

nate, crenate dentate; autumnal ones largest, very exactly reniform; peduncle somewhat 4-sided, longer than the leaves; divisions of the calyx subulate, acuminate, marginate behind, or very entire; petals (as in many American species) oblique, veiny, very entire, white at the base, upper one generally naked, glabrous, lateral ones bearded, and with the upper one marked with a few blue lines. Var. *papilionacea*, petioles and peduncles longer; sub-lanceolate; beards of the lateral petals often yellow. Var. *tetragona*, peduncle strong, exactly 4-sided; petals azure colour, veinless. Var. *villosa*, leaves, petals, and peduncles villose. 4—8. i.

(Leaves oblong or ovate, never reniform; younger ones cucullate.)  
*Sagittata*, (E. b-p. Ap. 2) glabrous; leaves ciliate, oblong, not acute, sagittate cordate, dentate, gashed at the base (or furnished with elongated divaricate teeth); peduncle somewhat 4-sided, longer than the leaves; divisions of the calyx lanceolate, acuminate, emarginate behind; petals all very entire, veiny, white at the base; upper one generally naked, glabrous; lateral ones densely bearded, and with the upper one marked with a few blue lines; spur elongated behind. A variety has the leaves more or leaves more or less villose. Drv.

(Stemless.)

*Rotundifolia*, (O. M. y. 2) glabrous; leaves thickish, appressed to the earth, broad ovate or obicular, cordate, crenate; nerves pubescent beneath; sinus closed, peduncle somewhat 4-sided, as long as the leaves; divisions of the calyx oblong, obtuse; petals somewhat emarginate; upper ones small; lateral ones somewhat bearded, and with the upper one marked with a few yellowish brown lines; spur very short.—Woods. 1—3. i.

*Cauliscent.*

*Pubes'cens*, (O. y. 2) villose pubescent; stem simple, erect, terete, leafless below; leaves broad ovate, cordate, dentate; petioles short; stipules large, ovate, dentate; peduncles 4-sided, shorter than the leaves; bracts subulate, minute; divisions of the calyx lanceolate; petals all very entire, veinless; upper one naked, glabrous lateral ones bearded, and with the upper one, marked with a few blue lines; lower ones often becoming reddish outside; spur short, gibbose, acutish; stigma pubescent, scarcely beaked. Varies in pubescence; leaves are even found glabrous; the capsules are also glabrous or woolly. 4—12. i. rarely—4. f.

*Exotic.*

*Tri'color*, (garden violet, heart's ease, pansy. p. y. b-p. M. 2) stem angular, diffuse, divided; leaves oblong, deeply crenate; stipules lyrate pinnatifid.

19—3. ZEA. (An ancient Greek name, perhaps from *zao*, to live.)

*Southern.*

*Maize*, (indian corn. y-g. Ju ☉) leaves lance-linear, entire, keeled.

## VOCABULARY.

OR

### EXPLANATION OF BOTANICAL TERMS

A.

- A.* in composition, signifies privation, or destitute of; as, *acautis*, referring to a plant without a caulis or stem.  
*Abortive* flower. Falling off without producing any fruit.  
 — stamens, not furnished with anthers.  
 — pistil. Defective in some essential part.  
 — seed, not becoming perfect through want of the fertilizing influence of the pollen.  
*Abrupt* leaf. A pinnate leaf with an odd or terminal leaflet.  
*Acalyces*, (from *a*, signifying without, and *calyx*, a flower cup.) A class in an ancient method of arrangement, consisting of plants without a calyx.  
*Acaules*, (from *a*, wanting, and *caulis*, a stem.) Including plants without stems.  
*Acerose* leaf. Linear and permanent, as in the pine.  
*Acicular*. Needle shaped.  
*Acinus*. A small berry which, with many others, composes the fruit of the mulberry and raspberry; the plural is *acini*.  
*Acotyled'onous*, (from *a*, without, and *cotyledon*, a seed lobe.) Plants destitute of seed lobes, and which consequently put forth no seminal or seed leaves, as mosses and ferns.  
*Aculeus*, (from *acus*, a needle.) A prickle, or sharp point; common to the rose and raspberry. It differs from the thorn, in being a prolongation of the outer bark of the plant, and unconnected with the wood. Prickles have been compared to the nails and claws of animals.  
*Acuminate*. Abruptly sharp pointed, having the point curved towards one edge of the leaf, resembling an awl.  
*Acute*. More gradually sharp pointed than acuminate. An obtuse angle, or any other mathematical angle, is acute in botanical language.  
*Adelphous*, (from the Greek *adelphos*, a brother or an equal.) Applied to plants whose stamens are united by their filaments, whether in one or two sets.  
*Adnate*. Growing together.  
*Adversifolia*, (from *adversus*, opposite, and *folium*, a leaf.) Plants whose leaves stand opposite to each other, on the same stem or branch.

