## Subject Classification

## Aestivation

Aestivation-n. The manner in which the floral parts are arranged in the bud before expansion.
Convolute-a. With petals rolled up in such a way that the outer part of each covers the inner part of the one in front of it, while in turn its inner part is covered by the one behind it. In cross section, the petals resemble curved spokes in a wheel.
Corrugate, or crumpled-a. Characterized by the irregular crumpling of otherwise plane petals due to rapid growth in a confined space.
Imbricate - a. With the outer parts overlapping the inner parts, as the shingles on a roof; they break joints.
Induplicate-a. Valvate with the margins of each part projecting inward.
Involute-a. Valvate with the margins of each part rolled inward.
Plicate-a. With the parts folded lengthwise.
Quincuncial -a. In aestivation, partially imbricated of five parts, two being exterior, two interior, and a fifth one having one margin exterior and the other interior, as in the calyx of the rose.

Reduplicate-a. Valvate with the margins projecting outward.
Valvate - a. With the parts meeting by their abrupt edges without overlapping or turning.

## Agents of Pollination

## Animal-pollinated:

Zoöchore-n. A plant distributed by animals (usually applied to plant dispersal).
Zoöphilous-a. Animal-loving; flowers pollinated by animals.
Bat-pollinated:
Chiropterophilous - a. Said of flowers pollinated by bats.
Bird-pollinated:
Ornithogamous - a. Said of flowers pollinated by birds.
Ornithophilous - a. Said of flowers pollinated by birds.
Insect-pollinated:
Cantharophilous-a. Said of flowers pollinated by beetles.
Dipterid - n. Fly-flower. Flowers visited by dipterous flies.
Entomogamous-a. Pollinated by insects.
Entomogamy - n. The pollination of flowers by insects.
Entomophilous-a. Said of flowers dependent upon insects for pollination.

Hover-fly flowers - n. Flowers adapted for pollination by Syrphidae.
Humble-bee (bumble-bee) flowers - n . Flowers especially adapted to pollination by the species of Bombus.
Insect-pollination-n. The transfer of pollen from the anther to the stigma by insects.
Lepidopterid - n. Flower adapted for pollination by moths and butterflies.
Moth-flowers-n. Flowers adapted for pollination by moths; they are usually white night-bloomers.
Muscarian flowers-n. Flowers that attract flies by a putrid stench.
Necrocoleopterophilous-a. Said of flowers pollinated by carrion beetles.
Psychophilous-a. Said of flowers pollinated by diurnal lepidoptera.
Sapromyiophilous-a. Said of flowers pollinated by carrionor dung-flies.
Sphingophilous-a. Said of flowers pollinated by hawk-moths and other nocturnal lepidoptera.
Man-pollinated:
Anthropochorous - a. Distributed by man (usually applied to plant dispersal).
Self-pollinated:
Autogamous-a. Characterized by self-fertilization.
Autogamy-n. The fertilization of a flower by its own pollen.
Cleistogamous-a. With small closed self-pollinated flowers.
Close-pollinated - a. Pollinated by its own pollen.
Self-pollination-n. Pollination by its own pollen.
Snail-pollinated:
Malacophilous - a. Said of flowers pollinated by snails and slugs.

Water-pollinated:
Hydrocarpic - a. Said of aquatic plants which are pollinated above the water but withdraw the fertilized flowers below the surface for development, as in Vallisneria.
Hydrochore - n. A plant distributed by water (usually applied to plant dispersal).
Hydrophilous-a. Water-loving; said of flowers pollinated by water.
Wind-pollinated:
Anemochorous-a. Wind-dis tributed (usually applied to plant dispersal).
Anemogamous-a. Wind-pollinated.
Anemophilous - a. Wind-pollinated.

## Corolla

Achilary - a. Without a lip, as in some orchids.
Achlamydeous-a. Without a perianth, as in willows.
Actinomorphic-a. With radial symmetry, regular.
Acyclic-a. With the parts arranged spirally, not in whorls.
Aestivation-n. The manner in which the parts of a flower are folded up in the bud.
Ambigenous - a. Said of a perianth whose exterior is calycine and the interior corolline, as in Nymphaea.
Amphichromy - n. A display of two different colors when in flower.
Apetalous-a. Without petals.
Banner - n. The standard of a papilionaceous flower.
Bilabiate-a. Two-lipped.
Calcarate-a. Spurred.
Campanulate-a. Bell-shaped.
Cardiopetalous-a. With heartshaped petals.

Carina - n. A keel; used either for the two combined lower petals of a papilionaceous corolla or for a salient longitudinal projection on the center of the lower face of an organ, as on the lemmas of many grasses.
Cement-disk - n . The retinaculum of orchids.
Chasmogamous - a. Said of a flower whose opening precedes pollination; see Cleistogamous.
Chasmogamy - n . The opening of the perianth at flowering time, the opposite of cleistogamy.
Chloranthy-n. The reversion of petals to green leaves.
Choripetalous-a. Polypetalous, with separate petals.
Claw - n . The long narrow petiolelike base of the petals or sepals in some flowers.
Clip -n . The seizing mechanism in the flowers of asclepiads.
Corolla-n. The inner floral envelope composed of separate or connate petals.
Corolline-a. Seated on a corolla; corolla-like; petaloid; belonging to a corolla.
Corona-n. Crown, coronet; any appendage or intrusion that stands between the corolla and stamens, or on the corolla, as the cup of a daffodil, or that is an outgrowth of the staminal part or circle, as in the milkweed.
Cyclic-a. In whorls, not spirals.
Deflorate-a. Past the flowering state.
Dialypetalous-a. With separate petals, polypetalous.
Dichlamydeous - a. With a double perianth, calyx and corolla.
Disk flowers - n. The tubular flowers in the center of heads of Compositae, as distinguished from the ray flowers.

Epipetalous-a. Borne upon the petals; placed before the petals.
Euephemerous - a. Said of flowers which open and close within 24 hours.
Faucal-a. Pertaining to the throat of a gamopetalous corolla.
Faux (pl. fauces) - n. Usually used in the plural to designate the throat in a gamopetalous corolla.
Floral-a. Pertaining to flowers.
Floral diagram-n. A drawing to show the relative position and number of the constituent parts of a flower.
Floral envelope-n. The perianth leaves, the calyx and corolla.
Florepleno - a. With full or double flowers.
Floret - n. A small flower, usually one of a cluster; in grasses, the flower with the two subtending bracts.
Floscule - n. A little flower, a floret.
Flower-n. A modified plant structure concerned with the production of seeds in angiosperms.
Funnelform-a. With tube gradually widening upward and passing insensibly into a limb, as in many flowers of Convolvulus; infundibuliform.
Galea-n. A petal shaped like a helmet, placed next to the axis, as in Aconitum.
Galeate-a. Hollow and vaulted as in many labiate corollas.
Gamopetalous - a. With petals united, corolla in one piece.
Gorge - n. The throat of a flower.
Haplochlamydeous - a. Monochlamydeous, having a single perianth.
Hemeranthous - a. Day-flowering.
Hercogamy - n. Applied to hermaphrodite flowers in which some structural peculiarity prevents self-pollination.

Hypochil - n . The (often fleshy or otherwise modified) basal portion of the labellum or lip in Orchidaceae.
Hypocrateriform - a. Salverform.
Infundibuliform - a. Funnelform.
Keel-n. The united lower petals of a papilionaceous flower.
Labellum-n. The third petal of orchids, usually enlarged and by torsion of the ovary becoming anterior from its normal posterior position; a lip.
Labiate - a. Lipped; of or pertaining to the Labiatae.
Labium-n. The lower lip of a labiate flower.
Lepanthium-n. A petal that contains a nectary.
Ligule - n. A strap-shaped body such as the limb of the ray florets in Compositae; the lobe of the outer corona in Stapelia.
Limb-n. A border, the expanded part of a gamopetalous corolla, as distinct from the tube or throat; the lamina of a petal.
Lip-n. One of the two divisions of a bilabiate corolla or calyx, that is, a gamopetalous corolla cleft into an upper and lower portion; the labellum of orchids.
Mitra-n. The galea of a corolla.
Monochlamydeae - pl. n. A large division of phanerogams which have only one set of floral envelopes.
Monochlamydeous-a. With only one set of floral envelopes.
Monopetalous-a. One-petaled; gamopetalous, with the corolla composed of several petals laterally united.
Monosymmetrical-a. Capable of being dissected equally in one plane only; zygomorphic; bilaterally symmetrical.
Palate-n. In personate corollas, a rounded projection or prominence of the lower lip closing the throat or very nearly so.

Peloria, pelory-n. Reversion, on the part of the individual, to the production of regular flowers, when the species typically has asymmetrical or bilaterally symmetrical flowers.
Perianth-n. The floral envelope, calyx and corolla.
Personate - a. Said of a bilabiate corolla having a prominent palate.
Petal-n. One of the leafy expansions in the floral whorl styled the corolla.
Petaliferous-a. Petal-bearing.
Petalode - $n$. An organ simulating a petal.
Petaloid-a. Like a petal, or having a floral envelope resembling petals.
Pitfall flowers-n. Transitional flowers, such as Asarum, which detain small Diptera.
Pleiopetalous - a. Many-petaled.
Pleiopetaly-n. Doubleness in flowers.
Polypetalous - a. With several distinct petals.
Protanthesis - n. The normal first flower of an inflorescence.
Quincuncial-a. Arranged in a quincunx; in aestivation, partially imbricated of five parts, two being exterior, two interior, and the fifth one having one margin exterior and the other interior, as in the calyx of the rose.
Rictus - n . The mouth or gorge of a bilabiate corolla.
Ringent-a. Gaping, as the mouth of an open bilabiate corolla.
Rotate-a. Wheel-shaped, circular and flat, applied to a gamopetalous corolla with a short tube.
Salverform - a. With a slender tube and an abruptly expanding limb, as that of the phlox; hypocrateriform.
Schizopetalous-a. With cut petals.

Seasonal amphichromatism - n. The production of two differently colored flowers on the same stock due to season.
Seasonal heterochromatism - n. Different colors in the flowers of the same inflorescence due to season.
Standard - n. The upper and broad more or less erect petal of a papilionaceous flower.
Stenopetalous-a. Narrow-petaled.
Symmetrical-a. Actinomorphic, regular, capable of division by a longitudinal plane into similar halves.
Throat-n. The opening or orifice into a gamopetalous corolla or perianth; the place where the limb joins the corolla tube.
Trap flowers-n. Prison flowers which confine insect visitors until pollination has taken place.
Trumpet-shaped - a. Tubular with a dilated orifice, salverform, hypocrateriform.
Unilabiate-a. One-lipped.
Vexillum - n . The standard or large posterior petal of a papilionaceous flower.

## Dehiscence

Assumentum (pl. assumenta)-n. One of the two valves of a silique.
Circumscissile-a. Opening or dehiscing by a horizontal line around the fruit or anther.
Dehisce - v. To open spontaneously when mature, as seed capsules.
Dehiscence-n. The method or process of opening of a seed-pod or anther.
Dehiscent-a. Said of that which dehisces, as the opening of a fruit or anther along lines of suture.
Fissile - a. Tending to split or easily split.

Hydrochastic - a. Said of plants in which the bursting of the fruit and the dispersion of the seeds are caused by absorption of water.
Locucidal - a. With dehiscence on the back between the partitions into the cavity.
Operculate-a. Opening by a lid.
Porocidal-a. Opening by pores.
Ruptile-a. Dehiscing in an irregular manner.
Septicidal - a. With dehiscence along lines of union of the carpels.
Septifragal-a. With the valves breaking away from the dissepiments in dehiscence.
Suture-n. A junction or seam of union; a line of opening or dehiscence.
Ventral suture-n. The ventral seam or line of dehiscence in a carpel.
Xerochase - n. A fruit that opens in dry air and closes in humid air.
Xerochastic - a. Said of plants whose fruits burst by desiccation, thereby scattering their seeds or spores.

