PRINCIPIA BOTANICA:

Or, a Concise and Easy

INTRODUCTION

TO THE

SEXUAL BOTANY OF LINNÆUS.

Containing

THE GENERA:

THEIR MODE OF GROWTH (AS TREE, SHRUB, OR HERB): THE KNOWN NUMBER OF SPECIES TO EACH GENUS: WHERE PRINCIPALLY NATIVE; AND THE NUMBER INDIGENOUS TO THE BRITISH ISLES:

Arranged in a Tabular Form,

UNDER EACH CLASS AND ORDER:

And

DIGESTED ALPHABETICALLY UNDER SE GENERIC DISTINCTIONS.

Together with

THREE INDEXE

- I. Of the LINNÆAN GENERA accented, with the BRITISH NA
- II. Of such TRIVIAL NAMES as were the GENERA of OLD AUTHORS.
- III. Of the BRITISH NAMES, with the LINNÆAN GENERA; to which BRARY are added the SPECIFIC NAMES.

ALSO

NEW YORK BOTANICAL GARDEN

A TABLE OF VEGETABLE DRUGS,

NOT IN THE INDEXES.

The Third Edition, corrected and enlarged,

With many curious and useful additional Notes.

And he spake of Trees, from the Cedar that groweth in Lebanon, even unto the Hyssop that springeth out of the wall...... 1. Kings, iv. 33.

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1810.

ROBERT WARING DARWIN,

M. D. & F. R. S.

As the Science of BOTANY has always been intimately connected with the Science of MEDICINE, I make no Apology for taking the Liberty of addressing this third Edition of the PRINCIPIA BOTANICA to one so eminent in his Profession. It also indicates a just Tribute to his Abilities and Merit; and a sincere Testimony of the high Esteem and Regard of his truly affectionate Uncle,

Robert Waring Darwin.

ROBERT WARING DARWIN,

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PREFACE.

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It may seem unnecessary to attempt an introduction to Botany, after so laborious and established a performance as that of Mr. Lee; but as that work is very diffuse, and more proper for an adept in the science, than a young student; it was thought a more easy way of inculcating the first principles might be adopted on a less scale; and by confining the necessary matter to each respective head, the whole might be so contracted as to give a general idea of the system at one view; and the mind not left at large to expatiate over an unbounded prospect, which frequently creates confusion, and ends in disgust.

Another reason also occurred to render this attempt necessary; that the price might be so

low, as not to deter those in less affluent circumstances from entering into the paths of Nature; and therefore the plates of the several parts of the fructification, the forms of the leaves, &c. (which may be seen in every larger publication of Botany) are omitted; as are also the several tables of scientific terms, which, as far as is necessary, will be easily acquired in a further progress.*

By these means it is hoped to encourage a more extensive inquiry into the science; for nothing is more pleasing and instructive to the human mind than to contemplate the harmony of Creation, as nothing more strongly evinces the existence of a Supreme Cause.

It is impossible for the most laboured harangues, or the most subtle reasoning, to make

^{*} Linnæus hath no good plates to explain his system, but if thought necessary, plates may be seen in many of the English publications on Botany, and especially in Rose's Elements of Botany, which contain the principal parts of the *Philosophia Botanica* of Linnæus; and very proper to be perused, after a general idea of the system is obtained.

the works themselves; and no part of Natural History is more inviting than the science of Botany, as the objects of it continually surround us, and present themselves before our eyes in the most beautiful attire; many of them indeed leave us in Autumn, and go into Winter quarters, but, like the parting of friends, the pleasure is enhanced by our meeting again in the ensuing Spring: neither is any part of Natural History more useful for the most important purposes of life, as food, drink, raiment, &c. but what is still more valuable, health; for it supplies us with a very essential part of the Materia Medica.

It is curious to observe the several ways Nature hath chosen for the protection of those plants she hath designed for particular purposes; some she hath armed with thorns, prickles, or stings, as a defence against the larger animals; others emit a viscous matter to annoy the voracious insect; others are guarded with bitter, acrid, or narcotic juices; she hath also given to plants and flowers agreeable and disagreeable odours, which are owing to the exha-

lation of their essential oils; * all intended as

* Oils of plants are obtained either by expression, where the oil is very copious, as in rape, linseed, &c. or by infusion, -and the oil extracted by distillation, or insolation; by which latter methods the fine essential qualities of the plant are preserved, and are hence called essential oils (see note to dyctamnus); which may be divided into two classes according to their specific gravities; some floating upon water, as lavender, mint, marjoram, citron-peel, roses, &c.; others sinking to the bottom, as cloves, cinnamon, sassafras, &c .- Dr. Monro, in his Treatise on Chymistry, v. ii. p. 311, hath given the method of preparing the essential oil of roses, as it is done in the East Indies, called the ottar of roses.—Take a very large earthen or stone jar, or a large clean wooden vessel; fill it with the leaves of the flowers of roses, very well picked, and freed from all seeds and stalks; pour on them as much pure spring water as will cover them, and set the vessel in the sun in the morning at sun rise, and let it stand till the evening, then take it into the house for the night; expose it in this manner for six or seven successive days, and at the end of the third or fourth day, a number of particles of a fine yellow oily matter will float on the surface, which in two or three days more will gather into a scum, which is the ottar of roses: this is taken up by some cotton, tied to the end of a piece of stick, and squeezed with the finger and thumb into a small phial, which is immediately well stopped; and this is repeated for some successive evenings, or while any of this fine essential oil rises to the surface of the water.

This oil is said to be sold at a guinea a drop in the East Indies.

Trans. of the R. S. Edinb. vol. 2.

The monks of St. Mark's Convent at Florence, are said to make very good ottar of roses for about eight pounds sterling an ounce.

Smith's Tour on the Continent, printed 1793.

The word ottar, used by the Asiatics to express the essence of roses, is originally Arabic; and signifies an aromatic odour or perfume in general.

weapons of defence against the depredations of a variety of animals, which would otherwise frustrate some higher intention.

Many of these plants, by the long experience of mankind, have already been converted into medicine, and other useful purposes; and by the diffusion of botanical science, it is hoped, in many others, the virtues which yet lie dormant will be awakened; and that those plants which are now ranked amongst destructive poisons, will gradually be reclaimed, and become a valuable acquisition to the science of medicine.

The analogy of plants as to their virtues, is well worth the enquiry of some able botanist, as the same virtues which are observed in a genus, do in a great measure run through all the species; and in some cases a whole order, and even a whole class, if natural, will have the same predominant virtue.*

^{*}Tournefort had a very easy method to discover the acid or alkaline quality of plants; he made use of a deep blue paper, which being moistened with the juice of the plant, shewed its quality; with an acid it becomes red, with an alkali, green.—A vegetable blue will

It is hoped also some able enquirer into Nature, will think it worthy attention to investigate the analogy and connexion between vegetables and minerals; and whether there exists such a sensible analogy, that by inspecting the plants which grow naturally on the surface of any place, the quality of the soil may be discovered, as also the several sorts of minerals it may contain.*

R. W. D.

Elston, Notts.

in general turn red with acid (indigo is an exception, being soluble in acid; as is also the root of the mercurialis perennis, which, by exposure to the air, will frequently become a brilliant blue), hence we observe a red colour developed in vegetables, in which an acid continually acts, as in the leaves of sorrel, vine, &c.—Nicholson's translation of M. Chaptal's Elements of Chymistry, in 3 vols. printed 1791.

* The lichen calcarius receives its name from its peculiarity in growing on lime stone rocks; that wherever that stone occurs amongst others, it may be distinguished by this plant growing upon it.

Dillon's Travels through Spain, printed 1782.

The digitalis and arenaria are found on sandy soils, and others are only found on boggy and marshy soils; as the rubus chamæmorus (cloud-berry), and the vaccinum oxycoccos (cranberry) are found on peat bogs.

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In this Edition, the errors of the former are corrected; the number of genera is taken from the 8th edition of the Genera Plantarum, by Thaddæus Haenke, member of the Scientific Society at Prague, printed in 1791; which includes all the genera (amounting to 1683) discovered to that time, by Linnæus, Forster, Thunberg, L. Heritier, Swartius, Aiton, and others.—In this edition of the genera (and it is said by the instruction of Dr. Thunberg) four of the original classes of Linnæus are omitted, viz. gynandria, monæcia, diæcia, and polygamia; as also the appendix: And the several genera are incorporated with the other classes according to the number of males and females to each genus: But the crowding the regular classes with plants of such different singularities in their sexual disposition, seems such a mutilation of the LINNEAN SYSTEM, as I cannot approve of, till sanctioned by more general authority; for it seems much more pleasing to see plants of particular singularities ranged together; besides the great confusion and inconvenience that will arise to all modern writers who have adopted the regular system of Linnæus, which hath now been long established and approved. The number of species is taken from the 14th edition of the Systema Vegetabilium, by Dr. Murray, printed in 1784, which includes all the genera and species of Linnaus the elder, and

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Linnæus the younger, with a few others.—Also several notes and observations are added, and the specific names to the genera in the Index of British Names; together with the British names to the Genera of Old Authors. - And that the Science may be divested of indelicacy in an English dress, for the word bastard, which frequently occurs in Botany, the word base is substituted; and the word hermaphrodite is entirely discarded; and instead thereof, the word monoclinia (one bed) which Linnæus makes use of in his Key to the Sexual System (called the nuptials of plants) is in general adopted (in allusion to the marriage state) in all those classes where husband and wife are in the same bed or flower; for in such the sexes are not united, but stand separate and distinct; each flower being perfect in its kind; whereas the word hermaphrodite (in our language) implies imperfection, and gives a very disagreeable idea, as also greatly lessens the affinity in the sexual analogy between plants and animals, which is the basis of the system; if any flowers can with propriety deserve the excluded appellation, they are those of the class gynandria.

PRINCIPIA BOTANICA.

No part of natural history hath employed the pens of so many writers, as the science of BOTANY, in order to distinguish and methodize the great variety of plants.

The systems most in esteem for this purpose, before Linnaus, were those of Ray and Tournefort. Ray is said to have described 18655 species, including varieties; and his method of arrangement was founded upon the general habit or structure of plants, their growth, as trees, herbs, &c. their greater or less degree of perfection, the number of petals, seed-leaves, and various other circumstances, which he arranged in 33 classes.

Tournefort's method is chiefly founded upon the figure of the petals, which is preferable in that respect to others, figure being more constant than number: His classes are 22, subdivided into 698 genera, which are again subdivided into 10146 species and varieties.

But the SEXUAL SYSTEM of LINNEUS hath now superseded all others, by its concise and elegant arrangement, and by shewing the great analogy and nice connexion between plants and animals: It is founded on the difference in the sexes* of plants, and is divided into 24 classes, which are

^{*} The ancients, as Theophrastus, Dioscorides, Aristotle, Herodotus, and Pliny, as well as the modern botanists, were well aware of the sexes in many plants, and thence concluded it might be the same in all; but the full investigation, and classing them according to their sexes, was reserved for Linnæus.

subdivided into several orders, and under the orders are ranked the respective genera,** with their attendant species: The names of the classes and orders are chiefly derived from the Greek, those of the first 13 classes being expressive of the number of stamina or males in a flower; and those of the orders, of the number of pistilla or females in a flower; and the names of the other classes and orders, are also particularly expressive of the circumstances attending the males or females of the genera under each respective class and order.†

Therefore to investigate a plant, we must first find the class and order to which it belongs, for that is the grand foundation of the system; next we must find the distinction in that order; and then (by Linnæus's description) the genus or family, and afterwards the several species or relations; for

* In the 6th edition of Linnæus's Genera Plantarum are described 1239 genera, which have since been augmented to 1444.—See the 13th edition of the Systema Vegetabilium. To which a few more are added in the 14th edition.—And under the several genera are the following number of species in each class, besides varieties.

several genera are the following number of species in cases, several states		
Classes.	Classes.	
1 Monandria 44	10 Decandria 511	19 Syngenesia 1165
2 Diandria 255	11 Dodecandria 164	20 Gynandria 275
3 Triandria 618	12 Icosandiia 293	21 Monœcia 374
4 Tetrandria 391	13 Polyandria 336	22 Diœcia 222
5 Pentandria 1603	14 Didynamia 646	23 Polygamia 224
6 Hexandria 471	15 Tetradynamia 286	24 Cryptogamia 860
7 Heptandria 10	16 Monadelphia 252	Appendix 17
8 Octandria 273	17 Diadelphia 697	Total 10080
9 Enneandria 28	18 Polyadelphia 65	2000 1. 10000

By this table it appears that, in the vegetable system, nature seems most to dealight in the number 5; see the classes pentandria and syngenesia, &c.

†Dr. Darwin thinks that if all the classes of plants had been distinguished by the proportion, situation, and disposition of the stamina, along with the number, the arrangement would have been more natural, than by number alone; as being less liable to variation; and he gives several examples.—Many of the orders also he thinks would admit of more plain essential characters (added to the present distinction) from the proportion and length of the style, compared with the stamina, and from several other peculiar circumstances attending the style and stigma; several examples of which are given, and by which a plant would be more easily found, and the orders be more natural.

Phytologia.

‡ The class and order of any plant may generally be found by the explanation of the classes and orders.

§ The word genus, in natural history, is aptly compared to a family, with reference to some higher distinction; it is only an abstract idea expressed by some general name or term, comprehending a greater or less number of species or relations, bearing the same sir-name, as resembling each other in certain established characters, or at least in some essential parts; though distinguished by different specific names.

the genera include a great number of relative species, distinguished by the specific difference of the root, the trunk, the branches, the leaves, &c. (yet all agreeing in the essential generic character) and are called by trivial names (expressive of the difference, or some other circumstances) added to the generic name.

The essence of every vegetable, says Linnæus, consists in the fructification (or mode of fruit-bearing) and the essence of the fructification consists in the flower and fruit; the essence of the flower consists in the antheræ and stigma, and the essence of the fruit consists in the seed: Hence in his Sexual Theory, he necessarily makes the flower and fruit the foundation of his generic distinctions, and these are generally composed of seven parts.

1st, The CALYX.
2d, The COROLLA.
3d, The STAMINA.
7th, The RECEPTACULUM.

And the presence or absence, the number, figure, proportion and situation of the several parts, constitute the genus: but as there are few genera wherein all the parts of the generic or natural character are constant in every one of the species; Linnæus found it necessary to fix upon such circumstances as are constant in both genus and species, and call those the essential or ruling character; as well the more easily to distinguish one genus from another, as to regulate and fix the several species and their varieties to their respective genera;* for which purpose, in some cases, he was obliged to have recourse to the nectarium.†

^{*} This variation renders the system incomplete (though perhaps it is the best hitherto formed) from the difficulty arising in adapting a plant to its proper class and order, as in one of the species of the horse-chesnut (Æseulus pavia) though it is of the class heptandria, hath eight stamina; and so of several others; as lychnis divica, hypericum, cleome, &c.

[†] See nectarium explained under corolla: And see the Gen. Plantarum, for a particular description of each genus, according to the natural character: And see the Systema Vegetabilium, where the genera and species are discriminated according to their essential and specific differences; under several generic and specific distinctions.

The first four parts of the fructification are properly parts of the flower, and the last three are parts of the fruit.

I. The CALYX* (a cup) is the termination of the outer bark (cortex) of a plant, and its chief use is to enclose, support, and protect the other parts of the fructification; when present, it is generally seated on the receptacle, and is distinguished by its figure, and by the number, division, and shape of its leaves or segments; and by the following names, according to the circumstances with which it is attended.

1st. Perianthium, (surrounding the flower) when its station is close to, and surrounds the other parts of the fructification, and it is then called the perianthium of the fructification: If it includes many florets, as in scabiosa, and other aggregate and compound flowers, it is called a common perianthium; if it includes only one floret, in such flowers, it is called a proper perianthium; if it includes the stamina, and not the germen,† it is the perianthium of the flower, and is said to be above, as in lonicera, ribes, campanula, pyrus, &c. if it includes the germen, but not the stamina, it is the perianthium of the fruit, and is said to be below, as in linnea and morina, each of which have two calyxes and two receptacles above each other, one of the flower and the other of the fruit; and may therefore serve as instances in both cases.

2d. Involucrum (a cover) when stationed at the foot of an umbel below the common receptacle, and at a distance

^{*}The calyx is considered a part of the flower, though it more generally attends, and is permanent with the fruit; as in the class didynamia, and most other plants; yet sometimes it drops before or with the corolla, and before the fruit is ripe; as in the class tetradynamia, and many other plants. It is also considered a part of the flower, as there is no instance of its coming out after the plant hath done flowering; yet in patagonula it is observed to grow to a much larger size in the fruit, than it had in the flower: In some plants there is none, (when the petals are strong, as in the tulip, &c.) or scarce perceptible; in others it is only a rim or border (margo). The germen is also considered as part of the flower, as being the base of the pistillum, though it afterwards becomes the seed-vessels.

⁺ See germen under pistillum.

[‡] When the calyx is a perianthium, it generally corresponds with the petals of the corolla, as to the number of its leaves, but not always, as in fragaria, &c.

from the flower; and it is called *universal*, if placed under the universal umbel, and *partial*, if placed under a partial umbel.**

3d. AMENTUM (a thong, meaning a catkin) when it consists of a great number of chaffy scales, disposed along a slender axis or common receptacle, which from its resemblance to a cat's tail, hath obtained the name of catkin; and these flowers have generally no petals: Sometimes the same amentum supports both male and female flowers, distinct, on the same plant, as in carpinus, &c.; sometimes the male and female flowers are removed from each other on the same plant, and the amentum supports only the male flowers, and the female flowers are enclosed by a perianthium, as in corylus, juglans, fagus, &c.; and sometimes an amentum only supports male flowers on one plant, and female flowers on another plant, as salix, populus, &c.

4th. Spatha (a sheath) being a sort of calyx growing from the stalk, bursting lengthways, and protruding a spadix,† or receptacle, supporting one or more flowers, which have often no perianthium; and consists either of one leaf, with a valve or opening on one side only, as in narcissus, galanthus, and the greater number of spathaceous plants; or of two leaves, with two valves or openings, as in stratiotes, &c.; or is imbricated, as in musa, &c. with one or two valves.

5th. Gluma (a husk) this chiefly belongs to corn and grasses, consisting of one, two, three, or more valves, folding over each other like scales, and frequently terminated by a long, stiff, pointed prickle, called the arista (beard or awn).

6th. CALYPTRA (a veil or covering) the proper calyx to mosses; it is placed over the antheræ of the stamina, resembling an extinguisher, a hood, or monk's cowl.

^{*} See umbellate flowers under distinction of flowering.

In umbellate flowers several want both the universal and partial involucium; as parsnip, herb-gerard, burnet-saxifrage, dill, &c.; and some have only a partial involucium, as shepherd's-needle, chervel, master-wort, &c.

⁺ See spadix under receptaculum.

7th. Volva* (from its infolding or involving) the proper calyx to fungusses being membranaceous, and surrounding the stalk or pillar before their expansion.

N. B. It is often difficult to distinguish the calyx from the bracteæ (sometimes called floral leaves) which are found on many plants, situated on the flower stalks; and are often so near to the lower parts of the fructification, as to be confounded with, and mistaken for the calyx, as in tilia, helleborus, passiflora, &c.; (in helleborus the calyx is wanting) but they may be best distinguished by this rule; the bracteæ are scales or small leaves, which differ in size, shape, and colour, from the other leaves of the plant, but are commonly of the same duration; whereas the calyx always withers when the fruit is ripe, if not before.

See bracteæ, under Props, postea.

II. The COROLLA (a wreath or little crown) is the termination of the inner bark (liber) of the plant; which accompanies the fructification, in the form of leaves variously coloured: it is generally seated on the receptacle, sometimes on the calyx, serving as an inner work of defence to the part it encloses; as the calyx, which is usually of stronger texture, does for an outer work. The leaves of which the corolla is composed are called petals, by the number, division, and shape of which it is distinguished; and the corolla is said to be below, when it includes the germen, and is attached to the part immediately below it, as in salvia, boraga, convolvulus, primula, &c.; and it is said to be above, when it is placed above the germen, as in lonicera, ribes, cratægus, &c. In respect to duration, the corolla either continues till the fruit is ripe, as in nymphæa; or falls off at the first opening of the

^{*} Volva, though mentioned as a calyx to fungusses, yet in the Genera Plantarum, it is not once taken notice of in the description of those genera. In Dr.
Alston's Tyrocinium Botanicum, published at Edinburgh in 1753, are enumerated
the several calyxes of each sort, from a former edition of the Gen. Pl. then containing 1021 genera; 673 of which have a perianthium; 75 an involucrum; 18
an amentum; 72 a spatha; 29 a gluma; 3 a calyptra; 25 have both a perianthium and involucrum; and a few have both perianthium and spatha. In
eriophorum xyris, cyperus, and scirpus, the spike is the calyx; in morinda and
eringium, the common receptacle is the calyx; and about 110 have no calyx, or
very imperfect.

flower, as in actaa, thalictrum, or falls off with the stamina, and other parts of the flower, as in most plants; or does not fall, but withers, as in campanula, cucumis, and others.

There is also a part which, Linnaus says, principally belongs to the corolla, as an appendage to the petals; which he calls the NECTARIUM,* (from nectar, the fabled drink of the gods) and is that part containing the honey, which is the principal food of bees, and other insects; but, though in such plants where it is found, it may more commonly be attached to the corolla, and be then most evident; yet it is almost as oft attached to other parts of the fructification; Linnæus therefore chiefly makes use of it, as an essential character in many of the genera, as being less variable than his other distinctions, as in ranunculus, and parnassia palustris, &c. + and observes that when it is distinct from the petals (that is) not united with their substance, those plants are generally poisonous: The tube or lower part of the flowers of one petal, he considers as a true nectarium, because it contains a sweet liquor. But as it affords very singular varieties in other instances, it hath obtained the following distinctions.

1st. CALYCINE NECTARIA, such as are situated upon, and make part of the calyx, as in tropwolum, monotropa, &c.

2d. COROLLACEOUS NECTARIA, such as are attached to the corolla; and are called calcariate (from calcar) when they resemble a spur or horn; which are either on flowers of one petal, as in valeriana, antirrhinum, &c. or on flowers of many petals, as in orchis, delphinium, viola, fumaria, &c.: Or the nectarium lies within the substance of the petals, as in fritillaria, lilium, berberis, iris, ranunculus, &c.

^{*} The proper use of the nectarium, and why it should have such very different situations, is not yet certainly known: but as it is found in most plants, there is great reason to believe it an essential part in the fructification, though not always perceptible. Pontedera imagined the balsam contained in the nectarium was imbibed by the seeds, to make them keep and preserve their vegetative quality the longer, and as long as this balsam remained in the seeds, so long they would generate.

[†] In Parnassia palustris, the 5 nectaries are very beautiful, each having an hearted concave scale, fringed with 13 pedicles along its margin rising gradually higher, and each terminated by a transparent globe.

- 3d. STAMINEOUS NECTARIA, such as attend the stamina, and are either scated upon the antheræ, as in adenantheræ; or upon the filaments, as in laurus, dictamnus, campanula, &c.
- 4th. PISTILLACEOUS NECTARIA, such as accompany the pistillum and are placed upon the germen, as in hyacinthus, butomus, cheiranthus, hesperis, &c.
- 5th. RECEPTACULACEOUS NECTARIA, such as join to the receptacle, as in polygonum, sedum, sempervivum, &c.
- 6th. NECTARIA that crown the corolla, that is, when placed in a series or row within the petals, though entirely unconnected with their substance, as in passiftora, tychnis, silene, &c.; and in this situation it often resembles a cup, as in narcissus, &c.
- 7th NECTARIA of singular construction, being such as cannot properly be placed under any of the foregoing distinctions, as in amomum, curcuma, salix, urtica, &c.
- III. The STAMINA, (threads or chives). These are the males of the flower, proceeding from the wood of the plant, each stamen consisting of two parts, (viz.) the filament and the anthera; and in most flowers are placed upon the receptacle, within the corolla, and round the germen; and are chiefly distinguished by number.

The FILAMENT (from filum, a thread) is the thread-shaped part of the stamen, serving as a footstalk to elevate the antheræ, and is sometimes found to have jags or divisions, (laciniæ) which are either two, as in salvia; three, as in fumaria; or nine, as in the class diadelphia. They are also distinguished by their form or figure, as awl-shaped, thread-shaped, hair-like, spiral, revolute, &c.; also by their proportion, as equal, unequal, irregular, long, or short; also by their situation, being generally opposite to the leaves or divisions of the calyx, and alternate with the petals; that is, when the divisions of the calyx are equal in number to the petals, and to the stamina.* In flowers of one petal

^{*} By this rule it may generally be known whether calyx or corolla be wanting, when there is a deficiency in either. But in aletris the stamens are an exception

(monopetalous) they are generally inserted into the corolla; but scarcely ever in flowers of more than one petal, (polypetalous) but into the receptacle. Yet in the class *icosandria*, they are inserted into the calyx or corolla, (though the flowers have many petals) as also in a few other plants. But in the class *polyandria*, and most other plants of many petals, they are inserted into the receptacle, like the calyx and corolla. But the class *gynandria* is an exception to the above rules, where the stamina are placed upon the pistillum, or female part of the flower; and are sometimes without filaments.

The ANTHERA, (from anthos, a flower) emphatically so called, from its great utility in the fructification, is the top or summit of the filament, containing the impregnating pollen or farina; * and is either one to each filament, as in most plants; or one common to three filaments, as in cucurbita, &c.; or one common to five filaments, as in the whole class syngenesia; or sometimes there are two anthere to each filament, as in ranunculus, and mercurialis; three to each filament, as in fumaria; five to three filaments, as in bryonia; or five to each filament, as in theobroma. The anthera is also distinguished by its form or figure, as oblong, round, angular, &c. It also consists of one or more cells, which burst differently in different plants; either on the side, as in most plants; on the top; or from the top to the base. It is also fastened to the top of the filament, either by its base, as in most plants; or horizontally, by its middle, to the top of the filament, so poised as to turn like a fane (versatillis); or it is fixed by its side, leaning to the top of the filament, then called incumbent; or it sometimes grows to the nectarium, as in costus; to the receptacle, as in arum; to the pistillum, as in the class gynandria.

IV. The PISTILLUM, (a pestle). This is the female of the flower, proceeding from the pith of the plant; and is that erect column, which is generally placed in the centre of the

to this rule, not being alternate with the segments of the corolla, but opposite to them; which gives the essential character.—As soon as the stamina have performed the office assigned by nature, they wither and drop off. See note to collinsonia.

^{*}The particles of the pollen or farina, appear by glasses to be of very different forms.—The pollen makes a third division of the stamen, but Linnaus generally includes it in the term anthera, along with the little cells in which it is enclosed.

flower, amidst the stamina; and consists of three parts, the germen, the style, and the stigma.

The Germen (a bud) is the base of the pistillum, supporting the style, and, after a process of nature, becomes a seed-vessel; may therefore be considered as the rudiment of the pericarpium; and is distinguished by its shape, number, and situation; and is said to be *above* or *below*, according to its situation above or below the attachment of the corolla.

The STYLE (from stylus, a pillar) is that part which elevates the stigma from the germen, in order to receive the influence of the stamina, and to convey the effects down to the germen, as through a tube. It is distinguished either by its number,* which, when present, (or when absent, the number of stigmata) gives rise to most of the orders, and are called so many females; or by its divisions (laciniæ) being double, treble, or quadruple, &c. though joined at the base; or by its length, being longer, shorter, or equal with the stamina; or by its proportion, being thicker or thinner than the stamina; or by its figure, being angular, cylindric, awl-shaped, bent, &c.; or by its situation, being generally on the top of the germen, though in some instances supposed to be both above and below, as in capparis and euphorbia; unless the lower part in these genera be considered as the extension of the receptacle: It is also often placed on the side of the germen, as in hirtella, suriana, also in rosa, rubus, and the rest of the plants in the class and order icosandria, polygynia. With respect to duration, it generally falls with the other part of the flower; but in some plants is permanent, and attends the fruit to its maturity, as in the class tetradynamia. In flowers which have no style, the stigma adheres to the germen.

^{*} The number of styles, generally speaking, is equal to the number of germina, each germen having its own proper style. The compound flowers, in the class syngemesia; the cone-bearing plants; rose, ranunculus, and many others, shew this to be the natural structure: yet several plants have more than one style to a single germen, as in the umbelliferous plants (pentan. digyn.) and many others. Some have only one style common to many germens, as the rough-leaved plants (pentan. mono.) and most of the lip flowers (didyna, gymnos). Again, there are some plants which seem to form a medium between the two latter, the style being single at its base, but afterwards branching out into as many ramifications as there are divisions or cells in the seed-vessel, as in geranium, and mallow, also in hibiscus, and some others.

The STIGMA, (a mark) when single, is generally placed like a head on the summit of the style; when several, they are either placed on the top, or regularly disposed along the side; and covered with a moisture, to retain the pollen of the antheræ. It is distinguished either by its number, being single in most plants; by its divisions; by its figure or shape; by its length; by its thickness; and by its duration, as in most plants it withers when the germen is become a seed-vessel; in some it is permanent, as in papaver.

V. The PERICARPHUM (round the fruit) is the germen grown to maturity, and now become a matrix or seed-vessel; yet, however, all plants are not furnished with a seed-vessel, as in corylus, &c. and in many it is supplied chiefly by the calyx, which converging, encloseth the seeds till they arrive at maturity; as is the case with the rough-leaved plants, the lip, and compound flowers of the several classes, pentandria, didynamia, and syngenesia: Sometimes the receptacle supplies the office of seed-vessel, as in gundelia; and sometimes the nectarium, as in carex. The pericarpium is situated at the receptacle of the flower, either above or below, or both, as in saxifraga and lobelia; and is distinguished by the following appellations, according to its different structure.

Ist. Capsula, (a little chest or casket) which is frequently succulent whilst green, but when ripe, is a dry husky seed-vessel, that cleaves or parts in some determinate manner, to discharge its contents; and by some sort of elastic motion, the seeds are often darted forth with considerable velocity, as in dictamnus, &c. It opens also various ways, either at the top, as in most plants; at the bottom; at the side; horizontally across the middle, or longitudinally; and if it is articulated or jointed, it opens at each of the joints, which contains a single seed. It is further distinguished externally, by its number of valves;* and internally, by the number of its cells or divisions, wherein the seed is enclosed; as also by its shape and substance.

^{*} Capsules and dry pods are divided externally into one or more pieces, called by Linnæus valves; and internally are generally divided by membranous partitions (called dissepiments) into cells, sometimes longitudinally, as in *cheiranthus*, lunaria, &c.; and sometimes transversly, as in jointed pods.

2d. SILIQUA (a pod) is a pericarpium of two valves; but as some are long, others round or broad, Linnæus thought it necessary to distinguish them by their form, into siliqua and silicula; which gives rise to the two orders in the class tetradynamia: The siliqua means a long pod, being much longer than broad, as in brassica, sinapis, &c.; the silicula (a little siliqua) is a roundish pod, either flat, or spherical, and the length and breadth nearly equal, as in lunaria, draba, thlaspi, &c. in both, the apex, which had been the style, is often so long beyond the valves, as to be of equal length with the pod; and the seeds in both are fastened alternately by a slender thread, to both the sutures or joining of the valves.