- Æstiva'les*, (from *æstas*, summer.) Plants which blossom in summer.
- Ajō'ra*, (from *a*, without, and *fores*, a door.) Having no doors or valves.
- Aga'mous*, (from *a*, without, and *gamos*, marriage.) Plants without any visible stamens or pistils, are by French botanists called *agamous*.
- A'ges* of plants. *Ephemeral* are such as spring up, blossom, and ripen their seed in a few hours or days; *annual* live a few months, or one summer.
- biennial*, spring up one summer, and die the following.
- perennia'*, live an indefinite period.
- Ag'gregate*, (from *aggregare*, to assemble.) Many springing from the same point: this term was at first applied to compound flowers, but there is at present a sevenfold division of aggregate flowers; the *aggregate*, properly so called.
- compound*,  
*umbellate*,  
*cymose*,  
*amentaceous*,  
*glumose*,  
*spadiceous*.
- Aggregate flower* is erected on peduncles or footstalk, which all have one common receptacle on the stem; they sometimes have one common calyx, and are sometimes separately furnished with a calyx.
- Ai'grette*. See egret.
- Al'a*. A Latin word signifying a wing. It is sometimes used to express the angle formed by the stem with the branch or leaf. Linnæus and some others use the term *ala*, as the name of a membrane affixed to some species of seeds which serves as a wing to raise them into the air, and thus promotes their dispersion.
- Al'ca*. The two lateral or side petals of a papilionaceous flower.
- Albu'men*. The farinaceous, fleshy, or horny substance, which constitutes the chief bulk of monocotyledonous seeds; as wheat, rye, &c.
- Alburnum*, (from *albus*, white.) The soft white substance, which in trees is found between the liber, or inner bark, and the wood, and becoming solid, in progress of time is converted into wood. From its colour and comparative softness, it has been styled the fat of trees. It is called the *sap wood*, and is formed by a deposit of the cambium or descending sap; in one year it becomes wood; and a new layer of alburnum is again formed by the descent of the cambium.
- Al'ga*. Flags; these by Linnæus comprise the plants of the order *Hepaticæ* and *Lichenes*.
- Al'pine*. Growing naturally on high mountains.
- Alter'nate*. Branches, leaves, flowers, &c. are alternate, when beginning at different distances on the stem; opposite, is when they commence at the same distances, and base stands against base.
- Al'ternately pinnate* leaf; when the leaflets are arranged alternately on each side of the common footstalk or petiole.
- Alve'olate*. Having cells which resemble a honey-comb.
- Am'bitus*. The outer rim of a frond, receptacle, &c.
- A'ment*. Flowers collected on chaff scales, and arranged on a thread

- or slender stalk; these scales mixed with the flowers, resemble the chaff in an ear of corn; in the willow and poplar, an ament supports both staminate and pistillate flowers on distinct roots. Flowers supported by an ament are generally destitute of a corolla.
- Amplexicaul'is*. Claspings the base of the stems.
- Anal'ysis*. To analyze a plant *botanically*, is to ascertain its name, by observing its organs, and comparing them with scientific descriptions of plants.
- Ancip'ital*. Having two sharp edges like a sword.
- An'dria*. Signifies stamens.
- Androg'ynous* plants. Such as bear staminate and pistillate flowers on the same root; as the oak and indian corn; such plants belong to the class *Monœcia*.
- Angioca'pus*. Fungi, bearing seeds internally.
- Angiosper'mal*, (from *angion*, a vessel, and *sperma*, seed.) Plants whose seeds are inclosed or covered.
- Angular*. Forming angles; when the stems, calyxes, capsules, &c. have ridges running lengthwise.
- Angustifo'lius*. Narrow-leaved.
- An'nuat*. A plant which lives but one year. The herbage is often annual, while the root is perennial; in this case the plant is said to be perennial.
- Annula'led*. Having a ring round the capsules, as in ferns; or in mushrooms having a ringed stripe.
- Annul'us*. A ring.
- Anom'alous*, (from *a*, without, and *nomos*, law.) Irregular, or whatever forms an exception to a general rule.
- Anther*, (from *anthos*, a flower, so called, as indicating its importance.) That part of the stamen which contains the pollen; it is of various forms, as linear, awl-shaped, heart-shaped, round, &c.; it is 1-celled, 2-celled, &c.; the anther of the crown imperial has 4 cells.
- Antherid'ium*. A mass of pollen.
- Antherif'erous*. Flowers bearing anthers without filaments.
- Anthus*, (from the Greek *anthos*.) A flower generally referring to the petals only.
- Apet'alous*, (from *a*, without, and *petalum*, a petal.) Having no petals, such flowers are termed *incomplete*; such as are destitute of either stamens or pistils are called *imperfect*.
- Apet'ala*. A class formed by some of the ancient botanists, including plants destitute of corollas.
- Ap'ex*. The top or summit.
- Aphyll'ous*, (from *a*, without, and *phylon*, a leaf.) Destitute of leaves.
- Aphyll'ea* is the name given by an ancient botanist to a class of plants without leaves, comprising garlic, rush, mushrooms, &c.
- Appen'daged*. Having bracts, thorns, prickles, &c.
- Appres'sed*. Closely pressed; as leaves against the stem, &c.
- Approx'imate*. Growing near each other.
- Ap'terous*. Without wings.
- Aquat'ic*, (from *aqua*, water.) Growing in, or near water.
- Aquat'ica*, was an ancient name for a class including all plants which grow in water.

- Ar'bor.** A tree; a perennial plant, which rises to a considerable height having a woody stem. Most trees spring from seeds having two cotyledons; they are therefore called dicotyledonous plants. The stems of such plants are said to be *exogenous*, that is, growing externally, new layers of wood being every year formed under the bark around the outside of the old wood. Palm trees are monocotyledonous plants; their stems are called *endogenous*, that is, growing internally, and pressing upon the outer coats, which become hard and compact. The ancient botanists divided plants into trees and herbs; but this distinction is too vague to form the basis of classification.
- Arbusti'vus.** (from *arbutum*, a shrub.) An ancient class of plants containing shrubs, as the myrtle, mock-orange, &c.
- Arcuate.** (from *arcus*, a bow.) Bent like a bow.
- Arcnarius.** Growing in sand.
- Argent'eus.** Silver coloured.
- Ar'id.** Dry.
- Ar'il.** (*arillus*.) The external coat or covering of seeds which, drying, falls off spontaneously.
- Arist'ate.** (from *arceo*, to be dried.) Awned, ending in a bristle.
- Aro'idés.** So called from *arum*, and forming a natural family of plants.
- Arms.** (*arma*.) Offensive weapons. Plants are said to be armed, when they are furnished with prickles, thorns, &c.
- Aromatic.** Sweet scented.
- Ar'row-form.** Shaped like an arrow head, the hind lobes acute.
- Articulated.** Jointed, as in the culm or stem of the grasses.
- Arundina'ceous.** (from *arundo*, a reed.) Resembling reeds.
- Arvensis.** Growing in cultivated fields.
- Ascending.** Rising from the ground obliquely.
- Asperifolius.** Rough leaved.
- Attenuated.** Gradually diminished or tapering.
- Auric'ulate.** Having appendages resembling ears.
- Awl-form.** Sharp at the point, and curved to one side.
- Awn.** A short stiff bristle.
- Ax'il.** The angle between a leaf and stem on the upper side.
- Axillary.** Growing out of the axils: leaves are said to be axillary when they proceed from the angle formed by the stem and branch