## Direction

Amphigean-a. Native around the world.
Austral-a. Southern.
Boreal - a. Northern.
Deflexed-a. Bent or turned abruptly downward.
Dextrorse-a. Turning to the right, clockwise.
Eutropic - a. Twining with the sun, clockwise, dextrorse.
Geonasty - n . The act of curving toward the ground.
Geotropic-a. Turning toward the earth.
Hesperal - a. Of the West.
Homalotropous - a. Said of organs which grow in a horizontal direction.

Hyperboreal - a. Of the far North.
Impressed-a. Bent inward, hollowed or furrowed as if by pressure.
Meridional-a. Southern (in the Northern Hemisphere).
Occidental-a. Western.
Oriental-a. Eastern.
Parallel-a. Extended in the same direction, but equally distant at every point.
Porrect - a. Directed outward and forward.
Septentrional-a. Northern.
Sinistrorse-a. Turning to the left or counterclockwise.
Zigzag-a. Having short bends or angles from side to side.

## Dispersal

Aelophilous - a. Disseminated by wind.
Anemochore - n. An organism that is disseminated by the wind.
Anemophilous - a. Distributed by wind.
Anthropophilous-a. Plants which follow man.
Blastochore-n. A plant distributed by offshoots or buds.
Bolochore-n. A plant distributed by propulsion.
Bradyspore-n. A plant which disperses its seeds slowly.
Brotochore-n. A plant dispersed by man.
Centrospore-n. A plant with spiny disseminules.
Clitochore-n. A plant which is distributed by falling or sliding.
Disseminule-n. A seed, fruit, or spore modified for dispersal.
Edobole-n. A plant whose seeds are scattered by propulsion through turgescence.
Glacospore - n. A plant with viscid disseminules.
Hydrochore - n. A plant distributed by water.

Hydrophilous-a. Water-loving; distributed by water.
Migration-n. Any movement by which the range of a species is extended (strictly speaking, it means moving under its own power.)
Migrule - $n$. The unit of migration, as seed, fruit, runner, bulb, etc.
Ornithophilous-a. Bird-loving; distributed by birds.
Sarcospore - n. A plant with fleshy disseminules.
Saurochore-n. A plant disseminated by lizards or snakes.
Synzoöchory - n. Dispersion by animals.
Xeriobole-n. A plant whose seeds are scattered by dehiscence due to dryness.
Zoöphilous-a. Distributed by animals.

## Fruits

## Carpography

Acarpic - a. Without fruit.
Acarpotropic - a. Not throwing off its fruits.
Achene-n. A small, hard, dry, indehiscent one-seeded fruit in which the ovary wall is free from the seed.
Achenodium - n. A double achene, as the cremocarp of Umbelliferae.
Aggregate fruit-n. A cluster of ripened ovaries traceable to separate pistils of the same flower and inserted on a common receptacle.
Akene-n. See Achene.
Amphicarpous - a. Producing two kinds of fruit.
Amphore - n. The lower part of a pyxis, as in henbane.
Anthocarpous - a. Said of fruits with accessories, sometimes pseudocarps, as in the strawberry and pineapple.

Apogamous-a. Developed without fertilization.
Apyrenous - a. Said of fruit which is seedless.
Article - n . The portion of a fruit (especially in Leguminosae) separated from others by a constriction or joint, as in Desmodium.
Assumentum (pl. assumenta)-n. One of the two valves of a silique.
Atrocarpous-a. Black-fruited.
Autocarp - n. A fruit obtained by self-fertilization.
Baccate-a. Berry-like, pulpy or fleshy.
Balausta-n. The fruit of a pomegranate with a firm rind, berried within, and crowned with the lobes of an adnate caly.
Beak-n. A long prominent and substantial projection; applied particularly to the prolongation of fruits and carpels.
Berry-n. A mature, fleshy, fewto many-seeded. ovary of a single pistil.
Biferous-a. Producing two crops of fruit in one season.
Bilocular-a. Two-celled, with two compartments.
Bivalvular - a. With two valves.
Brachycarpous - a. Short-fruited.
Bradycarpic-a. Fruiting after winter, in the second season after flowering.
Bur-n. Any fruit with a rough or prickly envelope, whether a pericarp, a persistent calyx, or an involucre, as of the sandbur and burdock.
Calyptra-n. A hood or lid; particularly, the hood or cap of the capsule of moss or lid in the fruit of Eucalyptus.
Capsella-n. Seed vessel; a small capsule.
Capsular-a. Pertaining to a capsule; formed like a capsule.

Capsule - n. A simple dry fruit, the product of a compound pistil splitting along two or more lines of suture.
Carpel-n. A simple pistil; one unit of a compound pistil; the cone scale in conifers.
Carpography - n. The description of fruits.
Carpophore-n. A portion of receptacle prolonged between the carpels as in Umbelliferae.
Caryopsis - n. A small, dry, indehiscent fruit in which the seed coat is adherent to the ovary wall.
Censer-action-n. The action of capsules which like censers (in-cense-burners), partially open by valves, the seeds being gradually shaken out by wind, as in Papaver and Stramonium.
Circumscissile-a. Opening or dehiscing along a horizontal line around the fruit or anther, the valve usually coming off like a lid.
Cochlea-n. A closely coiled legume.
Cochleate - a. Spiral, like a snail shell.
Coelospermous - a. Hollow-seeded; said of the seedlike carpels of Umbelliferae, with the ventral face incurved at the top and bottom.
Coenocarpium-n. The collective fruit of an entire inflorescence, as a fig or pineapple.
Columella-n. A persistent central axis around which the carpels of some fruits are arranged, as in Geranium; the receptacle bearing the sporangia of Trichomanes and other ferns.
Commissure-n. The place of joining or meeting, as the face by which one carpel joins another.
Cone - n. A fruit of the pine family Pinaceae and of Cyads; strobile.

Conelet-n. A little cone, applied to a cone of the first year.
Conocarpium-n. An aggregate fruit consisting of many fruits on a conical receptacle, as the strawberry.
Conoid - a. Conelike.
Creatospore-n. A plant with nut fruits.
Cremocarp-n. A dry, seedlike fruit, composed of two one-seeded carpels invested by an epigynous calyx, separating when mature into mericarps.
Cupule - n. The cup of such fruits as the acorn; an involucre composed of bracts adherent at least by their base.
Cyamium-n. A kind of follicle resembling a legume.
Cynarrhodion-n. A fruit like that of the rose, fleshy, hollow, and enclosing achenes.
Cypsela-n. An achene invested by an adnate calyx, as the fruit of Compositae.
Dasycarpous - a. Thick-fruited.
Dialycarpic-a. Having a fruit composed of distinct carpels.
Dicarpellary-a. Composed of two carpels.
Didymous - a. Found in pairs, as the fruits of Umbelliferae; divided into two lobes.
Dischisma (pl. dischismata)-n. The fruit of Platystemon, which divides into longitudinal carpels, each of which again divides transversely.
Dissepiment-n. A partition in an ovary or pericarp caused by the adhesion of the sides or the carpellary leaves.
Dissilient-a. Bursting asunder.
Drupaceous-a. Resembling a drupe, possessing its character, or producing similar fruit.
Drupe-n. A fleshy, one-seeded indehiscent fruit with the seed enclosed in a stony endocarp.

Drupelet - n. One drupe of a fruit made up of aggregate drupes, as in raspberry.
Endocarp - n. The inner layer of the pericarp.
Eriocarpous-a. Woolly-fruited.
Exocarp - n. The outer layer of the pericarp.
Flask - n . The utricle of Carex.
Follicle - n. A single carpellate dry fruit dehiscing along one line of suture.
Fructiferous - a. Producing or bearing fruit.
Fructification - $n$. The act of fruiting.
Fruit - n. A mature ovary or ovaries with or without closely related parts.
Fruit dots-n. The sori of ferns.
Galbulus - n. The fruit of Taxodium; a modified cone, the apex of each carpellary scale being enlarged and somewhat fleshy.
Gourd-n. A fleshy, one-celled, many-seeded fruit with parietal placentation.
Gynobase-n. An enlargement or prolongation of the receptacle bearing the ovary.
Hemicarp - n. A half-carpel, a mericarp.
Hesperidium-n. A berry with a tough, leathery rind, as the orange.
Heterocarpous - n. Producing more than one kind of fruit.
Hip - n . The fruit of the rose; technically, a cynarrhodion.
Hygrochastic - a. Said of plants in which the bursting of the fruit and the dispersion of seeds are caused by absorption of water.
Indehiscent-a. Not opening by valves or along regular lines.
Jugum - n. A ridge on the fruits of Umbelliferae.
Key fruit-n. The samara of the ash.
Lasiocarpous-a. Pubescent-fruited.

Legume - n. A dry fruit of a simple pistil usually dehiscing along two lines of suture; the fruit of Leguminosae.
Locule-n. A compartment or cell of a pistil or anther.
Loment - n. A flattened legume which is constricted between the seeds, falling apart at the constrictions when mature into one-seeded joints.
Lomentaceous-a. Bearing or resembling loments.
Mace-n. The aril of the nutmeg.
Malicorium-n. The rind of a pomegranate.
Mast-n. The fruit of such trees as beech, oak, hickory, etc.
Megasporocarp - n . The developed megasporangium in Azolla, finally containing a single perfect megaspore.
Mericarp-n. One of the achenelike carpels or a closed half-fruit of Umbelliferae.
Monolocular-a. One-celled, unilocular, applied to ovaries.
Multiple fruit-n. A cluster of ripened ovaries traceable to the pistils of separate flowers, as in mulberry.
Multiseptate-a. With many partitions.
Naucum-n. The fleshy part of a drupe; seed with a very large hilum.
Naucus - pl. n. Certain cruciferous fruits which have no valves.
Nuciferous-a. Bearing or producing nuts.
Nut-n. An indehiscent, usually one-celled, one-seeded fruit (though usually traceable to a compound ovary) with a bony, woody, leathery, or papery wall and in general, partially or wholly enclosed in an involucre or husk.
Nutlet-n. A small nut.
Nux-n. A nut.

Operculum-n. A lid or cover which separates by a transverse line of division, as in a pyxis.
Paracarpous-a. Said of ovaries whose carpels are joined together by their margins only.
Parietal-a. Borne on, or belonging to a wall.
Parthenocarpy - n. The production of fruit without true fertilization.
Parthenogenesis - n. A form of apogamy in which the oösphere develops into a normal product of fertilization without a preceding sexual act.
Pentacamarous-a. With five locules.
Pentacarpellary - a. With five carpels.
Pepo - n. A gourd type of fruit, a one-celled, many-seeded, inferior fruit with parietal placentas and a pulpy interior.
Pericarp-n. The wall of a mature ovary, consisting of an exocarp, a mesocarp, and an endocarp.
Phaenocarpous-a. Having a distinct fruit, with no adhesion to surrounding parts.
Phragma (pl. phragmata)-n. A spurious dissepiment in fruits.
Pit-n. The endocarp of a drupe with the enclosed seed.
Placenta-n. The place in an ovary where the ovules are attached.
Placentation - n. The disposition of the placenta.
Plococarpium-n. A fruit composed of follicles arranged around an axis.
Plurilocular-a. With many cells or locules.
Pod-n. A dry dehiscent pericarp; a rather general uncritical term.
Podocarp-n. A stipitate fruit, that is, with the ovary borne on a gynophore.
Polachena-n. A fruit similar to a cremocarp but composed of five carpels.