3d. LEGUMEN (pulse) is also a pod, and is likewise a pericarpium of two valves, wherein the seeds are fastened to short receptacles along the upper suture only, on each side alternate: This chiefly belongs to the papilinaceous (butterfly) flowers of the class diadelphia.

4th. Folliculus (a little bag, in former editions called conceptaculum) is a pericarpium of one valve only, opening lengthways on one side, and the seeds not fastened to the suture, but to a receptacle within the fruit, as in apocynum, asclepias, &c.

5th. Drupa (from drupe, unripe olives) is a pericarpium that is generally succulent, or pulpy, having no valve or external opening, and generally contains within its substance a stone or nut; * that is, a seed enclosed with an hard ligneous crust, as olea, cornus, juglans, prunus, amygdalus, &c.; and when the drupa is seated below the calyx, it is furnished with an umbilicus, like the pomum.

6th. Pomum (an apple) is also a pericarpium that is succulent or pulpy, and without valve; but containing in the middle a membranous capsule, with several cells or cavities,

^{*} All drupes have not a stone or nut (properly so called) for the seed, as in schrebera, &c. neither have all seeds that are called nuts a drupe for the pericarpium, as in fagus it is called a eapsule, one-celled, four-valved, containing two nuts; in quercus, as also in corylus, and trapa, there is no pericarpium, the nats are lodged in the calyx; and in pinus the nut is lodged in the calyx strobile; in eannabis the seed is also called a nut lodged in the calyx. See note to bacca.

containing the seeds; and at the end opposite the footstalk, is generally a small cavity, called *umbilicus*, (the navel) from its resemblance to that part in animals, and which was formerly the calyx, seated above the fruit, and permanent, as in pyrus, cucumis, cucurbita, &c.

7th. BACCA (a berry) is also generally a pulpy pericarpium without valve, enclosing one or more seeds, which have no membranous capsule, but are disposed promiscuously through the pulp without other covering,* as in solanum, &c. and are generally placed on footstalks, attached to receptacles within the pulp, as in ribes, &c. The berry also admits of the following distinction; it is said to be proper, when it is a true pericarpium formed of a germen; and improper, when it is formed from other parts of the fructification; as in morus. rosa, juniper, taxus, &c. a large succulent calyx becomes a berry; and in juniper the three petals become the umbilicus; in poterium the berry is formed of the tube of the corolla; in fragaria, &c. it is formed of the top of the receptacle; in rubus, &c. it is formed from a seed, which is the receptacle of the berry; in ruscus, &c. it is enclosed within, and is a part of the nectary. The berry is commonly either round or oval, and is frequently furnished with an umbilicus, as in ribes, &c: It doth not naturally open to disperse the seeds like the capsule. that office being performed by birds and other animals.

^{*} Dr. Milne, in his Botanical Dictionary, thinks Linnæus's definitions of the drupe and berry very imperfect; for the pericarpium in capsicum is called a berry, yet hath no pulp, and is hollow within; also in xanthium it is called a berry, though it contains a nut in a dry pericarpium: neither is drupa always succulent or pulpy, though so defined, as in ulmus, pistacia, sparganium, &c.; neither is the seed always a stone or nut, as in ulmus, schrebera, flugellaria, and mangifera.-But in the later editions the pericarpium of ulmus is now altered to a berry, and that of xanthium to a drupe: and though the seeds in flagellaria, &c. are not properly nuts, yet they are large and single, and are generally called nuclei.-Linnaus is very nice and accurate in those plants which he hath seen himself, but where he hath taken the description from others, or from dryed specimens, it is sometimes imperfect.—Though the drupe and berry are generally succulent, yet in some plants he describes them as dry; as in pistacia, &c. the drupe is called dry; and in trientalis, &c. the berry is called dry; for the chief ruling distinction is, that the capsule is divided into parts called valves, and the drupe and berry are entire, having no valve; and in favour of this distinction, he sometimes calls the dry drupe or berry, a capsular drupe or berry, from its resembling the capsule as to its dryness, but without valves.

Sth. Stobilus* (a cone) is a pericarpium formed of the amentum, being a seed-vessel composed of woody scales placed against each other in the form of a cone, opening only at the top of the scales, being firmly fixed below to a sort of axis, or receptacle, occupying the middle of the cone, as in pinus, thuya, cupressus, &c.

VI. The SEMINA,† (seeds). A seed is the essence of the fruit of every vegetable, and is defined by Linnæus to be a deciduous part of the plant, containing the rudiments of a new vegetable, fertilized by the sprinkling of the pollen; and they are distinguished according to number, shape, texture, appendage, &c. A seed, properly so called, consists of the five following parts; to which is added the *nut* and *propago*.

*Though Linnæus calls strobibus a pericarpium, from its containing the seed; yet in his Gen. Pl. he rather makes use of it as a calyx in many of the cone-bearing genera; which in his Fragments of a natural Method, under the order conifera, amount to seven, (viz.) cupressus, ephedra, equisetum, jumiperus, pinus, taxus, and thuya, to which may be added banksia: In which, as the seeds are attached together in the form of a cone, so the plants themselves grow conically, and make a beautiful appearance; all of which are evergreen, (except the larch) resinous, warm, stimulating, and diuretic.

† Plants, in analogy to animals, may properly be said to be viviparous and oviparous; seeds are vegetable eggs, and buds the living foctusses, or infant plants; some also are only viviparous, others only oviparous.—The focundity of some plants is wonderful. Dr. Milne says, from a single plant or stalk of Indian Turkey wheat, are produced in one summer, 2000 seeds; in elecampane, 3000; of sunflower, 4000; of poppy, 32000; of a spike of cat's tail, 10000 and upwards; a single fruit or seed vessel of tobacco contains 1000 seeds, that of white poppy 8000. Mr. Ray relates from experiments, that 1012 tobacco seeds are equal to one grane, and consequently those of the whole plant, in that proportion, amounted to 360000: he also estimates the annual produce of a single stalk of spleen-wort to be upwards of one million of seeds.

Reproduction is perhaps one of the greatest curiosities in the animal system; if a Crab or Lobster loses a leg, another will be reproduced; a species of Earth-worm may be cut in two, and each part will become a perfect worm; and the Polype (an aquatic insect) as also the Hirudo-viridis (the English green-leech) may be cut into a thousand pieces, and each part will become a perfect animal.—So in the vegetable system, M. Reynier, by depriving flowers of the sexual organs, hath discovered in many instances an attempt to reproduce the stamina and pistilla, for the flower threw out filaments from the wounded parts of different lengths, as was very apparent in the echinopsritro, geum rivale, and in many of the mallows: but it do not appear from his experiments that anthere were reproduced, yet he mentions that some of the flowers bore seeds. Royal Academy of Sciences, Paris, 1786.

Ist. The Corculum (from cor, a heart) is the essence of the seed, and principle of the future plant; and consists of two parts, (viz.) plumula and rostellum. Plumula (a little feather) is the scaly part and essence of the corculum, which ascends and becomes the stem or trunk of the plant: it extends itself into the cavity of the lobes or cotyledons, and is terminated by a small sort of branch resembling a feather.—Rostellum (a little beak) is the plain or simple part of the corculum, which descends into the earth, and becomes the root: its form is that of a small beak, placed without the lobes, and adhering internally to the plumula.

2d. The Cotyledons (from cotyledon, the hollow of the hucklebone) are the thick porous side-lobes of the seed, consisting of farinaceous matter, and which involve, and for some time furnish nourishment to the embryo plant; but when it becomes strong, they wither and die away.* The cotyledons are also called the seminal or seed-leaves; some plants have only one,† as in grasses and in cuscuta, &c.; others two, as in vicia, &c.; linum hath four; cypressus hath five; and pinus, Linnæus saith, hath ten. The cotyledons in mushrooms, ferns, and mosses, are not sufficiently ascertained, to know if they have any.

3d. The HILUM (the black spot on a bean, called the eye) is the external mark or scar on the seed, where it was fastened within the pericarpium.

4th. The Arilus, a term used by Linnæus, to express the proper exterior coat or covering of the seed; which falls off spontaneously, and is either cartilaginous or succulent;

^{*} If a plant be cut below the cotyledons, it will scarce ever put out fresh leaves, but withers and decays; if it is cut above the cotyledons, it generally shoots out afresh, and continues to grow: Therefore, if plants, whose cotyledons rise above ground, as turneps, beans, peas, &c. be cut, or eat to the ground by cattle, they decay; but where the cotyledons remain below ground, as in grasses, and are cut or eat to the ground, they will shoot out afresh.

[†] Linnæus observes that those plants which are said to have only one cotyledon, may more properly be said to want them, as they remain within the seed; as such seed doth not split when it germinates, but continues entire, to nourish the infant plant.—Two cotyledons are most common, and those plants that are thought to have more, are in fact said to be only different divisions almost to the base.

yet seeds are said to be naked, when not enclosed in any sort of pericarpium, as in the class and order didynamia gymnospermia.

5th. The Coronula, (a little crown) which is either a little sort of ealyx, (caliculous) adhering to the top of the seed, like a little crown, and assisting to disperse it by flying, as in scabiosa, knautia, &c. where the little calyx of the floret becomes the crown of the seed. Or the coronula is a down* (pappus) which is either feathery, as in valeriana, leontodon, gnaphalium, &c. or it is hairy, as in tussilago, senecio, hieracium, &c.; it is also either sitting, (sessilis) that is, attached close to the seed, as in hieracium, &c. or footstalked (stipitatus, from stipes) by a thread, elevating and connecting the crown or tuft with the seed, as in lactuca, crepis, &c. Some seeds are also furnished with a wing, a tail, a hook, an awn, &c. all coming under the term coronula, and tending either to disperse or fix the several seeds to which they belong.

6th. Nux, (a nut) which is a seed enclosed in an hard woody substance, called the *shell*, which is one-celled, two-celled, &c. and the enclosed seed is called (nucleus) the *kernel*.

The seed of a moss, not coming under the above description, Linnæus calls Propago, (a slip or shoot) which hath neither coat nor cotyledon, but consists only of a naked plumula, where the rostellum is inserted into the calyx of the plant.

VII. The RECEPTACULUM (receptacle) is the base which receives, supports, and connects the other parts of the

^{*} The down with which many seeds are furnished, as in goat's-beard, dandelion, thistle, &c. hath generally been thought intended to disperse them: yet as the down frequently breaks off, and is seen flying alone; it hath been imagined by some, that the down is only intended as a defence of the seed till arrived at maturity. Some seeds are also furnished with an elastic force, in order to disperse them, which is either in the calyx as in oats, and some others; in the pappus, as in retaurea-crupini; or in the capsule, as in justicia, geranium, fraxinella, sparting eucumber, hura, &c. Other plants of the burr kind, as burdock, hairiff, &c. are furnished with little hooks to stick to the hair of animals, by which means the seeds are dispersed. Other seeds, especially those whose pericarpium is a berry, as also the nutmeg, and other nuts, are dispersed by birds and other animals.

See note to monordica elaterium.

fructification, but it is only mentioned by Linnæus (in his Gen. Pl.) when it can be introduced as a character varying in shape and surface, as principally in the class syngenesia. It hath the following distinctions:

- 1st. A PROPER RECEPTACLE, when it supports the parts of a single fructification only; and when it is a base to which only the parts of the flower are joined, and not the germen, it is called a receptacle of the flower; in which case, the germen being placed below the receptacle of the flower, hath a proper base of its own, which is called the receptacle of the fruit; and it is called a receptacle of the seeds, when it is a base to which the seeds are fastened within the pericarpium (see bacca); in some simple flowers, where the germen is placed above the receptacle of the flower, the fruit hath a separate receptacle, as in magnolia, uvaria, &c. in which genera the numerous germens are seated upon a receptacle, rising like a pillar above the receptacle of the fructification.
- 2d. A COMMON RECEPTACLE, called so because it supports and connects a head of flowers in *common*, as in the *amentum*, and other aggregate flowers.
- 3d. Umbella, (an umbel) which Linnæus calls a receptacle.—See aggregate flowers.
- 4th. CYMA (a sprout) is also called a receptacle.—See aggregate flowers.
- 5th. Rachis, (the back bone) a thread-form receptacle, collecting the florets longitudinally into a spike, in many of the glumose flowers, as wheat, barley, rye, &c.
- 6th. Spadix (a branch of the palm) antiently only signified the receptacle of a palm, issuing out of a spatha, and branched: but now every flower stalk that is protruded from a calyx called spatha, is called a spadix, as in narcissus, &c.—See aggregate flowers.

A SPECIMEN

OF THE

DESCRIPTION OF A PLANT,

According to the Generic Character, from the Genera Plantarum; and also the Essential Character of the same Plant, with the several Species, from the Systema Vegetabilium.

PAPAVER.

(POPPY.)

Generic or Natural Character.

- CALYX. A perianth, two-leaved,* egged, end-nicked; the leaflets rather egged, concave, obtuse, deciduous.
- COROLLA. Petals four, roundish, flat, expanding, large, narrow at the base, less alternately.
- STAMINA. Filaments numerous, capillary much shorter than the corolla; anthers oblong, compressed, erect, obtuse.
- Pistillum. Germen, roundish, large; style none; stigma targetted, flat, radiated.
- Pericarpium. A capsule crowned with the large flat stigma, one cell, half-many-celled, gaping at the top under the crown with many apertures.
- SEMINA. Seeds numerous, very small; receptacles, longitudinal folds, of equal number with the rays of the stigma adhering to the sides of the pericarpium.

^{*} The two leaves of the calyx fall off when the flower opens.

Essential Character.

- PAPAVER. Corolla four-petaled; calyx two-leaved; capsule one-celled, gaping with pores under the permanent stigma.

 Poppy.
 - * With hispid capsules.
- 1 P. Hybridum. Capsules subglobular, brawny, hispid, stem leafy, many-flowered.

 Mule.
- 2 P. Argemone. Capsules clubbed, hispid, stem leafy, many-flowered. Rough Poppy.
- 3 P. Alpinum. Capsules hispid, scape one-flowered, naked, hispid, leaves twice feathered.

 Alpine.
- 4 P. NUDICAULE. Capsules hispid, scape one-flowered, naked, hispid, leaves simple, feather-sinuous. Naked Stem.

** With smooth capsules.

- 5 P. Rhoeas. Capsules smooth, globular, stem hairy, many-flowered, leaves feather-cleft, gashed.

 Red Field Poppy.
- 6 P. Dubium. Capsules oblong, smooth, stem many-flowered, with bristles appressed, leaves feather-cleft, gashed.
- 7 P. Somniferum. Calyxes and capsules smooth, leaves stem-clasping, gashed. Somniferous.
- 8 P. Cambricum. Capsules smooth, oblong, stem many-flowered, polished, leaves feathered, gashed. Welch.
- 9 P. ORIENTALE. Capsules smooth, stem one-flowered, rugged, leafy, leaves feathered, sawed. Oriental.
- N. B. The papaver cambricum, and the papaver orientale are both perennial; the papaver nudicaule is biennial; and the others are annual.—Papaver nudicaule hath two varieties, distinguished by the colour of the flower; and the papaver somniferum hath three varieties, distinguished by the colour of the seed.

THE DISTINCTION OR MODE OF FLOWERING:

CALLED

THE INFLORESCENCE.*

Complete flowers + are either simple or aggregate; simple, when no part of the fructification is common to many flowers or florets, but is confined to one only; aggregate, when the flower consists of many florets collected into a head by means of some part of the fructification common to them all, as by a common receptacle, or common calyx; as in dipsacus, scabiosa, &c.

From the different structure, disposition, and other circumstances of the receptacle or calyx, being the only common part to aggregate flowers, arise seven divisions.

Ist. AGGREGATE, properly so called, consisting of such flowers as are formed by the union of several lesser flowers or florets, placed on partial *peduncles*,‡ on a common dilated

^{*}This term is defined to be the mode by which flowers are joined to their several peduncles, whether common or partial.

[†] A flower in the Sexual Botany hath a very different signification from the same term of former writers; for if the antheræ and stigma be present; though the calyx, corolla, filaments of the stamina, and style of the pistillum be wanting; it is still a flower; and if all the parts are present, it is a complete flower. The seed also constitutes the fruit, whether there be a pericarpium or not.—The different colours and odours of plants and flowers are supposed to proceed, by a chemical process of nature, from the different qualities of the juices of plants combined with their essential oils. In many plants the colour of the flower corresponds with the juices of the root, as in celandine, barbary, &c. and in these plants the colour is more fixed, and apt for dying.

A peduncle is the footstalk of a flower only, issuing from the branches: the footstalk of a leaf is called petiole: peduncles are called fastigiate, when there are several, and their lengths so proportioned, that the flowers form a regular surface. The whole flower of the aggregate sort is called flos universalis, and the partial florets are called flores proprii; and each floret, in some genera, is a complete fructification of itself, having calyx, corolla, &c.

receptacle,* and within a common perianthium; and in those flowers where each floret hath its proper calyx, that is also a perianthium.

2d. Compound aggregate, consisting also of several lesser flowers or florets, placed sitting (or without partial peduncles) on a common dilated receptacle, and within a common perianthium; and where each floret hath its proper calyx, it is also a perianthium. Compound flowers also admit of a further description, (viz) each floret consists of a single petal, with generally five divisions, and having five stamina distinct at the base, but united at the top by the antheræ into a cylinder, through which passeth the style of the pistillum, longer than the stamina, and crowned by a stigma with two divisions, that are rolled backwards, and having a single seed placed upon the receptacle under each floret.

This is the general character of a regular compound flower, to which there are a few exceptions; it also differs when the flower is radiate; † but the essential character of a regular floret consists in the antheræ being united so as to form a cylinder, and having a single seed placed upon the receptacle under each floret.

3d. UMBELLATE AGGREGATE, when the flower consists of many florets placed on fastigiate peduncles proceeding from the same centre or receptacle, and though of different lengths, rise to such an hight, as to form a regular head or umbel, whether flat, convex, or concave; and both the common and partial calyx, Linnæus calls an *involucrum*. 1 It is

^{*}The membranous sort of chaffy substance, or laminæ, frequently growing on the receptacle, and intended as a partition between the florets, is called palea (chaff.)

[†] A flower is said to be radiate, when the florets in the radius or circumference differ from those in the disk; in which case they are generally larger, and are called semi-florets, from their difference in form, and in distinction from those of the disk, which are called proper-florets: and they also differ as to sex, as in dancus, &c. which gives rise to several of the orders in the class syngenesia, which contains the compound flowers; and where they are further explained.

[‡] The involucrum in umbellate flowers, greatly differs as to the number of leaves; and generally each floret hath a proper perianthium, besides the two involucies.

called a *simple* umbel, when it hath no lesser divisions; a *compound* umbel when each peduncle is subdivided at its extremity into many lesser peduncles for supporting the flowers, so as to form several little umbellas, uniting in one head; the whole together is called an *universal* umbel, and the little umbellas are called *partial* umbels. (See the class *pentandria*, order *digynia*). In some genera, that have radiated flowers, the florets of the centre and those of the circumference, differ both as to sex and size; but in general each hath five petals, five stamina, and two styles, or one that is bifid (two-cleft), with a germen placed beneath, and two naked seeds, which when ripe, separate below, but remain connected at the top.

4th. Cymous aggregate, (from cyma, a sprout) called by Linnæus a receptacle, is when several fastigiate peduncles proceed from the same centre, like the umbel, and rise to nearly an even hight; but unlike the umbel, the secondary or partial peduncles proceed without any regular order,* as in sambucus, viburnum, &c.

5th. AMENTACEOUS AGGREGATE, are such flowers as have a long common receptacle, along which are disposed squamæ or scales, which form that sort of calyx called an amentum or catkin, as in corylus, pinus, juglans, &c. Amentaceous flowers generally want the petals, and all of them are of the classes monoecia and dioecia.

6th. Glumous aggregate, are such flowers as proceed from a common husky calyx belonging to grasses, called gluma; (see class trian. digyn.) many of which are placed on a common receptacle called rachis, collecting the florets into the spike, as triticum, hordeum, secale, lolium, &c.

7th. Spadiceous Aggregate, are also such flowers as have a common receptacle, protruded from within a common calyx, called *spatha*, along which are disposed several florets; such a receptacle is called a *spadix*, and is either branched, as in *phænix*, or *simple*, as in *narcissus*, &c.: In this last case

^{*} Cymous flowers have no common calyx, yet each floret hath a perianthium (generally very small) either above or below the germen. In sambucus, and vi-burnum it is placed above.

the florets may be disposed, either all around it, as in calla, dracontium, pothos, &c.; on the lower side of it, as in arum, &c.; or on two sides as in zostera, &c. These flowers have generally no partial calyx.

These are the several distinctions of aggregate flowers, (according to Linnæus); besides which there are several other modes of flowering, properly so called, which come under the general term INFLORESCENCE; and often afford the best marks to discriminate the species. These modes of flowering are chiefly expressed as follow:

1st. Verticillus,* (a verticil, or whirl) when the flowers are placed in whirls at each joint, round the common stalk;† they have very short partial peduncles, are all of the lip kind, and have either two or four stamina, and four naked seeds, as in salvia, marrubium, mentha, &c. A verticil hath several distinctions, as naked, bracted, &c.; and all those genera with four stamina, are of the class didynamia.

2d. Capitulum, (a little head) when many flowers are connected into nearly a globular form or head, on the summit of the common stalk, sometimes with, and sometimes without partial peduncles, as in gomphrena, &c. and is distinguished by its shape, and other circumstances. Under capitulum is now introduced the term Fasciculus, (a little bundle) which in former editions stood distinct. It means when the peduncles are erect, parallel, approaching each other, and raised to the same hight, as in dianthus-barbatus, (sweet william)

^{*} The leaves of verticiled plants are fragrant, warm, and aromatic.

[†] Common receptacles and common peduncles we must take from Linnæus; he only calls those common receptacles, that belong to aggregate flowers. Proper modes of flowering are said to be either sitting, or on common or partial peduncles; and to constitute an aggregate flower, the common receptacle must either be dilated, as in the first two distinctions; or it must be a centre from whence the peduncles proceed, as in the umbel and cyme; or it must proceed from, or be connected with a common calyx, as in the other distinctions. Some of the species under the modes of flowering on peduncles, are also aggregate flowers, as being within a common calyx, as oats, panic-grass, &c. under panicula; and some of the species of dianthus, under the first distinction, are called aggregate, though fasciled and headed.—Pediculus (a pedicle from pes) was used by the antient botanists for the footstalk of a leaf or flower; but Linnæus has exploded the term, and substituted petiolus for the footstalk of a leaf, and pedunculus for that of a flower.

where they generally proceed from different parts of the common stalk, opposite to each other.

- 3d. Spica, (a spike) when the flowers, having no partial peduncles, are arranged alternately around a common simple peduncle; and it is called *spica secunda*, (a single rowed spike) when the flowers are all turned one way, following each other; and *spica disticha*, (a double rowed spike) when the flowers stand pointing two ways, as in *lolium*, &c.: and it is distinguished by shape and other circumstances.
- 4th. Corymbus, (a cluster of ivy berries) when the lesser peduncles of the flowers proceed from different parts of the common peduncle or stalk; and though of unequal lengths, and sometimes simple, and sometimes branched, yet form a regular surface at the top; as in the *siliquose* plants (class tetradynamia). The corymbus may be supposed to be formed from a spike, by adding partial peduncles to the flowers; and seems to be the mean between racemus and umbella, the peduncles rising gradually from different parts of the common stalk, like those of the raceme, and proceed to a proportionable hight like those of the umbel.
- 5th. Thyrsus (a young stalk). A thyrse is a mode of flowering resembling the cone of a pine: Linnaus saith, it is a panicle contracted into an oval, or egg-shaped form; the lower peduncles, which are longer, extend horizontally; and the upper, which are shorter, mount vertically, as syringa, &c.
- 6th. Racemus, (a bunch of grapes) it is called a raceme, when the flowers are placed on short partial peduncles, proceeding as little latteral branches from and along the common peduncle; it resembles a spike in having the flowers placed along a common peduncle, but differs from it in having partial peduncles; it also differs from a corymbus in the shortness and equal length of its peduncles, not forming a regular surface at the top; as in ribes-rubrum, vitis, &c.
- 7th. Panicula, (the tuft upon reeds, a panicle) when the flowers are dispersed upon peduncles variously subdivided; or it is a sort of branching spike, composed of several smaller spikes, attached along a common peduncle, as in avena, panicum, and several other grasses, and many other plants.

When the partial peduncles diverge and hang loose, it is called a diffuse, and when they converge, it is called a close panicle.

To these may be added the term AXILLIARES, (from axilla, the arm-pit) being such flowers as proceed from the angle formed by the leaf and the stem, as is most common: And TERMINALES, being such flowers as terminate the stalk or branch. Also every other mode of flowering is called the *Inflorescence*, whether opposite the leaves, lateral, single, double, erect, bending, &c.

Under this head of Inflorescence may be explained LUXU-RIANT FLOWERS, (commonly called double flowers) which, as they are considered only as varieties and unnatural, belong properly to the head, Habit of plants. A luxuriant flower is supposed generally to be owing to superabundant nourishment; the luxuriant part is generally the corolla, but sometimes the calyx also. It is divided into three degrees; 1st. multiplicatus, 2d. plenus, 3d. prolifer. To which may be added, as an opposite imperfection, flos mutilatus.

Ist. MULTIPLICATUS, (multiplied) when the petals of the corolla are only so far multiplied, as to exclude part of the stamina; and it is called duplicate, triplicate, quadruplicate, &c. according to the number of rows of petals.

2d. Plenus, (full) when the corolla is so much multiplied, as to exclude all the stamina; which is occasioned by the stamina running into petals; and the flower is often so crowded, as to exclude or choke the pistillum also. Therefore, as the essential parts of generation are thus wholly, or in part destroyed, the plants become barren or imperfect, and no seed, or very little, can be expected from them.* Flowers with one petal are not very subject to fulness, when they are, it generally arises from an increase of the divisions of the petal. It is most usual in flowers of many petals, where it arises various ways; sometimes by multiplication of petals only, sometimes of the calyx or nectarium, and sometimes of all. Compound flowers are also suject to luxuriance, arising several ways.

^{*} A remarkable instance of plenitude is in the gelder rose (viburnum opulus florepleno) where all the flowers are barren.

3d. PROLIFER, (prolific) when one flower grows out of another; this generally happens in full flowers, from their greater luxuriancy; in simple flowers, it rises from the centre, and proceeds from the pistillum shooting up into another flower, standing on a single footstalk. In aggregate flowers (properly so called) many foot-stalked flowers are produced out of one common calyx. In umbellate flowers, a second umbel proceeds from the centre of the first umbel, producing little umbels; which by a greater exertion of luxuriancy may produce others with little umbels, and thus may proceed several heads of flowers, each growing out of that immediately below it, furnished with little umbels variously compounded. A prolific flower is also called leafy, (frondosus) when it produceth branches with flowers and leaves, which, though rare, sometimes happens in rosa, anemone, monarda, and others.*

FLOS MUTILATUS, (a mutilated or maimed flower) is such a flower as occasionally is deprived of all, or the greatest part of the petals, yet bears seeds, as in some species of tussilago, campanula, &c. This term is opposed to luxuriance, and is supposed by Linnæus to be caused by a defect of heat, though it may also happen by other causes.

Under this head of flowers, may also be mentioned the different sexes.

FLOWERS, in respect to SEX, are distinguished into male, female, monoclinian, and neuter. Male flowers are such as have only the stamina or males, as in the classes monoecia, dioecia, and polygamia. Female flowers are such as have only the pistilla or females, as in the same classes monoecia, dioecia, and polygamia. Monoclinian flowers are such as have both the stamina and pistilla in the same bed or flower, as in all the other classes: monoclinians are also distinguished into

^{*} As in luxuriant flowers many parts of the natural character are deficient in the whole or in part, they can only be distinguished by the general habit, and by such parts as remain in the natural state; as very often by the calyx, and in polypetalous flowers, the lowest series or rows of petals remain the same, as in rosa, papaver, nigella, &c.

All double flowers, though admired by the florists, are termed by the botanist vegetable monsters.

male monoclinians, when the female is ineffectual; and female monoclinians, when the male is ineffectual. Neuter flowers are such as have neither stamina nor pistilla perfect; see the class syngenesia. The plants themselves also take a denomination from the sex of their flowers; as male plants are such as bear male flowers only; female plants are such as bear female flowers only: monoclinian plants are such as bear monoclinian flowers only. Androgynus (male and female) plants are such as bear both male and female flowers, distinct, upon the same root, as in the class monoecia. Polygamous plants are such as bear monoclinian flowers, and male or female flowers, or both distinct, on the same or on different roots: if on the same root, the flowers are either male monoclinians and female monoclinians; or monoclinians and male; or monoclinians and female, distinct: if on different roots, the flowers are either monoclinians and male; monoclinians and female; monoclinians and both male and female; or are androgynus and male; and sometimes androgynus and male and female on three distinct plants.—See the class polygamia.—See also the class sungenesia, where polygamy gives rise to the orders of the compound flowers.

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THE PRINCIPAL

OUTLINES OF A PLANT.

A PLANT principally consists of root, trunk, leaves, props, fructification, and inflorescence; and also the habit.

I. The ROOT consists of two parts, (viz.) the caudex and the radicula, distinguished according to shape, direction, duration, &c.

CAUDEX (a stump) is the body or knob of the root, from which the trunk and branches ascend, and the fibrous roots descend; and in different plants is either solid, bulbous, (placed under a bulb, as in tulips, &c. or above the bulb, as in orchis, &c.) or tuberous. Solid, as in trees, shrubs, and many of the herbs. Bulbous will be explained under hybernacle. Tuberous knobs* are also solid and hard, containing one or more embryos or eyes; and are either only one knob, as turnep, carrot, &c. containing only one eye at the top; or consist of many knobs connected together by slender fibres, as in potatoes, jerusalem artichokes, &c. each containing many eyes dispersed over the surface; and are either pitted, when the eyes lie inward, as in potatoes, &c.; or tuberculed, containing the eyes outward, as in jerusalem artichokes, &c. In tuberous knobs, the fibres or stringy parts issue from different

^{*} Those tuberous knobs with only one eye, differ as to duration, but are in general biennial; those with many eyes are perennial; both seem to be produced by the nutriment of the stem, and not by the fibrous roots, for the stem is first formed and becomes strong, and as it grows to maturity, the tuberous knobs increase; or as it is said in Phytologia, not until after the leaves are expanded in the air to oxygenate the vegetable blood. It is also said that pinching off the flowers of the potatoes, will increase the size and quantity of the roots, by adding to the roots the nourishment required for the flowers and seeds.—Tuberous roots are increased in number by a seminal chord which proceeds under ground from the old root, after the leaves are expanded; in the same manner as the wires of strawberries, which may be called seminal chords above ground, and the design seems evidently to place the offspring at a convenient distance from the parent plant, that they may not incommode each other.

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parts of the surface, which is an essential difference from bulbous knobs, where they are confined to the caudex of the bulb only, and are the true and genuine roots; the bulb itself being only a large bud under ground.

RADICULA (a little root) is the stringy or fibrous part of the root, descending from the caudex; and is really the principal and essential part of every root, and by which the nourishment is drawn from the earth for the support of the plant.