## B.

- Bac'ca.** A berry. It is a pulpy pericarp, enclosing seeds without capsules. In the raspberry of a seed.
- Baccif'erous.** Bearing berries.
- Ban'ner.** The upper petal in a papilionaceous flower.
- Barb.** A straight process armed with teeth pointing backwards.
- Barba'tus.** Bearded.
- Bark.** The covering of vegetables, consisting of several parts, as cuticle, cellular integument, &c. The bark consists of as many layers as the tree on which it grows has years: a new layer being formed from the cambium every year, the newest layer of bark is called liber.
- Bar'ren.** Producing no fruit; containing stamens only.

- Beak'ed.** Terminating by a process shaped like the beak of a bird.
- Ber'ry.** A pulpy pericarp enclosing seeds without capsules. See *Bacca*.
- Bi.** derived from *bis*, signifying two.
- Bicor'nes.** Anthers with two thorns.
- Bi'dens.** Having two teeth.
- Bien'nial.** Living two years, in the second of which the flower and fruit are produced; as in wheat.
- Bi'fid.** Two parted.
- Bilab'iate.** Corolla with two lips.
- Bipin'nate.** Twice pinnate.
- Biter'nate.** Twice ternate. The petiole supporting three ternate leaves.
- Bi'valve.** Two valved.
- Border.** The brim or spreading part of a corolla.
- Bot'rus.** A cluster, like grapes.
- Brach'iate.** Branches opposite, and each pair at right angles with the preceding.
- Bract.** Floral; a leaf near the flower which is different from the other leaves of the plant. In the crown imperial the bracts are at the termination of the flower stem; from their resemblance to hair, they are called coma.
- Branch.** A division of the main stem or main root.
- Branch'let.** Subdivision of a branch, a twig.
- Brevis.** Short.
- Bud.** The residence of the infant leaf and flower.
- Bulbs.** A kind of roots; sometimes found growing on the stem strictly speaking, bulbs are buds, or the winter residence of the future plants. A bulb contains in miniature or embryo, a plant similar to the parent plant. Plants may be renewed from bulbs as well as seeds. Annual plants do not have bulbs; they are only preserved by seeds.
- Bundle.** See *Fascicle*.

## C.

- Caducous.** (from *cado*, to fall.) Falling early; as the calyx of the poppy.
- Caspi'tose.** Forming tufts, several roots growing together.
- Calamus.** Reed like.
- Calcareous.** Containing lime; as in the shells of oysters, &c.
- Calyculated.** Having an additional calyx.
- Calypt'ra.** The cap or hood of pistillate mosses, resembling an extinguisher set on a candle. Although called a calyx, it is in reality the corolla of the moss closed.
- Calyx.** From the Greek, signifying a flower cup: in most plants it incloses, and supports the bottom of the corolla. It is defined by Linnæus to be the termination of the outer bark.
- Cambium.** The descending sap, which every year forms a new layer of bark and one of wood. It descends between the bark and the wood, so that the new wood is formed externally, and the new bark internally.

- Campanulate.* Bell-form.  
*Campestris.* Growing in uncultivated fields.  
*Canescent.* White or hoary.  
*Capillary.* Hair-form.  
*Capitate.* Growing in heads.  
*Capsule.* A little chest; that kind of hollow seed-vessel which becomes dry and opens when ripe; a capsule that never opens is called a *samara*.  
*Carina.* The keel or lower folded petal of a papilionaceous flower.  
*Carinated.* Keeled, having a sharp back like the keel of a vessel.  
*Carnose.* Of a fleshy consistence.  
*Carpus.* From the Greek *Karpos*, fruit.  
*Caryophylleous.* Pink-like corolla, having five petals with long claws, all regular and set in a tubular calyx.  
*Catkin.* See Ament.  
*Caudate.* Having a tail; as in some seeds.  
*Caudex.* The main body of a tree, or root.  
*Cauliscent.* Having a stem exclusive of the peduncle or scapes.  
*Cauline.* Growing on the main stem.  
*Caulis.* The main herbage-bearing stem of all plants, called in French, *la tige*.  
*Cell.* The hollow part of a pericarp or anther; each cavity in a pericarp that contains one or more seeds, is called a cell. According to the number of these cells the pericarp is one-celled, two-celled, three-celled, &c.  
*Cellular.* Made up of little cells or cavities.  
*Cerealis.* Any grain from which bread is made. (From *Ceres*, goddess of corn.)  
*Ceruus.* When the top only droops.  
*Chafsy.* Made up of short membranous portions like chaff.  
*Channeled.* Hollowed out longitudinally, with a rounded groove.  
*Chorion.* A clear limpid liquor contained in a seed at the time of flowering. After the pollen is received, this liquor becomes a perfect embryo of a new plant.  
*Cicatrice.* The mark or natural scar from whence the leaf has fallen.  
*Ciliate.* Fringed with parallel hairs.  
*Cinereous.* Ash-coloured.  
*Cingens.* Surrounding, girding around.  
*Cirrose.* Bearing a tendril. From *Cirrus*, a tendril or climber.  
*Clasping.* Surrounding the stem with the base of the leaf.  
*Class.* The highest divisions in the system of Botany. Linnæus divided all plants into 24 classes; 3 of these are now rejected, and the plants which they included placed in the remaining 21 classes. The ancient botanists knew neither methods, systems, nor classes; they described under chapters, or sections, those plants which appeared to them connected to each other by the greatest number of relations.  
*Clavate.* Club-shaped, larger at the top than at the bottom.  
*Clavus.* Closed, shut up.  
*Claw.* The narrow part by which a petal is inserted.  
*Cleft.* Split or divided less than half way.  
*Climbing.* Ascending by means of tendrils, as grapes; by leaf stalks,