Pome-n. A fleshy fruit, the product of a compound pistil with the seeds encased within a cartilaginous wall, as in the apple.
Pomiferous-a. Pome-bearing.
Porocidal - a. Opening by pores.
Putamen (pl. putamines) - n. The shell of a nut; the hardened endocarp of stone fruits.
Pyrene - n. Nutlet, particularly the nutlet in a drupe.
Pyxis-n. A capsule with circumscissile dehiscence, the upper portion acting as a lid.
Quinquelocular-a. Five-celled.
Regma (pl. regmata) - n. A fruit with elastically opening segments or cocci, as in Euphorbia; a form of schizocarp.
Repletum-n. A fruit with the valves connected by threads, persistent after dehiscence such as orchids, Aristolochia, and some Papaveraceae.
Replum-n. A framelike placenta from which the valves fall away in dehiscence, frequently used so as to include the septum of Cruciferae in the term.
Rhizocarp-n. A sporangium such as is produced on rootlike processes of members of the Marsileaceae.
Ripe-a. Mature, characterized by the completion of an organ or organism for its allotted function.
Samara - n. Winged, achene-like fruit.
Schizocarp-n. A pericarp which splits into one-seeded portions or mericarps.
Schleranthium-n. An achene enclosed in an indurated portion of the calyx tube, as in Mirabilis.
Septifragal-a. With the valves breaking away from the dissepiments in dehiscence.
Silicule-n. A short silique, not much longer than broad.

Sillicle - n. The short fruit of certain Cruciferae.
Silique-n. The peculiar pod of the Cruciferae, two valves falling away from a frame, the replum, on which the seeds grow and across which a false partition is formed.
Simple fruit-n. A fruit which results from the ripening of a single pistil.
Sorose-n. A fleshy multiple fruit, as a mulberry or a pineapple.
Sorus-n. A cluster of sporangia in ferns.
Sphalerocarpum-n. An accessory fruit, as an achene in a baccate calyx-tube.
Sporocarp-n. A receptacle containing sporangia or spores.
Stone-n. The hard endocarp of a drupe.
Stone fruit-n. A drupe such as a plum or peach.
Streptocarpous - a. With fruits spirally marked; with twisted fruits.
Strobile-n. A fruit made up largely of imbricated scales, as in the hop and the pine; a cone.
Strombuliform-a. Said of fruit that is spirally twisted.
Syconium - n. A multiple hollow fruit, as that of a fig.
Syncarp-n. A multiple or fleshy aggregate fruit, as the mulberry and magnolia.
Syncarpous-a. Composed of two or more united carpels.
Syncolliphytum - n. A plant in which the perianth becomes combined with the pericarp.
Systellophytum - n. A fruit in which a persistent calyx appears to form a part of the fruit.
Trachycarpous-a. Rough-fruited.
Triachaenium-n. A fruit similar to a cremocarp but of three carpels.
Tricarpellary - a. Of three carpels.
Trichocarpous - a. Hairy-fruited.

Tryma (pl. trymata) - n. A drupaceous nut with dehiscent exocarp.
Unicarpellate-a. With fruit consisting of a single carpel.
Urn-n. The base of a pyxis.
Utricle - n . A small bladdery pericarp, as in Atriplex; a membranous sac surrounding the fruit proper in Carex; any blad-der-shaped appendage.
Vallecula-n. The grooves in the intervals between the ridges in the fruit of Umbelliferae.
Valve-n. A segment into which a capsule naturally separates at maturity.
Xerochastic - a. Said of plants in which the bursting of the fruit and dispersion of seeds is caused by desiccation.

## Habitats

Terms concerned with the various kinds of habitats.
Alpine
Acrophilous - a. Dwelling in the alpine region.
Alpestrine-a. Nearly alpine, subalpine.
Coryphad - n. An alpine meadow plant.
Subalpine-a. Below alpine, almost alpine.

## Bank

Ochthad - n. A bank plant.
Ochthophilous - a. Bank-loving.
Bog
Turfaceus-a. Pertaining to bogs.
Turfophilous-a. Bog-loving, found in bogs.
Clay
Argillaceous-a. Clayey, pertaining to clay, or clay-colored.
Spiladophilous - $n$. Dwelling in clay.

## Cold

Coryphad - n. An alpine meadow plant.

Crymophilous - a. Loving polar regions; inhabiting polar regions.
Frigid-a. Cold, of cold regions.
Dark
Scotophilous-a. Darkness-loving, dwelling in darkness.
Skotophilous-a. See Scotophilous.

## Ditch

Taphrophilous - a. Ditch-loving, growing in ditches.
Dry
Cheradophilous - a. Loving dry habitats; dwelling in dry places.
Chersad-n. A plant growing in dry places.
Eremophilous-a. Desert-loving, dwelling in deserts.
Xerophilous-a. Loving dry places, dwelling in dry places.

## Dung

Fimetarious - a. Growing on or among dung.
Fimicolous-a. Inhabiting manure.
Earth
Epigeous-a. Above the soil; growing above the soil.
Geophilous-a. Earth-loving; said of plants which fruit underground.
Hypogeous - a. Below the soil; growing or remaining below the soil.
Terricolous-a. Dwelling on the ground.
Field
Agrophilous-a. Loving grain fields.
Campestrine-a. Of or pertaining to fields.
Hemerophilous-a. Loving cultivation, readily cultivated.
Nomad-n. A pasture plant.
Nomophilous-a. Pasture-loving, inhabiting pastures.
Poad-n. A meadow plant.

Forests
Alsad-n. A grove plant.
Ancophilous-a. Loving mountain glens or valleys.
Dendrocolous-a. Dwelling on trees.
Dendrophilous-a. Dwelling on or among trees, loving trees.
Helohylophilous-a. Loving wet forests.
Hylacolous - a. Tree-dwelling.
Hylocolous - a. Inhabiting forests.
Hylodophilous-a. Loving dry woods; dwelling in dry woods.
Nemorose-a. Growing in the woods.
Nemus (pl. nemores) - n. Woods.
Orgadophilous - a. Loving open woodland; dwelling in open forests.
Stenophyllophilous-a. Loving deciduous forests.
Sylvatic-a. Growing among the trees.
Sylvestrine-a. Growing in woods.
Gravel
Chalicad - n. A gravel-slide plant.
Chalicodophilous-a. Loving gravel-slides; inhabiting grav-el-slides.
Glareose - a. Frequenting gravel.

## Hedges

Sepicolous - a. Inhabiting hedges.

## Humus

Sapromyiophilous-a. Humusloving; inhabiting humus.
Lakes or ponds
Lacustrine - a. Belonging to, or inhabiting lakes and ponds.
Lentic-a. Pertaining to, or living in quiet or still water.
Limnophilous-a. Dwelling in lakes.
Tiphad - n. A pond plant.
Tiphophilous - a. Pond-loving; inhabiting ponds.

## Limestone

Calcareous - a. Of or pertaining to limestone.

Calcicolous-n. Inhabiting limestone soils.
Gypsophilous-a. Limestone-loving; inhabiting gypsum soils.

## Loam

Melangeophilous - n. Loam-loving; inhabiting loam soils.
Marshes
Banados-pl. n. Shallow swamps (Paraguay).
Helad-n. A marsh plant.
Limnodophilous-a. Dwelling in marshes.
Paludose-a. Growing in marshy places.
Palustrine-a. Of or growing in marshes.
Pontohalicolous-a. Dwelling in salt marshes.
Stasad-n. A plant of stagnant water.
Telmatophilous - a. Loving wet meadows.
Telmicolous-a. Dwelling in fresh water marshes.

## Mountains

Montane-a. Pertaining to mountains, as plants which grow on them.
Orophilous - a. Mountain-loving; inhabiting mountains.
Mud
Limicolous-a. Inhabiting muddy places, as on the margins of pools.
Limose - a. Of marshes.
Luticolous - a. Mud- or mireloving; inhabiting muddy places.
Prairie
Graminicolous - a. Grass-inhabiting.
Psilicolous-a. Prairie-dwelling.
Psilophilous-a. Prairie-loving.

## Rain

Ombrophilous-a. Rain-loving, inhabiting places of frequent rains.

## Salt

Drimophilous-a. Salt-loving.
Halophilous - a. Salt-lo ving; growing in salty soils.
Halophyte-n. A plant which grows in saline soil.
Saline-a. Of or pertaining to salt.
Sand
Amathicolous-a. Growing on sandy plains.
Amathophilous-a. Growing in sandy plains or in sandy hills.
Ammochthad - n. A sand-bank plant.
Ammophilous - a. Sand-loving; inhabiting sand.
Arenarious-a. Of sand or sandy places.
Arenicolous - a. Inhabiting sandy places.
Cheradad-n. A sand-bar plant.
Cheradophilous-a. Loving dry habitats; dwelling in dry places.
Enaulophilous-a. Loving sand draws.
Psammophilous-a. Sand-loving; inhabiting sand.
Sabulicolous-a. Growing in sandy places.
Thinicolous-a. Dwelling on shifting sand dunes.
Thinophilous - a. Dune-loving; inhabiting dunes.

## Sea

Agad-n. A beach plant.
Aigialophilous - a. Beach dwelling.
Aigicolous - a. Inhabiting a stony strand or beach.
Littoral-n. Belonging to or growing on the seashore.
Marine-a. Growing within the influence of the sea, or immersed in it.
Maritime-a. Belonging to the sea, or confined to the sea coast.

Shade
Sciophilous - a. Shade-loving; inhabiting shady places.
Umbracticolous - a. Inhabiting shady places.
Snow
Chionad-n. A snow plant.
Chionic-a. Of snow fields.
Niveous-a. Growing in or near the snow, pertaining to snow.
Springs
Crenad-n. A plant of springs.
Crenophilous - a. Loving springs.

## Stone

Chasmophilous-a. A crannyloving plant.
Lapidose-a. Growing among stones.
Petraeous-a. Of or pertaining to stones.
Petricolous-a. Rock-inhabiting.
Petrophilous-a. Stone-loving, dwelling among stones.
Phellophilous-a. Loving rock fields.
Rupestral - a. Pertaining to rocks.
Silicolous-a. Growing in flinty soils.
Streams
Crenicolous-a. Dwelling in spring-fed brooks.
Fluvial - a. Said of plants growing in streams.
Namatad-n. A plant growing in or near a brook.
Potomophilous - a. River-loving; dwelling in or near rivers.
Rheophilous - a. Creek-loving; dwelling in torrents.
Rhyacophilous - a. Torrent-loving; dwelling in torrents.
Riparious-a. Growing by rivers or streams.
Sun
Heliad - n. A heliphyte or sunloving plant.

## Thickets

Aithalophilous-a. Dwelling in evergreen thickets.
Capoe-n. A palm thicket (Brazil).

Driodad-n. A plant of a dry thicket.
Lochmocolous-a. Inhabiting thickets.
Lochmodophilous - a. Loving dry thickets; growing in dry thickets.
Lochmophilous - a. Thicket-loving; found in dry thickets.
Walls
Rupestral-a. Growing on walls and rocks.

## Waste places

Chledocolous-a. Dwelling in waste places.
Chledophilous-a. Loving waste places.

## Water

Emersed - a. Raised above and and out of the water, emerged.
Hydrophilous-a. Loving wet places or water; pollinated by water.
Hydrophyte - n. A water plant.
Natant-a. Floating.

## Inflorescence

Ament-n. A catkin; a more or less flexible, usually pendulous spike bearing apetalous unisexual flowers.
Amentiferous-a. Bearing aments.
Amentum - n. Catkin.
Anthela - n . The panicle of Juncus with the lateral axes exceeding the main axis.
Anthelate-a. With elongate flowerbearing branches, as in some Junci.
Anthemy, anthemia - n. A flowercluster of any kind.
Capitate-n. With a head.
Catkin-n. See Ament.
Centrifugal -a. In inflorescences, blooming from the inside outward, or from the top downward.
Centripetal-a. In inflorescences, blooming from the outside inward, or from the base upward.