II. The TRUNK, which includes the branches, is that part which rises immediately from the caudex, and produceth the leaves, flowers, and fruit. It is either herbaceous, shrubby, or arborescent; and is generally covered with an outer and an inner bark;* and is distinguished according to its shape, substance, surface, &c. and admits of the following sorts, (viz.) caulis, culmus, scapus, stipes.

1st. Caults (a stalk or stem) is the main or universal trunk, which elevates the leaves, and fructification, and is applied to trees, shrubs, and herbs: It is either simple or compound; simple, when it doth not divide; compound, when it is divided into branches.

2d. Culmus (a straw or haulm) is the proper trunk of grasses; and also elevates both the leaves and fructification: It is sometimes jointed, and sometimes not; it is also sometimes round, and sometimes angular.—See the class and order triandria digynia.

^{*} The outer bark either runs longitudinally, as in oak, ash, &c. and in most other trees; or transversely, as in cherry, birch, &c. if transverse bark is put into the fire, it shrivels up, and burns like parchment or leather; but in those trees where the outer bark runs transversely, the inner, or principal bark runs longitudinally; several other trees than above mentioned have a transverse cuticle, but in a less perfect manner.—Many trees have what is called the sap (alburnum) which lies between the more solid woody part and the bark, as oak, fir, &c.; and the sap juice is said to answer the same purpose to vegetables, as the chyle to animals; affording nourishment by sanguification and secretion; and in those trees that have not an apparent alburnum, as ash, &c.; the inner bark, though less indurated, is supposed to answer the same purpose, as it contains much mucilaginous or nutritious matter.

Phytologia, p. 492—187.

3d. Scapus (a stalk) is an herbaceous trunk, which elevates the fructification, but not the leaves; that is, it is a stalk proceeding immediately from the root, and terminated by the flowers, as in narcissus, hyacinth, &c.

4th. STIPES (a trunk) used by Linnæus for the trunk of mushrooms; as also for that slender thread or footstalk which elevates the feathery or hairy down, with which some seeds are furnished, and connects it with the seed, as in lettuce, dandelion, &c.

III. The LEAVES, which are said by Linnæus to be the muscles or organs of motion of a plant; by others, the organs by which perspiration and inspiration are performed. Hence, like insects, if the spiracula of the leaves are stopped by covering the upper surface with oil, death ensues. They are defined as proceeding from the expansion of the vessels of the stalk, forming several ramifications like net-work, extended in length and breadth in a determinate manner, having the interstices filled up with a tender pulpy substance, called the parenchyma; and the external covering is supposed to be a continuation of the scarf skin of the stalk.

Leaves are either simple or compound, and are distinguished by their figure, situation, insertion, number, divisions, &c.

A SIMPLE LEAF, is such as either adheres to the branch singly, or whose footstalk is terminated by a single simple expansion, not parted to the middle rib; and is determined by its shape, surface, and divisions.

A COMPOUND LEAF, is such whose footstalk is furnished with several separate simple expansions, or in other words, whose divisions extend to the middle rib; now called a common petiole (or footstalk) supporting several lobes, or little simple leaves, of which the compound leaf consists; and are distinguished by shape, &c. and the form by which they are attached to the common footstalk, as palmated, winged, feathered, &c. Sometimes leaves are twice or more compounded, which divisions admit of many modifications, and give rise to as great variety of terms. It may sometimes be

difficult, at first sight, to know a common footstalk to a compound leaf, from a branch; but it may be observed that a common footstalk, where it issues from the branch, is either flat or hollow on one side, and convex on the other; whereas branches are alike on both sides, whether round, flat, or angular: again, buds are never found at the angles formed by the lobes of a compound leaf with the footstalk; but at the angles formed by the footstalk of the whole compound leaf and the stem.* And it may always certainly be distinguished by its falling off with the little leaves which it supports.

The manner or place in which leaves are attached to the plant, is called the *determination* of leaves; and is as follows, distinguished by several terms, according to number, disposition, insertion, figure, &c.

RADICAL OR ROOT LEAF, such as proceed from the root.

STEM LEAF, such as grow on the stem.

BRANCH LEAF, such as grow on the branches.

AXILLARY LEAF, (from axilla, the arm pit) such leaves as grow in the angle formed at the insertion of the branch with the stem.

FLORAL LEAF,† (florale) such as are placed nearest to, and at the coming out of the flower; (see bractea, page 33). There are also seminal or seed-leaves, such as are first the cotyledons, and afterwards become leaves; but these are not noticed under determination of leaves, as not coming under the definition of a leaf.

^{*} The flowers in fruit trees generally appear before the leaves, that the process of impregnation may not be interrupted.

⁺ Floral leaves are in general those leaves placed nearest to the flower, and when like the other leaves, they come under the definition of a leaf; but when they differ in size, shape, or colour, from the other leaves of the plant, they are called bractew, and come under the term futera, and often afford essential marks for distinction of species.

- IV. The PROPS, (fulcra) a term used to express those external parts which strengthen, support, or defend the plants on which they are found, or serve to facilitate some necessary secretion; and are as follow:
 - 1st. Petiolus, the footstalk or support of a leaf.
 - 2d. PEDUNCULUS, the footstalk or support of a flower.
- 3d. Stipula, (haulm or husk) a sort of scale or small leaf, stationed in most plants (when present) on each side the base of the footstalk of leaves and flowers, at their first appearance, for the purpose of support: They are placed either single or double, and sometimes on the inside, as in the fig and mulberry; or on the outside, as in the birch, lime, and papilionaccous flowers: They are also either sitting, extended downwards, or sheathing along the stem, as in the plane tree. As to duration, they sometimes fall before the leaves, and sometimes are equally permanent: They often afford a good distinction for the species.
- 4th. Cirrus, (a curl) meaning a clasper* or tendril; being the fine spiral string or fibre, by which plants fasten themselves to some other body for support: They are sometimes placed opposite the leaves, sometimes at the side of the footstalks of the leaves, and sometimes issue from the leaves themselves; and sometimes they put out roots, as in ivy, &c.
- 5th. Pubes, (hair or down) a term to express the hair, down, wool, beard, bristles, glands, and several other appearances, on different parts of plants, serving the double purpose of defence and vessels of secretion.
- 6th. ARMA, (arms) the defensive weapons of plants; which are either spina, (a thorn) protruded from the wood of the plant; aculeus, (a prickle) proceeding from the cortex or

^{*} Plants that support themselves by claspers, eatch hold of any thing in their way for that purpose; and are different from the twining plants, which support themselves by the twisting of the stalk, though both may be called climbing plants.—See explanation to class Diadelphia.

outer bark of the plant, which are sometimes forked or divided, consisting of two or more prongs or divisions; or *stimuli*, (stings) producing inflamatory itching punctures to the naked parts of animals, by their venomous points.

7th. Bracter, (thin plates of metal) are sometimes called floral leaves, (floralia folia) when situated near the flowers, but differ in size, shape, or colour, from the other leaves of the plant; as in tilia, monarda, &c.; and mean not only those leaves generally situated on the stalk nearest to the lower parts of the flower, but are sometimes placed on the stalk at a distance from the flower, as in viola, and they sometimes seem to terminate the flower-stalk; being composed of a large tuft of leaves, resembling a bush of hair, (coma) and are then called bractea comosa, as in crown-imperial,* lavender, and some species of sage.—See bractea under calyx.

V. The FRUCTIFICATION, or mode of fruit-bearing; consisting of the calyx, corolla, stamina, pistillum, pericarpium, semina, and receptaculum; all which have been already explained.

VI. The INFLORESCENCE, which is defined to be the mode by which flowers are joined to their several peduncles, whether common or partial; as hath been already explained.

VII. The HABIT of plants, by which antient botanists meant the whole external appearance of every part thereof, whereby they were arranged in their several systems; but by Linnæus it is meant to be the agreement of plants of the same genus or natural order; chiefly in the following circumstances:

GEMMATION. The structure and disposition of the bulb, as solid, coated, scaly, stem-bulb. Also of the bud, its origin petioled, stipuled, cortical; its contents leafy, floral, common.—See hybernacle.

^{*}The tuft of the crown-imperial (fritillaria imperialis) seems to terminate the flower-stalk, from the flowers hanging down; but when the flower decays, the germen swells to a large hexagonal capsule, filled with flat seeds, and becomes erect, above the tuft; the better to retain and disperse the seed.

See note to dodecatheon meadia.

VERNATION. The complication of the leaves within the bud. at spring, as conduplicate, convolute, involute, revolute, imbricated, equitant, obvolute, plaited, spiral.*

ÆSTIVATION. The state of the bud in summer, before the unfolding of the flowers, as convolute, imbricated, conduplicate, valved, unequal-valved.

TORTION. The twisting or bending of the parts, as uniform, dissimilar, from the right, from the left, reciprocal, resupine, spiral.

NUPTIALS. Male, female, androgynous, monoclinian.

SEMINATION. The shape and other circumstances of the seed, as tail, wing, tuft, awn, hooks, gluten, curvature. Also of the pericarpium, as berrying, inflation, viscosity, elasticity, structure.

PLACENTATION. The number and disposition of the cotyledons; or if wanting.

Variation. Of colour, size, pubescence, age.

External. Plaited, bundled, broad-leaved, curled, awnless.

Internal. Mutilated, great-flowered, luxuriant, crested; viviperous, bulb-bearing.

By variation, or variety, are meant such differences as are only incidental to vegetables, and are not found constant and unchangeable; that is, where plants raised from the same seed, by some accidental cause, differ in form and appearance from

^{*} Conduplicate, (doubled together) as in oak, hazel, walnut, &c.

Convolute, ... (rolled together) as in bean, saxifrage, &c.

Revolute, ... (rolled in) as in apple, pear, &c.
Revolute, ... (rolled back) as in primrose, groundsel, colt's-foot, &c.
Imbricated, ... (tiled) as in lilac, campanula, &c.
Equitant, ... (riding) when the opposite margins approach, so as one to include the other, as in iris, sweet-rush, &c.

Obvolute, (rolled against each other) as in pink, lychnis, teazel, &c.

Plaited, (folded over) as in beech, vine, currant, &c.

Spiral, (coiled like a watch spring, one end in the centre) as in fem.

the true character of the species to which they belong; which cause being removed, the plant is restored to its true specific character: and these incidental varieties chiefly arise by difference of soil or culture, in some of the above circumstances.

And though it is as necessary to collect varieties under their proper species, as the species under their proper genera; yet it is often more difficult; first, from the difficulty of ascertaining the genus, and secondly, from the variety confounding the species;* and sometimes some parts of the specific character itself are also subject to variety, particularly the leaves;† though in general the true specific character is constant and unchangeable, arising only from such circumstances wherein plants of the same genus are found to disagree, which distinctions are commonly taken with most certainty, from the following parts, (viz.) root, trunk, leaves, fulcra, hybernacle, inflorescence: all which parts have been already explained, except hybernacle.

The HYBERNACLE, (winter lodgment) is that part of a plant which defends the embryo, or future shoot, from external injuries during the winter; and according to Linnæus, is either a bulb or a bud.‡—See gemmation under habit of plants.

I. A Bulb, (bulbus) is a large sort of bud produced under ground, placed upon the caudex of certain herbaceous plants; hence called *bulbus* plants; all of which are perennial, that is,

^{*} See the note at the end of *luxuriant flowers*. The name that constitutes the variety is to be placed immediately after the specific name, as *flore pleno*, *corolla rubra*, &c.

[†] In respect to leaves, which are mentioned as a distinction of species, yet subject to variety, it may be necessary to observe, that in general the leaves are constant as to figure and situation; but vary in respect to number of fingers, or lobes, in digitated and winged leaves, and in growing by threes, fours, or fives: Curled and variegated leaves are also a frequent variety, and they often differ as to size and colour.

[‡] From Linnæus's definition of the hybernacle, it seems to appear that tuberous roots, and seeds, might with equal propriety bear that appellation with the bulb and the bud; but he hath thought proper to give them a different distinction; for Linnæus does not allow the bulb and bud to be roots, but hybernacles or winter lodgments, into which the whole plant retires during the winter, in miniature; for the bulb is exactly the same under ground, as the bud is above.

perpetuated by their bulbs or ground buds, as well as by seeds; they are therefore improperly called *roots*, being only the hybernacle of the future shoot. Bulbs are of the following sorts:

- 1st. A scaly bulb, (bulbus squamosus) consisting of scales laid over each other like tiles, as in the lily.
- 2d. A solid bulb, (solidus) consisting of a solid substance, as in tulips.
- 3d. A coated bulb, (tunicatus) consisting of many coats infolding each other, as in onions.
- 4th. A stem bulb,* (caulinus) which is produced not only from the sides of the principal bulb, called a sucker, or offset; but from other parts of the stem; as in crow, or wild garlic, and in some species of onion and lily (hence called bulbiferous); in the onion they are produced at the origin of the umbel of flowers, instead of seeds.
- II. A Bup (gemma) is the embryo of the plant seated upon the stem and branches, covered with scales; and if a leaf bud, it consists of radicles which descend along the bark into the earth; and is also furnished with umbilical vessels, which are inserted into the alburnum, and form a part of it, and descending into the earth, supply it with its first nutrition. (Phytologia). In general there are three sorts of buds :- 1st. that containing the flower only, as in poplar, ash, &c. where the leaf-buds and flower-buds are distinct:—2d. that containing the leaves only, as in birch, hazel, &c .: - and 3d. that containing both flower and leaves, as in the generality of plants; and these last sometimes contain leaves and male flowers, sometimes leaves and female flowers, sometimes leaves and monoclinian flowers. Every flower-bud dies when it hath perfected its seed like an annual plant; and it is said to be the same with respect to flowering bulbs, they also die after having flowered a few times and perfected their seed, and produced other smaller bulbs to perpetuate their progeny.

^{*}Other bulbs, besides those here mentioned, were formerly enumerated, (viz.) the jointed bulb, as in moschatel; and the double bulb, as in orchis.

Annual plants are only renewed from seeds, and several other plants, both trees and shrubs, have no winter buds: It is also observed in hot countries, that few plants have buds, or at least they are without that scaly covering, which seems essential to a bud, and constitutes the hybernacle; instead whereof are protruded small feather-like branches from the wings of the leaves; (defence and protection from cold not being necessary); whereas in cold countries most plants have buds, which are wrapped up all the winter in readiness to greet the approaching spring.

I may, lastly, take notice of what is called the SLEEP of plants, which, according to Linnæus, happens various ways, as by converging, including, surrounding, fortifying, conduplicating, involving, diverging, depending, inverting, imbricating. This disposition in plants is very remarkable in chickweed, pimpernel, dandelion, goat's-beard, &c. which expand their flowers only at certain times of the day, and shut them up at certain times, or at the approach of night or a storm; which shews the great care a plant takes to protect and invigorate her feeble offspring, which may be called the storge of plants, as well as animals.—From hence is constituted what Linnæus calls the horologe or watch of Flora, shewing the hours of the day from what he calls the rising and setting of flowers; from hence may also often be prognosticated a change of weather.* And in many plants, not only the flowers, but the young shoots are defended from external injuries, by the nearest leaves converging and enclosing the tender rudiments. The averrhoa carambola is very remarkable for this quality of sleeping.—See the note to the genus.

^{*}The calendula pluvialis (violet and white-coloured African marygold) opens between 6 and 7 A. M. and shuts up at 4 P. M. if the weather is dry; but if it doth not open its flowers at 7, you are sure to have rain that day; sometimes the hasty surprize of a thunder storm will vary the above prognostic.—If the sonchus sibiricus (Siberian sow-thistle) shuts up its flowers in the night, the following day is generally dry, but if the flowers remain open all night, the next day is generally rainy.—The same observations may be made of several of the English plants.

CLASSES.

4 TETRANDRIA.

10 DECANDRIA.

TABLE

OF

CLASSES AND ORDERS:

According to the Systema Vegetabilium and Supplementum, Plantarum, &c.

2 DYANDRIA. 1 Monogynia. 2 Digynia. 3 Trigynia.
 3 TRIANDRIA. 1 Monogynia. 2 Digynia. 3 Trigynia.

1 MONANDRIA. . . . 1 Monogynia. 2 Digynia.

ORDERS.

· 1 Monogynia. 2 Digynia. 3 Tetra-

1 Monogynia. 2 Digynia. 3 Trigynia.
 4 Pentagynia. 5 Decagynia.

gynia.

5 PENTANDRIA. ... 1 Monogynia. 2 Digynia. 3 Trigynia. 4 Tetragynia. 5 Pentagynia. 6. Polygynia.

6 HEXANDRIA. ... 1 Monogynia. 2 Digynia. 3 Trigynia. 4 Tetragynia. 5 Polygynia.

7 HEPTANDRIA. ... 1 Monogynia. 2 Digynia. 3 Tetragynia. 4 Heptagynia.

8 OCTANDRIA. ... 1 Monogynia. 2 Digynia. 3 Trigynia. 4 Tetragynia.

9 ENNEANDRIA. ... 1 Monogynia. 2 Trigynia. 3 Hex-

agynia.

CLASSES.

ORDERS.

- 11 DODECANDRIA. 1 Monogynia. 2 Digynia. 3 Trigynia. 4 Pentagynia. 5 Dodecagynia.
- 12 ICOSANDRIA. · · 1 Monogynia. 2 Digynia. 3 Trigynia. 4 Pentagynia. 5 Polygynia.
- 13 POLYANDRIA. •• 1 Monogynia. 2 Digynia. 3 Trigynia. 4 Tetragynia 5 Pentagynia. 6 Hexagynia. 7 Polygynia.
- 14 DIDYNAMIA.... 1 Gymnospermia. 2 Angiospermia.
- 15 TETRADYNAMIA. 1 Siliquosa. 2 Siliculosa.
- MONADELPHIA. 1 Triandria. 2 Pentandria. 3 Heptandria. 4 Octandria. 5 Enneandria.
 6 Decandria. 7 Endecandria. 8 Dodecandria. 9 Polyandria.
- 17 DIADELPHIA. · · 1 Pentandria. 2 Hexandria. 3 Octandria. 4 Decandria.
- 18 POLYADELPHIA. 1 Pentandria. 2 Icosandria. 3 Polyandria.
- 19 SYNGENESIA. •• 1 Polygamia æqualis. 2 Polygamia superflua. 3 Polygamia frustranea. 4 Polygamia necessaria. 5 Polygamia segregata. 6 Monogamia.
- 20 GYNANDRIA. •• 1 Diandria. 2 Triandria. 3 Tetrandria. 4 Pentandria. 5 Hexandria. 6 Octandria. 7 Decandria. 8 Dodecandria. 9 Polyandria.
- 21 MONOECIA. ... 1 Monandria. 2 Diandria. 3 Triandria. 4 Tetrandria. 5 Pentandria. 6 Hexandria. 7 Heptandria. 8 Polyandria. 9 Monadelphia. 10 Syngenesia. 11 Gynandria.

CLASSES.

ORDERS.

22 DIOECIA. 1 Monandria. 2 Diandria. 3 Triandria. 4 Tetrandria. 5 Pentandria. 6 Hexandria. 7 Octandria. 8 Enneandria. 9 Decandria. 10 Dodecandria. 11 Icosandria. 12 Polyandria. 13 Monadelphia. 14 Syngenesia. 15 Gynandria.

23 POLYGAMIA. .. 1 Monoecia. 2 Dioecia. 3 Trioecia.

24 CRYPTOGAMIA. 1 Filices. 2 Musci. 3 Algæ. 4 Fungi.

APPENDIX. Palmæ.

NOTE.

THE number of genera is taken from the 8th edition of the Gen. Plantarum printed in 1791, with some others.

The number of species is taken from the Systema Vegetabilium, 14th edition, printed in 1784, with some others since discovered.

The distinctions of the genera in the several orders are taken from the synopsis to each class, in the same publication.

The growth, and places where principally native, are taken from Aiton, and other botanists.

The number of species indigenous to the British Isles, are taken from Broughton's Enchiridion Botanicum.

In the column under growth; t, stands for tree; s, for shrub; and h, for herb.

Vegetables, saith Linnæus, hath life without voluntary motion; his climax runs thus, lapides crescunt; vegetabilia crescunt et vivunt; animalia crescunt, vivunt, et sentiunt; and this was the doctrine of other authors before Linnæus; it may be right in a general sense, but if we accurately examine the connecting links of the three kingdoms, we shall find ourselves staggered in the definition. His System of Plants makes no difference between trees, shrubs, and herbs, yet the distinction is of great antiquity with other writers: The difference between trees and herbs is-very-

obvious; but the limit between trees and shrubs is not accurately ascertained. Linnæus thinks the bud the best distinction, trees having buds, and shrubs no buds; but he immediately acknowledges this distinction to be fallaceous, as many large trees in hot climates have no buds. Dr. Alston thinks the difference lies in the bark, that trees have an outer and inner bark, (cortex and liber) and generally a sap, (alburnum) but that the covering to shrubs is not a bark but a cuticle or simple skin; but this wants confirmation. We can therefore only say that a tree is a perennial plant rising to a great hight, with a simple, woody, durable, branching trunk, producing wood fit for timber: The same definition holds with respect to shrubs, only that they do not rise to so great an hight, the trunk not so simple, the branches more bushy, and not producing timber.

An herb is a plant with a succulent stem or stalk, not woody, and which generally dies down to the ground every year; and is either annual, biennial, &c. or perennial.

The duration of plants Linnæus thinks so inconstant, that he never employs it in specific differences. In hot climates that have a perpetual summer, most plants are trees or shrubs, or at least perennial; yet many, when removed to colder climates, loose their woody substance, and become herbaceous, and sometimes annual, as ricinus, mirabilis, tropwolum, beta, origanum, lavatera, &c.—Milne's Botan. Dict.

CLASSES, ORDERS,

AND

GENERA:

According to the SEXUAL SYSTEM of LINNÆUS.

CLASS I. MONANDRIA.

(ONE FERTILE* STAMEN OR MALE, HAVING THE ANTHERA.)

Consisting of such plants as bear monoclinian flowers, furnished with only one stamen or male.

And, to avoid repetition, it may be observed, that all the classes, except the last four, and part of the class syngenesia, regularly consist of monoclinian flowers, that is, where the males and females are in the same bed or flower.

This class contains two orders.

^{*} Many flowers will appear to have more stamina than is the character of the class to which they belong; but those are only to be numerated which have antheræ; the others are called *barren*, as being imperfect.

ORDER I. MONOGYNIA.

(ONE FEMALE.)

Containing such plants as have only one female: under the following distinctions:

1st. Scitamineous* beneath; or fruit-celled beneath.

			No of		Species in					
No	Genera.	Growth.	species	Native of	Britain.					
1	Alpinia	h	2	America						
	Amomum+	h	6	W. Indies						
3	Canna	h	3	America						
4	Costus	h	1	Arabia and Indies						
5	Cucullaria	h	1		4					
6	Curcuma	h	1 2	India						
7	Kæmpferia	h	2	E. Indies						
8	Maranta‡	h	3	India						
	Myrosma	h	1	Surinam						
10	Qualea	h	1							
	Renealmia	h	1	Surinam						
12	Thalia	h	1	America						
	2d. One-seeded.									
13	Boerhaavia	h	6	La-vera-crux						
14	Hippuris§	h	2	Europe	Brit. 1					
15	Salicornia	s & h		Arabia -	Brit. 2					
16	Pollichia	h	1	Cape						

^{*} Scitamineous, (from scitamentum) because some of the plants afford delicious fruit. Scitamineœ is also the name of the 8th order in Linnæus's Fragments of a Natural Method, containing most of the above plants.

⁺ Cardamom seeds are from a species of amomum, called amomum cardamomum.

[†] Maranta arundinacea (Indian arrow-root) called so, because the Indians, by using it as a poultice, expel the poison of their arrows, it also extracts the poison of the manchineel tree, and the venom of insects. And the root dried and made into powder, and mixed with hot water, is said to make an agreeable and nutritious beverage, and may be bought at the shops of the druggists; and the best sort sells for about 7s. 6d. per lb.

[§] Hippuris is called mare's-tail, to distinguish it from equisetum, (horse-tail); it hath a single jointed stalk, and at each joint are twelve (more or less) leaves, placed in a whorl; to each of these leaves, close to the stalk, belongs a little flower, with one stamen, one pistil, and one seed.

Witness I.

ORDER II. DIGYNIA.

(TWO FEMALES.)

No	Genera.	Growth.	Nº o specie		Species in Britain.			
8		V 30-1	lst.	Plants.				
18 19	Blitum Callitriche Corispermum Lacistema	h h h h	2 2 2 1	Spain, Tartary Tartary	Brit. 2			
2d. Grassy.								
21 22	Cinna Mniarum	h h	1	Canada				

CLASS II. DIANDRIA.*

(TWO STAMINA, OR MALES.)

Containing three orders.

ORDER I. MONOGYNIA.

(ONE FEMALE.)

No Genera. Growth. species. Native of Species in Britain.

1st. Flowers beneath, one-petaled, regular.

1	Arouna (cor. nor	ne) h	1	
2	Chionanthus	S	2	South Carolina
3	Eranthemum	Ś	4	Æthiopia
	Jasminum	S	9	India
5	Ligustrum	S	2	Brit. 1
6	Nyctanthes†	S	1.	India
	Olea‡	S	6	Spain
8	Phillyrea	S	3	Europe
	Sciuris	h	1	
10	Syringa	S	3	Persia

^{*}Several plants of this class diandria, are so similar to many of the class didynamia, that it is often very difficult to distinguish them: The flowers are nearly of the same form, and though many have properly only two stamina (the other two wanting antheræ); yet have filaments so very like stamina, that botanists have sometimes confounded the two classes, as to several plants.

⁺ Nyctanthes sambae (Arabian jasmine) flowers, and gives its perfume in the night, and not in the day; whence the name. But Aiton has taken sambae (to which he gives several varieties) from nyctanthes, and placed it under jasminum; and only allows one species to nyctanthes, viz. arbor-tristis.

[†] The European olive (olea Europea) bears the fruit for pickling; but as there are many varieties of this species; that most in esteem grows in France, called the province olive, both for the flavour of the fruit, and its oil. The olives we have from Spain are much larger, but both the fruit and the oil have a disagreeable flavour. In China the manner of gathering their olives is very convenient; they bore a hole in the trunk of the tree, and after having put some salt into it, they stop it up, and in a few days the fruit drops of itself.—Abbe Grosier's description of China, 1788.

No.	Genera.	No of Growth, species.	Native of	Species in Britain.
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2d. Flowers beneath, one petaled, irregular.

Fruit capsuled.

]	11	Calceolaria	h	3	Peru	<u>.</u>
3	12	Dianthera	h	7.	America	= at 1 = 17 h
]	13	Gratiola	h		Alps, America	
]	14	Justicia	s & h	30	Ceylon, &c.	
		Pæderota	h		Africa	
]	16	Pinguicula	h	4	Portugal	Brit. 2
]	17	Schwenkia	h	1	America	
]	18	Veronica	h	40	America	Brit. 15
]	19	Utricularia*	h	9	Alps	Brit. 2
0	20	Wulfenia		1	Carinthia	

3d. Flowers beneath, one-petaled, irregular.

Fruit seed-naked.

21	Amethystea	h	1	Siberia	
	Collinsonia +	h	1	Virginia, Canada	
23	Cunila	h		Virginia	
24	Lycopus	h	3	Virginia	Brit. 1
25	Monarda	h	5	Oswego, America	
26	Rosmarinus	S	1	Spain, Italy	
27	Salvia‡	S	, 52	Italy, America	

^{*} In utricularia (bladder-wort) the roots are loaded with membranaceous bladders.

[†] It hath been observed in many plants, as in lilium, ruta, dictamnus allus, saxifraga, parnassia, &c. that at the proper times the stamina make the first advances by bowing down in their turns to the female; but in collinsonia canadensis, nigella, damascena, spartium scoparium, and some others, the lady seems to make the first advance, by bowing first to one or more of her husbands for a day or two, and then to the others. But what is still more remarkable; the common berberry hath six erect stamina resting on the petals, under whose concave tops are sheltered the antheræ; and on touching the inside of the filament near its base, with a bristle or fine wire, the stamen instantly incurvates, so as the anthera to embrace the stigma.—In the kalmia the ten stamens lie round the pistil, like the radii of a wheel, and each anther is concealed in a nich of the coral to protect it from cold and moisture; these anthers rise separately from their niches, and approach the stigma of the pistil for a time, and then recede to their former situations.

[‡] In salvia, the singular cross thread of the stamina constitutes the essential character of the genus: the rudiments of two stamina appear in the mouth of the flower, but have no anthera.—Sage and clary are distinct plants by other writers, but by Linnæus, they both come under the genus salvia, notwithstanding some little difference in the flower.

37 Crypsis

No Genera. Growth. species. Native of Britain. 28 Verbena* h 19 America, Chili 29 Ziziphora h 4 Virginia 4th. Flowers beneath, four-petaled. 30 Thouinia t 1 Ceylon 5th. Flowers beneath, five-petaled. 31 Dialium s 1 India 6th. Flowers above. 32 Ancistrum 33 Circæa† h 2 France, Alps 34 Globba 4 E. Indies 35 Morina h 1 Persia ORDER II. DIGYNIA.											
28 Verbena* h 19 America, Chili Brit. 1 29 Ziziphora h 4 Virginia 4th. Flowers beneath, four-petaled. 30 Thouinia t 1 Ceylon 5th. Flowers beneath, five-petaled. 31 Dialium s 1 India 6th. Flowers above. 32 Ancistrum 2 New Zealand, Peru 33 Circæa† h 2 France, Alps Brit. 2 34 Globba 4 E. Indies 35 Morina h 1 Persia ORDER II. DIGYNIA.											
29 Ziziphora h 4 Virginia 4th. Flowers beneath, four-petaled. 30 Thouinia t 1 Ceylon 5th. Flowers beneath, five-petaled. 31 Dialium s 1 India 6th. Flowers above. 32 Ancistrum 2 New Zealand, Peru 33 Circæa† h 2 France, Alps Brit. 2 34 Globba 4 E. Indies 35 Morina h 1 Persia ORDER II. DIGYNIA.											
4th. Flowers beneath, four-petaled. 30 Thouinia t 1 Ceylon 5th. Flowers beneath, five-petaled. 31 Dialium s 1 India 6th. Flowers above. 32 Ancistrum 2 New Zealand, Peru 33 Circæa† h 2 France, Alps Brit. 2 34 Globba 4 E. Indies 35 Morina h 1 Persia ORDER II. DIGYNIA.	28 Verbena* h 19 America, Chili Brit	. 1									
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5th. Flowers beneath, five-petaled. 31 Dialium s 1 India 6th. Flowers above. 32 Ancistrum 33 Circæa† h 2 France, Alps 34 Globba 35 Morina ORDER II. DIGYNIA.											
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6th. Flowers above. 32 Ancistrum 33 Circæa† 4	5th. Flowers beneath, five-petaled.										
32 Ancistrum 33 Circæa† 34 Globba 35 Morina ORDER II. DIGYNIA.	31 Dialium s 1 India										
33 Circæa† h 2 France, Alps Brit. 2 34 Globba 4 E. Indies 35 Morina h 1 Persia ORDER II. DIGYNIA.	6th. Flowers above.										
33 Circæa† h 2 France, Alps Brit. 2 34 Globba 4 E. Indies 35 Morina h 1 Persia ORDER II. DIGYNIA.	30 Ancistrum 2 New Zealand, Peru										
34 Globba 4 E. Indies 35 Morina h 1 Persia ORDER II. DIGYNIA.		0									
35 Morina h 1 Persia ORDER II. DIGYNIA.		- ~									
ORDER II. DIGYNIA.	91 910 10										
	35 Morina h 1 Persia										
(myr o TERMATES)	ORDER II. DIGYNIA.										
(TWO FEMALES.)	(TWO FEMALES.)										
36 Anthoxanthum; h 5	36 Anthoxanthum‡ h 5	. i									

ORDER III. TRIGYNIA.