- as the Clematis; by cauline radicals or little fibrous roots, as the creeping American ivy.  
*Club-shaved.* See clavate.  
*Clustered.* See racemed.  
*Clypeate.* Form of a buckler. See Peltate.  
*Coadunate.* United at the base.  
*Coccinous.* Scarlet coloured.  
*Cochleate.* Coiled spirally, like a snail shell.  
*Cocum.* A grain or seed; triccoccus, 5-seeded, &c.  
*Ceruleus.* Blue.  
*Collinus.* Growing on hills.  
*Coloured.* Different from green; in the language of botany, green is not called a colour. White, which in reality is not a colour, is so called in botany. The primitive colours and their intermediate shades and gradations, are by botanists arranged as follows:  
 Water-colour, *hyalinus*.  
 White, *albus*.  
 Lead-colour, *cinereus*.  
 Black, *niger*.  
 Brown, *fuscus*.  
 Pitch-black, *ater*.  
 Yellow, *luteus*.  
 Straw-colour, *flavus*.  
 Flame-colour, *fulvus*.  
 Red, *rubens*.  
 Flesh-colour, *incarnatus*.  
 Scarlet, *coccineus*.  
 Purple, *purpureus*.  
 Violet-colour, *cæruleo-purpureus*.  
 Blue, *cæruleus*.  
 Green, *viridis*.  
 White is most common in roots, sweet berries, and the petals of spring flowers. Black, in roots and seeds. Yellow, in anthers, and the petals of compound flowers. Red, in the petals of summer flowers and acid fruits. Blue and violet, in the petals. Green, in the leaves and calyx.  
*Columella.* That which connects the seed to the inside of the pericarp. The central pillar in a capsule.  
*Column.* The style of gynandrous plants; used for columella.  
*Coma.* A tuft of bracts on the top of a spike of flowers.  
*Compound flowers.* Such as are in the class Syngenesia, having florets with united anthers.  
 ——— leaf. When several leaflets grow on one petiole.  
 ——— raceme. When several racemes grow along the side of a peduncle.  
 ——— umbel. Having the peduncles subdivided into peduncles of lesser umbels.  
 ——— petiole. A divided leaf stalk.  
 ——— peduncle. A divided flower stalk.  
*Compresssed.* Flattened.  
*Conchology.* The science which treats of shells.

- Cone*. A scaly fruit like that of the pine. See *Strobilum*.  
*Conglomerate*. Crowded together.  
*Conic*. With a broad base, gradually narrowing to the top like a sugar loaf.  
*Coniferous*. Bearing cones.  
*Conjugate*. In pairs.  
*Connate*. Opposite, with the bases united or growing into one forming the appearance of one leaf. Anthers are sometimes connate.  
*Connivent*. Converging, the ends inclining towards each other.  
*Continous*. Uninterrupted.  
*Contorted*. Twisted.  
*Contracted*. Close, narrow.  
*Converging*. Approaching or bending towards each other.  
*Convex*. Swelling out in a roundish form.  
*Convolute*. Rolled into a cylindrical form, as leaves in the bud.  
*Coraculum*, or *Corcle*. The embryo or miniature of the future plant, which is found in seeds often between the cotyledons.  
*Cordate*. Heart-shaped, side lobes rounded.  
*Coriaceous*. Resembling leather; thick and parchment-like.  
*Cornu*. A horn or spur.  
*Corniculate*. Horn shaped.  
*Corolla*, or *corol*, (a word derived from *corona*, a crown.) Usually encloses the stamens.  
*Coronatus*. Crowned; as the thistle seed is crowned with down.  
*Coriaceous*, (from *corium*, leather, or hide, and *tego*, to cover.) The rind or coarse outer bark of plants; the organization of the outer and inner barks differs chiefly in the fineness of their texture.  
*Cortical*. Belonging to the bark.  
*Corymbis*. Helmet like.  
*Corymb*. Inflorescence, in which the flower stalks spring from different heights on the common stem, forming a flat top.  
*Costate*. Ribbed.  
*Cotyledons*, (from *kotyle*, a cavity.) Seed lobes. The fleshy part of seeds which in most plants rises out of the ground and forms the first leaves, called seminal or seed leaves. These lobes in the greatest proportion of plants, are two in number; they are very conspicuous in the leguminous seeds; as beans, peas, &c. The cotyledons are externally convex, internally flat, and enclose the embryo or principle of life, which it is their office to nourish.  
*Creeping*. Running horizontally; stems are sometimes creeping, as also roots.  
*Crenate*. Scalloped, notches on the margin of a leaf which do not point towards either the apex or base.  
*Crenulate*. Finely crenate.  
*Crescent-form*. Resembling a half moon.  
*Crested*. Having an appearance like a cock's comb.  
*Crinitus*. Long haired.  
*Cruciform*, (from *crux*, *crucis*, a cross.) Four petals placed like a cross.  
*Crustaceous*. Small crusty substances lying one upon another  
*Cryptogamia*. Stamens and pistils concealed.