Cincinnus-n. A one-branched scorpioid cyme.
Compound inflorescence-n. An inflorescence composed of secondary inflorescences.
Corymb - n. A short, broad, more or less flat-topped, indeterminate flower-cluster, the outer flowers opening first.
Corymbiform-a. In the shape of a corymb.
Corymbose-a. Arranged in a corymb.
Cyanthum-n. The ultimate inflorescence of Euphorbia consisting of a cuplike involucre bearing the flowers from its base.
Cyme-n. A broad, more or less flat-topped, determinate flowercluster, with central flowers blooming first.
Cymose-a. Cymelike.
Cymule-n. A small cyme.
Definite-a. Determinate, terminating in a flower bud.
Definite inflorescence-n. A determinate inflorescence, terminating in a flower bud, blooming from the inside outward or from the top downward.
Determinate - a. Said of an inflorescence in which the terminal flower blooms slightly in advance of its nearest associates.
Dichasium-n. A cyme with two lateral axes.
Dicymose-a. Doubly cymose.
Diffuse-a. Loosely branching or spreading; of open growth.
Drepanium-n. A sickle-shaped cyme.
Ecblastesis - n. The appearance of buds within a flower, proliferation of an inflorescence.
Fascicle-n. A condensed or close cluster.
Fasciculate-a. In condensed or close clusters.
Glome-n. A rounded head of flowers.

Glomerate-a. In a dense or compact cluster or clusters.
Glomerule-n. A cluster of heads in a common involucre.
Head-n. A dense spherical or flat-topped inflorescence of sessile flowers clustered on a common receptacle.
Indefinite-a. In an inflorescence, indeterminate.
Indefinite infiorescence - n . An inflorescence that is indeterminate, blooming from the outside inward, or from the bottom upward.
Indeterminate - a. Descriptive of an inflorescence in which the flowers open progressively from the base upward or from the outside inward.
Inflorescence - n . Mode of flowerbearing; technically less correct but much more common in the sense of a flower-cluster.
Intercalary inflorescence - n. An inflorescence in which the main axis continues to grow vegetatively after giving rise to the flowers.
Julaceous-a. Bearing catkins, amentaceous.
Mixed inflorescence-n. One in which partial inflorescences develop differently from the main axis, as centrifugal and centripetal together.
Monochasium-n. A one-branched cyme, either pure or resulting from the reduction of cymes.
Nucamentum-n. An amentum, or catkin.
Panicle-n. A compound or branched raceme.
Paniculate-a. Having a panicle type of inflorescence.
Phoranthium-n. The receptacle of the head of Compositae.
Polythalamic-a. Having more than one female flower within the involucre; derived from more than one flower, as a collective fruit.

Raceme-n. An indeterminate inflorescence consisting of a central axis bearing a number of flowers with pedicels of nearly equal length.
Racemose - a. Resembling a raceme; in racemes.
Racemiform - a. In the form of a raceme.
Rhipidium-n. A fan-shaped cyme, the lateral branches being developed alternately in two opposite directions.
Scape-n. A leafless peduncle arising from the ground; it may bear scales or bracts but not foliageleaves and may be one- or manyflowered.
Scapiform-a. Resembling a scape.
Scapose-a. Bearing or resembling a scape.
Scorpioid - a. Said of a coiled cluster in which the flowers are tworanked and borne alternately at the right and left.
Scorpioid cyme-n. Cincinnus, the lateral branches developed on opposite sides alternately, as in Boraginaceae.
Simple inflorescence-n. A flowercluster with one axis, as a spadix, spike, or catkin.
Spadix-n. The thick or fleshy spike of certain plants, as the Araceae, surrounded or subtended by a spathe.
Spathe - n . The bracts or leaf surrounding or subtending a flower-cluster or spadix; it is sometimes colored and flowerlike, as in the Calla.
Spiciform-a. Spikelike.
Spike-n. An inflorescence consisting of a central rachis bearing a number of sessile flowers.
Tassel-n. The staminate inflorescence in maize.
Thyrse-n. Compact and more or less compound panicle; more correctly a panicle-like cluster with main axis indeterminate and other parts determinate.

Thyrsoid-a. Resembling a thyrse.
Thyrsula-n. A little cyme which is borne by most labiates in the axil of the leaves.
Trichasium-n. A cymose inflorescence with three branches.
Umbel-n. An indeterminate inflorescence consisting of several pedicellate flowers having a common point of attachment.
Umbel, compound -n. An umbel in which each ray bears a small umbel.
Umbel, cymose-n. An apparent umbel, but with the flowers opening centrifugally; a cyme which simulates an umbel.
Umbellate - a. With or pertaining to umbels.
Umbellet-n. A secondary umbel.
Umbelliferous-a. With umbels.
Umbelliform - a. In the shape of an umbel.
Umbellule-n. An umbellet; a small umbel.
Verticillaster-n. A false whorl, composed of a pair of opposed cymes, as in labiates.

## Leaves

## Forms

Aciculate-a. Slender, needleshaped.
Awl-shaped - a. Narrow and gradually tapering to a sharp point.
Cochlear-a. Said of a form of imbricate aestivation with one piece exterior.
Cordate-a. Heart-shaped, with the notch basal.
Cuneate-a. Wedge-shaped, with the broad end apical.
Deltoid-a. Triangular; deltashaped.
Drepaniform - a. Sickle-shaped.
Elliptical - a. Oblong with rounded ends.
Ensiform-a. Sword-shaped, gladiate.
Falcate-a. Sickle- or scytheshaped.

Gladiate-a. Sword-shaped, ensiform.
Halberd-shaped - a. Sagittate with the basal lobes turned outward, hastate.
Hastate - a. Arrow-shaped with the basal lobes turned outward, hal-berd-shaped.
Heart-shaped - a. Cordate, broadly ovate with two rounded lobes at the base.
Lanceolate-a. Lance-shaped, much longer than wide and tapering upward.
Linear-a. Long and narrow with margins parallel or nearly so.
Lyrate - a. Lyre-shaped.
Needle - n . The stiff linear leaf of a Pinaceae.
Nephroid-a. Kidney-shaped, reniform.
Obcordate-a. Heart-shaped with the notch apical.
Oblanceolate-a. Inverted lanceolate.
Oblong - a. Longer than broad, with the margins nearly parallel.
Obovate - a. Oval, but broader toward the apex.
Orbiculate-a. Round or circular.
Oval-a. Elliptical with the width greater than half the length.
Ovate-a. Oval, but broader toward the base.
Pandurate-a. Fiddle-shaped.
Panduriform-a. Fiddle-shaped.
Peltate-a. Shield-shaped with the petiole attached to the under side.
Reniform-a. Kidney-shaped nephroid.
Rhomboidal-a. Rhombic-shaped.
Sagittate- a. Arrow-shaped.
Scale-n. Any thin scarious body, usually a degenerate leaf, sometimes of epidermal origin; sometimes used meaning glume.
Scale-leaves - n. Modified leaves on underground stems; small flat leaves as those on Cupressus and Selaginella.

Spatulate-a. Spatula-shaped.
Subulate-a. Awl-shaped.
Wedge-shaped - a. Cuneate.

## Apexes

Acuminate-a. Tapering to a prolonged point.
Acute-a. Distinctly and sharply pointed, but not drawn out.
Apiculate-a. With a minute pointed tip.
Aristate-a. Awned, bearing an arista.
Cuspidate-a. Tipped with a sharp rigid point.
Emarginate-a. With a shallow notch at the apex.
Mucronate-a. With a mucro; bristle-tipped.
Obcordate-a. Heart-shaped with the notch at the apex.
Obtuse - a. Blunt or rounded at the end.
Retuse-a. An obtuse tip with a slight depression in the middle.
Truncate-a. As though cut off by a straight transverse line.

## Bases

Acuminate-a. With prolonged tapering to the petiole.
Acute-a. Distinctly and sharply pointed but not drawn out.
Amplexicaul-a. Clasping the stem.
Auriculate-a. With an auricle or a claw.
Clasping-a. With the base clasping the stem.
Connate-perfoliate-a. Having opposite leaves joined at the bases.
Cordate-a. Heart-shaped with the notch at the base.
Cuneate-a. Wedge-shaped.
Decurrent - a. Said of a leaf which extends down a stem below the point of insertion.
Hastate-a. Similar to sagittate but with the lobes pointing outward. Oblique-a. With one side of the base being larger than the other.
Obtuse - a. Blunt or rounded at the end.

Ocrea-n. A legging-shaped or tubular structure formed by the union of two stipules.
Peltate-a. With the petiole attached to the under side rather than the margin.
Perfoliate-a. With the stem apparently passing through the leaf.
Sagittate-a. With basal lobes pointing downward, like the base of an arrow.
Surcurrent-a. With winged expansions from the base of a leaf prolonged up the stem.
Truncate-a. As if cut off by a straight transverse line, blunt.

## Modifications

| Bracts | Scales |
| :--- | :---: |
| Fronds | Sepals |
| Petals | Spines |
| Phyllode | Stamens |
| Pistils | Tendrils |
| Complexity |  |

Simple-a. With one blade with incomplete or no segmentation.
Compound-a. With two or more blades called leaflets.
Pinnately-adv. With the leaflets arranged on opposite sides along a common rachis. Odd pinnate - a. With a terminal leaflet.
Abrupt pinnate-a. Without a terminal leaflet.
Palmately - adv. With the leaflets arising from the apex of the petiole in a palmate manner.
Radiately-adv. With the leaflets radiating in all directions from the apex of the petiole.
Decompound - a. More than once compound.

## Margins

Cleft-a. Divided into lobes separated by narrow or acute sinuses which extend more than half way to the midrib.
Crenate-a. With rounded or blunt teeth.

Crenulate-a. Finely crenate.
Crisp-a. Curly or wavy, as the leaves of Rumex crispus.
Dentate-a. With sharp teeth pointing outward.
Denticulate-a. Minutely or finely dentate.
Dissected-a. Deeply divided or cut into many segments.
Divided-a. With lobing or segmentation extending to the base or midrib.
Doubly serrate-a. With small serrations on larger ones.
Entire-a. With an even margin; not interrupted by toothing, lobing, or other divisions.
Fimbriate-a. With the margin bordered with long slender processes.
Glandulose-serrate-a. With serrations tipped or bordered with glands.
Incised - a. Cut sharply and irregularly, more or less deeply.
Inflexed - a. Turned in at the margins.
Intramarginal -a. Within and near the margins.
Lacerated-a. Torn or irregularly cleft.
Laciniate-a. Cut into lobes separated by deep, narrow, irregular incisions.
Lobed - a. With lobes extending to near the middle.
Multifid-a. Cleft into many lobes or segments.
Palmate-a. Lobed or divided, so that the sinuses point to the apex of the petiole.
Palmatifid-a. Lobed or divided, so that the sinuses point nearly to the apex of the petiole.
Parted-a. Divided by sinuses which extend nearly to the midrib.
Partitioned-a. Having the deepest division into which a leaf can be cut without becoming compound.

Pectinate-a. With narrow segments set close together like the teeth of a comb.
Peltate-a. With the petiole attached to the under side instead of the margin.
Peltified-a. Said of a peltate leaf that is cut into segments.
Peripheral-a. On or near the margins.
Pinnatifid-a. Cleft almost to the midrib.
Repand-a. Undulate or wavy.
Revolute-a. With margins rolled toward the lower side.
Runcinate - a. Saw - toothed or sharply incised with retrorse teeth.
Serrate-a. With sharp teeth pointing forward.
Serrulate-Serrate with minute teeth.
Sinuate-a. With a deep wavy margin.
Sinuous-a. Wavy.
Undulate-a. Wavy, repand.

## Venation

Anadromous - a. Said of ferns, in which the first set of nerves in each segment of the frond is given off on the upper side of the midrib toward the apex, as in Aspidium and Asplenium.
Anametadromous - a. Said of the venation of ferns in which the weaker pinnules are anadromous and the stronger are catadromous.
Anastomosing - a. Characterized by the union of one vein with another, the connection forming a reticulation.
Arcuate-a. Moderately curved, bent like a bow, said of leaf venation of Cornus, Caenothus, etc.
Argyroneurous-a. With silvercolored veins.
Basinerved-a. Veined from the base.