S. of Europe

(THREE FEMALES.)

38 Piper s & h 25 E. and W. Indies

h

* The English species of vervain, called simpler's joy (verbena officinalis) hath four stamina, as hath also the verbera triphylla (sweet-scented vervain) and most of the other species; that it is necessary to examine the essential character.

† Enchanter's nightshade (bircæa lutetiana) was much celebrated in the mysteries of witchcraft, and for the implous purpose of raising the devil. It grows amidst the mouldering bones and decayed coffins in the ruinous values of Staeford Church, in Lincolnshire.

Botanic Garden.

*The grateful smell to hay is said chiefly to be given by the British species of vernal grass, anthoxanthum odoratum.

§ The leaves of the piper-betle are esteemed cordial, and give a fine flavour to the breath, for which they are much used in the East.—In Peru, this shrub is also much used, and is there called caca. (See areca). The betle leaves are in great request throughout India, from being used to wrap round the areca nut, in order for chewing; the nut is like a nutneg in size and shape, but differs in taste. The inside is of a lively red colour, and has an agreeable flavour: The Indians in general consume a great quantity of these nuts.—In the Gentleman's Mag. for Dec. 1805, this nut is highly spoke of.

White pepper is from the same plant as the black pepper, (piper nigrum) it is made white by being laid in lime before it is dry, by which it loses its external coat.

CLASS III. TRÌANDRIA.

(THREE STAMINA OR MALES.)

Containing three orders.

ORDER I. MONOGYNIA.

(ONE FEMALE.)

No	Genera.	Growth.	No of		Species in Britain.
-, 1	O C.I.C.I.U.				,
		1st.	Flow	vers above.	
1	Antholyza	h	7	Africa	
2	Aristea	h	1	Cape of Good Hope	
3	Crocus*	h	1	Europe	Brit. 1
	Comocladia	s	1	Jamaica	
	Dilatris	h	3	Cape	
	Gladiolus	h	24	Europe, Africa	
-	Iris	h	45	Europe, China	Brit. 2
	Txia	s & h	24	Alps, Africa	
	Macrolobium	h	1		
	Marica	h	1		
	Melothria ·	h	1	Virginia	
12	Moræa	h	12	Africa	4 %
	Oxybathus			Peru	
	Rohrra	h	1		
15	Tapura	h	1		
16	Tonsella	h	1		

^{*} Crocus sativus is the only known species of this genus, with two very singular varieties, viz. officinalis and vernus; the first is the autumnal crocus, the latter is the vernal crocus; these plants are one of the wonders of the vegetable creation, being so similar as no specific difference can be obtained, yet flowering at so great a distance of time from each other: The flower of the crocus, as also the colchicum, hath no stalk, but the tube is very long, proceeding from the bulb; from the crocus satious officinalis (which flowers in autumn, and bears a purple blue flower) is produced the saffron of the shops, which Mr. Miller says, is the stigmata of the three divisions of the style, with part of the style itself; these being properly dried, are made into cakes for use; it is said to be very narcotic or anodyne.

N.B. This plant hath many varieties.

No	Genera.	Growth	Ѻ o		Species in
		2			Britain.
	Valeriana*	h	21	France, China, &c.	Brit. 4
18	Witsenia	h	1	Maura	
		2d.	Flow	vers beneath.	
19	Callisia	h	1	America	
20	Cneorum	S	1	Spain ,	
21	Commelina	h	9	W. Indies, Africa	
22	Comocladia	S	2	America	
23	Hippocratea	h	- 1	America	
24	Loeflingia	h	1	Spain	
25	Olax	t	1	Ceylon	
26	Ortegia		2	Spain	
27		h	1	France, Italy	
28	Rotala	h	1	E. Indies	
29		s	1	Amboyna	
30		h	1		
31	Tamarindus†	t	1	E. and W. Indies	
32	Wachendorfia	h	3	Africa	
	Willichia	h	1	Mexico	
	Xiphidium	h	1		
35			1	India	
		m di coni	mith	malmalate of the adlum	r laines
_	_			valvelets of the calyx-g	
36	Cyperus‡	h	32	Jamaica, Egypt, &c.	Brit. 1
	Eriophorum	lı	5	Europe	Brit. 2
	Fuirena	h	1	Surinam	
39	Kyllingia	S	4	E. and W. Indies	
40	Lygeum	h -	1	Spain	
41	Nardus	h	6	Europe	Brit. 1
42	Pommereulla	h	1	India	1
43		h	13	Europe	Brit. 7
44	Scirpus	h	41	America	Brit. 13
45		h	1		,

^{*} Valerians differ greatly in several parts; as in the corolla being regular or irregular; in the stamens being 1, 2, 3, or 4; the fruit one-seeded, or two-seeded, naked, crowned with a pappus, &c.—These plants may be generally known (when not in flower) by the roots being scented, and two leaves at each joint opposite.

 $[\]uparrow \mathit{Tamarindus}$ (the tamarine tree) renders the air under its shade very unwhole-some.

[†] Cyperus papyrus (the Egyptian papyrus, or paper of the antient Egyptians) is a triangular rush, growing s or 9 feet high, and an inch thick, bearing a woolly tuft.

ORDER II. DIGYNIA.*

(TWO FEMALES.)

No	Genera.	Growth.	Nº of species	Native of	Species in Britain.
	1st. 1	Tlowers	one-fl	owered, straggling.	1 1 1
46	Agrostis	h	26	Europe	Brit. 8
47	Alopecurus	h	8	Europe, Indies	Brit. 6
	Anthistiria†	h	$\frac{1}{6}$	India	
	Aristida	h	6	Jamaica	
50	Bobartia	h	1	India	
	Cornucopiæ	h	2	Smyrna	
52	Dactylis	h	5	Virginia	Brit. 2
53	Lagurus	h	2	Italy	
	Milium	h	8	Europe	Brit. 2
55	Muhlenbergia	ı h	1		
56	Panicum‡	s & h	34	E. and W. Indies	Brit. 5
57	Paspalum	h	6	America	
58	Phalaris§	h	. 13	Europe	Brit. 3
59	Phleum	h	5	Europe	Brit. 3
60	Rottboella	h	5	India	
61	Saccharum	h	5	Indies	
62	Stipa	h	9	Europe	Brit. 1

^{*} All the plants of this 2d. order, digynia, are grasses, and comprehends much the greater part; though there are others of different characters arranged in their proper classes, as in MONANDRIA, cinna,—DIANDRIA, anthoxanthum.—HEXANDRIA, oryza, ehrharta, galnia.—MONŒCIA, zea, tripsacum, coix, olyra, zizania, pharus.—DIŒCIA, restio.—POLYGAMIA, æziops, cenchrus, ischemum, aphuda, holcus, andropogon, manisuris, chrysitrix, spinifex.—Grass is defined to be a plant, having simple leaves, a stem generally jointed and tubular, a husky calyx. (called gluma) and the seed single. The leaves are food for cattle, the small seeds for birds, and the larger grain for man: none are poisonous. And it is observed, that nature hath so provided, that cattle (in grazing) seldom eat the flower intended to produce seed, unless compelled by hunger.

[†] Anthistiria is easily distinguished from all the known genera of grasses by its four-valved calyx, for the division of the calyx is very essential in forming the character of grasses.

[‡] Panicum arborescens, (tree panic grass) whose stem is scarce thicker than a goose quill, rises in India as high as the tallest trees.

[§] Striped riband grass, or reed grass, according to Linnæus, is phalaris arundenacra; according to Aiton, it is arundo colorata.

^{||} Though sugar is chiefly obtained from the saccharum officinarum, which is a perennial plant, yet several other vegetables secrete a sweet juice easily converted into sugar; as in America, a considerable quantity is obtained from the acer

No	Genera.	Growth. sp	Nº of pecies.	Nat	ive of	-	Species in Britain,			
	2d.	Flowers to	wo-flo	wered, s	tragglin	ıg.				
63	Aira	h	13 l	Europe			Brit. 7			
64	Melica*	h		Europe	onling.		Brit. 3			
65	Perotis	h		E. Indies	;					
	3d. Flowers many-flowered, straggling.									
66	Avena+	h 9	21 5	Siberia		17 11 9 94	Brit. 6			
	Arundot	s & h	6]	Europe			Brit. 4			
68	Briza	h		Europe			Brit. 2			
	Bromus		26 I	Europe			Brit, 12			
70	Festucas	h		Europe			Brit. 11			
	Poa	h :		Europe			Brit. 14			
72	Uniola	h	4 (Carolina						

saccharinum; in New Spain it is procured from the agave americana; it is likewise obtained from asclepias syriaca, and zea mays; in Kamshatska it is produced from heracleum syphonalylium, and fucus saccharinus—The museum of natural history at Paris, has received several plants of the violet sugar cane from Batavia, and the whits from Otaheite, which are said to yield a greater product than the common sort in the West Indies.

- * In melica, the rudiment of a third floret, standing upon a little footstalk between the other two florets, gives the essential character.
- † In avena, the essential character consists in the jointed twisted awn, growing from the back of the corolla.—Avena sativa (the common oat) which hath three varieties, black, white, and brown, is described as having two seeds in a calyx, but the white oat hath generally only one. The wild oat (avena fatua) is described as having three flowers in a calyx, but in England it hath generally only two seeds.
- †The drug in high estimation in India, as a refrigerant, called tabasheer, is said to be contained in the joints of the arundo bambos: and the arundo donax is imported into England principally from Spain, to be manufactured into weavers' slaics. The instruments used by the Turks and Persians, &c. in writing their beautiful manuscripts are formed of an Egyptian reed (arundo calamagrostis) which is much properer than our pens, to make those exquisitely fine strokes and flourishes, in which eastern manuscripts so greatly abound.—It is said that the male and female bamboo always grow together, and if one is felled, the other very soon dies.
- § The seeds of festuca fluitans (flote fesure grass) are gathered yearly in Poland, and from thence sent into Germany, and even to Sweden, and sold under the name of manna seeds, from their sweet and agreeable flavour. They are much used at the tables of the great, on account of their nutritious quality and pleasant taste. They make an excellent foundation for soup and puddings; and their mucilage, prepared with sugar and white wine, makes an excellent nourishment for invalids.

A practical Treatise on Diet, by Wm. Nisbet, M. D. 1801.

	No	Genera.	Growt	Nº o h. specie		ive of		Britain.	
,		4th.	Flowers	spikes,	with recep	otacle ar	vled.	-1 Le	
	73	Cynosurus	* h	13	Europe		ellinnu	Brit. 3	
		Elymus	h	10	Europe,	America		Brit. 3	
	75	Hordeum*	h	8	Italy	1		Brit. 3	
	76	Lappago	h	-1	I Q			ON EB	
		Lolium	h	4	Europe	ď		Brit. 4	
		Secale	h		Asia, Eur	ope		1100	
gia.	79	Triticum+	h	14	Europe		-	Brit. 3	
							/		

ORDER III. TRIGYNIA.

(THREE FEMALES.)

1st. Flowers beneath.

80 Eriocaulon	h	5	Brazils	Brit. I
81 Holosteum	h	-	Jamaica	
82 Koenigia	h	1	Iceland	

- * French, or pearl barley, is one of the species of barley (hordeum) with the husk taken off, by which means it becomes whitish, and somewhat of the colour of pearl.
- + In the memoir of M. le Marquis de Turgot on the different sorts of wheat (triticum) cultivated in some parts of Lower Normandy, he mentions that the stalks of several of the sorts are not hollow, but filled with pith.

 Royal Society of Agriculture at Paris, v. ii.—1785.

The common Lammas wheat (triticum hybernum) is described as having four flowers in a calyx, but it rarely happens in England that there are more than two or three seeds or corns, which number is most desirable, for if more, the corn is small.

Mr. Needham observed, that in the ripe pollen of every flower examined by the microscope, some vesicles are perceived from which a fluid had escaped; and that those, which still retain it, explode if they are wetted, like an colipile suddenly exposed to a strong heat. These observations have been verified by Spallanzani and others. Hence rainy seasons may make a scarcity of grain, by bursting the pollen of the flower of corn, before it arrives at the stigma of the flower. Botanic Garden.

If wheat is long masticated, or a little of the flour made into a paste with water, and then washed with the hands under water, which must be frequently changed, itill it is no longer discoloured, that is, till the mucilage and starch are washed from it, then what remains is called the gluten, which is indissoluble in either hot or cold water, and if the corn be good, is elastic, and will contract itself when drawn out; but if the corn hath begun to heat, it is brittle; and if the corn hath fermented, none of the gluten will be obtained, and the corn is then bad, and will not grow.

Phytologia.

TRIANDRIA.

No	Genera.	Nº of Growth. species		Species in Britain.				
	Lechea	2 nana) h 1	Canada	1-10				
85	Meborea (cor. Minuartia	h 3	Spain					
	Mollugo Montia	h 4 h 1	Ceylon, &c.	Brit. 1				
	Polycarpon Queria	h 2 h 2	Italy Spain	Brit. 1				
	Triplaris	s 2	America					
2d. Flowers above,								
91	Proserpinaca	h 1	Virginia					

CLASS IV. TETRANDRIA.*

(FOUR STAMINA OR MALES.)

Containing three orders.

ORDER I. MONOGYNIA.

(ONE FEMALE.)

No of Specie Brita 1st. Flowers one-petaled, one-seeded, beneath. 1 Choetocarpus h 1							
1st. Flowers one-petaled, one-seeded, beneath. 1 Choetocarpus h 1	IPPe						
1 Choetocarpus h 1							
2 Ernodea h 1							
3 Globularia s & h 7 Italy							
4 Hydrophylax h 1 Sea-shore							
5 Opercularia h 1							
6 Protea s 61 Cape of G. Hope							
7 Rhopala (3 pet.)							
2d. Flowers one-petaled, one-seeded, above, aggregate.							
8 Allionia 2 America							
9 Cephalanthus s 1 W. Indies							
10 Dipsacus h 4 France Brit	. 2						
11 Knautia h 4 Archipelago							
12 Labatia h 1							
13 Scabiosa h 34 Italy, &c. Brit	. 3						
3d. Flowers one-petaled, one-fruited, beneath.							
14 Ægiphila s 1 Martinico							
15 Aquartia s 1 America							

^{*}The stamina in this class being of equal length, is the distinction from the class didynamia, where they are two long and two short.

[†] One-fruited means a single seed-vessel undivided, containing several seeds.

					d toba
			N° of		Species in
No	Genera.	Growth.	species.	Native of	Britain.
16	Blæria	s	5	Cape of G. Hope	
17	Buddleia	S		W. Indies	
18	Callicarpa	S	3	Virginia, Japan	
19	Centunculus	h	1		Brit. 1
20	Exacum	h	4	India	
21	Lasiostoma	h	1.		
22	Myrmecia	h	, 1,	Employment .	
23	Penæa	S	. 8	Æthiopia	4 . 2
24	Plantago	h	24	Europe	Brit. 6
25	Polypremum	h	1	Carolina	
26	Scoparia	h.	3	America	
	-				

4th. Flowers one-petaled, one-fruited, above.

				The second secon
2	7 Catesbæa	S	1	Carolina
2	8 Chomelia	S	1	-
2	9 Embelia	S	1	· I di amentali.
3	0 Hediotis	s & h	6	Ceylon
3	1 Hossmannia	S	1	1 To the shift on the
3	2 Ixora	Silli	3	India, America
3	3 Mannettia	h	1	Mexico
3	4 Mitchella	S	1	Carolina
3	5 Oldenlandia	h h	10	America, Cape, &c.
3	6 Pavetta	S	2	India
8	7 Petesia	s	Q.	Jamaica
3	8 Sanguisorba	h	- 3	Canada . Brit. 1
_				

5th. Flowers one-petaled, two-grained, theneath.

39	Houstonia	h	2	Virginia
40	Scabrita	s	1	India

^{*} From the roots of oldenlandia umbellata is extracted that fine permanent red dye, so much admired in the India cottons; and it is said this plant is so valuable in Asia, that it is sold for a guinea a lb. It is called chay root, or East India madder.

[†] In sanguisorba officinalis (common wild burnet) are found small red tubercles on the root, which dyers frequently use instead of cochineal; and it is said they are also found on the roots of pimpinella saxifraga, (burnet saxifrage).

[‡] Two-grained, three-grained, &c. means, when the capsule is divided into two or three cells, &c. and a single grain or seed in each.

Species in

No of

No	Genera. Gr	owth.	Specie	s. Na	ative of	Britain.			
	6th. Flowers one-petaled, two-grained, above, starred.*								
41	Asperula	h	10	Europe		Brit. 2			
42	Crucianella	h		France,	Italy				
	Diodia	h	1	Virgina	T m	uitmoderat to			
	Galium	h	26	Europe		Brit. 11			
45	Knoxia	h	1	Ceylon		197 Summer			
	Rubia	h	5	France,	Italy	Brit. 1			
-	Scherardia	h	3	Europe		Brit. 1			
	Siderodendrum	h	1						
49	Spermacoce	h	8	Carolina					
7th. Flowers one-petaled, four-grained, beneath.									
50	Siphonanthus	ŝ	1	India					
			*			. III ment to			

8th. Flowers four-petaled, beneath.

51	Ammannia	- h	5	Jamaica	
52	Banksia	h	6	New Holland	
53	Blackburnia	h	1		
	Curtisia	S	1	Cape	
	Epimedium	h	1	Alps	Brit. 1
56	Fagara	S	5	Jamaica	
57	Hartogia	S	1	Cape	
58	Monetia		1	- ·	
59	Orixa		1	Japan	- 1111
60	Othera	s	1	Japan	
	Ptelea	S	2	America	
62	Rhacoma	S	1	Jamaica	
63	Samara	S	1	E. Indies	
64	Skimmia		1	Japan	

^{*}These are the plantæ stellatæ of Ray, having two naked seeds, and the leaves disposed round the stem in the form of a radiant star; and are held to be diuretic. There are several other starry plants than those above mentioned, which may be seen in the order stellatæ, of the Fragments of a Natural Method; viz. Phyllis, Richardia,valentia, anthospermum, hedyotis, lippa, ophiorhiza, spigelia, houstonia, oldenlandia, coffea, psychotria, cornus, ixora, pavettu.

00		TILL	16 11	INDICIA.					
No	Genera.		Nº o						
74.	Genera.	Frowth. S	peci	es. Native of Britain.					
	9th. Flowers four-petaled, above.								
65	Cissus	S	6	India					
66	Cornus*	t&h	9	Virginia, Canada Brit. t 1					
67	Embothrium	h	4	N. Caledonia, N. Holland					
	Ludwigia	h		Virginia					
69	Santalum	t	1	India					
	Trapa	h	2	Europe					
	1								
	10th	Flore	no år	ncomplete, beneath.					
		I wat	13 11	complete, beneath.					
71	Alchemilla	h	4	Sweden Brit. 2					
72	Camphorosma	S	5	Spain, Italy					
73	Cometes	h	1						
74	Dorstenia	h	4	America					
75	Krameria	S	1						
76	Louichea	h	1						
77	Nigrina		1	Japan					
78	Rivina	S	4	W. Indies					
79	Salvadora	S	1	Persian Gulf					
80	Struthiola	Ś	3	Cape					
	11th.	Flowe	rs	incomplete, above-					
			, '	The same of the sa					
	Acæna	S	1	Mexico					
82	Elæagnus	_ S	9	Spain, Japan					
	Gonocarpus		1	Japan					
	Isnardia	h	1	China, America					
85	Sirium	S	1						

^{*} The berries of the cornus sanguirea, when ripe, and laid in a heap to soften and heat a little, and the pulp then pressed, will yield an oil of a clear green colour, without smell or taste, and when mixed with sallad, cannot be distinguished from the best olive oil: when spread upon the surface of water, and exposed to the air for a month, it becomes a solid consistence, and of a white colour like wax, and with a wick, will burn with a white flame, without any sensible smell or smoke.

L'Hèritier in his description of the genus cornus, (printed at Paris, 1788) makes eleven species.—He leaves out the japonica of Linnæus, and adds three others lately found in America, viz. circinata, stricta, paniculata.—He says the cornus florida hath a febrifuge quality, and its decoction is not inferior to the cinchona officinalis, and the cornus mascula is the cornelian cherry; which some persons are fond of eating, as having an agreeable acid.

ORDER II. DIGYNIA.

(TWO FEMALES.)

	ANDRE		No of		Species in
No	Genera.	Growth.	Species.	Native of	Britain.
86	Alphanes	h	1		Brit. 1
87	Bufonia	h	1		Brit. 1
88	Cruzita		1 8	Spain, America	
89	Cuscuta*	h	3 1	irginia, Europe	Brit. 1
90	Galopina		· 1		
91	Gomozia		1 (Granada	
92	Hamamelis	s	1 1	/irginia	
93	Hypecoum	h	3 A	Archipelago	
94	Nertera	h	1		4

ORDER III. TETRAGYNIA.

(FOUR FEMALES.)

95	Coldenia	h	01.1	India	0, 1, 1, 1, 1,
96	Ilex†	t	10	Asia	Brit. 1
97	Myginda	S	1	America	
98	Potamogeton	h		Europe	Brit. 12
99	Ruppia	h		Sea-side	
100	Sagina	h	4	Europe, Virginia	Brit. 3
	Tillæa	h	4	Europe	Brit. 1

^{*} Cuscuta (dodder) is a parasitical plant, for it decays at the root, and is afterwards nourished by the plant that supports it: it will frequently twine round a thistle. It's spirals turn contrary to the motion of the sun; it bears no leaves, except a few small membraneous scales.

⁺ Ilex is very variable in the parts of fructification, and hath many varieties.

CLASS V. PENTANDRIA.

(FIVE STAMINA OR MALES.)

Containing six orders.

ORDER I. MONOGYNIA.*

(ONE FEMALE.)

N°	Genera.	Growth.	Nº of Species.	Nativ	e of	Species in Britain.
	1st	Flowers one-	-petalee	d, beneath	, one-seeded.	
2	Mirabilis Plumbag Weigela Xystris	S	4 S 1 J		y, Zeylon	
	, aget 3		Rough-		otto secucia.	- 1776
	Cerinthe Messersc	h himidia s&	2 I h 2 J			- 1 - 101
	3d. J	Flowers one-	petaled	l, beneath,	four-seeded	

Rough-leaved.

			_	,	
7	Anchusa	h	8	America	Brit. 1
8	Asperugo	h	2	Egypt	Brit. 1
9	Borago	h		Africa, India	Brit. 1
OÉ	Cynoglossum	h	14	Virginia, Peru	Brit. 1
11	Echium	s & h	16	Italy, &c.	Brit. 2
10	Heliotronium	e & h	17	Furane India Peru	

^{*} The berries of the monopetalous plants of this first order, are for the most part poisonous.—The rough-leaved plants are said to be glutinous and vulnerary: they are the asperifoliw of Ray, having four naked seeds.

Nº Genera.	Growth	Nº of species		ve of	Species in Britain,
13 Lithospermum	h	13	Europe, I	Peru	Brit. 3
14 Lycopsis	h	7	Virginia,	Egypt	Brit. 1
15 Myosotis	h & s	9	Virginia,	Peru	Brit. 1
16 Onosma	h	3	Siberia, I	ndia	
17 Pulmonaria*	h	6	Siberia	1-	Brit. 2
18 Symphytum	h	3	India		Brit. 2

4th. Flowers one-petaled, beneath, five-seeded.

19 Nolana h 5 Peru

5th. Flowers one-petaled, beneath, seed-covered. Capsules.

Surinam 20 Allamanda h Europe, Peru 6 21 Anagallis h rit. 2 22 Androsace h 6 Austria Swiss, Alps 23 Aretia S 3 India, Lapland 24 Azalea Brit. L S 25 Brossæa S 1 America 26 Chironia 10 Cape S 27 Convolvulust 68 W. Indies, Peru, &c. Brit. 3 h 28 Coris h 1 Europe 29 Cortusa 0 Alps Europe, India 30 Cyclamen‡ h 4 Brit. 1 China, Peru 31 Datura§ h 32 Diapensia h 1 Lapland

^{*} Pulmonaria officianalis (common spotted lungwort, or Jerusalem cowslip) with white spots distinct, on dark green leaves; with flowers in small bunches on the top of the stalks.—Pulmonaria paniculata, with flowers panicled, and confluent spots.

[†] Convolvulus jalapa (jalap) receives its name from Jalapa, a town in New Spain in South America, where it was first discovered — Convolvulus scammonia (secammony) is also a cathartic, and much of the same nature as jalap, but rather. The combinad that is so very troublesome a weed in gardens and the fields, and peatertates so very deep into the ground, is the smaller cornbinad, convolvulus arvensis.

I See note to arachis.

[§] Datura (thorn apple) is narcotic, and dangerous to be taken inwardly, but a cataplasm of its leaves and seeds are commended for burns.

No	Genera.	Growth.	Nº o		Species in Britain.
33	Dodecatheon*	* h	1	Virginia	
	Dorœna	1 1 1	1	Japan	
	Epacris	h		New Zealand	
	Galax	h	1	Virginia	
-37	Geniostoma	h	1		
	Hottonia	h	2	India	Brit. 1
39	Hydrophillum	h	2	Virginia, Canada	
	Hyoscyamus†		7	Syria	Brit. 1
	Ipomoea	h	- 28		
	Lisianthus	s	9	Jamaica, Peru	
43	Lysimachia	h	10	Levant, Japan	Brit. 4
44	Menyanthes!	h	4		Brit. 2
45	Nicotiana §	h &	s 10	America, Peru	
46	Ophiorhiza	h	2	E. Indies, America	
	Oribasia	h	1		
48	Patagonula	S	1	America	
49	Phlox	h	11	America, Peru	
	Porana	s	1	E. Indies	
51	Polemonium	h	5	America	Brit. 1
52	Primula	h	13	Europe	Brit. 3
	1			* * *	

* In the beautiful flower of the dodecatheon meadia, the pistil is very long, and the stamens are very short, hence the necessity of the flower hanging down, that the farina may fall on the stigma; but when the seeds are formed, the flower-stalks erect themselves to retain the seed.—In the same manner the crown-imperial, the dog-tooth violet, and several others, whose pistils are longer than the stamens, hang down their heads till the seed is formed, and then erect themselves. See note to bractees, page 33.

+ The roots of hyoscyamus niger (black henbane) are used for anodine necklaces; and in the leaf and stem exists a narcotic quality like opium, but not in the seeds.

Phytologia.

‡ Buckbean, bogbean, or bogbane (menyanthes trifoliata) is said to be a sovereign remedy for the rheumatism, if made into tea in a morning, and rather above half a pint warmed and drank every night, at going to bed.

Universal Museum, for June 1766.

§ Nicotiana tabúcum (tobacco) received the name of nicotiana in honour of M. Nicot, who introduced it to the Queen of Portugal.—See the number of seeds in a tobacco plant, under the word semina, one of the parts of the fructification.

|| Primula veris hath three varieties, viz. primula veris officinalis (cowslip) primula veris elatior (oxslips and polyanthus) and primula veris acaulis, (common primrose). In this genus primula, the stamina are very short, fixed in the tube of the corol; and are sometimes placed near the bottom of the tube, and sometimes

			N.To.	•	
No	Genera.	Growth.	Nº o		Species in Britain.
53	Retzia	S	1	Cape	
	Sheffieldia	h	1	Cape	
55		h		Alma	
			l	Alps	
50	Spigelia	h	2	Maryland	
57	Stephanium	h		•	
58	Theophrasta	S	1	America	46
	Verbascum	h	12	Italy, Phenicia	Brit. 5
60	Uncaria	h	1		
			Foll	licles.*	
61	Cameraria	8	2	W. Indies	
	Ceropegia	h	-	Malabar	1
	Echites	S	01	W. Indies, Peru, Jama	ioa
		h	70	Ceylon, Peru	irea.
	Nerium			W. Indies	
	Plumeria	S			
	Tabernæmon		10	E. & W. Indies, Peru	Brit. 2
07	Vinca	s & h	5	Madagascar	DIII. 2
			Be	rries.	
68	Arduina	S	1	Саре	
	Atropa	s & h	10	Europe, Peru	Brit. 1
	Bassovia	h	1	1	
	Bertiera	h	1		
	Bladhia	7	3	Japan, &c.	
	Blunsfelsia	S	1	America	
	Camax	ly ly	î		
	Capsicum†	h & s	7	E. & W. Indies, Peru	
10	Capsican	11 00 3		La. Co Lineiroty a crea	

near the top; when placed near the bottom, the style of the pistillum, with its stigma, rises without interruption between the stamina, so as to be equal with the mouth of the tube, and sometimes higher; this by florists is called pin-eyed, and considered as an imperfection; but when the stamina are placed near the top of the tube, they become even with the mouth, and in this case the style is kept low by the stamina filling the mouth of the tube; this is called thrum-eyed, and adds to the perfection of the flower.

^{*} See follicle under pericarpium; as also berry and drupe.

⁺ Capsicum annuum (Guinea pepper) hath many varieties.—In Ceylon they have a red pepper called chilly, which it is said makes cayenne, or Kiang pepper.—But it was lately asserted in a newspaper, that the composition generally sold as cayenne pepper, consisted of four tenths red lead, three tenths salt, and three tenths cayenne pepper; if this is fact, it must be very prejudicial to health. See note to cayenne pepper in index.

		W. 4		√o of	Species in	
	No	Genera. Grown	th. sp	ecies	Native of Britain.	
- 3	76	Carissa s		2	India	
,	77	Cerbera s		3	Brazils	
,	78	Cestrum s	1	1_	W. Indies, Peru	
1	79	Chrysophyllum t			W. Indies	
	80	Cordia s		6	W. Indies	
-	81	Cryptostomum h		1		
. :	82	Ehretia t		4	W. Indies	
1	83	Ellisia h		1	Virginia	
- (84	Fagræa			Zeylon	
1	85	Gynopogon s		1		
		Jacquinia s &	h	3	America	
	87	Laugeria s		3	America, Peru	
1	88	Lightfootia h		3		
		Lycium s	1	6	Spain, Africa, Peru	
-	90	Menais s			America ,	
1	91	Myrsine s		1	Africa	
-	92	Pæderia s		1	India	
-	93	Physalis* h	1	4	Spain, Peru	
į		Randia s			America, Peru	
	95	Rauvolfia s		5	W. Indies, Peru	
1	96	Schwenkfeldia s		1		
	97	Sideroxilon t		9	Æthiopia	
1	98	Solanum† h &	ts 8	35	America, Peru, &c. Brit. 2	
-	99	Strychnos‡ t			India, Peru	
1	00	Tournefortia s &	h 1	3	W. Indies, Peru	
1	01	Varronia s		6	America	
		404				

^{*} Physalis alkehengi (common winter cherry) is good against suppression of urine, and for promoting the expulsion of gravel;—five or six, or more of the cherries may be taken at a time.