- Subit*. A measure from the elbow to the end of the middle finger.  
*Cucullate*. Hooded or cowl'd, rolled or folded in, as in the spathe of the Arum or wild turnip.  
*Cucurbitaceous*. Resembling gourds or melons.  
*Culinary*. Suitable for preparations of food.  
*Culm* or *straw*, (from the Greek *kalama*, stubble or straw; in Latin *culmus*.) The stem of grasses, Indian corn, sugar cane, &c.  
*Culmiferous*. Having culms; as wheat, grasses, &c.  
*Cuneiform*. Wedge-form, with the stalk attached to the point.  
*Curved*. Bent inwards. See *Incurved*.  
*Cuspidate*. Having a sharp straight point. (The eye tooth is cuspidate.)  
*Cuticle*. The outside skin of a plant, commonly thin, resembling the scarf or outer skin of animals. It is considered as forming a part of the bark.  
*Cyanus*. Blue.  
*Cyathiform*. Shaped like a common wine glass.  
*Cylindrical*. A circular shaft of nearly equal dimensions throughout its extent.  
*Cyme*. Flower stalks arising from a common centre, afterwards variously sub-divided.
- D.
- Debilis*. Weak, feeble.  
*Decandrous*. Plants with ten stamens in each flower.  
*Decaphyllus*. Ten leaved.  
*Deciduous*. Falling off in the usual season; opposed to *persistent* and *evergreen*, more durable than *caducous*.  
*Declined*. Curved downwards.  
*Decomposition*. Separation of the chemical elements of bodies.  
*Decomposed*. Twice compound, composed of compound parts.  
*Decumbent*. Lying upon the ground, the base being erect.—This term is applied to stems, stamens, &c.  
*Decurrent*. When the edges of a leaf run down the stem or stalk.  
*Decussated*. In pairs, crossing each other.  
*Deflected*. Bent off.  
*Defoliation*. Shedding leaves in the proper season.  
*Dehiscent*. Gaping, or opening.—Most capsules when ripe are dehiscent.  
*Deltoïd*. Nearly triangular, or diamond form, as in the leaves of the Lombardy poplar.  
*Demersus*. Under water.  
*Dense*. Close, compact.  
*Dentate*. Toothed; edged with sharp projections; larger than serrate.  
*Denticulate*. Minutely toothed.  
*Dismutate*. Plants whose flowers appear before the leaves; appearing naked.  
*Deorsum*. Downwards.  
*Depressed*. Flattened, or pressed at the top.  
*Descriptions*. In giving a complete description of a plant, the order of nature is to begin with the root, proceed to the stem, branches, leaves, appendages, and lastly to the organs which compose the flower, and the manner of inflorescence. Colour and size are circumstances

- least to be regarded in descriptions, out stipules, bracts, and glandular hairs, are all of importance.
- Dextrar'sum*. Twining from left to right, as the hop vine.
- Diadelphous*, (from *dis*, two, and *adelpia*, brotherhood,) two brotherhoods. Stamens united in two parcels or sets; flowers mostly papilionaceous; fruit leguminous.
- Diamond form*. See Deltoid.
- Dianthe'ria*, (from *dis*, two, and *anther*;) a class of plants including all such as have two anthers.
- Dichot'omous*. Forked, dividing into two equal branches.
- Dichin'ia*. Stamens in one flower, and pistils in another; whether on the same plant or on different plants.
- Dicoc'eous*. Containing two grains of seed.
- Dicotyled'onous*. With two cotyledons or seed lobes.
- Did'ymous*. Twinned, or double.
- Didyna'mia*, (from *dis*, twice, and *dunamis*, power;) two powers. A name of one of the Linnæan classes.
- Diffrac'ted*. Twice bent.
- Dig'itate*. Like fingers. When one petiole sends off several leaflets from a single point at its extremity.
- Digyn'ia*. Having two pistils.
- Dimid'iate*. Halved.
- Diac'eous*. Having staminate and pistillate flowers on different plants.
- Dis'coid*. Resembling a disk without rays.
- Disk*. The whole surface of a leaf, or of the top of a compound flower as opposed to its rays.
- Disper'nus*. Containing two seeds.
- Dissep'iment*. The partition of a capsule.
- Dissil'iens*. A pericarp, bursting with elasticity, as the Impatiens.
- Distichus*. Growing in two opposite ranks or rows.
- Divar'icate*. Diverging so as to turn backwards.
- Diver'ging*. Spreading. Separating widely.
- Dur'vus*. Enduring but a day.
- Dors'al*. Belonging to the back.
- Dotted*. See Punctate and Perforated.
- Droop'ing*. Inclining downward, more than nodding.
- Drupe*. A fleshy pericarp enclosing a stone or nut.
- Drupa'ceous*. Resembling, or bearing drupes.
- Dul'cis*. Sweet.
- Dumo'sus*. Bushy.
- Dup'lez*. Double.

## E.

- Eared*. Applied to the lobes of a heart-form leaf, to the side lobes near the base of some leaves, and to twisted parts in the plants which are supposed to resemble the passage into the ear.
- Ebur'neus*. Ivory white.
- Echin'ate*. Beset with prickles, as a hedge-hog.
- Ecos'tate*. Without nerves or ribs.
- Efflorescent'ia*, (from *effloresco*, to bloom.) A term expressive of the precise time of the year, and the month in which every plant closes