Campylodromous - a. Said of venation in which the secondary veins curve toward the margins but do not form loops.
Catadromous - a. Said of the venation of ferns in which the first set of nerves in each segment of the frond is given off on the basal side of the midrib, as in Osmunda.
Convergent - a. Said of veins which run from the base to the apex of a leaf in a curved manner.
Costa-n. A rib, as a midrib.
Craspedodromous - a. With the lateral veins running from midrib to margin without dividing.
Diadromous - a. With fan-shaped venation, as in Gingko biloba.
Dictyodromous-a. With reticulate venation.
Feather-veined - a. With secondary veins proceeding from the midrib; pinninerved.
Hinoideous-a. With veins proceeding from the midrib parallel and unbranched.
Hyphodromous-a. With the veins sunken in the leaf and not readily visible.
Infossous-a. With the veins sunken but leaving a visible channel.
Intercostal - a. Between the ribs or veins.
Internerves - n. The space between the nerves.
Leuconeurous-a. White-nerved.
Marmorate-a. With veins of color, as marbled, or mottled.
Midrib-n. The main rib or central vein of a leaf or leaflike structure.
Multicostate-a. Many-ribbed.
Nervation-n. Venation, the manner in which foliar nerves or veins are arranged.
Nerve-n. A simple or unbranched vein or slender rib.
Net-veined-a. Reticulated; netveined with any system or irregularly anastomosing veins.

Palmately veined-a. With veins arranged in a palmate manner.
Parallelodromous - a. With parallel veins, as in lilies.
Parallel-veined-a. With the lateral veins straight, as in Alnus; with the entire system straight as in grasses.
Penniveined-a. Veined in a pinnate manner.
Pinninerved-a. Pinnately veined, the veins running parallel towards the margin.
Plagiodromous-a. Said of tertiary leaf-veins when at right angles to the secondary veins.
Quinquenerved - a. With the midrib dividing into five, that is, the main rib and a pair on each side.
Radiately veined-a. With veins radiating from a centrally attached petiole.
Reticulate-a. Forming a network.
Rib-n. A primary vein, especially the central longitudinal or midrib.
Trinervate - a. Three-nerved.
Vein-n. A strand of vascular tissues in a flat organ, such as a leaf.
Venation-n. Veining; the arrangement or disposition of veins.

## -onyms

Antonym - n. A word of opposite meaning; a counterterm.
Basonym - n. The original epithet, retained when transferred to a new position.
Homonym-n. A name having the same spelling as another name in the same language but different in meaning; in taxonomy, homonyms are two or more names having the same spelling but applied to two or more taxa of the same rank based upon different types. A later homonym is illegitimate.

Hyponym - n. A name to be rejected for want of an identified type.
Metonym-n. A name that is rejected because there is an older valid name based on another member of the same group.
Synonym - n. A name with the same meaning as another name in the same language but spelled differently; in taxonomy, synonyms are two or more scientific names for the same taxon, one of which is correct and the others incorrect under the International Rules of Nomenclature.
Synonymous-a. Having the same meaning.
Synonymy - n. Discarded names for identical objects.
Typonym-n. A name rejected because an older name was based on the same type.

## Ovules and Seeds

Albuminous-a. Having albumin or an endosperm.
Amphitropous-a. Half-inverted and straight, with the hilum lateral.
Anatropous-a. With the ovule reversed, with the micropyle close to the side of the hilum and the chalaza at the opposite end.
Angiospermous - a. With the seeds borne within a pericarp.
Angiosperm-n. A plant having its seeds enclosed in an ovary.
Aril-n. An appendage or an outer covering of a seed, growing out from the hilum or funiculus; sometimes it appears as a pulpy covering.
Campylotropous-a. Said of an ovule or seed which is curved in its formation so as to bring the micropyle or true apex down near the hilum.
Caruncle-n. An excrescence or appendage at or about the hilum of the seed.

Chalaza-n. That part of the ovule or seed where the nucellus joins the integuments; it is the base of the nucellus and is always opposite the upper end of the cotyledons.
Cotyledon-n. A seed leaf; a primary leaf in the embryo.
Dicotyledones - pl. n. Plants of the class denoted by their possession of two cotyledons.
Dispermous - a. Two-seeded.
Embryo - n. The rudimentary plant formed in the seed.
Endosperm - n. The albumen of a seed in angiosperms; in gymnosperms, the prothallium within the embryo sac.
Exalbuminous-a. Without albumin, used only of seed in which the embryo occupies the entire cavity within the testa.
Foramen-n. An aperture, especially that in the outer integuments of the ovule; micropyle.
Funicle-n. See Funiculus.
Funiculus - n. A stem or threadlike structure that connects the ovule or seed to the placenta.
Hilum - n. The scar or mark on a seed indicating the point of attachment.
Hylum-n. See Hilum.
Hypocotyl-n. The axis of an embryo below the attachment of the cotyledons.
Incumbent cotyledons - pl. n. Cotyledons so arranged that the back of one lies against the radicle.
Integument-n. The envelope of an ovule; the seed coat.
Kernel-n. The nucellus of an ovule, or of a seed, that is, the whole body within the seed coats.
Melanospermous-a. With black or dark-colored seeds, or spores.
Mesocotyl-n. An interpolated node in the seedling of grasses, so that the sheath and cotyledon are separated by it.

Micropyle-n. The aperture in the integument of a seed formerly the foramen; it marks the position of the radicle.
Monocotyledon-n. A plant having but one cotyledon or seed lobe.
Monocotyledonous-a. With only one cotyledon.
Monospermous - a. One-seeded.
Nucleus-n. A kernel of an ovule, which by fertilization becomes a seed; a dense protoplasmic structure near the center of living cells.
Oligospermous-a. Few-seeded.
Oncospore - n. A seed with hooks which aid in dispersal.
Oobspore-n. The fertilized egg in the archegonium of cryptogams from which the new plant develops directly.
Orthotropous-a. Said of an ovule or seed with a straight axis, chalaza at the insertion, the orifice at the other end.
Ovuliferous-a. Bearing ovules.
Parthenogenesis - n. The production of seeds without fertilization.
Perisperm-n. The ordinary albumen of a seed, restricted to that which is formed outside the embryo sac; the integuments of the seed.
Pip-n. A popular name for the seed of an apple or pear.
Pleiospermous-a. With an unusually large number of seeds.
Plumule - n. The primary leaf-bud of an embryo.
Primine-n. The outer integument of an ovule.
Pterospermous-a. With winged seeds.
Raphe - n. An adnate cord or ridge or fibro-vascular tissue which, in a more or less anatropous ovule, connects the hilum with the chalaza.
Rhaphe - n. See Raphe.
Seed-n. A mature ovule.
Seed leaf-n. A cotyledon.

Semen - n . The seed of flowering plants.
Seminiferous-a. Seed-bearing; used for the special portion of the pericarp bearing the seeds.
Strophiole-n. An appendage at the hilum of certain seeds; a caruncle.
Testa-n. The outer coat of the seed, usually hard and brittle.
Umbilical cord -n. A vascular strand by which seeds are attached to the placenta; the funiculus.
Umbilicus - n . The hilum of the seed.

## Pistils

Adynamogyny - n . Loss of function in the female organ of a flower.
Agamogynaecism-n. In Compositae, the state of having female and neuter flowers in the same individual.
Apocarpous-a. With separate carpels, not syncarpous.
Apocarpy - n . The condition of having the carpels separate.
Bursicule-n. The pouchlike expansion of the stigma into which the caudicle of some orchids is inserted.
Carpel-n. A simple pistil; one unit of a compound pistil; in conifers, the cone scale of the female cone.
Carpellate-a. Possessing carpels.
Compound pistil-n. With two or more carpels coalesced into one body.
Dodecagynous-a. Possessing twelve distinct pistils or carpels.
Gynoecium - n. The pistil or pistils of a flower; the female portion as a whole.
Gynophore-n. The stipe or stalk of an ovary prolonged within the calyx.

Gynosporangium - n. The receptacle in which gynospores are developed.
Gynospore-n. One of the larger reproductive bodies (female) in the Isoëtaceae.
Heterodistyly - n. Dimorphism, the presence of two kinds of plants within a species, one with long, the other with short styles.
Hexagynous - a. With six pistils.
Homostyly - n . The same relation of length between all styles and anthers of the same species.
Hypogynium - n. The perianth-like structure subtending the ovary in Scleria and some other Cyperaceae.
Hypogynous-a. Free from, but inserted beneath, the pistil or gynoecium.
Inferior - a. Beneath, lower, as an inferior ovary, one that is below the calyx-leaves.
Inferior ovary - n. An ovary with the perianth located on top.
Macrostylous - a. Long-styled.
Mesocarp-n. The middle layer of a pericarp.
Metandry-n. A condition in which the female flowers mature before the male; protogyny.
Monogynous - a. With one carpel.
Monostylous-a. With a single style.
Octagynia - n. A Linnean order of plants with eight-styled flowers.
Octagynous-a. With eight-styled flowers.
Ovary - n. That part of the pistil which contains the ovules.
Pentagynous-a. With five pistils or styles.
Perigynium-n. The hypogynous setae of sedges; the flask or utricle of Carex; any hypogynous disc.
Perigynous-a. Borne around the ovary and not beneath it, as with calyx, corolla, and stamens borne on the edge of a cupshaped hypanthium.

Pistil-n. The female organ of a flower, consisting when complete of an ovary, style, and stigma.
Pistillate-a. With pistils and no stamens; female.
Protogynous - a. With pistil maturing before stamens in the same flower.
Pterogynous-a. With a winged ovary.
Scutum-n. The broad dilated apex of the style in asclepiads.
Simple pistil-n. A pistil of one carpel; not compound.
Stegium-n. Threadlike appendages sometimes found covering the style of asclepiads.
Sterile - a. Barren, as a flower without a pistil.
Stigma-n. The part of a pistil that receives the pollen; a point on the spores of Equisetum.
Stigmatic-a. Pertaining to the stigma.
Stylar-a. Relating to the style.
Style-n. The more or less elongated part of the pistil between the ovary and the stigma.
Stylopod-n. The enlargement at the base of the styles in Umbelliferae.
Superior ovary - n. An ovary with all of the floral envelopes inserted below on the torus.

## Positions

Accumbent-a. Lying against another organ.
Accumbent cotyledons-pl. n. Cotyledons having their edges against the radicle.
Appressed-a. Lying flat against an organ.
Ascending - a. Sloping upward; produced somewhat obliquely or indirectly upward.
Assurgent - a. Ascending, rising.
Cernuous-a. Drooping; inclining somewhat from the perpendicular, nodding.

Coarctate-a. Crowded together.
Decumbent-a. Reclining or lying on the ground, but with the ends ascending.
Descending - a. Tending gradually downward, as the branches of some trees and as the roots.
Dextrorse-a. Turning to the right, or clockwise.
Erect-a. Upright, perpendicular.
Extrorse - a. Turned or faced outward or away from the axis, as an anther turned away from the center of the flower.
Incumbent-a. Resting or leaning upon.
Introrse - a. Turned or faced inward or toward the axis, as an anther turned toward the center of the flower.
Inverted - a. Turned over; end-forend; top side down.
Juxtaposition-n. The relative position in which organs are placed; a placing or being placed side by side.
Nodding-a. Curved somewhat from the vertical, drooping.
Procumbent-a. Lying upon the ground, prostrate, trailing.
Prostrate-a. Lying flat, procumbent.
Reclinate-a. Bent down or falling back from the perpendicular.
Recurved - a. Bent or curved downward or backward.
Reflexed-a. Abruptly curved or bent downward or backward.
Repent-a. Prostrate and rooting.
Reptant-a. Creeping on the ground and rooting.
Resupinate-a. Upside down, or apparently so.
Retrocurved - a. Bent or curved back.
Retroflexed-a. Bent back, reflexed.
Retrorse-a. Directed backwards or downwards.
Scandent - a. Climbing in any manner.