[†] The fruit of the egg-plant (solanum melongena) broiled and eaten with pepper and salt, is held to be very delicious at Batavia. (Cook's Voyage). Solanum tuberosum is the common potatoe, of which there is a variety that produces potatoes on the stem, in the air, as well as under-ground; like the magical onion. In Barbadoes, &c. they make a drink from the potatoe root, called mobby.

[†] The seeds or nuts of the *strychnos nux-vomica* are used here to kill rats, and in the East Indies they are used in the distillation of the country spirits, to render them more intoxicating.—And the *strychnos potatorum* is used to clear muddy water, by rubbing the inside of the vessel with one of the nuts for a minute or two, and the impurity will soon subside; they are sold in the market for this purpose, and are constantly carried about by the soldiers in time of war; they are easier to be had than alum, and probably less hurtful.

Species in

Matira of

No of

No	Genera.	Growth	f. specie	s. Native of	Britain.				
* *	Drupes:								
103,	Ardisia Ignatia Tektona*	s h t	1 1 1	Madaira India Ceylon, E. Indies	100				
	6th. Flowers one-petaled, above.								
			Ca	psules.					
105	Bacopa	h	1 1	America					
107	Bellonia Campanula†	h	68	America, Peru	Brit. 8				
109	Chimarrhis Cinchona	h	1 13	Peru					
	Macrocneum Phyteuma	s h	6	Jamaica, Peru Europe	Brit. 1				
112	Portlandia Roella	s s &							
	Rondeletia Samolus	h	1	W. Indies, Asia Europe	Brit. 1				
116	Trachelium Virecta	h	3	Italy					
	Jeffersonia‡	Š	1	Georgia					
			B	erries,					
	Bæobotrys Cephælis	ŝ	1 1						
121		s s	3		Peru				
123	Erithalis	S	1	Jamaica					

^{*} Tectona grandis (teke tree) is the most useful timber-tree of Asia, being light, easily worked, and both strong and durable. For ship building it is esteemed superior to any other wood, and will last much longer than oak.

[†] In campanula (bell-flower) the pericarp is indeterminate, having various valves and cells in different species; and the flower, like many others, hath no tube below.

[†] Jeffersonia sempervirens was discovered by Dr. Brickell in Georgia; it is a twining shrub, flowers yellow, having a sweet odour, and continues many months.

[§] The W. India coffea shrub differs from the Arabian in the corolla; the former having four clefts, berries one-seeded; the latter five clefts, two-seeded.

1			Nº of		Species in		
No	Genera.	Growth.	specie	s. Native of	Britain.		
124	Gardenia* -	s	11	India, Coromandel, Pe	ru		
125	Genipa	S		America, Peru			
	Hamellia	S	1	America			
127	Lonicera	8	16	Alps, &c.	Brit. 1		
128	Matthiola	S	1	America			
129	Morinda	s & h	3	America			
130	Mussæenda	S	2	India			
	Plocama	S	1	Canary Islands			
132	Psychotria† Triosteum	h	30	Jamaica, Asia, Peru			
133 '	Triosteum	h	2	America			
	Drupes.						

Drupes.

134 Scævola s 1 India

7th. Flowers three-petaled, above.

Capsules.

135 Strelitzia s 1 Cape

8th. Flowers five-petaled, beneath.

Capsules.

136	Calodendram	t	1	Cape
137	Cedrela‡	S		America
138	Claytonia	8 .	3	Virginia, Siberia
	Diosma\$	S	18	Africa, &c.
140	Hovenia		1	Japan
	Itea	3 -	1	Virginia
142	Roridula	Ś	1	Cape
	Sauvagesia	lı	1	Jamaica

^{*} Gardenia thunbergia (the wild Cape jasmine) when in full flower, gives out so powerful a scent, that, in an evening, it may be felt for some miles.

⁺ Ipecacuanha is the root of phychotria emetica, of which there are two sorts, the Peruvian and the Brazilian, both of a brownish colour, but the first is said to be the best. There is also a white kind, which hath sometimes been imported, but is of a base sort, and hath not the same effects as the others.

[‡] This genus cedrela is very similar to swietenia.

[§] This genus diosma is various in sex, nectaries, and capsules.

970	C	۲.	IN C	
No	Genera. Growt	n.	specie	es. Native of Dinam.
		7	3erri	es.
144	Aquilicia s		1	India
145	Ceanothus s		3	America, Asia, Africa
146	Celastrus s		16	Virginia, Æthiopia
147	Euonymus		7	Virginia, Japan Brit. 1
148	Hirtella s		1	Basil
149	Rhamnus* s		27	Europe, Judea, Alps Brit. 2
150	Vitis† s		11	Europe, Japan
151	Mangifera, † drupe t		2	India
152	Corynocarpus, nut h		1	New Zealand
153	Brunia, seed 1 s		8	Africa
154	Kuhnia, seed 1 s		1	W. Indies
155	Nauclea, seed 1 t&	S	3	Oriental
156	Ruyschia s		1	
	Caroxylon, seed 1		1	
	Elæodendron, drupe		1	Oriental

9th. Flowers five-petaled, above.

159	Argophillum	h	1	New Caledonia
160	Carpodetus	h	1	
161	Conocarpus, seed 1	S	3	W. Indies

^{*}From the berries of the common buckthorn (rhampus catharticus) is made a very fine green colour, called by the French, verd-de-vessie, much esteemed by miniature painters.—Rhampus theexans is used by the lower people in China instead of tea.—The fruit of the rhampus xizyphus, (Jujube tree) in France and Italy, furnish part of the winter dessert for the table.

[†] Each corol of the vine (vitis vinifera) consists of five green petals, (appearing like a bud) which does not open at the top like other corols; but becomes detached at the base by the forcible advance of the stamina, and rises up along with them like a little hood or cowl, and then drops off, and the stamina expand themselves. Foreign currans or currants, or more properly Corinths, because they were chiefly cultivated about Corinth, are a very small sweet high-flavoured black or purple grape, generally without stones, (being a variety of the vitis vinifera) they are picked from the stalks and dried in the sun, and we have them now chiefly from Zante, an island in the Mediterranean sea, about twenty-four miles in length and twelve in breadth, and in common years is said to produce between nine and ten millions of pounds.

^{*} Mangifera indica (the mango tree) is inserted in this class, although in reality it is polygamous, and hitherto very imperfectly described; the Indian curry (a spicy powder) is not only obtained from the fruit of this tree, but they have curries made of fish, fowl, or the flesh of mutton and goat.

Boyd's Embassy to the King of Candy, in 1782.

Nº of	Consiss in
	Species in
- I was a second of the second	Native of Britain.
162 Cyrilla, capsules s 1 Carolin	na
163 Escallonia h 1 Ameri	ca
164 Gronovia, capsules h 1 Vera	Crux
165 Hedera, berry s 2 Canad	a Brit. 1
166 Heliconia, capsules h 4 Cape	
167 Lagoecia, seeds 2 h 1 Crete	
168 Phylica, berry s 12 Cape,	&c.
169 Plectronia, berry s 1 Cape	
170 Portulacaria h 1	
171 Ribes,* berry $s \left\{ \begin{array}{l} curr. \\ goos. \end{array} \right\}_{6}^{4}$ Amer	
10th. Flowers incomplete,	beneath.
172 Achyranthes, seed 1 s 9 India	*
173 Celosia, capsule h 11 China	
	•
174 Chenolea, capsule 1 175 Glaux, capsule h 1 Sea-si	de Brit. 1
176 Hedycrea, drupe s 1	
177 Illecebrum, caps. s&h 19 E. Inc	dies, Canada Brit. 1
1,, 2110000111111, 0,,,,,,,,,,,,,,,,,,,,	
11th. Flowers incomplete,	, above.
178 Thesium, seed 1 h 17 Alps,	&c. Brit, 1

ORDER II. DIGYNIA.

(TWO FEMALES,)

1st. Flowers one-petaled, beneath.

179	Melodinus, berry	Ş	1	New Caledonia
180	Rochefortia		1	
181	Schrebera	S	1	Cape
182	Steris, berry	S	1	Java

^{*} Ribes inerme (unarmed) are currants, of which there are four species; and ribes aculeata (prickly) are gooseberries, of which there are six species.

N. B. Linnaeus makes ribes of the neuter gender, when it refers to currants; and of the feminine gender, when it relates to gooseberries.

No Genera.	Nº o Growth. specie		Species in
Guicia	Growth specie	.s. Ivalive of	Britain.
	Follice	les*.	
183 Apocynum†	s&h 9	N. America, Siberi	
184 Asclepias	h 27	France, Spain, &c.	
185 Cynanchum	h 15	Spain, Cape, &c.	
186 Pergularia	s 2	India, Japan	
187 Periplocat	s 5	India, Africa	
188 Stapelia§	h 5	Cape	
		*	
	Capsu	iles.	
189 Cressa	h 1	Crete	
190 Dichondra	h 1		
191 Gentiana	h 39	Pirenean, &c.	Brit. 5
192 Hydrolea	h 1	America	
193 Swertia	h 6	Siberia	Brit. 1

^{*} See follicle under pericarpium,

‡ Periploca is from the Greek, and means round embracing.

§ Stapelia hirsuta (African swallow-wort) hath a foeted oftour so very like carrion, that the common flesh fly deposits its eggs on it, which are frequently hatched, but the maggots wanting proper food, die soon after. (See note to arum.) Mr. Masson, who hath been twice sent out to the Cape of Good Hope to collect various plants for the botanic garden at Kew, hath collected about forty species of the stapelia, ten of which he hath published (in 1796) with accurate plates and descriptions; and he purposes that the rest should follow in decades.

|| The species in gentiana greatly vary in the clefts of the corol; and according to Dioscorides obtained its name from Gentius a king of Illyria, who discovered its virtues: though sometimes the ranuculus thora hath been substituted for, or hath happened to be mixed with the gentian, as having a similar root, but hath had bad effects from it being a poisonous plant; it is known by being a darker colour on the outside, and not so yellow within.

[†] Apocynum androsæmifolium is called the catchfly apocynum, or dogs-bane, from its power in catching small flies by the converging of the anthers, and is thus in part described by Linnæus; it hath a nectarium with five corpuscules, glandular, oval, surrounding the germen; filaments five, very short; anthers five, oblong, erect, acute, two-cleft at the base, converging.—And as there are interstices at the bottom, between the short filaments, to give air to the nectarium, when a fly inserts its proboscis through those interstices to plunder the honey, in drawing it out to often gets between the forcible converging of the anthers, and in struggling upwards gets the faster entangled, as the anthers seem to converge gradually closer towards the top, and having sharp edges on the sides, prevent a return, and generally hold the fly till it dies; but if it is so fortunate as to make its escape, which is sometimes the case, it is probably by descending its proboscis to the place where it entered: sometimes the fly is caught by a leg.

Nº Genera.	Growth. sp	Nº o		Species in Britain.				
2d. Flowers five-petaled, above.								
194 Russelia		1	Cape					
195 Staavia	h	1						
196 Vahlia	h	1	Cape					
3d. F	lowers fix	e-p	etaled, beneath.					
	Ca	psu	iles.					
197 Anabasis, berry	y s & h	4	Spain					
198 Bumalda		1	Japan					
199 Coprosma		2	New Zealand					
200 Heuchera	h	2	America					
201 Linconia	S	1	Cape					
202 Nama	h	2	Ceylon, Jamaica					
203 Velezia	h	1	Europe					
. 4	th. Flowe	rs	incomplete.					
204 Beta	h	3	France, Germany	Brit. 1				
205 Bosea	S		Canaries					
206 Chenopodium*	s & h 9	20	Europe	Brit. 9				
207 Gomphrena	' h	8	India, Brasil					
208 Herniaria	s & h		Spain	Brit. 2				
209 Microtea	h	1	•					
210 Salsola	s & h 1	6	Europe	Brit. 2				
211 Ulmus	t	6	America	Brit. 1				
5th. Flowers five-petaled, above, two-seeded, umbelled.								

5th. Flowers five-petaled, above, two-seeded, umbelled.

A. With an universal and partial involucre.

212 Astrantia	h	5	Alps	
213 Danaa	h]	•	
214 Eryngium	h	9	Alps	Brit.

2

^{*} Chenopodium-see atriplex.

[†] These are the umbellate plants of Tournefort; and it is observed, that in dry soils they are aromatic, warm, resolvent, and carminative; but in moist places frequently poisonous. The virtue is in the roots and seeds.—Note, panax and arctopus (though umbelled) are placed in the class and order polygamia, diacia, as having the character of that class and order, though they have only five stamina. There are also a few other umbelled plants placed in different classes, as allium, opercularia, &c.

	1.1					
Na	Genera.	Growth	Nº of		Species in Britain.	
215	Hydrocotyle	h,	13	America, China	Brit. 1	
216	Phyllis	S	i	Canaries		
217 5	Sanicula	h	3	Canada, Maryland	Brit. 1	
	Spananthe	h	1			
	Flowers radio	ate;* j	Aoret	s of the disc abortive	*	
219	Artedia	h	1	Libanus		
	Caucalis	h	7	India	Brit. 2	
	Daucus	h	6		Brit. 1	
999	Echinophora	h	2	Apulia	Brit. 1	
993	Heracleum	h	7	Siberia, Alps	Brit. 2	
# W .	LICIACICALL		•	organia, raife		
	Flowers radio	ite; flo	rets	of the radius abortive		
224	Oenanthe†	h	5	Europe	Brit. 3	
	Flo	wers ra	diate	e, all fertile.		
WAY F					D:4 0	
225.	Tordylium,	h	. 7	Syria, Crete	Brit. 3	
	Flowers floscu	lous: †	Aore	ets of the disc abortiv	e.	
	Laserpitium	h		Europe	-	
227	Peucedanum	h	7	Alps, Japan	Brit. 2	
Flowers flosculous, all fertile.						
228	Ammi	h	3	Europe		
229	Angelica	h			Brit. 1	
	Anthamanta	- h		Sicily, Crete, China	Brit. 1	
	Bubon	s & h	4	Macedonia		
	Bunium	h	î		Brit. 1	
	Bupleurum	s & h	_	Æthiopia	Brit. 2	
234 (Cachrys	h	3	Sicily		
	Conium	h	4.	Africa	Brit. 1	
200	Communit	2.1		111100		

^{*}See radiate flowers explained in a note under the head of distinction of flowers.

 $[\]uparrow$ $Oenanthe\ crocata$ (water drop-wort) is one of the strongest vegetable poisons that is known.—See $laurel,\ cherry,$ in index.

[‡] See flosculous explained in observation to the head of the class syngenesia.

252 Carum

253 Smyrnium

Species in

Brit. 1

Brit.

No	Genera.	Growth.	species	. Native of	Britain'.		
236	Crithmum*	h	3	Pyrenean	Brit. I		
237	Cuminum	h	I.	Egypt			
	Ferula†	h	9	Europe, Canada			
	Haselquistia	h	2	Egypt			
	Ligusticum	h	7	Austria	Brit. 2		
	Selinum	h		Germany, Austria	Brit. 1		
	Sison	h		Canada	Brit. 4		
243	Sium‡	h	12	Sicily, Japan	Brit. 3		
	B. With only	y partie	al inve	olucres; no universal			
	Flor	vers sub	radia	te, all fertile.			
244	Æthusa	h	3	Europe	Brit. 2		
	Flowers ra	diate;	florets	s of the disc abortive.			
245	Coriandrum	h	2	Italy	Brit. i		
246	Scandix	h	10	Europe	Brit. 4		
	Fla	wers flo	sculo	us, all fertile.			
047	Cicuta	h	9	Canada	Brit. 1		
	Imperatoria			Alps	Brit. 1		
240	Phellandrium	- ĥ	2	Europe	Brit. 1		
	Seseli	ĥ	11	Europe			
Flowers flosculous; florets of the disc abortive.							
251	Chærophyllum	s & h	10	Europe	Brit. 2		
e. With no involuere; neither universal nor partial.							
	Flowers flosculous; florets of the disc abortives						
	-						

Europe

Egypt

h

^{*} The samphire used as a pickle is the British species (crithmum maritimum) and grows in the crevices of rocks by the sea-side; which is said to be a very wholesome and agreeable pickle; but the markets are too often supplied with a spurious sort, called golden samphire, (inula crithmifolia).

[†] The drug of asafætida is a gum resin of ferula asafætida. Ferula communis (giant fennel) grows plentifully in the kingdom of Naples, and is said to rise to the hight of twelve feet.

[‡] Sium nodiflorum (creeping water parsnep).—See note to sisymbrium.

No	Genera.	Caronath	Nº o		Species in
TM	Genera.	Growth.	Specie	S, Ivalive of	Britain.
		Flowers flo	sculo	us, all fertile.	
254	Anethum*	h	3	Germany	Brit. 1
	Apium†	h	2		Brit. 1
256	Econodium	ı h	1		Brit. 1
257	Cussonia {	5 petals h	2		
258	Pastinaca‡	h	3	Italy	Brit. 1
	Pimpinella§	h	7		Brit. 3
	Thapsia	h	5	Spain	
		ORDER	III.	TRIGYNIA.	
		(THRE	E FE	EMALES.)	
		1st. Flowe	rs ab	ove, five-cleft.	
261	Sambucus	t & h	6	Canada	Brit. 2
	Viburnum	S	19		
		2d. F/	lower	s beneath.	
	Basella	h	3		
	Pharnaceun		13	Asia, Africa	
	Reichelia	h h	1		
200	Xylophylla	1.	2		,
		Corol	ls five	-petaled.	
267	Alsine ¶	h	3	France	Brit. 1
	Cassine	s	3	Æthiopia, Ca	

^{*} Anethum (fennel and dill). Note, fennel only differs from dill, in the seeds not being bordered at the edge like those of dill.

[†] Selery (a species of apium) called apium dulce by other authors, not described by Linnæus, being only a variety from apium graveolens: The universal involucre is often wanting.

The gum resin called opoponax, is from the pastinaca opoponax.

[§] Aniseeds are from a species of pimpinella (pimpinella anisum).

^{||} Dr. Sims thinks there is no difference between the genus xylophylla and phyllanthus; and that they ought to be placed in the class and order monæcia, monadelphia.

[¶] In alsine media (the common chickweed) the stamina soon fall off, so that the flowers frequently appear with fewer than five. The young shoots and leaves, when boiled, are said to be very like spring spinach, and equally wholesome.

C. Court		Nº o	
Nº Genera.	Growth.	Specie	es. Native of Britain.
269 Corrigiola	h	1	France
270 Drypis	h	.1	Italy
271 Rhus*	S	26	'Italy, Spain, America
272 Salmasia	h	1	
273 Sarothra	h	1	Virginia
274 Semecarpus†	t	1	India
275 Staphyleat	S	2	Virginia Brit. 1
276 Spathelia		1	Jamaica
277 Tamarix	S		France, Germany
278 Telephium	h	2	France, Italy
279 Turnera	S	5	Jamaica

ORDER IV. TETRAGYNIA.

(FOUR FEMALES.)

280 Evolvulus 281 Parnassia§	h h	6	India	Brit. 1
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ORDER V. PENTAGYNIA.

(FIVE FEMALES.)

1st. Flowers above.

282 Aralia	s & h		China
283 Commersonia	h	1	Taheita
084 Glosconetalum	Q.	1	

	2nd. Flower	's veneain:	
285 Crassula 286 Gisekia 287 Statice	h . 1	Æthiopia, &c. E. Indies America	Brit. 3

^{*} The resin called gum copal, is from rhus copallinum; and the rhus coriaria was formerly much used for tanning leather, especially in Turkey.

⁺ Semecarpus-see anacardium.

[†] Staphylea pinnata (bladder nut) is sometimes strung for beads by Roman catholics, and children will sometimes eat them, though the taste is disagreeable.

[§] See note in page 7, under nectarium.

Nº	Genera.	Growth. Spec	~.	Species in Britain.
		Corols five	-petaled.	
289 290 291	Aldrovanda Drosera* Linum Mahernia Sibbaldia	h 1 h 8 h 22 s 2 h 3	Italy, India India, Cape Alps, Austria, Virg. Cape Siberia	Brit. 3 Brit. 5

ORDER VI. POLYGYNIA.

(MANY FEMALES.)

293 Myosurus†	h	1	Brit. 1
294 Shefflera	h	,1	

^{*} Sun-dew (drosera) derives its name from small drops of a liquor like dew, hanging on its fringed leaves, (which are purple) and continuing in the hottest part of the day, exposed to the sun. It is a very minute villous plant, usually growing entangled with moss on peat bogs; the leaves are curiously fringed with very numerous strong reddish hairs, terminated by small pellucid globules of viscous liquor, which occasion, by the reflection of the sun, that peculiar lustre from which its name is derived: It is in these hairs that the essential properties of the plant reside. For if a small insect should fix itself on one of the leaves, these hairs immediately begin to close one by one; the insect being held fast by the viscous juice of the smaller hairs, till the larger hairs, together with the edges of the leaf, close in and imprison it; in which state the insect is killed, generally in less than fifteen minutes, by the operation of the acrimonious juice exuding from the ends of the hairs.

[†] The number of stamens in *myosurus* varies greatly; it was formerly described as having five petals, but it was afterwards found they were five *nectaries*, and are now described as such, awled, petal-form. Sys. Veg. 14th edit.

CLASS VI. HEXANDRIA.*-

(SIX STAMINA OR MALES.)

Containing five orders.

ORDER I. MONOGYNIA.

(ONE FEMALE.)

Nº Genera.

Nº of Growth. species.

Native of

Species in Britain.

1st. Flowers calycled,+ furnished with calyx and corolla.

Corols one-petaled.

1 Agapanthus 2 Duroia 1 Cape

Corols three-petaled, or three-parted.

3	Bromelia	h	7	W. Indies
4	Burmannia	h	2	Ceylon W. Indies
5	Bursera	S	1	W. Indies
6	Hepetis	h	1	
7	Lachenalia		1	
8	Mnasium	h	1	
9	Tillandsiat	h	7	America
10	Tradescantia	\mathbf{h}	8	Virginia, Malabar
				-

^{*}The stamina in this class being of equal length, is the distinction from the class tetradynamia, where the stamina are four long and two short.—The bulbous roots in this class, according as they smell and taste, are esculent or noxious; as daffodil, hyacinth, fritillary, &c. having a disagreeable smell, are noxious; others are corrosive, as garlic, &c. but by roasting or boiling they lose great part of their acrimony, and become esculent. The roots of martagon, tulip, star of Bethlehem, &c. are esculent, having no smell.

⁺ The calyx in some genera is only a rim or border.

^{*} Tillandsia is a parasitical plant, and grows on branches of trees, like the misletoe; the seeds are furnished with many long threads on their crowns; which as they are driven forwards by the winds, wrap round the arms of trees, and thus are held fast till they vegetate.—This is very analogous to the migration of spiders on the gossamer, who are said to attach themselves to the end of a long thread, and rise thus to the tops of trees or buildings, as the accidental breezes carry them. (Botanic Garden, part ii. p. 56.) The tillandsia lingulata is a native of Jamaica, and

NTO of

No	Genera.	Growth.	Specie		Species in Britain.		
Corals five-petaled.							
			a co je	oc peracea.			
11	Frankenia		3				
		Corols si	r-pete	aled, or six-cleft			
12	Berberis*	s	4	Crete, Siberia	Brit. 1		
	Canarina	s	1	Canaries			
14	Capura	s	1	India			
	Cyrtanthus	s h	2	Cape			
	Hillia	s	. 1	America			
17	Leontice	h	4	Greece			
18	Loranthus	S	12	China, Europe			
19	Nandina		1	Japan			
20	Prinos	s	2	America			
21	Richardia	h	1	Vera Crux			
					*		
		Cor	ols to	welve-cleft.			
22	Achras	t	4	W. Indies			
2d. Flowers spathed, or glumed.							
23	Ehrharta	h	1	Africa			
	Co	rols above	, six-	petaled, or six-c	left.		
			17 17				

24 Amaryllis†	h ,	12	Spain, Italy, Cape		
25 Crinum	h	11	Africa, America, E. In	idies	
26 Galanthus	h	. 1	Europe	Brit. 1	
27 Hæmanthus	h	4	Guinea		

commonly grows in the fork of the greater branches of the wild cotton tree, and by the shape of its leaves catches and retains water from every shower; each leaf. resembles a spout, and at its base is a reservoir containing about a pint of pure water, where it remains sheltered from the wind and the sun, often yielding refreshment to the thirsty traveller in places where water is not to be procured.

^{*} See note to collinsonia.—Berberis vulgaris (common berbery) is said to be very hurtful to growing corn, and should not be planted near it, as at a certain period of its growth, it is apt to communicate its disease to a considerable extent. Panorama for January 1808.

[†] Amaryllis disticha is used by the Hottentots to poison the points of their arrows; it is called the mad poison, from its effects. Patterson's Journeys.

Nº of	Species in
No Genera. Growth. species. Native of	Britain.
28 Hypoxis h 13 Virginia, &c.	
29 Lanaria h 1 Cape	
30 Leucojum h 3 Germany	
31 Narcissus h 14 Eastern	Brit. 2
32 Pancratium h 9 Ceylon, Mexico, &c.	,
33 Pontederia h 5 Malabar	

Corols beneath, six-petaled.

	Allium* Aphyllanthes	h h	42	Europe, Canada Montpelier	Brit. 7
36	Bulbocodium Sowerbia	h	1	Spain New Holland	Brit. 1
	Tulbagia	h		Cape	

3d. Flowers naked (without calyx.)

39 Phormium h 3 New Zealand

Corols above, six-petaled, or six-cleft.

40		h	4	America
41	Alstroemeria	t & h	5	Italy, Peru
42	Gethyllis	h	4	Cape

^{*}The apparent and specific difference of the onion (allium cepa) from garlic, (allium sativum) is the swelling pipy stalk of the former being thicker in the middle than at either end.—Allium magicum (the magic onion) bears its bulbs on the top of the stem. See note to poligonum.

[†] The flower stems in some of the species of American aloe (agave) rise to the hight of above twenty feet: they are generally many years before they flower, but this greatly depends on the health of the plant, and heat of the climate: the flower stem rises from the centre of the radical leaves, which are closely folded over other, and until they are fully expanded, the stem cannot advance. It continues in flower by succession, two or three months; and then the whole plant dies. See note to corypha.

The Jamaica vegetable soap is prepared from the succulent leaves of the great American aloe or *coratoe* (agave Americana). The expressed juice is reduced to a thick consistence by being exposed to the sun, or boiling; and is then made up into balls with lye ashes, to prevent it sticking to the fingers, after which it may be kept for years, and will serve for use as well as Castile soap, and hath this superior quality, of forming a lather with salt water as well as fresh: one gallon of ruice will yield about one pound of soft extract.

NTO of

No	Genera.	Growth, specie		Britain.
	Corols	beneath, six	-petaled, or six-cleft.	
43	Albuca	h 5	Cape, Abyssinia	
44	Aletris	h 5 h 4	Cape	
45	Aloe*	h 12	Africa	
46	Anthericum	s & h 27	Greece, Japan, &c.	Brit. 3
	Asparagus	s & h 13	Cape, Asia	Brit. 1
	Asphodelus	h 3	Sicily	
	Convallaria	h 11	Japan, &c.	Brit. 3
50	Cyanella	h 3	Cape	
51	Dracæna	t & h 10	Cape, Madeira	
52	Erythronium	h 1	Hungary	
53	Fritillaria+	h 6	Persia, Pyrenees	Brit. 1
	Gloriosa‡	h 2	Malabar	
55	Hemerocallis	h 4	Hungary, Japan	
56	Hyacinthus	h 16	Italy, Austria, &c.	Brit. 1
	Lindera	1	Japan	
58	Lilium	h 10	Italy, America, Japan	m ()
59	Massonia	h 4	Cape	
60	Ornithogalum	h 22	Cape, Japan, &c.	Brit. 3
	Polianthes	h , 1	India	
	Pollia	1	Japan	
63	Scilla	h 12		Brit. 2
64	Tulipa	h 4	Spain, Dantzick	

^{*}The socotrine aloe (called so from the island Socotora in the E. Indies, where it is produced) is a gum resin from the aloe spicata (Sys. Veg. 14th edit.) and the hepatic or horse aloe, (which is chiefly from Barbadoes) is a coarser sort from the aloe perfoliata. Almost all the species of aloe have many varieties. The aloe of the shops is the inspissated juice of the leaves, which is said to be much used in the porter breweries.

⁺ Fritillaria imperialis (crown imperial).—See note to bractea, page 33.

[†] Gloriosa superba (called superb lily) is a climbing plant, foliis cirrhiferis) and the roots whereof are poison.—See Asiatic Annual Register for 1805. There is only one more known species, which Linnæus calls gloriosa simplex, with pointed leaves.

[§] The Marquis de Gouffier mentions a curious experiment he made with the hyacinth, by placing the stem downwards and the roots upwards in a glass, such as they are put in to blow in rooms; he found the stem would extend in the water, and the flower appear as perfect as in the air; from this experiment he supposed that the flower drew its nourishment from the interstices of the coats, and that the roots were of little use but to retain the plant in the earth.—No other bulbous plant will vegetate in the same manner.

Nº Genera.	No of Growth. species.	Native of Species in Britain.
65 Uvularia 66 Yucca	h 5 Bohen s 4 Americ	
,	4th. Flowers incom	nplete.
67 Acorus 68 Calamus	h 1 Hollan h 1 India	Brit. 1
69 Juneus 70 Orontium	h 22 Europe h 2 Virgin	ia, Japan
71 Peplis	h 2 Jamaio	ea Brit. 1

ORDER II. DIGYNIA.

(TWO FEMALES.)

72	Atraphaxis		S	2	Cape		
	Falkia		h	. 1	Cape		
74	Gahnia	0.0.1	h -	1			
75	Nectris	N.	h	1			
76	Oryza		h	1	E. and	W.	Indies

ORDER III. TRIGYNIA.

(THREE FEMALES.)

1st. Flowers beneath.

77	Colchicum*	h	3 Spain	Brit. 1
78	Helonias	h	2 Pensilvania	13.5
79	Madeola	h	2 Africa, Virginia	

^{*} The hermodactyls of the shops, is supposed to be the root of a species of colehicum, called colchicum variegalum. The colchicum autumnale (common meadow saffron, called so from its similarity to the autumnal crocus, which produces the saffron) is impregnated when it flowers in autumn, which matter of impregnation descending down the tube of the pistillum to the germen within the bulb, is there maturated during winter; the plant then shoots up again in spring to disperse the seeds, with only leaves and a fruit-stalk with a capsule of three lobes, containing the seed, so that this plant produces its purple flowers in autumn, and its leaves and fruit in the spring following. The bulbs of this plant are poisonous, but are given with caution in some pestilential and putrid cases; and also in a dropsy, in the form of an oxynel, with honey and vinegar. (N. B. This plant hath many varieties). See its effects in an inveterate dropsy, in the Universal Museum for June, 1766.