- soms. The term *efflorescence* is applied to the powdering substance found on Lichens.
- Effolia'tion*. Premature falling off of leaves, by means of diseases or some accidental causes.
- Effuse*. Having an opening by which seeds or liquids may be poured out.
- E'gret*, or *Ai'grette*. The feathery or hairy crown of seeds, as the down of thistles and dandelions. It includes whatever remains on the top of the seed after the corolla is removed.
- stiped*. When it is supported on a foot stem.
- simple*. When it consists of a bundle of simple hairs.
- plumose*. When each hair has other little hairs arranged along its sides.
- Ellip'tic*. Oval.
- Elong'ated*. Exceeding a common length.
- Emar'ginate*. Having a notch at the end, retuse.
- Embryo*, (from *embryo*, to bud forth,) the germ of a plant; called by Linnæus the *corculum*.
- Endog'eous*. Applied to stems which grow from the centre outwardly, as in monocotyledons.
- Eno'dis*. Without joints or knots.
- En'siform*. Sword form, two edged, as in the flag and iris.
- Entire*. Even and whole at the edge.
- Entomol'ogy*. The science of insects.
- Epi*. A Greek word signifying upon; often used in composition.
- Epicarp*, (from *epi*, upon, and *karpos*, fruit,) the outer skin of the *pericarp*.
- Epider'mis*, (from *epi*, upon, and *derma*, skin.) See Cuticle.
- Epig'ynous*, (from *epi*, upon, and *gynia*, pistil.)
- Ep'sperm*, (from *epi*, upon, and *sperma*, seed.)
- Equinoct'ial* flowers. Opening at stated hours each day.
- E'quitant*. Opposite leaves alternately enclosing the edges of each other.
- Erect'*. Straight; less unbending than strictus.
- Erod'ed*. Appearing as if gnawed at the edge.
- Es'culent*. Eatable.
- Ever'green*. Remaining green through the year, not deciduous.
- Excava'tus*. Hollowed out.
- Exot'ic*. Plants that are brought from foreign countries.
- Expan'ded*. Spread.
- Expect'orant*, (from *expectoro*, to discharge from the breast,) medicines which promote a discharge from the lungs.
- Exsert'ed*. Projecting out of the flower or sheath.
- Eye*. See Hilum.

## F.

- Fab'ulous*. Not natural, produced by art, (from *facio*, to make.)
- Fam'ilies*. A term in Botany implying a natural union of several genera into groups; sometimes used as synonymous with Natural Orders.
- Fal'cate*. Sickle shaped. Linear and crooked.

*Fari'na*, (from *far*, corn.) Meal or flour. A term given to the glutinous part of wheat and other seeds, which is obtained by grinding and sifting.

It consists of gluten, starch, and mucilage. The pollen is also called farina.

*Fas'cicle*. A bundle.

*Fascic'ulate*. Collected in bundles.

*Fastig'iate*. Flat topped.

*Favo'sus*. Resembling a honey comb.

*Faux*. Jaws. The throat of the corolla.

*Ferns*. Cryptogamous plants, with the fruit on the backs of the leaves or in spikes made up of minute capsules opening transversely.

*Fertile*. Pistillate, yielding fruit.

*Filament*. The slender, thread-like part of the stamen.

*Fil'ices*, (from *filum*, a thread.) Ferns.

*Fil'iform*. Very slender.

*Fim'briate*. Divided at the edge like fringe.

*Fist'ulous*. Hollow or tubular, as the leaf of the onion.

*Flac'id*. Too limber to support its own weight.

*Flagel'liform*. Like a whip lash.

*Flam'meus*. Flame coloured.

*Fla'vus*. Yellow.

*Flex'u'ous*. Serpentine, or bending in a zig-zag form.

*Flo'ra*. Considered by the heathens as the goddess of flowers. Books describing flowers are often called *Floras*.

*Flo'ral leaf*. See Bract.

*Flo'ret*. Little flower, part of a compound flower.

*Flos'cular*. A tubular fruit.

*Flow'er*. (Flos.) A term which was formerly applied almost exclusively to the petals. At present a stamen and pistil only are considered as forming a perfect flower.

*Flow'er stalk*. See Peduncle.

*Folia'ceous*. Leafy.

*Fol'licles*. Leaflets; a diminutive of folium, a leaf. The smaller leaves which constitute a compound leaf.

*Fol'ium leaf*. Leaves are fibrous and cellular processes of plants; they are of different figures, but generally extended into a membranous or skinny substance.

*Fol'licle*. A seed vessel which opens lengthwise, or on one side only.

*Foot-stalk*. Sometimes used instead of Peduncle and Petiole.

*Frag'ilis*. Breaking easily, and not bending.

*Fron'd*. The leaf of Cryptogamous plants; formerly applied to palms.

*Fron'des'cence*, (from *frons*, a leaf.) The time in which each species of plants unfolds its leaves. See Frondose.

*Fron'do'se*. (Frondosus.) Leafy, or leaf-like.

*Fructif'ication*. The flower and fruit with their parts.

*Fructif'erous*. Bearing or becoming fruit.

*Fruc'tus*. The fruit. This is an annual part of the plant which adheres to the flower and succeeds it; after attaining maturity it detaches itself from the parent plant, and on being placed in the bottom of the earth, gives birth to a new vegetable. In common language, the fruit includes both the pericarp and the seed, but strictly speaking, the

latter only is the fruit, while the former is not the case or vessel which contains it.

*Frutes'cent*. Becoming shrubby.

*Frut'ice*. A shrub.

*Frut'icra*. Props supports; as the petiole, peduncle, &c.

*Frut'ivous*. Yellowish.

*Fun'gi*. The plural of Fungus, a mushroom.

*Fun'gous*. Growing rapidly, with a soft texture like the Fungi.

*Fun'nel-form*. Tubular at the bottom and gradually expanded at the top.

*Fusiform*. Spindle shaped, a root thick at the top and tapering downwards.

## G.

*Gal'lea*. A helmet.

*Gem'ma*. A bud containing a plant seated upon the stem and branches, and covered with scales, in order to defend it from injury. The bud resembles the seed in containing the future plant in embryo; but this embryo is destitute of a radicle, though if the bud is planted in the earth, a radicle is developed.