Sinistrorse-a. Turning to the left, or counterclockwise.
Strict - a. Stiff, upright, rigid.
Subterraneous-a. In or under the soil.
Supine-a. Prostrate with face turned up.
Trailing-a. Prostrate, but not rooting.

## Sepals

Asepalous-a. Without sepals.
Caducous-a. Falling off early or prematurely, as the sepals in some plants.
Calyanthemy - n. Petalody of the calyx; the formation of colored petal-like structures in place of a normal calyx.
Calyculate-a. Calyx-like, bearing a part resembling a calyx, particularly, with bracts against or underneath the calyx resembling a supplementary or outer calyx.
Calyx-n. The outermost circle of floral envelopes.
Disepalous-a. With two sepals.
Epicalyx-n. A series of bracts close to and resembling the calyx.
Gamosepalous-a. With the sepals united.
Monosepalous-a. With one sepal.
Octosepalous - a. With eight sepals.
Pentasepalous - a. With five sepals.
Pleiosepalous - a. Many-sepaled.
Polysepalous - a. With many distinct sepals.
Sepal - n. One of the separate parts of a calyx.

## Sex Distribution

Agamohermaphrodite - a. With hermaphrodite and neuter flowers on the same plant.
Agamospermy - n. Seed production without fertilization.
Allautogamia - n. The state of having two methods of pollination, one usual, and the other facultative.

Allogamous-a. Reproducing by cross-fertilization.
Allogamy - n. The pollination of a flower with pollen from another flower; see Geitonogamy and Xenogamy.
Amixia-n. Cross-sterility.
Androgynous - a. Hermaphrodite; with both male and female flowers in the same inflorescence; occasionally used meaning monoecious.
Autoicous-a. See Monoecious.
Autophilous - a. Self-pollinated.
Cenanthy-n. The suppression of the stamens and pistil leaving the perianth empty.
Column-n. A combination of stamens and styles into a solid central body, as in orchids.
Cleistogene-n. A plant which bears cleistogamous flowers.
Cleistogeny-n. The state of bearing cleistogamous flowers.
Cleistogenous-a. Cleistogamous.
Dichogamous - a. Hermaphrodite with one sex maturing earlier than the other, the stamens and pistil not synchronizing.
Dichogamy - $n$. A condition in perfect flowers in which the sexes do not mature simultaneously.
Diclinism-n. The separation of anthers and stigma in space, as dichogamy does in time.
Diclinous - a. Unisexual, having the stamens in one flower and the pistil in another.
Diecious-a. See Dioecious.
Dimorphic-a. Occurring under two forms, as with long and short styles.
Dioecious-a. Unisexual, with staminate flowers on one plant and the pistillate on another.
Disanthic-a. With fertilization by pollen from another plant.
Epigymous - a. Borne on the ovary, the ovary inferior and not perigynous.

Exogynous-a. With the style longer than the corolla and projecting beyond it.
Flos. (pl. flores) - n. A perfect flower with some protecting envelope.
Frustraneous - a. Said of Compositae with disk flowers hermaphrodite, and those of the ray neuter or imperfect.
Geitonogamy - n. Pollination by pollen from another flower on the same plant.
Gnesiogamy - n. Fertilization between different individuals of the same species.
Gynandrous - a. With the stamens adnate to the pistil, as in orchids.
Gynecandrous - a. With staminate and pistillate flowers in the same spike, the pistillate at the apex; used chiefly in the Cyperaceae.
Gynodioecious-a. Dioecious with some flowers hermaphrodite, others pistillate only, on separate plants.
Gynomonoecious-a. Monoecious with female and hermaphrodite flowers on the same plants.
Gynostemium - n. The compound structure resulting from the union of the stamens and pistil in Orchidaceae.
Hermaphrodite-a. With stamens and pistils in the same flower.
Heteracmy - $n$. The condition in which stamens and pistils mature at different times.
Heterogamous-a. Bearing two kinds of flowers.
Homocephalic - a. Delpino's term in reference to homogamy in which the pollen fertilizes another flower in the same inflorescence.
Heterocephalous-a. With staminate and pistillate flowers on separate heads on the same plant.
Homoclinous - a. Delpino's term in reference to that kind of homog-
amy in which a complete flower is fertilized by its own pollen.
Homogamous - a. Bearing one kind of flower.
Homogony-n. The condition in which the pistils and stamens of all flowers are of uniform relative length.
Homotropic - a. Fertilized by pollen from the same flower.
Imperfect - a. Said of flowers lacking one of the essential organs.
Misogamy-n. Reproductive isolation.
Monoclinous-a. Having both stamens and pistils in the same flower; applied to the heads of Compositae that have only hermaphrodite flowers.
Monoecious-a. Having unisexual flowers with both sexes on the same plant.
Motion-dichogamy - n. A condition in which the sexual organs vary in length or position during flowering.
Neuter-a. Sexless, as a flower that has neither stamens nor pistils.
Neutral-a. Without stamens or pistils, sexless.
Nyctigamous-a. Said of flowers which open at night and close by day, marrying at night.
Panmixy - n. Free and more or less unlimited cross-fertilization.
Perfect-a. Said of flowers having both sex organs present and functioning.
Phaenogamous - n. Said of plants sexually propagating by flowers, the essential organs of which are stamens and pistil.
Phenological isolation - n. Isolation by a time of flowering, as either earlier or later than the other species of the genus.
Phytogamy - n. Cross-fertilization of flowers.
Polygamodioecious-a. Polygamous, but chiefly dioecious.

Polygamomonoecious-a. Polygamous, but chiefly monoecious.
Polygamous-a. Bearing perfect and unisexual flowers on the same individual.
Psychrocleistogamy-n. Cleistogamy induced by low temperature.
Staurigamia-n. Cross-fertilization.
Superior-a. Growing or placed above; hypogynous.
Synacmy - n. A condition in which stamens and pistil mature simultaneously; the opposite of heteracmy.
Symanthesis - n. The simultaneous maturation of stamens and pistil; synacmy.
Synoecious - a. With staminate and pistillate flowers both present in the same head.
Thermocleistogamy - n. Self-pollination taking place within flowers the opening of whose perianth has been inhibited by low temperature.
Trigamous - a. Bearing three forms of flowers; trimorphic.
Trimorphic-a. Occurring in three forms, as with long, short, and intermediate styles.
Unisexual -a. Of one sex; stamens or pistil only.
Xenogamy - n. Cross-fertilization between sexual elements borne by different individuals.

## Stamens

Agamandroecism - n. The condition in Compositae of having male and neuter flowers in the same individual.
Agynic - a. Said of stamens which are free from the ovary; destitute of pistils.
Androecium - $n$. The stamens of a flower (a collective term).
Androphore-n. A support or column on which the stamens are raised.

Anther-a. That portion of the stamen which bears the pollen.
Antheriferous-a. Anther-bearing.
Antheroid-a. Anther-like.
Bicruris-a. Two-legged, as the pollen masses of asclepiads.
Clinandrium-n. The anther bed in orchids, that part of the column in which the anther is concealed.
Cryptandrous-n. With hidden anthers, clesistogamous, the stamens remaining enclosed in the flower.
Decandrous - a. With ten stamens.
Diadelphous-a. With stamens formed in two groups by the union of their filaments.
Diandrous-a. With two stamens.
Didynamous-a. Four-stamened with stamens in pairs, two long, two short, as in many labiates.
Dodecandrous - a. Normally possessing twelve stamens, occasionally extended to more than twelve.
Emasculation-n. The removal of the anthers from a bud or flower.
Enneandrous-a. With nine stamens.
Exserted-a. Sticking out, projecting beyond, as stamens from perianth; not included.
Filament-n. The part of a stamen that supports the anther.
Gynostegium-n. A sheath or covering of the gynoecium, of whatever nature.
Heterandrous - a. With two sets of stamens, as flowers with two kinds of stamens.
Hexandrous - a. With six stamens.
Homoeandrous - a. With only one kind of stamen.
Icosandrous-a. With twenty or more stamens.
Incumbent anther - n. An anther attached to the inner face of its filament.

Isadelphous - a. Equal brotherhood, the number of stamens in each group being equal.
Massule-n. A group of cohering pollen-grains produced by one primary mother cell in orchids, also styled pollen-mass.
Melantherous-a. With black anthers.
Monadelphous-a. With stamens united by their filaments into a tube or column.
Monandrous-a. With one stamen.
Nototribal - a. With stamens arranged so as to deposit pollen on the backs of their insect visitors.
Octostemonous-a. With eight fertile stamens.
Oligandrous - a. With few stamens.
Parastemon-n. An abortive stamen, a staminode.
Pentadelphous-a. With five fraternities or bundles of stamens.
Pentandrous-a. With five stamens.
Phaenantherous-a. With stamens exserted.
Pleurotribal-a. Said of flowers whose stamens are adapted to deposit their pollen upon the sides of insect visitors.
Polyadelphous-a. With stamens disposed into several brotherhoods or groups.
Polyandrous-a. With an indefinite number of stamens.
Polystemonous-a. Polyandrous; with numerous stamens.
Porandrous-a. With anthers opening by pores.
Protandrous-a. With the anthers maturing before the pistil in the same flower, one kind of dichogamy.
Protandry-n. A condition in which the stamens mature before the pistil in the same flower.
Proterandrous - a. With the stamens maturing before the pistil in the same flower; protandrous, one kind of dichogamy.

Proterogyny - n. A condition in which the pistil matures before the anthers.
Psilostemon-a. Smooth-stamened; naked-stamened.
Resilient - a. Springing or bending back, as some stamens.
Sporophyll-n. A spore-bearing leaf.
Stamen-n. The pollen-bearing organ of the flower, the male organ.
Stamen, sterile- n. A body belonging to the series of stamens but without pollen.
Staminate-a. With stamens but no pistil; male.
Stamineal-a. Relating to or consisting of stamens.
Staminode-n. A sterile stamen, or a structure resmbling such and borne in the staminal part of the flower; in some flowers (as in Canna) staminodia are petal-like and showy.
Sternotribal-a. Said of flowers whose anthers are so arranged as to dust their pollen on the under part of the thorax of their insect visitors.
Sulphur rain-n. Pine pollen carried in excessive amounts by air currents.
Synantherous-a. With anthers joined to form a tube.
Synema (pl. synemata)-n. The column of monadelphous stamens, as in Malvaceae.
Triadelphous-a. With stamens in three sets.
Triandrous-a. With three stamens.
Tridynamous - a. With three stamens out of six being longer than the rest.

## Stems

Acaulescent-a. Stemless or apparently so.

Armed - a. Possessing any kind of strong and sharp defense, as thorns, spines, prickles, or barbs.
Articulate-a. Jointed; with nodes or joints, or places where separation may naturally take place.
Axil-n. The upper angle formed between the axis and any organ that arises from it.
Axillary - a. Situated in the axil.
Axis - n . The main or central line of development of any plant or organ; the main stem.
Bast - n. The fibrous constituent of the bark of many species.
Bole - n . The main trunk of a tree with a distinct stem.
Brachiate-a. Spreading with branches suggesting arms.
Branch-n. A lateral division of the stem or axis of growth.
Branchlet-n. The ultimate division of a branch.
Bud-n. An embryonic axis with its appendages.
Bulb-n. A modified bud usually underground; imbricated - with scaly modified leaves, as in the lily; tunicated-with modified leaves forming concentric layers around the bud, as the onion.
Bulbiferous-a. Bearing bulbs.
Bulbil - n. A bulb arising from the mother bulb.
Bulbet-n. A little bulb produced in the leaf axil, inflorescences, or other unusual places.
Bulbose-a. Having bulbs or the structure of a bulb.
Caespitose-a. Growing in tufts.
Caudex-n. The woody base of a perennial plant.
Caulescent-a. More or less stemmed or steam-bearing; having an evident stem above ground.
Cauliculous - a. With a small stem.
Cauline - a. Pertaining or belonging to the stem.
Cladophyll-n. A branch assuming the form and function of a leaf; a cladode.