Nο	Genera.	Growth	Nº of species		Species in Britain,
80	Melanthium	h	8	Cape, America, Si	iberia
81	Rumex	s&h	31	Egypt, Alps, &c.	Brit. 11
82	Scheuchzeria	h	1	Helvetia	
83	Triglochin	h		Europe	Brit. 2
	Trillium	h'	3	Canada	
85	Wurmbea		1	Cape	
		2d.	Flow	ers above.	

86 Flagellaria s 1 Java

ORDER IV. TETRAGYNIA.

(FOUR FEMALES.)

87 Petiveria 2 W. Indies

ORDER V. POLYGYNIA.

(MANY FEMALES.)

h 8 Europe Brit. 3 88 Alisma

M

CLASS VII. HEPTANDRIA.

(SEVEN STAMINA OR MALES.)

Containing four orders.

ORDER I. MONOGYNIA.

(ONE FEMALE.)

Species in Britain.
Brit. 1

ORDER II. DIGYNIA.

(TWO FEMALES.)

5 Limeum h 2 Africa

ORDER III. TETRAGYNIA

(FOUR FEMALES.)

6 Aponogeton* h 2 E. Indies 7 Saururus h 1 Virginia

ORDER IV. HEPTAGYNIA.

(SEVEN FEMALES.)

8 Septas h 1 Cape

^{*}The stamens in aponogeton are uncertain as to number, being from 6 to 1%

CLASS VIII. OCTANDRIA.

(EIGHT STAMINA OR MALES.)

Containing four orders.

ORDER I. MONOGYNIA.

(ONE FEMALE.)

No	Genera.	Growth.	Nº of species	. Native of	Species in Britain.
		1st. I	lowe	rs complete.	
	6	Cor	ols or	ne-petaled.	- 1 OF
1	Erica	s & h	74	Many places	Brit. 4
2	Michauxia	h	1		
3	Vaccinium	s	15	Europe	Brit. 4
		Cord	ls fo	ur-petaled.	
4	Allophyllus	S	1	Ceylon	
	Amyris*	s	9	Carolina	
	Anticorus	S	1	Arabia	
7	Combretum	· s	2	America	51
8	Elaphrium	h	1		
9	Epilobium	h	7	Alps	Brit. 7
10	Gaura	h ·	1	Virginia	
11	Grislea	S	1	America	
12	Guarea	S	1	Brasils	
13	Hedwigia	S	1		
14	Jambolifera	S	1	India	
15	Lawsonia†	s	3	Egypt, India	

^{*} Amyris opobalsamum is a native of Arabia, (of the same genus with the balm of Gilead) the juice, when first extracted from the tree, is white, it then becomes green, and afterwards gold colour, which tarnishes as it grows old. It is often mixed with the turpentine of cyprus, but the cheat may be discovered by pouring it into a basin of water; when pure, it turns yellow, dissolves, and unites with the water, afterwards it disengages itself, and rises to the surface as white as milk; but if adulterated, it falls to the bottom, to which it adheres without changing colour.

⁺ Lawsonia inermis, called in Egypt henna or alhenna, a shrub like privet, with the juice of which they stain the nails of their hands and feet of a bright yellow colour.

No

Genera.

16 Melicocca

40 Skinnera

42 Valentinia

41 Stellera

1 America

Native of

Growth. species.

Species in

Britain.

20	Michelecca	0	7	America	
17	Melicope	h	1		
18	Menecylon	S	1	Ceylon	
19	Œnothera	s & h	10	America	
20	Ophira	S	1	Africa	
21			2	Ceylon, China	
29	Rhexia	h	5	Virginia	
29	Ximenia	S	2	America	
		Corols	five	-petaled.	
01	Bæckea			China	
	Ephielis	s h	1	Cillia	
06	Hypelate	h	1		
27		-14	1		
	Tropæolum	h	4	Peru	
-			-	44	
	Coro	ls eight pe	etal	ls, or eight-cleft.	
	Chlora	h	4	Italy	Brit. 1
30	Fuchsia*	s & h	3	America	
31	Mimusops	S	2	India	
		1 7777			
	2	id. Flowe	rs a	incomplete.	
	Calyx four	or five le	ave:	s, or four or five cle	ft.
39	Athenæa, cal. 6	parts h	1		
33		leaf	1		
34			17	Alps, India	Brit. 2
35	Direa, no calyx	t	1	Virginia	
	Dodonæa	s	2	India	
37	- A 74	S	11	Africa	
	Lachnæa	S	2	Æthiopia	
39		s & h	13	Cape	
	CI.	h	7		

1

2

Germany

h

h

^{*} Both in the Gen. Plan. and in the Sys. Veg. fuchsia is described as having no calyx; but Mr. Aiton, in Hortus Kewensis, describes the fuchsia coccinea as having calyx 1-phyllus, coloratus, corollifer, maximus; petala 4, parva; bacca infera, 4-locularis, polysperma.

ORDER II. DIGYNIA.

(TWO FEMALES.)

No	Genera. G	rowth.	Nº.of species.	Native of	Species in Britain.
		Corols	four	-petaled.	
	Codia		1	Mountains	
45	Galenia, cor. non Moehringia	e s h		Africa Alps	
	Schmiedelia	S	1	E. Indies	
47	Weinmannia	S	4	Jamaica	

ORDER III. TRIGYNIA.

(THREE FEMALES.) '

Corols four-petaled.

48	Cargiospermum	S	2	America
49	Paullinia	S	15	E. & W. Indies
50	Ponæa	h	1	
51	Sapindus	t	. 4	E. & W. Indies

Corols none.

52	Coccoloba	t	7	Barbadoes	
53	Polygonum*	s & h	31	America, E. Indies	Brit. 10

ORDER IV. TETRAGYNIA.

(FOUR FEMALES.)

Corols four-petaled.

54	Adoxa, 4 or 5 cleft	h	1	Dantzick	Brit. 1
	Elatine	h		France	Brit. 1
56	Haloragis	h	1	New Caledonia	
57	Paris	h	1	Dantzick	Brit. 1

^{*} The root of polygonum bistorta (bistort) is one of the strongest vegetable bitters. (See tormentilla). The stamens are uncertain as to number. The polygonum viviparum (viviparous bistort) receives its name from its producing (after impregation) a living offspring of buds instead of seed, which, when ripe, fall to the ground and grow.—The same occurs in the allium magicum (the magic onion) and other bulbiferous plants; only, the one bears buds, and the other bulbs.

CLASS IX. ENNEANDRIA.

(NINE STAMINA OR MALES.)

Containing three orders.

ORDER I. MONOGYNIA.

(ONE FEMALE.)

TATO OF

			TA., OI			č	pecies in
No	Genera.	Growth,	species.	Na	tive of		Britain.
1	Anacardium*	t	1 1	E. & W	. Indie	es	
2	Cassyta	h		ndia			
3	Laurus†	S	16 I	ndia, P	ersia		
4	Tinus	s	1	W. Indi	es		_
	* 1	ORDEF	R II.	TRIGY	NIA.		
		(тня	EE FI	EMALES	s.) -		
5	Rheum	h	7 (China, A	Asia		

ORDER III. HEXAGYNIA.

(SIX FEMALES.)

Europe

6 Butomus h 1

Brit. 1

^{*}The milky juice of the true anacardium occidentale (Cashew nut) will stain linen of a deep black, which cannot be washed out; and Mr. Miller says, the inspissated juice of the tree is the best sort of lack, which is used for staining of black in China and Japan.—The semecarpus anacardium is used for the same purpose.

[†]The true cinnamon is the bark of the laurus cinnamomum; and the base cinnamon, which is often sold for the true, is the bark of the laurus cassia.—The commercial drug, camphor, is obtained from another species of laurus; called laurus camphora; but camphor may be also obtained, in small quantities, from the roots of zedoary, thyme, rosemary, sage, anemony, &c. by distillation. Thyme and peppermint, slowly dried, afford much camphor. (Gregory's Economy of Nature, v. iii. p. 52). Laurus benzoin from Sumatra, is said to be the true benzoin of the shops.—Phil. Soci. at Haarlem.—See terminalia benzoin. The stamens in laurus vary as to number. Laurus nobilis is the laurel of the antients, the berries of which are an article of commerce, and are esteemed carminative, &c.

CLASS X. DECANDRIA.

(TEN STAMINA OR MALES.)

Containing five orders.

ORDER I. MONOGYNIA.

(ONE FEMALE.)

No of Species in No of Species in No Genera. Growth. species. Native of Britain.

1st. Flowers many-petaled, irregular.

	Anagyris	S	3	Italy
2	Bauhinia	S	8	E. & W. Indies
3	Cæsalpinia	t	3	E. & W. Indies
4	Cassia	s & h	38	E. & W. Indies
5	Cercis*	S	2	Italy, Canada
6	Dictamnus†	h	2	Cape, Germany

^{*} Cercis siliquastrum (Judas tree) is supposed to be the tree on which Judas hanged himself, from whence the name.

⁺ If a candle is applied to the stalks of the fraxinella (dictamnus albus) which are covered with a kind of resinous matter, it will burn like spirits of wine, until all the essential oil is consumed, without burning the stalks; and it is said, the atmosphere which floats around the fraxinella is inflammable, supposed to arise from an exhalation of its essential oil. (See preface). For all essential oils are inflammable, and perhaps may be only different modifications of that universal inflammable oil called petroleum (oil of petre, or rock oil) which is extremely subtle and volatile, and as it is plentifully diffused in the atmosphere, and found more or less in many different bodies, is supposed to invade and be a constituent part in almost all bodies, in some form or other. (See William's Natural History of the Mineral Kingdom, v. i. printed in 1789). Petroleum is perhaps a principal ingredient in all bituminous matter, as coal, amber, &c.; and being brought down from the rocks and mountains in Persia, Tartary, &c. is found floating on the surface of certain springs and lakes under the name of naphtha, which is so very inflammable, that if a lighted candle be held near to the surface of the water, it immediately takes fire to a considerable extent. There is also a well at Ancliff near Wigan, in Lancashire, called the burning well, the surface of which will flame on application of a candle (though the water is very cold) which is said to be petroleum issuing from the neighbouring coal mines.—There is also a similar phænomenon in the western parts of Virginia, called the burning spring. This oil is also found in several other parts of America, either floating on water, or issuing out of the ground, particularly in Barbadoes, where it is called Burbadoes tar.

No	Genera.	Growth. s	Nº of species.	Native of	Species in Britain.
8	Guilandina* Hymenæa†	s t	1 W	& W. Indies Indies	
	Myroxylon‡ Parkinsonia Poinciana§			ru . Indies & W. Indies	
12 13	Rhodora Sophora	s & h 1	1 13 Le	vant, Cape, &c.	
14	Toluifera	t	1 S.	America	

2d. Flowers many-petaled, equal.

	`			
15	Adenanthera	t	2	India
	Bergera	S	1	Africa
	Chalcas	S	1	India ·
18	Clethra	S	1	Carolina
	Cynometra	S	2	India
20	Dionæa¶	S	1 -	Carolina
21	Ekebergia		1	Cape
22	Fagonia	h	3	Crete, Spain, Arabia
23	Guajacum	t	3	
24	Hæmatoxylon	t	1	Campechy
25	Heisteria	8	1	
26	Jussieua	S	6	Lima, India
27	Ledum	S	1	Europe
28	Limonia	S	3	India

^{*}On the Malabar coast, the roots of guilandina moringa are scraped and used as horse-radish, and have much the same taste. Though this tree is considered as a species of the genus guilandina, it seems to be erroneous, as there are nine stamina, five of which are fertile, and four barren.

⁺ The resin called gum anime is from hymenæa courbaril.

[‡] The balsam of Peru is from myroxylon peruiferum.

[§] Flower fence, (poinciana) is so called, because they make fences with it in Barbadoes to divide land: it hath a beautiful flower, and is armed with spines.

^{||} The balsam of tolu is from toluifera balsamum.

[¶] Dionea muscipula is a very remarkable sensitive plant, having succulent leaves, which spread upon the ground, and at the end of each leaf are two lobes, or lips, an inch broad, fringed on the margin with a row of stiff hairs; and on a fly or any thing being introduced between them, they immediately close; hence the specific name muscipula (fly-trap) nor do they open again while the dead animal continues there, whence it is supposed to contribute to the nutriment of the plant.

^{||||} Gum guajacum is from guajacum officinale. -- See buxus.

	1 0		Nº of			Species in
No	Genera.	Growth.	Specie	S.	Native of	Britain.
29	Melastoma	s	15	Ameri	ica, Malab	ar
30	Melia*	t	2	Syria,	Spain, Ce	ylon
31	Monotropa	h	2	Canad		Brit. 1
	Murraya	s	2	E. Ind	dies	
33	Myrospermun	i h	1			
34	Petaloma		1			
85	Prosopis	t	1	India		
36	Pyrola	h	6	Europ	e	Brit. 3
	Quassia+	S	2	Surina		
38	Quisqualis	S	1	India		
	Ruta -	S	5	Batav	ia, Europe	
40	Swietenia [†]	t	1	Ameri	ica	
41	Thryallis	Š]	Brasil		
42	Tribulus§	h	4	Jamai	ca, France	Te-
	Trichilia	Š ·	3	Jamai		
44	Turræa	s	1	E. Inc	dies	
45	Zigophillum.	s & h	11	Syria,	&c.	

^{*}The melia azedarach is greatly esteemed in Ceylon: it is an admirable succedanium for the cinchona officinalis, and its leaves are very obnoxious to moths and other insects.

⁺ Quassia is said properly to belong to dioecia decandria; especially as to some of the species, as the quassia simarouba is of two houses. It is said that the root of quassia is more certain than the bark in the cure of intermittents, as it will stop vomitting, and stay on the stomach when the bark will not; the dose is a dram, either with or without Virginia snake root. Quassia polygama is mentioned as a species to quassia in the "Transactions of the Royal Society of Edinburgh," vol. 3, though it is not in the Sys. Veg. and is also of two houses. It is a native of Jamaica and other western islands, and grows to a very large tree, above 100 feet in hight, and 10 or more feet in circumference. It is called bitter wood, or bitter ash, as both bark and wood are intensely bitter, but especially the wood. It is also given in fevers and agues, either alone or with the bark; the dose is from 15 grains to a dram. The bark of this tree hath for some time been exported to England in considerable quantities for the purposes of the brewers of ale and porter; and is said to be sold in London for the quassia amara, and answers all the same purposes: but the stem of the quassia amara never exceeds two inches in diameter, and is very scarce and dear. Linnæus says it received its name from a slave called Quassi, who first discovered its virtues.

[‡] The genus swietenia is very similar to cedrela.

[§] This seems to be the same plant mentioned by Virgil, under the name of tribulus. It is called in English caltrops, from the form of the fruit resembling those instruments of war, strewed in the enemies' way to annoy their horses. It is a troublesome weed amongst the corn in some parts of France and Spain, annoying the feet of the cattle with its strong prickles. The species is tribulus terrestris.

No	Genera. G	rowth.	No c	of es. Native of	Species in Britain.					
3d. Flowers one-petaled, equal.										
46 A	ndromeda	s	16	Alps, Lapland	Brit. 2					
47 A	rbutus*	S	9	Acadia, Spain	Brit. 3					
48 C	odon	h	1	Royen						
49 E	pigæa,	S	1	Virginia						
	aultheria	S	2	Canada	,					
	nocarpus	S	1	Taheite						
52 K	almia†	S	2	Virginia						
53 N	licandra		1							
54 R	hododendron	S	7	Alps, America						
55 S	tyrax	t	ŀ	Italy						
	4th. Flowe	rs wi	thou	t petals, or incom	pletes					
56 B	ucida	S	1	Jamaica						
57 C	asearea		1							
58 C	opaifera.	3	1	Brasil, Antillas						
59 C	rudia		1							
60 C			1							
61 D		S	2	Cape						
62 S	amyda	S	5	W. Indies						
ORDER II. DIGYNIA.										
		(TW	O F	EMALES.)						
Corols none.										
63 C	hrysosplenium	h	2	Germany	Brit. 2					
64 S	eleranthus§	h	3	Germany	Brit. 2					
65 T	rianthema	h	3	Jamaica						
		Core	ds or	ne-petaled.						
				~						

Cape

66 Royena

^{*} The arbutus uva ursi (bear-berries) is an evergreen, and very common in Spain, but is called by different names in different districts, the most common name is gayubal; it is in high fame in calculous and scorbutic cases. Dillon's Travels through Spain, printed 1782.

[†] Kalmia-see note to collinsonia.

[#] Balsam capaibi is from copaifera officinalis.

[§] The Scleranthus perennis is the plant on which the coccus polonicus (German cochineal) is found.—See coctus and quercus.

Brit. 8

Ø.7			Nº o		Species in			
No	Genera.	Growth	speci	es. Native	of Britain.			
Corols five-petaled.								
67	Cunonia	S	1	Cape				
	Dianthus*	s & h	22		Brit. 6			
69	Gypsophila*	s & h	12	France, Spai	n			
70	Hydrangea	S	2					
	Mitella	h	2					
72	Saponaria‡	h	8	Crete	Brit. 1			
73	Saxifraga	h	42	America, &c	Brit. 9			
	Tiarella	h	2	America				
	ORDER III. TRIGYNIA.							
		(THRE	E FI	EMALES.)				
75	Banisteria	S	7	W. Indies, F	Bengal			
	Erythroxylon, a	lru. s	2					
	Garidella	h .	1	Italy				
	Malpighia, berr	y t	. 9	W. Indies				
79	Triopteris	\$	1	Jamaica				
,-,-	X.	~	,	77 7				
		Capsu	tes of	ne-celled.				
80	Arenaria	h	26	Bavaria, Aus	tria Brit. 8			
	Stellaria	h	9	Europe	Brit. 3			
	, , , , , , , , , , , , , , , , , , , ,	0 1						
		Capsule	es the	ree-celled.				
89	Cherleri	h	1	Alps,	Brit. 1			
	Cucubalus	h	1.5		Brit. 4			
	Deutzia	**	1	Japan				
	Hiræa	s	1	Carthagena				
00			_		T 1. 0			

Crete, Egypt

86 Silene&

^{*} Formerly only those plants with broader-leaves were called sweet William, (under dianthus barbatus); and those with narrower leaves were called sweet John.

⁺ Gypsophila struthium is the plant or shrub, Linnæus tells, was used by the antients instead of soap, and that it is now used in Spain for the same purpose.

[‡] Saponaria officinalis (common soap-wort) so called as being used in a decoction to scour and cleanse woollen cloths; and poor people in some places use it to wash with instead of soap.

[§] Silene muscipula, silene armeria, and lychnis viscaria, are called catchflies, from a viscous matter surrounding the stalk for about an inch in length below the flower, which will detain small flies and insects.

ORDER IV. PĖNTAGYNIA.

(FIVE FEMALES.)

			Nº of		Species in
N	Genera.	Growth.	specie	es. Native of	Britain.
8	Agrostemma	h	4	Europe	Brit. 1
88	3 Averrhoa*	s	2	India	
8) Bergia	h h	2	Cape	
	Cerastium	h	16	Alps	Brit. 8
9	1 Cotyledon	h	15	Cape, Siberia	Brit. 2
	2 Forskohlea	h	3	Cape	
	3 Grielum	s	1	Æthiopia	
9	4 Joncoquetia	h	1		
	5 Lychnis†	h	10	Siberia	Brit. 3
9	6 Oxalis	h	26	Africa, America	Brit. 1
- 9	7 Penthorum	h	1	Virginia	
9	3 Sedum	h	20	Europe, &c.	Brit. 8
	9 Spergula	h	5	Europe	Brit. 4
10	O Spondias‡	t	2	W. Indies W. Indies	
	1 Suriana	s	1	W. Indies	

ORDER V. DECAGYNIA.

(TEN FEMALES.)

102	Neurada	h	1	Egypt, Arabia America
103	Phytolacca	s & h	4	America

* Averrhoa carambola is a remarkable sensitive tree, similar to some species of mimosa; it grows in Bengal, and is there called camruc or camrunga. The stamina are ten, yet only the five longer have antheræ; the leaves are alternately pinnated, with an odd one; the moving quality is only in the leaves (not the petiole) which will bend down from the petiole so as to touch one another with their under sides, yet the petiole is the sensitive part which must receive the touch, or be some way injured by it, to affect the leaves; the touch must be by striking the part with the hail or any hard body, for if the branch is moved gently by the hand or wind, no motion takes place: after sun-set the leaves go to sleep, by bending down from the petiole, so as to touch by their under sides: the other species of this genus have no sensitive power. Philo. Trans. vol. 75.

In the 8th edit. of Gen. Plant. averrhoa is placed in monadelphia decandria.

- † In bachelor's button (lychnis dioica) the male and female flowers grow on different plants.
- ‡ The wood of the spondias mombin is so soft and spongeous, that it is used to stop bottles instead of cork; and is said to be brought to England for that purpose.

CLASS XI. DODECANDRIA.

(TWELVE STAMINA OR MALES.)

This class, although its title is expressive of twelve stamina only, consists of such plants as are furnished with any number of stamina from eleven to nineteen inclusive. And it is also to be observed, that in this class the stamina are fixed to the receptacle, but in the next class they are fixed to the calyx or corolla.

Obs. The reason of the chasm in the classes from ten to twelve stamina, is, that no flowers have yet been found with only eleven, so constant as to form a class. Reseda hath sometimes only eleven, but ofter more, yet never exceeding fifteen.

This class contains five orders.

ORDER I. MONOGYNIA.

(ONE FEMALE.)

No	Genera.	Growth.	Nº of species	Native of	Species in Britain.
			Corol	s none.	1 2
1	Asarum	h	3	Canada, Europe	Brit. 1
2	Bocconia	S	1	Jamaica	
3	Hudsonia	s	1	Virginia	
	Tomex		1	Japan	
		Corols fou	r-peta	led, or four-cleft.	
5	Apactis		1	Japan	
	Cratæva	t	3	Indies	
7	Garcinia*	t	3	E. Indies	

^{*} Garcinia mangostana (mangostan or mangosteen) is about the size of an orange, the inside is divided like the orange, by several thin partitions, in which the seeds are lodged; surrounded by a pulp of most delicious flavour; and is esteemed one of the richest fruits in the world.—See the note to annovar.

No	Genera.	Growth.	Nº o		Species in Britain,				
8	Halesia	S	2	Carolina					
9	Rhizophora*	S	6	India					
		Core	ols fi	ve-petaled.					
10	Canella†	t	1	America					
	Dodecas	S	1	Surinam					
	Eurya		1	Japan					
	Nitraria	S	1	Volga					
14	Peganum	h	2	Assyria					
15	Portulaca	h	10						
	Triumfetta	S	4	Indies					
17	Vatica	S	1	China					
		Cor	ols s	ix-petaled.					
18	Banara	h	1	,					
19	Blakea	s	2	Jamaica					
	Ginora	s	1	America					
21	Gethyllis	h	1,	Africa					
22	Lythrum	s & h	15	America, &c.	Brit. 2				
		Coro	ls se	ven-petaled.					
23	Befaria	h	2	New Granada					
		Cor	ols (eight-cleft.					
24	Bassia	h	2	Malabar					
	Corols ten-petaled.								
25	Decumaria	S	1	Barbary					

^{*} Rhizophora candel is called the kandel or candle of the Indians, because the wood, which is very solid and heavy, makes the clearest, most ardent, and durable fire, of any other materials.

⁺ The bark called canella alba, is from canella alba.

ORDER H. DIGYNIA.

(TWO FEMALES.)

No	Genera.	Growth.	Nº of species.	Native of	Species in Britain.
	Agrimonia*	h	4 Eu	rope	Brit. 1
27	Heliocarpus†	t	1 Am	erica	7 9 00

ORDER III. TRIGYNIA.

(THREE FEMALES.)

28 Euphorbia	s & h 69	Canaries, &c.	Brit. 11
29 Pallasia‡	s 1	Caspian Sea	
30 Resedas	h 12	France	Brit. 2
31 Tacca	h 1	E. Indies, Taheite	
32 Visnea	s 1	Canaries	

ORDER IV. PENTAGYNIA.

(FIVE FEMALES.)

33 Glinus

h 2 Spain

ORDER V. DODECAGYNIA.

(TWELVE FEMALES.)

84 Sempervivum s & h 8 Canaries

Brit. I

^{*} In Agrimonia the stamens are very uncertain in number, are often under 12.

⁺ Heliocarpus, (sun-fruit) called so from the capsule being surrounded with threads representing rays.

[‡] Pallasia—see note to calligonum.

[§] Searce any genus in which the character is more difficult to determine than in reseda, for it varies both in number and figure in different species. The essential character consists in the petals being three-cleft, one at the base being melliferous, and a capsule not closed, but always gaping.

CLASS XII. ICOSANDRIA.

(TWENTY STAMINA OR MALES.)

The plants of this class furnish most of the eatable fruits in esteem; none are noxious except the *cherry-laurel*. The flowers bear the following character:

- 1st. A calyx of one leaf, and concave.
- 2d. The corolla fastened by its claws into the inner side of the calyx.**
- 3d. The stamina, twenty or more, inserted also into the inner side of the calyx or corolla.

Obs. As the number of stamina in this class is not limited, great attention must be had to the above character, to distinguish it from the next class (polyandria) where the stamina are inserted into the receptacle.

This class contains five orders.

ORDER I. MONOGYNIA.

(ONE FEMALE.)

Nº Genera.

No of Growth. species.

Native of

Species in Britain.

Calyx above.

1 Cactust

s 24 W. Indies, Mexico

2 Calyptranthes s 1

^{*} When the corolla is inserted into the calyx, it always consists of many perals; and the calyx of one leaf.

[†] The cactus pitajaya (one of the erect cereuses in California) grows with a triangular stem, but the branches are said to be fluted, and it bears a most delicious fruit.—The cochineal animals (coccus infectorius) are supported on a species of the cactus, called cactus echenillifer; and from cochineal the best carmine is extracted. (See celeranthus and quercus). The flower of the cactus grandiforus (one of the creeping cereuses) is said to be as grand and beautiful as any in the vegetable system: It begins to open in the evening about seven o'clock, is in perfection about eleven, and fades about four in the morning, so that the same flower only continues in perfection about six hours. The calyx, when expanded, is about a foot in diameter, of a splendid yellow within, and a dark brown without; the petals are many, and of a pure white; and the great number of recurved stamina surrounding the style in the centre of the flower, make a grand appearance, to which may be added the fine scent, which perfumes the air to a considerable distance. It flowers in July.

		-0.1	No		Species in Britain.
No	Genera. Gi	owth.	Spec	ies. Native of	Britain.
3	Eugenia	S	7	Malacca, India	
4	Fabricia	S	- 1	New Holland	
5	Leptospermum*	S	11	New Holland	
	Metrosideros	S		New Holland	
.7	Myrtus+ -	S	14	Europe, Asia	
8	Philadelphus	S		Verona, Carolina	
9	Psidium	t	3	E. & W. Indies	
10	Punica‡	t	2	Spain, &c.	
	. *				

Calyx beneath.

11	Amygdalus	t	4	Persia, Jordan
12	Chrysobalanus	t	1	America
	Plinia	t	2	Surinam
	Prunus§	t	22	Amer.Siberia, Armeniaca Brit.6
15	Sonneratia	t	1.	New Guinea

ORDER II. DIGYNIA.

(TWO FEMALES.)

16	Cratægus	s	15	India	Brit. 3

- * $Leptospermum\ scoparium\ (New\ Zealand\ tea)$ of great use in the voyages of Captain Cook.
 - † The common myrtle (myrtus communis) hath many varieties.
- ‡ The balaustines of the shops are the calyx and corolla of the double flowering pomegranates (punica granatum).
- § Prunus, by the laws of botany, is a genus, which contains as its relative species, the plum, cherry, apricot, and laurel, with their several varieties; but Mr. Miller thinks that the plum and cherry ought to have had a separate genus, as they will not grow upon each other, either by budding or grafting; though it is said by some, that a cherry will grow on a plum-stock, but not a plum on a cherry-stock. Prunus Cerasus, (the cherry); Linnæus retains the Latin name Cerasus, as being supposed the native place; the town is situated in Natolia, on the banks of the Euxine or Black Sea, famous for cherries, and from whence Lucullus first brought them into Italy.

|| The cratagus, sorbus, and mespilus, are very near allied, the females in each vary as to number: The leaves of cratagus are angled, of sorbus are feathered, of mespilus commonly entire.

ORDER III. TRIGYNIA.

(THREE FEMALES.)

No	Genera.	Growth.	Nº of species		Species in Britain.
	Sesuvium Sorbus*	s t	-	India Europe	Brit. 3

ORDER IV. PENTAGYNIA.

(FIVE FEMALES.)

Calyx above.

20 21	Mesembryanther Mespilus Pyrus‡ Tetragonia		s t	8	50 Africa,&c. Canada Cydonia Æthiopia	Brit. 1 Brit. 2
			Calg	yx b	eneath.	
23 24	Aizoon§ Spiræa	s	h & h		Canaries Japan	Brit. 2

^{*}The berries of the sorbus aucuparia (mountain ash) have been considered as useless, if not pernicious; but in Merionethshire in Wales, they are not only considered as a pleasant viand, but are manufactured also into an intoxicating liquor, called by the Welsh diod.griafol. Warner's second Walk through Wales, 1799.

[†] In the year 1794 a whole volume was published on the genus mesembryan-themum, describing upwards of 136 species (though Linnæus only enumerates 50) by Adrian Hardy Haworth, 8vo. 480 p.p. 6s. Linnæus hath divided the species into such as have white corols, red corols, and yellow corols; and Mr. Aiton hath met with one that hath green corols.

[‡] Pyrus is the generic name for apple, pear, and quince; as having (according to Linnæus) the same generic character; but as the apple will not grow grafted on the pear or quince, nor the pear or quince on the apple, but the pear or quince, as also the medlar, will grow on each other; Mr. Miller therefore thinks they ought to have different genera.

[§] In aixoon the essential character consists in the stamina being inserted by sets or phalanxes into the sinuses of the calyx (commonly by threes approximated); not equally distributed on the receptacle.

ORDER V. POLYGYNIA.

(MANY FEMALES.)

Nº	Genera.	Nº o Growth. Speci		Species in Britain.
		Calyx fi	ve-cleft.	
	Rosa* Rubus		France, Carolina W. Indies, Canada	Brit. 5 Brit. 5
		Calyx eig	ght-cleft.	
	Dryas Tormentilla†	h 2 h 2	Kamschatka Europe	Brit. 1 Brit. 2
		Calyx to	en-cleft.	
30 31 32	Calycanthus, s Comarum Fragaria‡ Geum§ Potentilla∥	h 1 h 3	France Virginia	Brit. 1 Brit. 2 Brit. 2 Brit. 8

^{*}Rosa spinosissima (the dwarf Scotch rose) is the least of the rose kind, seldom rising above a foot or two in hight.

[†] Tormentilla from the number of stamina (being sixteen) appears to belong to the class dodecandria, but all the other characters being agreeable to this class overrule the number of stamina. The root (which is one of the strongest vegetable bitters) hath been frequently used for tanning leather, and is said to be equal to oak bark. See polygonum bistorta.

