendicular to the horizon; Tri-. In composition, three or thrice. longitudinal Triandrous. Having three stamens. Verticillate. Disposed in a whorl. Trifoliolate. Having three leaflets. Vesicle. A small bladder or air-cavity Trigonous. Three-angled. Vesicular, Vesiculose. Composed of or Trimorphous. Occurring under three forms. covered with vesicles. Triquetrous. Having three salient angles, Villous. Bearing long and soft hairs. the sides concave or channelled. Virgate. Wand-shaped; slender, straight Truncate. Ending abruptly, as if out off and erect transversely. Viscid. Glutinous; sticky. Tuber. A thickened and short subterranean branch having numerous buds or eyes. Whorl. An arrangement of leaves, etc., in Tubercle. A small tuber or tuber-like body. a circle round the stem. Tuberiferous. Bearing tubers. Wing. Any membranous or thin expansion Tuberous. Having the character of a tuber ;

tuber-like in appearance. .

Tunicated. Having concentric coats, as an

Tumid Swellen

bordering or surrounding an organ; the

lateral petal of a papilionaceous corolla.

matted hairs.

Woolly. Clothed with long and tortuous or