Corm-n. A solid bulblike structure, usually subterranean, as the "bulb" of Gladiolus.
Cormel-n. A corm arising from a mother corm.
Crown-n. Corona; the base of a tufted, herbaceous, perennial grass; the hard ring or zone at the summit of the lemma of some species of Stipa; the part of a stem at the surface of the ground; a part of a rhizome with a large bud, used in propagation.
D. B. H. - n. Diameter breast high.

Deliquescent-a. Dissolving or melting away; said of a stem that loses itself by repeating branching; opposed to excurrent.
Digonous-a. Two-angled, as the stems of some Cacti.
Excurrent-a. With the stem remaining central and other parts being regularly disposed around it; running through to the apex.
Gemma - n. A bud or a body analogous to a bud capable of producing a new plant.
Haplocaulous-a. Having a simple unbranched stem.
Infra-axillary-a. Below the axil, sub-axillary.
Internode-n. The part of a stem between two successive nodes.
Melanoxylon-n. Black wood.
Nodal-a. Pertaining to the node.
Node-n. That point on a stem which normally bears a leaf or leaves.
Nodiferous-a. Bearing nodes.
Nodose - a. With nodes.
Ramal-a. Pertaining to a branch.
Rameal - a. See Ramal.
Rhizome-n. A dorsiventral, rootlike, underground stem which produces roots and shoots; rootstock.
Sapwood-n. The new wood in an exogenous tree, so long as it is pervious to water; the alburnum.
Sautellus - n. A bulblet, such as those of Lilium tigrinum.

Scapose-a. Bearing or resembling a scape.
Semester ring - n . The ring produced in the wood of many tropical trees in consequence of two periods of growth and rest in a year.
Stem-n. The main axis of a plant, leaf-bearing as distinguished from the rootbearing axis.
Stems, subterranean-pl. n. Rhizomes, tubers, bulbs, and corms.
Stipitate-a. With a stipe.
Sub-axillary-a. Borne below the axil.
Supra-axillary-a. Borne above the axil, super-axillary.
Triquetrous - a. With three salient angles and three concave faces.
Tuber-n. A short thickened branch of a subterraean stem, beset with buds or "eyes."
Tubercle-n. A little tuber.

## Surfaces and Vestures

## Shiny surfaces

Glittering-a. With luster as from a polished surface which is not uniform.
Illustrous - a. Bright, brilliant, lustrous.
Lucid-a. Shiny, bright.
Lustrous-a. Glossy, shiny.
Micaceous-a. Glittering, sparkling, mica-like.
Nacreous-a. With pearly luster.
Nitid - a. Smooth and clear, lustrous, glittering.
Vernicose-a. Shiny, as though varnished.
Smooth surfaces (without hairs, spines, bristles, or scales)
Regular
Alepidote-a. Destitute of scurf or scales.
Bloom-n. The white, waxy, or pruinose covering on many fruits, leaves, and stems.

Glabrate-a. Nearly glabrous, or becoming glabrous with maturity or age.
Glabrous-a. Smooth, devoid of pubescence or hair of whatsoever form.
Glaucous-a. Covered with a "bloom" or a whitish substance that rubs off, as of a plum or cabbage leaf.
Laevigate-a. Smooth, as if polished.
Naked-a. Wanting its usual covering, as without pubescence.
Pruinose-a. Having a waxy powdery secretion on the surface, a "bloom."
Unctuous-a. Having a surface which feels greasy.
Vernicose - a. Shiny, as though varnished.
Viscid-a. Sticky from a tenacious coating or secretion.
Irregular
Alveolate-a. Honey-combed.
Areola - n. A small area marked out on a surface.
Areolate-a. With areola.
Bullate-a. With surface blistered or puckered, as the leaf of a Savoy cabbage.
Canaliculate-a. Channel ed longitudinally.
Colliculose-a. Covered with little round elevations or hillocks.
Corrugate-a. Wrinkled.
Faveolate-a. Honey-combed, alveolate.
Fluted-a. Regularly marked by alternating ridges and groovelike depressions.
Foveolate-a. Marked with small pitting.
Furrowed-a. With longitudinal channels or grooves, sulcate, striate on a large scale.

Lacuno-rugose - a. Marked with irregular wrinkles, as the stone of a peach.
Mammiform - a. Breast-shaped, conical with rounded apex.
Mammilla-n. A nipple or teat.
Mammillate-a. Having teatshaped processes.
Mammose-a. Having teatshaped processes.
Nodulose - a. With little knobs or knots.
Papilla (pl. papillae) - n. A minute nipple-shaped projection.
Papillary-a. Resembling papillae.
Papillose-a. Bearing papillae.
Pitted-a. Marked with small depressions, punctate.
Pustulose-a. Blistery, furnished with pustules or irregular raised pimples (not as roughened as papillose).
Rugose - a. Wrinkled, as leaf surface with sunken veins.
Rugulose - a. Somewhat wrinkled.
Scrobiculate-a. Marked by minute or shallow depressions, pitted.
Striate-a. With fine grooves, ridges, or lines of color.
Sulcate-a. Grooved or furrowed lengthwise.
Tesselate-a. Having the surface marked with square or oblong depressions.
Thelephorous - a. Covered with nipple-like prominences.
Verrucose-a. Covered with wartlike elevations.
Wrinkled - a. Rugose, irregularly creased.
Granular and scaly surfaces
Farinose-a. Covered with a mealiness.
Fornix (pl. fornices) - n. A small arched scale.

Granular - a. Covered with very small grains; minutely or finely mealy.
Grumose-a. Crumby.
Lepis (pl. lepides) -n. A scale, usually attached by its center.
Lepidote-a. Beset with small scurfy scales.
Pulveraceous-a. Covered with a layer of powdery granules.
Ramentum (pl. ramenta)-n. Used in the plural for the thin chaffy scales of the epidermis, as the scales of many ferns.
Scobinate-a. Rough as though rasped.
Scurf-n. Small branlike scales on the epidermis.
Scurfy-a. Covered with small scales.
Squamaceous-a. Scaly.
Squamate-a. Furnished with scales.
Squamose-a. Squamate, full of scales.
Stellate scales - pl. n. Trichomes, dises borne by their edge or center.
Tartareous-a. With a loose or rough crumbling surface, as some lichens.
Hairy surfaces
Straight hairs
Canescent-a. Gray-pubescent or becoming so.
Cilium (pl. cilia)-n. Used generally in the plural to desginate marginal hairs.
Ciliate-a. Said of a margin fringed with hairs.
Comose-a. Bearing a tuft or tufts of hair.
Crinus-n. A stiff hair on any part.
Down-n. Soft pubescence; the pappus of such plants as thistles.
Glochidiate-a. Pubescent with barbed bristles.

Hair-n. An outgrowth of the epidermis consisting of one to several cells.
Hirsute - a. With stiff or bristly hairs.
Hirsutulous - a. Slightly hirsute.
Hirtellous - a. Softly or minutely hirsute or hairy.
Hispid-a. Beset with rough hairs or bristles.
Hispidulous - a. Somewhat or minutely hispid.
Hoary-a. Covered with a close white or whitish pubescence.
Multiciliate-a. With many cilia.
Piliferous-a. Bearing hairs, or tipped with hairs; hairpointed.
Pilose - a. With soft hairs.
Plumose-a. Pubescent in a manner simulating a feather or a plume.
Puberulent-a. Somewhat or minutely pubescent.
Pubescence-n. The hairiness of plants.
Pubescent-a. Covered with short soft hairs; down.
Scabrous-a. With short bristly hairs; rough to the touch.
Sericeous - a. Silky, clothed with closely appressed, soft, straight pubescence.
Silky-a. Said of a condition produced by a covering of soft, appressed, fine hairs; sericeous.
Strigose - a. Beset with sharppointed, appressed, straight, and stiff hairs or bristles; hispid.
Trichome-n. Any hairlike outgrowth of the epidermis, as a hair or bristle.
Tufted-a. Cespitose, comose, having a small cluster of hairs.

Velutinous-a. Velvety, due to a coating of fine, soft hairs.
Velumen-n. Close, short, soft hair.
Villose-a. Covered with long, silky, straight hairs.
Interwoven hairs
Arachnoid-a. Cobwebby, composed of slender entangled hairs; spider-like.
Eriophorous - a. Wool-bearing, densely cottony.
Felted-a. Matted with intertwined hairs.
Floccus (pl. flocci) - n. A lock of soft wool or hair.
Floccose-a. Bearing flocci.
Flocculose-a. Like wool.
Gossypine-a. Cottony, flocculent; like the hairs on the seeds of Gossypium.
Holosericeous - a. Woolly-silky.
Indument - n . Hairy or pubescent with rather heavy covering.
Lanate-a. Clothed with woolly and interwoven hairs.
Lanose-a. Woolly.
Lanuginose - a. Woolly or cottony.
Manicate-a. Said of pubescence so dense and interwoven that it may be stripped off.
Panniform-a. Having the appearance or texture of felt or woolen cloth.
Pannose-a. Having the appearance or texture of felt or woolen of very close texture.
Tomentose-a. With tomentum; densely woolly or pubescent; with matted soft woollike hairiness.
Tomentulose-a. Somewhat or delicately tomentose.

Tomentum-n. A densely matted pubescence.
Velutinous-a. Velvety, due to a coating of fine soft hairs.
Web-n. A cluster of slender, soft hairs.
Woolly-a. Lanate, tomentose, clothed with long and tortuous or matted hairs.
Hooked hairs
Aduncate-a. Bent or crooked, as a hook.
Aduncous-a. Hooked.
Uncinate - a. Hooked, bent at the tip like a hook.
Branched hairs
Candelabra hairs - pl. n. Stellate hairs in two or more tiers.
Stellipilous-a. With stellate hairs.
Stellate-a. Starry, often said of hairs that have radiating branches from base or of separate hairs similarly aggregated.
Spiny or prickly surfaces
Acantha-n. Thorn.
Aculeate-a. With prickles.
Aculeolate-a. Beset with small prickles.
Asperate-a. Rough.
Asperous-a. Rough or harsh to the touch.
Barbed-a. Furnished with retrorse projections.
Barbellate-a. Finely barbed.
Barbulate-a. Finely bearded.
Bearded - a. Bearing or furnished with long or stiff hairs.
Bristle-a. A stiff hair.
Bristly-a. Bearing stiff strong hairs.
Echinate-a. Armed with prickles.
Exasperate-a. Rough, with hard, projecting points.

Glochid-n. A barbed hair or bristle.
Glochideous-a. Pubescent with barbed bristles.
Muricate - a. Rough with short, hard points.
Muriculate - a. Very finely muricate.
Pungent-a. Ending in a rigid and sharp point.
Scabridulous-a. Slightly rough.
Scabrous-a. With short bristly hairs; rough to the touch.
Setigerous - a. Bristly, bristlebearing.
Setose-a. Bristly, beset with bristles.
Setulose-a. With minute bristles.
Spiculose - a. With a surface covered with fine points.
Spinescent-a. Ending in a spine or sharp point.
Spinose - a. Spinelike; with spines or thorns.
Spinulose-a. With small spines or spinules.
Spiny-a. Beset with spines.

## Miscellaneous surfaces

Cilium (pl. cilia) - n. Used generally in the plural to designate marginal hairs.
Ciliate-a. Said of a margin fringed with hairs.
Ciliolate-a. Minutely ciliate.
Derma (pl. dermata) - n. Surface of an organ, bark, rind, or skin.
Fimbria-n. A fringe.
Fimbriate-a. Fringed, the hairs longer or coarser as compared with ciliate.
Fimbrillate-a. With a minute fringe.
Malpighiaceous hairs - n . Hairs which are straight and ap-
pressed but attached, by the middle, frequent in the family Malpighiaceae.
Pelta-a. A bract attached by its middle as in peppers.
Piloglandulose-a. Bearing glandular hairs.
Process-n. Any projecting appendage.
Punctate-a. Dotted with depressions or punctures.
Stinging hair-n. A hollow hair seated on a gland which secretes an acid substance, as in nettles.
Tentacle-n. A sensitive glandular hair, as those on the leaf of Drosera.
Trap-hairs-n. Special hairs which confine insects in certain flowers until pollination is effected.
Tricholoma-n. With the edge or border furnished with hairs.