[‡]Linnæus makes only three species of the strawberry, (viz.) fragaria vesca, monophylla, and sterilis; but of the first there are many varieties; which, as named by Aiton, are fragaria vesca sylvestris, wood strawberry; fragaria vesca pratensis, hautboy strawberry; fragaria vesca chiloensis, Chili strawberry; fragaria vesca virginiaca, scarlet or Virginian strawberry; fragaria vesca ananas, pine strawberry, with varieties, as from Carolina, &c. The strawberry is not properly a berry, for the seeds are disposed upon the surface; therefore Linnæus calls it a pulpy berried receptacle of the seeds. In planting strawberries, care should be taken to have the sets from good bearing young plants; for the old often become barren, or what the gardeners term blind, in which case there will be found an imperfection in the stamina or pistilla, and Mr. Miller says this is very common to plants that have creeping roots or stalks. The strawberry propagates itself by wires above ground, as the potatoe does by wires below ground.

[§] The roots of avens or herb-bennet (geum) smell somewhat like cloves; hence this genus was known by the name of caryophillata in the time of Pliny.

^{||} In potentilla take away one fifth part of the number, in the several parts of the fructification, and you will have tormentilla.

CLASS XIII. POLYANDRIA.

(MANY STAMINA OR MALES.)

The flowers of this class are furnished with many stamina, (above twenty) inserted into the common receptacle. From this invariable character, is this class distinguished from the preceding class, *icosandria*; which is very necessary to observe, as the fruits of this class are frequently poisonous.

This class contains eight orders.

ORDER I. MONOGYNIA.

(ONE FEMALE.)

No	Genera.	Growth. sp	o of ecies.	Native of	Species in Britain,		
	1st. One-petaled.						
2	Alstonia* Marcgravia Rittera Ternstroemia	S S		erica Indies			
5	Trilix	s		thagena			
		Ca	lyx nor	ne.			
6	Rheedia		1 . Am				
7	Legnotis	h	1		on the second second		

^{*} See symplocos.

Brit. 6

Nº Genera.	Growth.	-	Native of	Species in Britain.
	Ca	lyx ta	wo-leaved.	
8 Chelidonium [*] 9 Mammea 10 Papaver†	t h	5 1 9	Italy, Japan America Alps, Oriental	Brit. 4 Brit. 6
10 Tapaver	**	9	mps, orientar	DIII. 0
Ca	lux fou	r-lear	ved, or four-cleft.	
1				
11 Actea‡	h	3	America, Japan	Brit. 1
12 Calophyllum	t	2	India	
13 Cambogia	t	1	India	
14 Capparis§	S	15	Italy, Ceylon, &c.	
15 Caryophyllus	s	1	Molucco	
16 Dicera		1	2	
17 Grias	t	1	Jamaica	
18 Sparmannia	. S	.1	Africa	
19 Vallea	S	1		
		6	4	
	4th	. Fir	ve-petaled.	
		. Cap	osules.	

*In chelidonium (the horned poppy species) after the stamens have performed their office, the pistil elongates to upwards of a foot (whence the name horned) filled

Japan

Cape, Syria, &c.

Aleppo, E. & W. Indies

+ Opium is extracted from the leaf, stalk, and head of the papaver somniferum, of which there are some varieties; but is not found in the seed.

‡ The berries of actea are said to be of a very noxious quality.

h

s&h

s & h 49

1

9

20 Bonnetia

21 Cistus¶

22 Clevera

23 Corchorus

with small seeds.

§ The capers that are used as a pickle, are the full grown flower-buds of the capparis spinosa; and are chiefly brought from Italy.

 \parallel The spice called cloves, are the flowers of the $clove\ tree$ (caryophyllus aromaticus) got before expansion and dried.

¶ Ladanum or labdanum (cistus ladaniferus) is collected in a particular manner; it is gently brushed off the leaves of the shrub in a calm day, with a sort of brush or whip composed of many leather straps, to which it adheres, and from which it is scraped off, and made into cakes; it is also often taken from the beards of the goats, that brouze on these shrubs.

No	Genera.	Growth.	No of	. Native of	Species in Britain.
24	Loosa	h	1	Peru	Dinam.
	Lemniscia	h	1	z cru	
26	Mentzelia		1	America	
27	Myrodendrum	h	1		
	Sarracenia	h	2	America	
	Sloanea	s	2	Brasils	
	Sterbeckia*	h	1		
	Tiliat	t	2	America	Brit. 1
32	Vateria	S	1	India	
			Berri		
	,		Derri	es.	
33	Ascium	h	1		
34	Elæocarpus, druj	pe s		India	
	Muntingia	t	1	W. Indies	
36	Ochna ,	ŧ	2	Africa, India	
		-11	o.	. 1 1	
		otn.	Six-p	petaled.	
37	Argemone	h	3	W. Indies, Arr	menia
	Lagerstræmia	t	2	India	
39	Lecythis	S	2	America	
40	Thea $\ddagger \left\{ egin{array}{l} bohea, \\ viridis \end{array} ight\}$	s	2	China	

† An infusion of the blossoms of the tilia (lime tree) is in much esteem in the south of France, for coughs, hoarsenesses, fevers, &c.; it is a very soft, well-flavoured, pleasant saccharine juice, in taste much resembling the juice of liquorice. (White's Naturalist's Calendar, 1795). Pliny also mentions a papyrus made of the bark of the philyra, being the antient name for tilia.

† The article tea (thea) hath employed the conjectures of many writers, and yet the real plant seems not clearly ascertained, or, at least, how it is managed by the eartious Chinese. Linnæus makes two species, bohea and viridis; the bohea tea is described as having six petals, and the green tea nine petals: but it is now said that Linnæus received wrong information, and that it is only one species, which Airon calls thea bohea, which hath six petals, and two varieties, one with broad leaves, and the other with narrow leaves; and it is said that the different flavours and colours are owing to the manner and time of gathering the leaves, and mode of drying and curing; and some use a mixture of different plants (perhaps the olea fragrams, or camellia japonica, &c.) as may be seen by the different shape of the leaves in the tea we buy. In Sir George Staunton's account of China, it is said 18,000,000 pounds of tea are consumed annually in England, Scotland, and Ireland; above 5,000,000 of which are said to be manufactured in England.

^{*} Sterbeckia hath three or five petals.

Nº Genera.	No of Growth species. Native of	Species in Britain
	6th. Eight-petaled.	
41 Sanguinaria	h 1 Canada	
i	7th. Nine-petaled.	
D 1 128		
42 Podophillum	h 2 America	
	8th. Ten-petaled.	
43 Bixa*	s 1 W. Indies	
	9th. Many-petaled.	
44 Nymphæa	h 7 India	Brit. 2
	10th. Without petals.	
	Calyx three-leaved.	
فالا سما	Catyx turve-teavea.	
45 Prockia 46 Trewia	8 1	
40 Trewia	1	
	Calyx fire-leaved.	
47 Delima	s 1 Ceylon	
48 Lætia	s 2 America	
49 Seguieria	s 1 America	
	ORDER II. DIGYNIA.	
		-7.07
	(TWO FEMALES.)	
50 Calligonum+	s 1 Mount Ararat	

1

America

51 Curatella

^{*} Anotta or arnotta, called by the French roucou, is said to be the red succulent capsule or the covering of the seeds of the bixa orellana: It is collected for the use of dyers and painters; and is also much used in England for colouring cheese and butter. Also the membrane which covers the seeds of euonymus, is said to be manufactured as anotta, and used for colouring butter and cheese; and I am told that madder is frequently sold in the shops as anotta, or mixed with it, and is equally wholesome.

⁺ Calligonum and pallacia, M. L. Heritier proves to be the same genus, which he stiles calligonum, with three species.

No	Genera.	N° of Growth. species. Native of	Species in Britain.
54 55	Euryandra Fothergilla Lacis Pæonia* Trilocarpus	s 1 t 1 Carolina h 1 s & h 8 Helvetia h 1	

ORDER III. TRIGYNIA.

(THREE FEMALES.)

57	Aconitum	h	7	Alps, Stiria, &c.	
58	Delphinium	h	9	Siberia	Brit. 1
59	Homalium	h	1		

ORDER IV. TETRAGYNIA.

(FOUR FEMALES.)

60	Caryocar	S	1	Barbary
61	Cimicifuga	S	1	Siberia
62	Tetracera	8	1	W. Indie

ORDER V. PENTAGYNIA.

(FIVE FEMALES.)

63 Aquilegia†		Canada	Brit. 2
64 Brathys 65 Nigella‡		New Cranada France, Spain, &c.	
66 Reaumuria	h 1	Egypt	

^{*} In pæonia the most natural number of germens are two, but different species have from two to five: The one is called male pæony, as having stamina; the other female, as having no stamina, from its luxuriance. Pæonia moutan (the Chinese tree pæony) is a beautiful plant when in flower.

[†] Aquilegia vulgaris (common columbine) of which there are great varieties.

¹ In nigella damascena (fennel flower, or devil in the bush) the females are very tall compared to the males; and binding over in a circle to them, give the flower some resemblance to a regal crown.

ORDER VI. HEXAGYNIA.

(SIX FEMALES.)

No	Genera.	Nº of Growth, species		Species in Britain.
67	Stratiotes	h 3	Indía	Brit. 1

ORDER VII. DECAGYNIA.

(TEN FEMALES.)

68 Brasenia

60 Atracana

h 1

ORDER VIII. POLYGYNIA.

(MANY FEMALES.)

Calyxes none.

Alne Carlon Cane

09	Linagene		0	Trips, oction, out	
70	Anemone*	h	28	Alps, America	Brit. 4
71	Caltha	h	1	Europe	Brit. 1
72	Clematis	s	. 15	Virginia, Japan	Brit. 1
73	Helleborus†	h	5	Italy	Brit. 2
74	Hydrastis	h	1	Canada	
	Isopyrum	$-\mathbf{h}$		Siberia	
76	Thalictrum	h	21	Alps, Siberia, &c.	Brit. 3
	Trollius	h	2	Asia, Europe	Brit. 1

Calyxes three-leaved.

78	Annona‡	t	9	Asia, Africa
79	Liriodendron	t	2	Virginia

^{*} Anemone hath in general no calyx, but the anemone hepatica hath a three leaved perianth. Pliny says this flower never opens its petals but when the wind blows; whence its name.

[†] In the hellehorus niger (Christmas rose) the petals are white till the seed is impregnated, they then change into green, forming a kind of calyx.

^{*} Custard apple (annona reticulata) is in high repute in Jamaica and other West India islands; and is of the same genus with the famous fruit so much cultivated in Peru, in South America, (viz. annona squamosa) called by the Spaniards chirimoya, and is said to be one of the most delicious fruits in the world. See note to garcinia.

		· No	OI	Species in
Nº	Genera.	Growth, spec	ies. Native of	Britain.
80	Magnolia	t 4	Virginia	
	Michelia	s 2		
82	Unona	1		
83	Uvaria	s 2	Ceylon, Java	
84	Wintera	s 2	Granada	
		Calyxes for	ur-leaved.	
85	Houtuynia	1	Japan	
		Calyxes f	ive-leaved.	
86	Adonis	Calyxes for		Brit. 1
	Adonis Aubletia		~	Brit. 1
87		h 7		Brit. 1
87 88	Aubletia	h 7 h 1	Cape, &c.	Brit. 1
87 88	Aubletia Dillenia	h 7 h 1 s 1 h 59	Cape, &c.	
87 88 89	Aubletia Dillenia	h 7 h 1 s 1 h 59	Cape, &c. India Crete, Asia, &c. ix-leaved.	

^{*}In ranunculus the essence consists in the nectary, all other parts of the fructification are inconstant; the nectary is a pit in each petal above the claws. Some
of the species of ranunculus are acrimonious and deleterious, especially the ranunculus bulbosus, and ranunculus sceleratus. The butter-cups or crow-foots in our
meadows are of three species, viz. 1st. ranunculús bulbosus (bulbous) hath the calyx
turned back to the flower-stalk, the peduncles furrowed, and a bulbous root.—2d.
ranunculus repens (creeping) hath the calyx open or spreading, the peduncle furrowed, and puts out runners like the strawberry.—3d. ranunculus acris (acrid) hath
the calyx open and spreading, the peduncle round, and grows the highest.

CLASS XIV. DIDYNAMIA.

(TWO POWERS.)

The flowers of this class are furnished with four stamina, two of which are long, and two short; which is the essential character of this class. The two shorter stamina stand nearest to, and approaching the style of the pistillum, received within an irregular corrolla.—The flowers of this class are generally a little inclining from the stem, that the corolla may more easily cover the antheræ, and that the pollen may fall on the stigma, and not be injured by rain.—This class comprehends the virticiled or whorled plants, the lipped, the masked, and the grinning or ringent flowers of other authors; and in general admits of the following natural character:

- Calvx. A perianthium of one leaf, erect, tubular, with five clefts, segments unequal; permanent with the fruit.
- COROLLA. One petal, nearly erect, the base tubular, containing honey, and doing the office of a nectarium. The border generally ringent (gaping); the upper lip straight, the lower lip expanding, with three clefts, the middle cleft broadest.
- STAMINA. Four filaments, awl-shaped, inserted into the tube of the corolla, and inclined towards the back thereof, the two inner and nearest to the pistillum being shorter*; they are all parallel, and seldom exceed the length of the corolla. The antheræ are generally covered by the upper lip of the corolla, and approach each other so as to stand in pairs.
- PISTILLUM. The germen generally above the receptacle. The style single, thread-shaped, bent in the same manner as the filaments, and usually placed in the midst of them, but rather longer, and a little curved towards the summit. The stigma is generally end-nicked.

^{*} See the reason why they are shorter, in the explan. of the class tetradynamia.

Pericarpium. Either none, as in the first order gymnospermia; or, if present, as in the second order angiospermia, it generally consists of two cells.

SEMINA. Either four (if no pericarpium) situated in the bottom of the calyx as in a capsule; or, if a pericarpium, there are generally many, fixed to a receptacle placed in the middle of the pericarpium.

This class contains two orders.

ORDER I. GYMNOSPERMIA.*

(SEED-NAKED.)

Nº	Genera.	Growth.	Nº of Species	. Native of	Species in Britain.
	1st.	Calyxes	some	what five-cleft.	
1	Ajuga	h	6	Alps, Geneva	Brit. 2
2	Ballota	h	5	Siberia, America	Brit. 2
3	Betonica	h	5	India	Brit. 1
4	Galeopsis	··h	3	Europe ,	Brit. 3
5	Glecoma	h	1	Europe	Brit. 1
	Hyptis	h	1	* · · · · · · · · · · · · · · · · · · ·	
7	Hyssopust -	s & h	3	China, Amer. Siberia	a
-8	Lamium‡	h	8	Italy	Brit. 3
. 9	Lavandulas	s	6	Europe	
10	Leonurus	h	5	Siberia, Tartary	Brit. 1
11	Marrubium	h	11	Spain, Africa, &c.	Brit. 1

^{*}The plants of this order are scented, and said to be cephalic and resolvent; the virtue is in the leaves. None are poisonous.—And the seeds are said to be naked, as not being lodged in a capsule, but are situated in the bottom of the calyx.

⁺Common hyssop (hyssopus officinalis) of which there are four varieties, is much recommended in bruises; by applying a boiled cataplasm of the leaves, it both takes off the pain and blackness. It is also good in an asthma, &c.

[‡] In Linnæus's description of the specific character of the white archangel (lamium album) he says the verticils have twenty flowers, but in England I have examined several, and have not found twenty.

[§] From lavender (lavendula) is obtained an oil, called oil of spike; which is brought chiefly from France, where lavender is called espic.

Brit. 1

		Nº of		Species in
Nº Ge	nera. Growth	. Species	. Native of	Britain.
12 Mentl	ha* h	20	Canada, Austria	Brit. 12
13 Molue		3	Syria	
14 Nepet		18	Italy, &c.	Brit. 1
15 Perilla			India	
16 Phlon		13	Ceylon, India	
17 Sature			France, Greece	
18 Sideri			Canary, Syria	
19 Stach	9	17	Germany, Alps, &c.	Brit. 4
20 Teucr			America, &c.	Brit. 4
			The state of the s	
		1 1 4		
	2d. Ca	lyxes to	wo-lipped.	
21 Cleon				
	ia h	1	wo-lipped. Portugal America	Brit. 1
22 Clino	ia h podium h	1 3	Portugal America	Brit. 1
22 Clino 23 Drace	ia h podium h ocephalum h	1 3 13	Portugal	Brit. 1
22 Clino 23 Draco 24 Horm	iia h podium h ocephalum h iinum h	1 3 13	Portugal America America, Siberia	Brit. 1
22 Clino 23 Drace	iia h podium h ocephalum h iinum h sa s &	1 3 13	Portugal America America, Siberia Pyrenia Crete	-
22 Clino 23 Drace 24 Horm 25 Melis 26 Melit	iia h podium h ocephalum h ninum h sa s & tis h	1 3 13 1 h 6	Portugal America America, Siberia Pyrenia Crete Germany	Brit. 2
22 Clino 23 Draco 24 Horm 25 Melis 26 Melit 27 Ocym	iia h podium h pocephalum h ninum h sa s & tis h num† h	1 3 13 1 h 6	Portugal America America, Siberia Pyrenia Crete Germany India, America, &c.	Brit. 2 Brit. 1
22 Clinop 23 Drace 24 Horm 25 Meliss 26 Melit 27 Ocym 28 Origa	iia h podium h ocephalum h ninum h sa s & tis h num† h nuum h	1 3 13 1 1 4 6 1 21	Portugal America America, Siberia Pyrenia Crete Germany	Brit. 2
22 Clino 23 Draco 24 Horm 25 Melis 26 Melit 27 Ocym	iia h podium h pocephalum h ninum h sa s & tis h num† h anum h	1 3 13 1 h 6 1 21	Portugal America, Siberia Pyrenia Crete Germany India, America, &c. Egypt, Syria,	Brit. 2 Brit. 1

3

Europe

h

31 Prunella

^{*}W. Sole, a medical practicer at Bath, hath lately published a treatise on mints, or rather ments, (mentha) 1798, pr. £1. 1s. with plates. He hath adopted the subdivision of the genus from Linnaus; 1st. into spited mints, of which he makes eight species; 2d. into round-headed, containing four species; 3d. into whorled, containing twelve species.—The common spear mint (mentha viridis) is of the spiked species. The pepper mint (mentha piperita) Linnaus describes as one of the round-headed species, but Mr. Sole makes three varieties, viz. 1st. mentha piperita officinalis, the true pepper mint, which is spiked, and lanceolate leaves.—2d. mentha piperita vulgaris, common pepper mint, which is round-headed, and hath ovate leaves: and 3d. mentha piperita silvestris, wild pepper mint, which is spiked, and hath broad ovate leaves; this is larger and coarser than the two former, and hath a disagreeable smell.

[†] The Abbe Gruvel, in his history of Chili, (translated from the Italian of the Abbe Molina, 1788) mentions a species of basil in the province of St. Jago, which he calls ocymum salinum, and says it greatly resembles the common basil, except that the stalk is round and jointed; but what is remarkable in this plant is, that though it grows sixty miles from the sea, yet every morning it is covered with saline globules, which are hard and splendid, appearing at a distance like dew, and that each plant furnishes about half an ounce every day, and that the peasants collect this salt and use it as common salt, to which it is superior in flavour.

No Genera.		No of		Species in
	Growth.	-		Britain.
32 Scutellaria	h	15	Italy, Havannah, &c	Brit. 2
33 Thymbra	h	2	Macedonia	70.
34 Thymus	h	13	America, Alps	Brit. 2
35 Trichostema		2	N. America	
ORD	ER II.	ANC	GIOSPERMIA.	
	(SEED	-co	VERED.)	
	1-4 C	7		
	1st. Ca	tyxe	s gaping.	
36 Castilleja	h -	2	New Granada	
	od Cal	ures	two-cleft.	
	ga. Car	gaco	two-bity i.	
	· C	apsu	eles.	
37 Acanthus	h	10	Italy, Cape, &c.	
38 Alectra	-	1	raily, cape, etc.	
39 Dombeya		1		
40 Hebenstretia	h	5	Æthiopia	
41 Obolaria	h	1	Virginia	
42 Orobanche	h	9	Virginia	Brit. 2
43 Torenia	h	1	Asia	
		Berr	ies.	
44 C	_	^	Jamaica	
44 Crescentia 45 Premna	t s	2 2	E. Indies	
45 Fienma	D	- 24	L. Indies	
	3d. Cal	/xes	three-cleft.	
46 Halleria		1	Æthiopia	
40 Hancha		Ť	Historia	
	4th. Cal	yxes	four-cleft.	
47 Lippia	t	4	America	
48 Matourea	h	1		
49 Selago	S	19	Æthiopia, &c.	
50 Taligabea	S	1		
	Canen	les a	ne-celled.	
	Capsu	ics u		20.0
51 Lathræa	þ	4	France	Brit. 1

		C	Nº o		Species in
Mo	Genera.	Growth	specie	s. Native of	Britain.
		Capsui	les tu	o-celled.	
52	Barleria	h	10	India, Jamaica	
	Bartsia	h	5	Alps	Brit. 2
	Euphrasia	h	7	Europe	Brit. 2
	Hemimeris	h	3	Cape	
	Melampyrum	h	5	Europe	Brit. 4
	Rhianthus	\mathbf{h}	7	Cape, Virginia	Brit. 1
58	Schwalbia		1	America	12
		Capsul	es thi	ree-celled.	
	T P.	•	7	La-Vera-Crux	
99	Loecelia		1	La-vera-Crux	
		Drupe	es tw	o-celled.	
60	Gmelina	s	1	Asia	
61	Lantana	S	9	W. Indies, Africa	
		5th Ca	Tures	five-cleft.	
		_			
		Capsu	les or	re-celled.	
62	Avicennia	S	2	Martinico	
	Browallia	h	3	S. America	
	Conobea	h	ł		
	Gloxinia		1	S. America	
66	Limosella	h	2	Europe	Brit. I
	Lindernia	h	2	Virginia, Japan	
68	Myoporum	h	1		
69	Piripea	h	1		
70	Tozzia	h	1	Alps	
71	Vandellia	h	1	St. Thomas	
		Capsul	'es tw	o-celled.	
72	Antirrhinum	h	47	America, Alps	Brit. 10
	Bignonia	t & t s		America, India, Pe	
74	Buchnera	h	9	America, Asia	
-	a			W. Indies	
15	Capraria*	S	5	vv. Illules	1

^{*} Capraria biflora is the tea plant of St. Domingo; it is an evergreen shrub, the leaves of which are employed by the inhabitants of the Antilles for the same purpose as the tea of China and Japan.

			Nº of		Species in
No	Genera.	Growth.	species	s. Native of	Britain.
	Celsia	h	3	Crete	
	Chelone	h	5	N. America	
	Columnea	j.	2	Martinico, E. Indies	
	Digitalis*	s & h	9	Canary	Brit. 1
	Dodartia	h	2	Mount Ararat	
	Erinus	h	7	Alps, Africa, Peru	
	Gerardia	h	10	Virginia, Japan	
	Gesneria	S	3	Jamaica	
	Manulea	h	17	Cape, &c.	
	Mimulus	h	2	Virginia, Peru	
	Montira	h	1	A	ai e
	Pedicularis	h	17	Canada, &c.	Brit. 2
	Penstemon	h	2	S. America	
	Petrea	S	1	S. America	
	Ruellia	h	21	W. Indies, Japan	TD 1
	Scrophularia	h	17	N. America	Brit. 4
	Sesamum	h	2	India	D 1. 6.
	Sibthorpia	h	2	Africa, Europe	Brit."1
94	Stemodia	h	1	Jamaica	
		Capsul	es fiv	ve-celled.	
0.5	Craniolaria	\$ & h	9.	W. Indies	
0 -	Martynia	h	3	S. America	* - x
Ju	2.202.5)		_		
		Nut	one-	celled*	
97	Amasonia	h	1	Surinam	
		Nut	two-	celled.	
98	Pedalium	, h	1	Ceylon	
		Berry	one-	-seeded.	
ÓO	Bontia	S	1	Antilles	
	Clerodendron	s	6	India	
101	Cornutia	S	1	W. Indies	
101	0011101110	-	-		

^{*} Digitalis popurea (foxglove) is much recommended in some species of dropsy, but it must be given with caution.

Botanic Garden.

N° of Genera. Growth. Species.	Native of Species in Britain.
Berry two-seed	led.
103 Ovieda s 2 W.	Indies Indies naica, Japan
Berry three-celled	l, dry.
105 Linnæa* s 1 Sib	eria, Canada
Berry four-seed	led.
106 Duranta 3 W. 107 Vitex s 7 Sici	Indies ly, &c.
Berry many-see	ded.
108 Besleria h 4 Am	erica
Siliqua	man and a complete
109 Millingtonia s 1	
6th. Calyxes many	y-cleft.
Capsules two-ce	lled.
110 Cymbaria h 1 Dau 111 Hyobanche h 1 Cap 112 Thunbergia h 1 Cap	e
7th. Many-peta	iled.
113 Melianthus h 2 Ætl	hiopia

^{*} This plant (Linnwa borealis) Linnwus took for a crest to his coat of arms; the flowers appear in June and July, are bell-shaped, white without, and red within, and somewhat hairy, and have a pleasant smell, especially in the evening. In Tronheim and the neighbouring parts, it is drank as tea for medicinal purposes.

CLASS XV. TETRADYNAMIA.*

(FOUR POWERS.)

The flowers of this class are furnished with six stamina, four of which are long and two short. It corresponds with the siliquosa of Ray, and the cruciformes of Tournefort. This class (except in one genus, cleome, in which the stamina, in many of the species, are joined to a footstalk supporting the germen, and ought therefore rather to belong to the class gynandria) is truly natural; and admits of the following character:

- Calyx. A perianthium, oblong, consisting of four leaves, oblong-egg-shaped, concave, blunt, converging, gibbous at the base, standing opposite in equal pairs, deciduous with the corolla. The nectarium is a part of, and formed in the calyx, and often occasions it to be gibbous.
- COROLLA. Four petals, cruciform, equal; claws flattish, awlshaped, erect, rather longer than the calyx, limb or border flat, the laminæ broadest towards the end, blunt, the sides scarcely touching each other. The insertion of the petals is in the receptacle along with the stamina.
- STAMINA. Filaments six, fixed in the receptacle, awl-shaped, erect; of which the two shorter, that are opposite, are as long as the calyx; the other four rather longer, but not so long as the corolla. The antheræ rather oblong, taper, thicker at the base, erect, the tops bending outwards.

The nectaria are glands, which appear different in different genera; they are seated on the stamina, and are fixed on the inside of the base of the shorter filaments, which are generally bent, that they may not press upon the glands of the nectaria; and they thereby appear shorter than the others; but they are fixed on the out side of the base of the longer stamina, as in *sinapis*, &c.

^{*}The plants of this class are held to be antiscorbutic, the taste acrid and watery: in moist and wet situations their qualities are strongest; but they lose most of their virtues by drying. None are poisonous. These plants applied externally are useful in diseases of the skin, as itch, leprosy, &c.

- PISTILLUM. Germen above, increasing daily in hight. Style, either the length of the longer stamina, or none. Stigma obtuse.
- Pericarpium. A siliqua (pod) with two valves, often with two cells, opening from the base to the top; the dissepiment (partition) often projecting at the top beyond the valves; which projection had before served as a style. The siliqua is distinguished into siliquosa and siliculosa (long and short pods) which gives rise to the orders.
- Semina. In general many, roundish, lodged in the dissepiment (which runs lengthways) and alternately on each side: the receptacle linear, surrounding the dissepiment, and immersed in the sutures of the pericarpium.

This class contains two orders.**

ORDER I. SILIQUOSA.+

(A SILIQUE.)

Meaning such plants whose pericarpium, according to the distinction of Linnæus, is a long siliqua.

Nº Gen	era.	Growth.	Specie		Britain.
1st. Cal	x closed	with le	aflets	longitudinally	converging.
1 Arabis		h	11	Alps, Canada	Brit. 3
2 Brassica	t	h	14	Alps, China	Brit. 5

^{*} In the Gen. Plan. siliculosa is the first order, and siliquosa the second order; but in the Fragments of a Natural Method, under the order siliquosa, the siliqua is the first section, and silicula the second section, which method (as it seems more regular) I have here adopted.

[†] This order admits of a few exceptions as to the long form of the seed-vessel, as in bunias, isatis, and especially in crambe, which hath a round pod, one cell, and a single seed.

^{*}Brassica (cabbage) greatly abounds in varieties, as brocoli, cauliflower, &c. And as the surface of the leaves of the family of cabbage are highly polished, there is no attraction between them and dew drops, hence the drop does not come into contact with the leaf, but hangs over it repelled, and retains its natural form, composed of attraction and pressure of its own parts, and thence looks like quicksilver: one advantage from which is, that the leaf not being moistened, is less injured by frost, and another may be that respiration is less incommoded. Botanic Garden.

No	Genera.	Growth.	Nº of Specie		Species in Britain.
3	Chamira		1		
4	Cheiranthus	h	20	Alps	Brit. 3
	Dentaria	h	3	Italy	Brit. 1
	Erysimum	\mathbf{h}_{i}	6	Barbary	Brit. 4
	Hesperis	h	6	Africa	Brit. 1
8	Raphanus	h	5	Siberia	Brit. 1
	Ricotia	h	1	Egypt	
10	Turritis	h	3	Alps	Brit. 2

2d. Calyx gaping with leaflets diverging above,

11	Bunias	h	9	Egypt	Brit. 1
	Cardamine*	h	15	Virginia, Africa	Brit. 7
13	Cleome†	h	22	Cape, Indies, Arabia	
14	Crambe	h		Spain, Tartary	Brit. 1
15	Heliophila	h	9	Cape, &c.	
16	Isatis	h	4	Portugal, Egypt	Brit. 1
17	Sinapis‡	h.	17	China, &c.	Brit. 3
18	Sisymbrium§	h	29	India, &c.	Brit. 7

- * The cardamine pratensis (lady's smock) made into strong tea, whether in the green or dry state, and to be the only drink, is said to be a sovereign remedy for convulsions in children.
- + In many of the species of *cleome*, there are more than six stamina, and not always unequal as to length; that the only reason for introducing this genus to this class, is the *nectariferous* glands, being three, placed at each division of the calyx, except one; yet are often so very small, as scarcely to be discovered by glasses.
- ‡ The seed of the sinapis arvensis (charlock or ketlock), according to Mr. Miller, is commonly sold under the title of Durham mustard. The common mustard is from the sinapis nigra, and grows four or five feet in hight.
- § Sisymbrium nasturtium (water cress) is much admired as a sallad at Spring, and is said to be preferable to all others against the scurry; but as some people have suffered by mistaking the creeping water parsnip for the true water cress, it may not be improper to give a short description of both.—The sisymbrium nasturtium is of the class and order tetradynamia siliquosa, hath the pod declining, leaves feathered, leaflets somewhat hearted; the small leaves have few indennues on the edges, are of a dark green, with a tincture of brown upon them, and the odd one at the end very large and roundish.—The sium nodiflorum (creeping water parsnip) is of the class and order pentandria digynia, hath the leaves feathered, umbels axillary sessile, the small leaves oblong, pointed, serrated on the edges, and are of a light green.