*Gemma'ceous*. Belonging to a bud. Made of the scales of a bud.

*Gener'ic name*. The name of a genus.

*Genic'ulate*. Bent like a knee.

*Ge'nus*, (the plural of genus is *genera*;) a family of plants similar in their flower and fruit. Plants of the same genus usually possess similar medicinal powers.

*Germ*. The lower part of the pistil which afterwards becomes the fruit.

*Germinal'ion*. The swelling of a seed, and the unfolding of its embryo.

*Gib'bous*. Swelled out commonly on one side.

*Glab'rous*. Bald, without covering.

*Glab'rrous*. Sleek, without hairiness.

*Gland*. A small appendage, which seems to perform some office of secretion or exhalation.

*Gland'ular*. Having hairs tipped with little heads or glands

*Glauc'ous*. Sea green, mealy, and easily rubbed off.

*Glome*. A roundish head of flowers.

*Glom'erate*. Many branchlets terminated by little heads.

*Glume*. The scales or chaff of grasses, composing the calyx and corolla, the lower ones are called the calyx, all others the corolla, each scale, chaff, or husk, is called a valve; if there is but one, the flower is called univalve, if two, bivalve.

*Glu'tinous*. Viscid, adhesive.

*Gon*, (from *gonu*, a knee or angle;) as pentagon, five angled; hexagon, six angled; polygon, many angled.

*Graft'ing*. Is the process of uniting the branches or buds of two or more separate trees. The bud or branch of one tree, is inserted into the bark of another, and the tree which is thus engrafted upon is called the stock.

- Gram'ina.* Grasses and grass-like plants. Mostly found in the class Triand. ia.  
*Gramin'eous.* Grass like; such plants are also called culmiferous.  
*Grandiflorus.* Having large flowers.  
*Granular.* Formed of grains, or covered with grains.  
*Grave'olens.* Having a strong odour.  
*Gregarious.* In flocks, plants growing together in groups.  
*Groov'ed.* Marked with deep lines.  
*Gymnosper'mia,* (from *gymnos*, naked, and *sperma*, seed.) Having naked seeds.  
*Gynan'drous.* Stamens growing upon the pistil.  
*Gyn'ia.* From the Greek, signifying pistil.

## H.

- Habita'tio,* or *Habitat.* The native situation of plants.  
*Habit.* The external appearance of a plant, by which it is known at first sight, without regard to botanical distinctions.  
*Hair'-like.* See Capillary.  
*Halbert-form.* See Hastate.  
*Hand'-form.* See Palmate.  
*Hang'ing.* See Pendant.  
*Hastate.* Shaped like a halbert; it differs from arrow-shaped in having the side processes more distinct and divergent.  
*Head.* A dense collection of flowers, nearly sessile.  
*Heart.* See Corculum and Corcle.  
*Heart'-form.* See Cordate.  
*Hel'met.* The concave upper lip of a labiate flower.  
*Helminthol'ogy.* The science of worms.  
*Hepal'ic.* Liver like.  
*Herb.* A plant which has not a woody stem.  
*Herba'ceous.* Not woody.  
*Her'bage.* Every part of a plant except the root and fructification.  
*Herba'rium.* A collection of dried plants.  
*Hexag'onat.* Six cornered.  
*Hi'ans.* Gaping.  
*Hi'lum.* The scar or mark on a seed at the place of attachment of the seed to the seed vessel.  
*Hir'sute.* Rough with hairs.  
*His'pid.* Bristly, more than hirsute.  
*Ho'ary.* Whitish coloured, having a scaly mealiness, not unlike glaucous.  
*Holera'ceous.* Suitable for culinary purposes. The term is derived from *holus*, signifying pot herbs. One of the natural orders of Linnaeus, called *Holeraca*, includes such plants as are used for the table, or in the economy of domestic affairs.  
*Hon'eycup.* See nectary.  
*Hood'ed.* See Cucullate, or cowed.  
*Hora'rius.* Continuing but an hour.  
*Horizon'tal.* Parallel to the horizon.  
*Horn.* See Spur.  
*Hu'milis.* Low, humble.  
*Husk.* The larger kind of glume, as the husks of Indian corn.

- Hyberna'lis.* Growing in winter.  
*Hy'brid.* A vegetable produced by the mixture of two species; the seeds of hybrids are not fertile.  
*Hy'po.* From *upo*, under; much used in the composition of scientific terms.  
*Hypocrater'iform.* Salver shaped, with a tube abruptly expanded into a flat border.  
*Hypog'yneus.* Under the stvle.  
*Icthyol'ogy.* The science of fishes.  
*Kosan'drous.* Having about twenty stamens growing on the calyx. Such plants furnish a great proportion of the most delicious pulp fruits.  
*Im'bricate.* Lying over, like scales, or the shingles of a roof.  
*Imper'fect.* Wanting the stamen or pistil.  
*Incarna'tus.* Flesh coloured.  
*Inci'sor.* Fore tooth.  
*Inclu'ded.* Wholly received, or contained in a cavity; the opposite of exsert.  
*Incomple'te.* Flowers destitute of a calyx or corolla are said to be incomplete. A term differing from imperfect.  
*Incras'sate.* Thickened upward, larger towards the end.  
*In'crement.* The quantity of increase.  
*Incum' bent.* Leaning upon or against.  
*Incur'ved.* Bent inwards.  
*Indig'enous.* Native, growing wild in a country, (some exotics after a time, spread and appear as if indigenous.)  
*In'durated.* Becoming hard.  
*Infe'rior.* Below; a calyx or corolla is inferior when it comes out below a germ.  
*Infla'ted.* Appearing as if blown out with wind, hollow.  
*Inflex'ed.* The same as incurved.  
*Inflores'cence,* (from *infloresco*, to flourish.) The manner in which flowers are connected to the plant by the peduncle, as in the whorl, raceme, &c.  
*Infrac'tus.* Bent in with such an acute angle as to appear broken.  
*Infundibulifor'mis.* Funnel form.  
*Inser'ted.* Growing out of, or fixed upon.  
*Insi'dens.* Sitting upon.  
*Insigni'tus.* Marked.  
*In'teger.* Entire.  
*Interno'de.* The space between joints; as in grasses.  
*Interru'ptedly-pin'nate.* When smaller leaflets are interposed among the principal ones.  
*Intor'tus.* Twisted inwards.  
*Introdu'ced.* Not originally native. Brought from some other country.  
*Involu'crum.* A kind of general calyx, serving for many lowers, generally situated at the base of an umbel or head.  
*Involu'cel.* A partial involucreum.  
*In'volute.* Rolled inwards.