## Texture

Callose-a. Hard and thick in texture.
Cartilagineous - a. Like cartilage or gristle.
Cereous-a. Waxy.
Chaffy - a. With small membranous scales.
Chartaceous-a. Having the texture of writing paper.
Coriaceous-a. Leather-like.
Corneous - a. Horny, with a horny texture.
Crustaceous - a. Of hard and brittle texture.
Crystalline-a. Resembling a crystal.
Fibrous - a. Having much woody fiber, as the rind of a coconut.
Flaccid-a. Withered and limp, flabby.
Fleshy-a. Succulent.

Fragile-a. Weak, easily broken.
Frutescent-a. Becoming shrubby.
Fruticose - a. Shrubby or shrublike in the sense of being woody.
Gelatinous-a. Jelly-like.
Glutinous-a. Sticky.
Granular - a. Composed of grains; divided into little knots or tubercles.
Herbaceous-a. With the texture, colors, and properties of a herb, not woody.
Hyaline - a. Thin and translucent or transparent.
Indurated - a. Hardened.
Ligneous - a. Woody.
Membranaceous-a. The same as membranous.
Membranous-a. Thin, more or less flexible, and translucent.
Mucilaginous - a. Slimy, composed of mucilage.
Oleaginous-a. Oily and succulent.
Oleiferous-a. Oil-bearing.
Oleraceous - a. Herbaceous.
Osseous-a. Bony.
Ossified - a. Made hard as bone, as the stones of drupes, such as the peach or plum.
Paleaceous-a. Chaffy.
Papery - a. Having the texture of paper, chartaceous.
Papyraceous-a. Papery, white as paper.
Resinous - a. Like, or pertaining to resin.
Sap - n . The juice of a plant; the fluid contents of cells and young vessels consisting of water and salts absorbed by the roots and distributed through the plant.
Saponaceous - a. Soapy, slippery to the touch.
Scarious - a. Thin, dry, and membranous, often more or less translucent.
Scleroid-a. Having a hard texture.
Sebaceous-a. Like lumps of tallow.
Spumose-a. Frothy.

Suberous-a. Corky in texture.
Succulent-a. Juicy or pulpy.
Suffruticose-a. Shrubby at the base.
Viscid-a. Sticky from a tenacious coating or secretion.

## Time and Season

Aestival-a. See Estival.
Allochronic species - pl. n. Species which do not belong to the same time level, as opposed to contemporary or synchronic.
Allogenous flora-pl.n. Relic plants of an earlier prevailing flora and environment; epibiotic plants.
Annotinous-a. A year old, or in yearly growths.
Annual -a. Of one year's duration; completing its life cycle in one year.
Asyngamic-a. Unable to cross by reason of differences in time of flowering.
Autumnal-a. Of or pertaining to autumn, flowering in autumn.
Biennial - a. Of two seasons' duration from seed to maturity and death.
Crepuscular-a. Of or pertaining to twilight.
Dipiobiont-n. A plant flowering or fruiting twice each season.
Diurnal-a. Occurring in the daytime, sometimes used for ephemeral.
Efflorescence-n. The season of flowering; anthesis.
Ephemer-n. A flower which closes after a short term of expansion.
Ephemeral-a. Persisting for one day only, as flowers of spiderwort.
Estival-a. Of or pertaining to summer.
Frutescence-n. The time of maturity of fruit.
Hemeranthous-a. Day-flowering.

Hibernaculum - $n$. The winter resting part of a plant, as a bud or underground stem.
Hibernal - a. Hibernating, relating to winter.
Hibernation- n. Passing the winter in a dormant state.
Hiemal-a. Relating to winter.
Horary-a. Lasting an hour or two, as the petals of Cistus.
Hyemal - a. See Hiemal.
Matutinal-a. Pertaining to morning; plants flowering early, as Ipomoea purpurea.
Menstrual - a. Lasting for a month or so.
Nocturnal-a. Occurring at night, or lasting one night only.
Nox (pl. noctes) - n. Night.
Nyctanthous - a. Said of nightflowering plants.
Nyctigamous-a. With flowers which open at night and close by day; pollinated at night.
Nyctitropic-a. Turning in response to darkness.
Nyctitropism-n. The act of assuming the sleep position.
Paraheliotropism-n. Diurnal sleep, the movement of leaves to avoid the effect of intense sunlight.
Perennation-n. A lasting or perennial state.
Perennial-a. Said of a plant which lasts several years, not perishing normally after one flowering and fruiting.
Photeolic-a. Pertaining to the "sleep" of plants.
Precocious-a. Appearing or developing very early, as aments in Salix expanding before the leaves.
Prevernal - a. Of early spring.
Serotinal - a. Produced late in the season, or the year, as in autumn.
Serotinous - a. Produced or occurring late in the season.

Sleep-n. The response of plants, with changes in position of organs such as leaves due to the absence of light.
Sleep movement-n. Positions taken by leaves during the night, nyctitropic movement.
Synchronic species - pl. n. Species which belong to the same time level, contemporary.
Therophyllous-a. Producing leaves in summer, deciduousleaved.
Therophyte-n. A plant which completes its development in one season, its seeds remaining latent during the hot season; an annual.
Trimestris - a. Of three months, as lasting that time or maturing in it.
Vernal - a. Pertaining to spring.
Vespertine-a. Appearing or expanding in the evening.

## Tropisms

Tropism is the innate tendency of an organism to react in a definite manner to an external stimulus.

Anemotropism - n. The tropic response of organisms to wind and air currents.
Aphaptotropism - n . The state of not being influenced by touching stems or other surfaces.
Apheliotropism-n. The act of turning away from the sun; negative photropism.
Aphercotropism - n. The act of turning away from an obstruction.
Aphototropism - n . The act of turning away from the light.
Autonyctitropism-n. Regularly assuming the position usual during the night.
Autoörthotropism - n. The tendency of an organ to grow in a straight line forward.

Barotropism - n. The response of an organism to changes in barometric pressure.
Chemotropism-n. Curvature in response to chemical stimuli.
Cryotropism-n. Movements induced by cold or frost.
Diaphototropism-n. The act of turning at right angles to incident light, as the leaves of some plants.
Diatropism - n . The act of organs placing themselves crosswise to an operating stimulus.
Dromotropism-n. The tropic movement of climbing plants which results in their spiral growth.
Edaphotropism-n. Tropic responses to the soil.
Epigeotropism - n. Tropism resulting in growth on the surface of the soil.
Geodiatropism-n. A function which places an organ at right angles to the force of gravity.
Heliotropism-n. The act of turning in response to the sun.
Homalotropism - n . The act of turning to a horizontal position.
Hydrotropism - n. The act of turning in response to the influence of water.
Nyctitropism-n. The tendency of certain plant organs, as leaves, to assume special "sleeping" positions or to make curvatures under the influence of darkness.
Ombrotropism-n. Tropic responses of organisms to the stimulus of rain.
Orthoösmotropism-n. The act of assuming an erect position due to osmotic action.
Orthotropism-n. Growth in a vertical position.
Paraheliotropism-n. Diurnal sleep; movements of leaves to avoid the effects of intense sunlight.

Paraphototropism - n. The act of turning at right angles to the incident light.
Phototropism-n. The act of turning in response to light.
Polytropism-n. The act of leaves placing themselves vertically and meridionally, the two surfaces facing east and west respectively.
Prohydrotropism-n. The act of turning toward a source of moisture.
Rheotropism - n. The act of turning in response to a current of water.
Selenotropism-n. Movements of plants caused by the light of the moon.
Siotropism-n. Response to shaking, as with Mimosa.
Stenotropism-n. A condition with narrow limits of adaptations to varied conditions.
Stereotropism-n. Response to contact stimuli.
Telotropism-n. The act of turning to one stimulus to the exclusion of all others.
Thermotropism-n. The act of turning in response to heat.
Thigmotropism-n. The act of turning in response to a mechanical stimulus.
Topotropism-n. The act of turning toward the place from which a stimulus comes.
Traumatropism-n. The sensitiveness of certain plant organs to wounds.
Zenotropism-n. Negative geotropism.

## Type Terminology

Agrotype - n. An agricultural race. Biotype-n. A group of individuals all of one genotype.
Chirotype-n. The specimen on which a manuscript name is based.

Clastotype-n. A fragment from the original type.
Cotype - n. An additional or associate type specimen from which a taxon is described.
Generitype-n. The type species of a genus.
Genotype-n. The type of a genus, the species upon which the genus was established.
Holotype - n . The one specimen or other element used by the author of the name, or designated by him, as the nomenclatural type (i.e., the element to which the name of the taxon is permanently attached).
Icotype-n. A type serving for identification, but not previously used in literature.
Isotype-n. A specimen believed to be a duplicate of the holotype.
Lectotype-n. A specimen or other element selected from the original material to serve as the nomenclatural type, when the holotype was not designated at the time of publication, or when the holotype is missing.
Logotype-n. A type determined historically from two or more original species.
Merotype-n. A specimen collected from the original type in cultivation by means of vegetative reproduction.
Metatype - n . A specimen from the original locality, recognized as authentic by the describer himself.
Mimotype - n. Forms distinctly resembling each other, fulfilling similar functions, and thus representing each other in different floras.
Monotypic-a. Having only one exponent, as a genus with but one species.
Necrotype - n. A form that formerly existed but is now extinct.

Neotype-n. A specimen selected to serve as the nomenclatural type of a taxon in a situation when all material on which the taxon was based is missing.
Paratype-n. A specimen cited with the original description other than the holotype.
Phenotype - n. A group of individuals of similar appearance but not necessarily of similar genetic constitution.
Phototype-n. A photograph of a type specimen.
Proterotypes - pl. n. Primary types; all specimens which have served as a basis for descriptions and figures of organisms; further divided into holotype, cotype (or syntype), paratype, lectotype, and chirotype.
Prototype - n . The assumed ancestral form from which the descendents have become modified.
Spermotype-n. A specimen cut from a seedling grown from the original type.
Syntype-n. One of two or more specimens or elements used by an author when no holotype is designated, or one of two or more specimens simultaneously designated as type.
Tectoparatype-n. A specimen selected to show the microscopic structure of the original type of a species or genus.
Topotype-n. A specimen of a named species from the type locality.
Type specimen-n. The original specimen from which a description is written.
Typical-a. In classification, conforming to the originally described specimen.
Unitypic - a. See Monotypic.

## Vernation

Vernation deals with the disposition of foliage leaves in the bud. It does not treat of the insertion of the leaves on the axis as this comes under phyllotaxy. The disposition of floral parts in the bud is treated under Aestivation.

Circinate-a. Coiled from the top downward, as the leaves of Frosera and the fronds of true ferns.
Complicate-a. Folded upon itself. Conduplicate-a. Folded lengthwise, or doubled up flat on the midrib, the upper face of the leaf always within, as in Magnolia.
Convolute-a. Rolled up from one margin, one margin on the inside and the other on the outside.

Equitant-a. Folded over as if astride; used for conduplicate which enfold each other in two ranks, as in Iris.
Involute-a. With both margins rolled toward the midrib on the upper surface, as the leaves of water lily and violets.
Plicate-a. Folded on the several ribs in the manner of a closed fan. It occurs in palmately veined leaves, as in maple and currant.
Reclinate (inflexed)-a. With the upper part bent on the lower, or the blade on the petiole, as in Liriodendron.
Revolute-a. With both margins rolled toward the midrib on the lower face, as the leaves of Azalea.