- Irides'cent.* Reflecting light, (from Iris the rainbow.)  
*Irreg'ular.* Differing in figure, size, or proportion of parts among themselves.  
*Irritability.* The power of being excited so as to produce contraction; this power belongs to vegetables as well as animals; sensation is thought to imply the existence of internal properties not possessed by plants; though some have attributed sensation to plants, as well as animals.

## J.

- Jag'ged.* Irregularly divided and sub-divided.  
*Jaws.* See Faux.  
*Joints.* Knots, or rings in culms, pods, leaves, &c.  
*Ju'gum.* A yoke; growing in pairs.  
*Juxta-position,* (from *juxta*, near, and *pono*, to place,) nearness of place.

## K.

- Keel.* The under lip of a papilionaceous flower.  
*Keel'ed.* Shaped like the keel of a boat or ship.  
*Ker'nel.* See Nucleus.  
*Kia'ney-shaped.* Heart-shaped without the point and broader than long.  
*Knee.* A joint being geniculate.  
*Knob'bed.* In thick lumps, as the potato.  
*Knot.* See joints.

## L.

- La'biate.* Having lips as in the class Didynamia.  
*Lacin'rate.* Jagged, irregularly torn, lacerated.  
*Lactes'cent.* Yielding a juice, usually white, like milk, sometimes red, as in the blood-root.  
*Lac'teus.* Milk white.  
*Lacus'tris.* Growing about lakes.  
*Læ'vis.* Smooth, even.  
*Lamel'lated.* In thin plates.  
*Lam'ina.* The broad or flat end of a petal, in distinction from its claw.  
*La'nate.* Woolly.  
*Lance'olate.* Spear-shaped, narrow, with both ends acute.  
*Lance'o-vate.* A compound of lanceolate and ovate, intermediate.  
*Lat'eral.* On one side, (from *latus*.)  
*La'tent.* Hidden, concealed, (from *lateo*, to hide.)  
*Lar'va.* The caterpillar state of an insect.  
*Lax.* Limber, succid.  
*Leaf'et.* A partial leaf, part of a compound leaf.  
*Leaf-stalk.* See petiole.  
*Leg'ume.* A pod or pericarp having its seeds attached to one side of suture; as the pea and bean.  
*Legu'minous.* Bearing legumes.  
*Lepan'thiums.* A term used for a petal-like nectary; like that of the larkspur and monkshood.  
*Li'ber.* The inner bark of plants. Immediately under the cuticle is a succulent, cellular substance, for the most part of a green colour, especially in the leaves and branches. Under this cellular integument

is the bark consisting of but one layer in plants or branches only one year old. In older branches and trunks of trees, it consists of as many layers as they are years old; the innermost and newest being called the *liber*: it is in this layer only that the essential vital functions are carried on for the time being, after which it is pushed outwards with the cellular integument, and like that, becomes a lifeless crust.

- Lig'neous.* Woody.  
*Lig'num.* Wood.  
*Lig'ulate.* Strap or ribbon like, flat, as the florets of the dandelion.  
*Lil'ac'eous.* A corolla with six petals gradually spreading from the base.  
*Limb.* The border or spreading part of a monopetalous corolla.  
*Lin'ear.* Long and narrow with parallel sides as the leaves of grasses.  
*Lip.* The under petal in a labiate corolla.  
*Littora'lis.* Growing on coasts, or shores.  
*Liv'idus.* Dark purple.  
*Lobe.* A large division; or distinct portion of a leaf or petal.  
*Loc'ulus.* A little cell, from *locus* a place.  
*Lo'ment.* A pod resembling a legume, but divided by transverse partitions.  
*Longifoli'us.* Long leaved.  
*Longis'simus.* Very long.  
*Lu'cidus.* Bright and shining.  
*Lu'rid.* Of a pale dull colour.  
*Lu'teus.* Yellow.  
*Ly'rate.* Pinnatifid, with a large roundish leaflet at the end.

## M.

- Macula'tus.* Spotted.  
*Marces'cent.* Withering.  
*Margin.* The edge, or border.  
*Mara'time.* Growing near the sea.  
*Medul'la.* The pith or pulp of vegetables. The centre or heart of the vegetable. Various opinions have been entertained respecting the importance of the pith; Linnæus considered that it was the seat of life and source of vegetation: that its vigour was the principal cause of the shooting forth of branches, and that the seeds were formed from it. It is now generally thought that the pith does not perform so important a part in the economy of vegetation as was supposed by Linnæus.  
*Mellif'erosus.* Producing, or containing honey.  
*Mem'branous.* Very thin and delicate.  
*Mid'rib.* The main or middle rib of a leaf running from the stem to the apex.  
*Minia'tus.* Scarlet, vermilion colour.  
*Mola'res.* Back teeth, grinders.  
*Mol'lis.* Soft.  
*Mollus'cosus.* Such animals as have a soft body without bones; as the oyster.