ORDER II. SILICULOSA.

(A SILICLE.)

Meaning such plants whose pericarpium is a little or short siliqua (called silicula), and is either flat or turgid.

No	Comons	Change	N° of		Species in
Dito	Genera.	Growti	ı. specie	s. Native of	Britain.
	1st,	Silicle enti	re, not	end-nicked at top.	
	Draba	h	9 2	Alps	Brit. 3
	Lunaria	h	2	Hungary	
	Myagrum	h	10	Spain, &c.	Brit. 1
22	Subularia	h	1	Europe	Brit. 1
23	Vella	h	2	Spain	Brit. 1
			2.11	Environt of	
		2d. Silici	e end-r	nicked at top.	
24	Alyssum	s &	h 17	Spain, Alps, Crete	
25	Anastatica*	* h	74 1	Jericho, Syria	
26	Biscutella	. h		Italy .	
27	Clypeola	\mathbf{h}	3	Italy	
	Cochlearia	h h	8 .	Denmark, Greenla	nd Brit. 6
29	Iberis	s &	h 13	Gibraltar, &c.	Brit. 2
30	Lepidium	h			Brit. 4
	Peltaria	h	2	Cape	
32	Thlaspi,	h	12	Alps, Europe	Brit. 6
	(9)	relocnoria		un the standard and the	Carrolle

^{*} Anastatica hierochuntica (rose of Jericho) was formerly called by the monks rosa mariae, who made a miracle of the flower opening in the form of a cross on the night that our Saviour was born.—The fact is this; according to Mr Miller, the flower consists of four small petals of a whitish green colour, which open in the form of a cross, like the other genera of this class; it is a low annual plant, dividing into many irregular woody branches, which being dried, may be preserved many years, and at any time being set two or three hours in water, will dilate and open so as to disclose the seed vessels and seed.—For this singular circumstance it is preserved in the cabinets of the curious. It is said that Lord Trimbleston has one that hath been in the family above seventy years, and still possesseth this remarkable property.

CLASS XVI. MONADELPHIA.*

(ONE BROTHERHOOD.)

The flowers of this class have their stamina in one set, that is, they are united at the base into one circular body, in the midst of which standeth the pistillum.

The genera of this class have been variously distinguished by different botanists; some by the petals, others by the fruit and leaves of the plant, but Linnæus found the best and most infallible distinction to be in the calyx, which in the last order is generally double.

This class hath the following natural character:

- Calvx. A perianthium always present, permanent, and in many genera double.
- COROLLA. Petals five, or five divisions, generally inversely heart-shaped, the sides of which fold one over the other from the right to the left, contrary to the motion of the sun.
- STAMINA. The filaments united at the bottom, separate at the top,† the exterior shorter. The anthera generally kidney-shaped, and incumbent, that is, fixed by its side leaning to the top of the filament.
- Pistillum. The receptacle of the fructification is prominent in the centre of the flower. The germens erect, surrounding the top of the receptacle in a jointed ring.

^{*} The plants of this class, especially those of the order polyandriu, are esteemed emollient and mucilaginous; which properties are common to every part of the plant. None are poisonous.

[†] In some plants the separation is not to be effected without a pin or needle, as in hibiscus, (althæa) &c.—They are differently situated in different genera; sometimes on the receptacle, as in barringtonia; sometimes on the calyx, as in hydnora; sometimes on the coral, as in althæa, alcea, malva, &c.

The styles all united at the bottom into one body with the receptacle, but separated above into as many threads as there are germens. The stigmas spreading and slender.

Pericarpium. A capsule divided into as many cells as there are pistilla; of various figures in different genera.

SEMINA. Kidney-shaped.

This class contains nine orders, founded on the number of stamina*.

ORDER I. TRIANDRÍA.

(THREE STAMINA OR MALES.)

No	Genera.	Growth.	Nº of species.	Native of	Species in Britain.
1 2	Aphyteia Galaxia	, h	1 0	Cape	-11/0 91

ORDER II. PENTANDRIA.

(FIVE STAMINA OR MALES.)

One female.

3	Buettneria	h	3	Carthage	
	Erodium	s & h		Italy, &c.	Brit. 3
5	Hydnora		1	•	
	Lerchea	s	1	E. Indies	
	Ochroma	h	1		
8	Symphonia	t	1	Surinam	
9	Ticorea	h	1		
10	Triguera Waltheria	S	1		
11.	Waltheria	S	3	E. & W. Indies	

^{*} In this and the two following classes, Linnæus hath thought proper to found the orders on the number of stamina only; the pistilla are only used as a distinction of genera and species.

Nº Genera.

No of Growth, species.

Native of

Species in Britain.

Five females.

12 Hermannia 13 Melochia h 17 Africa, &c. s & h 7 W. Indies

ORDER III. HEPTANDRIA.

(SEVEN STAMINA OR MALES.)

14 Pelargonium s & h 94 Africa

ORDER IV. OCTANDRIA.

(EIGHT STAMINA OR MALES.)

15 Alchornea

h 1

16 Aitonia, one fem.

s - 1 Cape

17 Portesia

h 1

18 Quivisia

h 1

ORDER V. ENNEANDRIA.

(NINE STAMINA OR MALES.)

19 Dryandra

1 Cape

20 Quararibea

h 1

ORDER VI. DECANDRIA.

(TEN STAMINA OR MALES.)

One female.

21 Aquilarea

h :

22 Ciponima*
23 Connarus

s 1 s 1 India

24 Chinodendron

b 1

^{*} See symplocos, in polyadelphia.

No	Genera.	Nº of Growth. species. Native of	Species in Britain.
	Flabellaria Geranium*	h 1 s & h 37 Italy, &c.	Brit. 12
	Molina Sandoricum	h. 1	
	Strigilia	h 1	

Five females.

30	Hugonia	- t	1	India
	Plagianthus	h	1	

ORDER VII. ENDECANDRIA.

(ELEVEN STAMINA OR MALES.)

32 Brownea, one fem. s 1 W. Indies

ORDER VIII. DODECANDRIA.

(TWELVE STAMINA OR MALES.)

33	Acioa		1	
34	Assonia	h	1	
35	Pentapedes, 1	Cem. h	3	Ind

^{*} In geranium the stamina are generally alternately long and short; this genus, according to Linnæus, hath eighty-two species under several divisions, viz. The African geraniums have only seven of the filaments that bear anthers; others have only five bearing anthers; and in others all the ten have anthers. But Mr. Aiton, in his Hortus Kewensis, hath very properly (from L. Heritier) divided the genus geranium into three genera, according to the number of stamina that bear anthers; those with five anthers he calls erodium, from erodios (an heron) containing the myrrhina of Linnæus; those with seven anthers he calls pelargonium, from pelargos (a stork) containing the Africana of Linnæus; and those with ten anthers he calls geranium, from geranios (a crane) containing the batrachia of Linnæus. But in the sth. edit. of the Gen. Plan. this distinction is not adopted.

ORDER IX. POLYANDRIA.

(MANY STAMINA OR MALES.)

	72.55-	h		Nº o			Species in
	Mo	Genera.	Growth.	speci	es.	Native of	Britain.
			On	e fe	male.		
	36	Achania	s & h	3	Jama	aica, America	,
	37	Adansonia*	t	1.	Sene		
	38	Aleurites	h -	1		0	
8.	39	Barringtonia	t	1	Chin	a, Taheite	
		Bombax†	t	4		W. Indies	
		Camellia	Ś	2	Japa	ın	
		Carolinea‡	t	1		ico, Guinea	
	43	Cienfuegosia	h	1			
	44	Couroupita	h	1			
	45	Crossostylis	h	1			
	46	Franklinia	S	Ī	Geor	rgia	
		Gordonia	S	1	Caro	olina	
	48	Gossypium /	s & h	6	Leva	int, Barbadoes,	&c.
		Gustavia	t.	1	Surin		
	50	Hibiscus	s & h		Afric	ca, America, Ce	ylon

^{*} Adansonia digitata receives its name from Mr. Adanson, who says the diameter of the trunk frequently exceeds twenty-five feet, and is supposed to be the largest tree in the world. The horizontal branches are from forty-five to fifty-five feet long, and so large as to equal the largest tree in Europe, and yet these stupendous trees do not exceed seventy feet in hight.

[†] The silk-cotton tree (bombax) grows to a very large size both in the E. and W. Indies, and the wood being very light, the trunk is chiefly hollowed for canoes. In Hispaniola it is called jaruma.

I Carolinea omitted in the 8th. edit. of Gen. Plan.

[§] Franklinia alatamaha is said to be a new genus, (though nearly allied to gordonia) its trivial name is taken from a river in Georgia, where it was found native; it is a beautiful flowering tree-like shrub, rising about twenty feet; the flower is often five inches in diameter, consisting of five petals, with a tuft or crown of yellow stamina, and hath the fragrance of a China orange. Franklinia is not in the 8th edit. of Gen, Plan.

^{[|} The cotton from the Levant is said to be from the gossypium herbaceum; it is sown in Spring, and is ripe in about four months: That from the E. and W. Indies is from a shrub.

p. T.			Nº o		Species in
No	Genera.	Growth.	specie	es. Native of	Britain.
51	Laguna	S '	1	-	
52	Malvaviscus	h	1		
53	Mesua	S	1	India	
54	Morisonia	S	1	America	
55	Myrodia	h	1		
	Pachira	h	1		
57	Palava	h	1		
	Pavonia	h	1		
	Ruizia	S	1		
	Sida	t & h	27	E. & W. Indies	
	Solandra	S	1	Cape	
	Urena	S	6	China, America	
-	Cicaro		Ť		
		Trie.	a far	nales.	
		Lit	e jei	mucs.	
63	Malochodendron	h	1		
	Stewartia	S	1	Virginia	
		Mar	mı fe	males.	
		212.00	.9) 0		
65	Alcea*	h	2	E. Indies	
66	Althæa	h	4	Italy, Spain	Brit. 1
67	Lavatera	s & h	9		Brit. 1
68	Malachra	S	2		
	Malope	h	1	Hetrurea	
	Malya	s.& h	26	Amer. Peru, Cape	Brit. 5

^{*} Alcea (hollyhock) omitted in the 8th edit. of Gen.Plan. by Thaddæus Haenke, and seems to be placed under althæa.

CLASS XVII. DIADELPHIA.*

(TWO BROTHERHOODS.)

All the flowers of this class are supposed to have their stamina in two sets or bodies, severally united at the base: yet though this is the general classic character, we are not to imagine it is invariable; for under the first distinction of the last order, the plants are monadelphious, that is, all the stamina are connected; also the two sets of stamina in the last order, are often to be traced with difficulty, for only one of the sets are properly united, the other consisting only of a single filament, which in most plants adheres so closely to the united set, that it cannot be separated without the application of a pin or needle for that purpose, in some you cannot by this means effect a separation. Therefore the plants of this class are more easily ascertained by their papilionaceous corollæ, (resembling a butterfly) with stamina united at the base,† and other parts of the fructification, especially the calyx.

This class corresponds with the *leguminosa* of Morison, Hermannus, Boerhaave, Ray, and Roen; with the *tetrapetali irregularis* of Rivinus and Christopher Knaut; with the *tetrapetali* difformes of Christian Knaut; and with the *papilionacei* of Tournefort and Pontedera.

This class is truly natural, and the structure of the flowers very singular, and their situation mostly obliquely pendant; and admits of the following general character.

^{*}The leaves of the plants of this class are food for cattle, and the seeds, which are farinaceous and flatulent, are food for men as well as animals. None are poisonous.

[†] The papilionaceous corolla alone, is not the general characteristic of this class; as in decandria monogynia there are five plants of the same character, viz. sophora, anagyris, cercis, hymenea, and monospermum, but the stamina are distinct.—Also a species of African pelargonium hath a papilionaceous corolla.

^{*}The character is not exactly agreeable through the whole class, but as there are few plants but of the order decandria, it seems principally to respect that order, and particularly those genera that have nine stamina joined, and one distinct.

CALYX. A perianthium of one leaf, bell-shaped, withering, base gibbous, the lower part annexed to the fruit-stalk, the upper part blunt, containing honey; the rim five teeth, sharp, erect, oblique, unequal; the lower tooth longer than the rest, the upper four stand in pairs, of which the uppermost pair is mostly shorter, and stands further asunder. The bottom of the calyx including the receptacle may be deemed the nectarium, as it is moistened with a sweet liquor.

COROLLA. Papilionaceous, unequal, each petal having a distinct name, (viz.)

The standard, (vexillum) which is the petal covering the rest, incumbent, greater, flat, and horizontal; inserted by its claws in the upper margin of the receptacle, approaching to a circular figure when it leaves the calyx, and nearly entire; an elevated line or ridge marking it lengthways, particularly towards the top, as if the sides were depressed. The part of the petal nearest the base is nearly the form of half a cylinder, embracing the parts that lie under it; the surface of the petal is depressed on each side, but the sides nearest to the border are reflexed; and at the unfolding of the half cylinder, are generally two concave appendages, resembling ears, prominent on the under side, compressing the wings which lie beneath them.

The wings (alæ) are two equal petals, one on each side of the flower, placed under the vexillum'; inner borders incumbent to each other and parallel, broader outward, the upper margin straighter, the lower more dilated into a roundish form; the base of each wing is cloven, the lower division being lengthened into a claw, inserted into the side of the receptacle, and is about the length of the calyx; the upper division is shorter and inflexed.

The keel (carina) is the lowest petal enclosing the stamina and pistillum, generally divided, placed under the standard, and between the wings, it is boat-shaped, concave, compressed on the sides, placed in the position of a vessel afloat, lessened at the base, the lower part extending into a claw as long as the calyx, and inserted into the

receptacle; but the side and upper shorter divisions, which are cloven, are interwoven with those parts of the wings which most resemble them in shape. The keel either consists of one petal, as in cytisus, or of two adhering together, as in spartium, and is distinguished by its shape, as half-moon, spirally twisted, compressed, &c. The sides of the keel are shaped like those of the wings, and have a similar situation, only lower and more inward. The line that forms the keel runs straight as far as the middle, and then gradually rises in an arch, but the marginal line runs straight to the end, where it obtusely joins the line of the keel.

STAMINA. Are most generally ten, (placed on the receptacle*) either all united at the base, as in the first distinction of the order decandria, or nine united, and one single; the united filaments enclose the pistillum, and the single filament is incumbent upon it. The united filaments are membranaceous below the middle, being united into a eylinder, open on one side through its whole length; along which opening lies the tenth stamen, which is called the other set, and is often so closely attached to the nine, as not easily to be separated; the membranaceous set of stamina separate upwards into nine distinct awl-shaped filaments, bent like the keel, and of the same length, longer and shorter by pairs: the single filament is awled, or bristle-shaped, simple, and bent as the other nine, but somewhat shorter, and is detached from the rest at the base, to give vent on each side for the honey.

The anthera numbered together are ten, one upon the single filament, and one upon each of the nine divisions of the united filaments, small, equal in size, terminating.

Pistillum. Single, placed upon the receptacle of the flower. The germen oblong, cylindrical, more or less compressed, as long as the cylinder of the united stamina, by which it is involved, and sometimes, as in *erythrina*, &c. it is elevated by a slender footstalk issuing from the centre of the calyx.

^{*} Monadelphia, diadelphia, polyadelphia, and gynandria, are distinguished by the situation of the stamina; by which they approach nearer towards natural classes.

The style is single, slender, awled, and generally bent, agreeing in length and position with the stamina, withering.

The stigmata are generally covered with a beautiful down, from the part turned upwards, and placed immediately under the antheræ.

- PERICARPIUM. A legumen, oblong, more or less compressed, two valves, with a straight, longitudinal suture both above and below, yet the upper one descends near the base, and the lower one ascends near the top; and either with only one cell, or articulated (jointed) having two or more cells; opening at the upper suture; and is of various shapes in different genera.
- SEMINA. Generally few, smooth, and are fastened alternately along each side of one suture only, and not alternately to both; they are generally kidney-shaped, sometimes roundish, and are marked with an embryo a little prominent, at the place where they were fastened in the pericarpium; and when the seeds begin to grow, the cotyledons retain the form of half the seeds.

The receptacles proper to the seeds are very small, short, and thinner towards the base; and where they adhere to the disc, obtuse, oblong, inserted along the upper suture only, but placed on each side alternate, so that the seeds adhere to each of the valves.

Singular qualities of plants in this class.

Twining plants.*—Phaseolus, dolichos, clitoria, glycine.

Feathered without an odd one.—Orobus, pisum, lathyrus, vicia, ervum, arachis.

^{*} There are many other twining plants dispersed in the several classes (as cuscuta, &c.) the spirals of which turn different ways by the twisting of the stalkes some according to the motion of the sun, and others contrary to his motion, which singularity is not understood; and is very different from those which support themselves by claspers, though both may be called clining plants. See cirrus, under Outlines of a plant.

Feathered with an odd one.—Biserrula, astragalus, phaca, hedysarum, glycyrrhiza, indigofera, galega, colutea, amorpha, piscidia, mullera.

Three-leaved.—Trifolium, lotus, medicago, erythrina, genista. cytisus, ononis, trigonella, phaseolus, dolichos, clitoria, monnieria.

Umbelled plants.—Lotus, coronilla, ornithopus, hippocrepis, scorpiurus.

This class contains four orders, founded on the number of stamina considered as distinct.

ORDER I. PENTANDRIA.

(FIVE STAMINA OR MALES.)

No of Species in No Genera. Native of Growth. Species. Britain. 1 Monneria 1 America

ORDER II. HEXANDRIA.

(SIX STAMINA OR MALES.)

Brit. 3 2 Fumaria* Siberia, &c. 14 India, Peru 3 Saraca 5

ORDER III. OCTANDRIA.

(EIGHT STAMINA OR MALES.)

4 Coumaroura

5 Dalbergia 0 Brasils, Senegal, &c. Brit. 1 6 Polygalat h 38 7 Securidaca Jamaica, Europe

Surinam

^{*} Fumaria. - See note to alcali in the Index.

⁺ Polygala senega (senega rattle-snake root) called so from its being a cure for the bite of a rattle-snake; the root is powdered, and both taken inwardly, and applied to the part bitten.

ORDER IV. DECANDRIA.

(TEN STAMINA OR MALES.)

19	Ţø	Genera.		Growth.	No o	
*	•	Conclus			1	ll connected.
			120	Stan	iens a	ii connecieu.
	8	Abrus		S	1	India
	9	Amorpha		S	1	Carolina
1	0	Anthillis		s & 1	1 15	
		Arachis*		h	. 1	
1	2	Aspalathus		s	35	Crete, Æthiopia, India
3	13	Borbonia		5	6	Cape
1	14	Bossiæa		s	1	Botany Bay
		Crotalaria+		h	· 23	China, Carolina
		Cylista		S	1	
1	7	Ebenus		S	1	Crete, Cape
j	18	Erythrina‡		s & 1	1 5	
		Genista		s	14	Spain, &c. Brit. 3
2	20	Ivira		h	1	27 Ombo L.
2	21	Lupinus		h	7	Virginia, France
6	22	Moutouchia	1	h	1	

- * Arachis hypogwa (ground nut) receives its trivial name from hiding its seed in the earth; the branches trail upon the ground, and the flowers (which are yellow, and monæcious) are produced singly upon long foot-stalks, and as the flowers decay, the germen is thrust into the earth, where the pod is formed and ripened.— Similar to this is the cyclamen; when the flowers decay, the footstalks twist themselves spirally downwards to the earth, to lodge the seeds; which are supposed for some time to receive nourishment from the plant, as they are often difficult to make grow when sowed in the common way.—Linnæus also tells us that the little globular heads of the trifolium subterraneum penetrate the earth.—The arachis hypogwa is cultivated in Spain and France for its oil: it is said that the seeds of it vield more than half their weight of an oil which is fit to be used in food, to burn in lamps, or employed in the arts, as in making soap, &c.
- + Crotalaria juncea is the Chinese hemp, very common in India, called sunn, or sunn hemp; is managed in the same manner, and used for the same purposes as the common hemp.
- ‡ Coral tree (crythrina) called so from the flowers being collected in long close spikes of a scarlet colour, somewhat resembling coral.—N. B. real coral not perfectly known whether formed by animals, or to be a mineral, or of vegetable production.—Erythrina is also called the American bean tree, from its bearing pods with seeds in them like beans.
- § The seeds of the hupine were used by the Greeks for food; and Mr. Miller says that the white lupine is cultivated in some parts of Italy, as other pusle for food.

	ATSTA		Nº o	for Market	Species in
No	Genera.	Growth.	speci	es. Native of	Britain.
23	Mullera	t the	1	Surinam	
24	Nissolia	t	2	America	
25	Ononis	s & h	31	Cape, &c.	Brit. 3
	Piscidia*	8	2	W. Indies	
27	Platylobium	S	4	New Holland	
28	Pterocarpus	t	5	W. Indies	
29	Spartium†	S	16	Cape, &c.	Brit. 1
30	Taralea		1		
31	Teramnus		1		
32	Tetrapteris	h	1		
33	Ulex	S	2	Cape, Europe	Brit. 1

2d. Stigmas downy, (not amongst the former).

34	Coluteat		s & h	4	Austria, Italy	111
35	Dolichos	. * .			China, Cape, &c.	
36	Lathyrus	- 1	h		Tangier	Brit. 7
	Orobus	1	.h	12	Pyrenean	Brit. 2
38	Phaseolus	many "2	h	17	America, India	
39	Pisum -		h	4	Europe	Brit. 1
40	Vicia	10	h	20	Bengal, &c.	Brit. 8

- * The bark of the dogwood tree (piscidia erythrina) being pounded and put into a sack, and thrown into any water, and afterwards squeezed, will in a short time intoxicate the fish, so that they may be taken by the hand, without imparting any bad quality to the fish; a diversion much used in the W. Indies.
- + Spartium scoparium (common English broom) is the sort used in medicine; chiefly in dropsical complaints.
- ‡ The leaves and seeds of bladder senna (colutea arborescens) being purgative, are often substituted in Italy, &c. for the senna of the shops; so are also the leaves of scorpion senna (coronilla emerus).
- § Dolichos pruriens (cowage) is said to be famous as an anthelmintic, and hath given occasion to a Practical Treatise on the superior efficacy of stizolobium, or cowage, internally given, in diseases occasioned by worms.

 By Wm. Chamberlaine.—9th edit. 1805, 3s.
- || Bush-vetch (vicia sepium) being an indigenous perennial evergreen, is much recommended as a fodder for cattle, and is said to produce above four tons of dry fodder on an acre, but it is not easily raised from seed, being much infested by insects.

 Buth Society.

Nº Genera.	Growth. Sp	of of pecies	
3d. Legumen son	newhat to	vo-c	elled, (not of the former).
41 Amerimnon	h .	1	A7 Scothiums
42 Astragalus*	s & h	47	Alps, Syr. Canada, &c. Brit. 3
43 Biserrula	h	1	Sicily
44 Phaca	h	10	Alps, Siberia
4th Lamenan	mantly or	,	eded, (not of the former).
4th. Legumen	mostly on	te=8t (eueu, (not of the former).
45 Acouroa	h	1	Or Oliveria la
46 Deguelia	h	1	of Children and a second
47 Glycyrrhiza	h	4	Apulia, Spain
48 Parivoa	h	1	mayal 44
49 Psoralia	S	23	Africa, America
50 Trifolium	h	46	Italy, &c. Brit. 17
,	7		.7
511	a. Legum	en r	ather jointed.
51 Æschynomene	s	8	America, India
52 Coronilla	s & h	11	Crete, America
53 Hedysarum†	.s & h	67	Amer. Persia, E. Ind. Brit. I
54 Hippocrepis	h	4	Italy Brit. 1
55 Medicagot	s & h	10	America Brit. 4
	- /		

^{**} Gum tragacanth is from a species of astragalus, called astragalus tragacantha. But in M. Bilardier's memoirs on the tree which furnisheth the gum tragacanth, he says that the astragalus tragacantha of Linnæus, which is found at Marseiles affords no gum: but that the true gum tragacanth occurs as an exudation from many species of astragalus; though that found on Mount Lebanus, from whence it is chiefly collected, hath not hitherto been described by botanists.

[†] The hedysarum gyrans, a shrub mentioned in the Sup. Plan. of the younger Linnæus, is very remarkable for its self-moving power; it is a native of the E. Indies, grows to the hight of about four feet, and in Autumn produces yellow flowers. Its leaves are three'd, those on the sides are smaller than those at the extremity, and in the day, they are continually moving either upward or downwards, or in the segment of a circle; the last motion is performed by the twisting of the footstalk, and whilst one leaf is rising, the opposite is generally descending. A self-moving power at certain times is also discovered in the stamina of many plants. See note to collinsonia.

[‡] The medicago polymorpha hath many varieties, which consist in the shape of the pods; as some resemble snails; others, caterpillars; others, hedge-hogs, &c. Medicago arborea is the upright moon trefoil, and is supposed by some to be the cytisus of Virgil. Medicago falcata is the prostrate moon trefoil.

No	Genera.	Growth.	Nº of		Species in Britain.
57 58	Ornithopus Scorpiurus Smithia Stylosanthes	h h h	4 4 1 1	France Europe E. Indies	Brit. 1

6th. Legumen one-celled, many-seeded, (not of the former).

60	Cicer	h	1	Spain	
	Clitoria	h	5	Virginia, Brasil	
	Cytisus		17	Alps, &c.	
63	Diphysa	h	1		
64	Diphysa Ervum	h	6	France	Brit. 2
	Galega	h	12	Spain, America	
	Geoffroya*		2		
	Glycine	s & h	15	America	
68	Indigofera†	s & h	23	E. & W. Indies	
69	Liparia	. s	5		
	Lotus	h	19	Arabia, Crete	Brit. 1
71	Robinia	S	9	N. America	
	Trigonella	h '	11	France, India	
	0				34.

See London Magazine for 1778, p. 264.

^{*} Geoffroya had only one species known to Linnæus, which he calls spinosa; but William Wright, M. D. in the Philosophical Transactions for 1777, p. 512, table 10, adds another of the specific name of inermis, and calls it the cabbage-bark tree, and recommends the bark as an antheliminite.

⁺ The finest indigo is made from the leaves of the indigofera tinctoria, a coarset is made from the leaves and small twigs.

CLASS XVIII. POLYADELPHIA.

(MANY BROTHERHOODS.)

The flowers of this class have their stamina in three or more sets or bodies, severally united at the base; and generally placed on the receptacle.*

Containing four orders.

ORDER I. PENTANDRIA.

(FIVE STAMINA OR MALES IN EACH SET.)

No	Genera.	Growth.	Nº of species.	Native of	Species in Britain.
_	Ambroma	h	1		
2	Theobroma+	t	2	W. Indies	

ORDER II. DODECANDRIA.

(FROM TWELVE TO TWENTY MALES IN SEVERAL SETS.)

3 Monsonia

s 3 Cape

ORDER III. ICOSANDRIA.

(TWENTY MALES IN SEVERAL SETS.)

4 Citrust

t 4 Asia, Japan, &c.

^{*} See note to aizoon, where the stamina are inserted by sets into the calyx.

[†]Theolroma cacao, though called chocolate nut, is not properly a nut, but, according to Linnæus, hath an oblong woody pod or pericarpium, containing many fleshy seeds, of which chocolate is made; and what is called cocoa in the shops, is made of the shells, husks, and refuse of the chocolate.

[‡] Bergamot is a fragrant essence obtained from a cyon of the limon (citrus medica) grafted on the stock of a bergamot; whence the name. Citrus medica (the citron) contains also several varieties, as lime, limon, &c.

5 Ocotea

ORDER IV. POLYANDRIA.

(MANY MALES IN SEVERAL SETS.)

No	Genera.	Nº of Growth, species,	Native of	Species in Britain.
			0 *	

Calyx one leaf.

h Calyx two-leaved, beneath.

s & h 3 Virginia 6 Ascyrum

Calyx five-cleft, above.

7 Hopea Carolina 8 Melaleuca New Zealand, New Holland

Calyx five-cleft, beneath.

E. Indies 9 Durio 10 Glabraria E. Indies

11 Hypericum* America, Egypt, &c. Brit. 8 s & h 42

12 Symplocost Martinico

Calyx six-cleft, beneath.

13 Munchhausia China

^{*} Hypericum varies as to number of styles, there are generally three, sometimes five, some have only two, and one species hath only one, which is a distinction of the species.

⁺ M. L. Heritier pronounces the four genera symplocos, hopea, alstonia, and eiponima, to be in reality but one, to which he gives the name of symplocos, and describes six species.

CLASS XIX. SYNGENESIA.*

(CONFEDERATE MALES.)

This class consists of compound aggregate flowers, which (as before explained under the head of distinction of flowers) are such flowers as are formed by the union of several lesser flowers or florets, placed sitting (or without peduncles) on a common dilated receptacle, and within a common calyx, called a perianthium; each floret consisting of a single petal, with generally five divisions, and having five stamina distinct at the base, but united at the top by the antheræ into a cylinder, through which passeth the style of the pistillum, longer than the stamina, and crowned by a stigma with two divisions that are rolled backwards; and having a single seed placed upon the receptacle under each floret.—This is the general character of a regular compound flower, to which there are a few exceptions in the order monogamia; but the essential character consists in the antheræ being united so as to form a cylinder, and having a single seed placed upon the receptacle under each floret: yet this is not without some exceptions in the order monogamia.

Linneus also gives a further character of a flower in its regular compound state, which he calls a flosculous flower, (taken from the calyx and receptacle, the only parts that are in common, and by which antient botanists founded their

^{*}The name of this class means congeneration, alluding to the circumstance of all the stamina being united by their antheræ, and therefore is translated confederate males.

Some flowers have such close heads, as at first sight appear to be of the class syngenesia, but if they want the essential character of a compound flower, they belong to some other class.—The florets in a compound flower have generally a small calyx, which is always a perianthium, and remains, so as to become the crown of the seed.

This class differs from the *idelphia* classes, in the stamina not being joined at the bottom by the filaments, but at the top by the antheræ.

This class is natural, except the last order monogamia, which upon systematic principles was found necessary to be admitted, as having the antheræ united.

The plants have various specific virtues, though most of them are bitter and stomachic. None of them are poisonous, except perhaps lactuca virosa (strong scented lettuce), especially in shady situations; and doronicum (leopard's bane), and carthamus (base safiron or safflower).

distinction), and also of a floret or floscule; he also calls the compound flower flos universalis, and the florets of which it is composed, he calls flores proprii.

Character in the compound state.

CALYX. A common perianthium containing the receptacle and florets; which contracts when the florets are fallen, but expands and turns back when the seeds are ripe. It is either simple, as when composed of only a single row of scales or leaves; imbricated, (tiled) as when the scales are numerous, and the outer lie upon the inner, like tiles upon a house; or augmented, (increased or leafy) as when a single row of longer leaves or segments of the calyx surrounds the florets, and another row of very small leaves or scales surrounds the base of those longer leaves or segments.

RECEPTACLE. Is the common receptacle of the fruetification, receiving many florets sitting on its disc; which is either concave, convex, flat, pyramidal, or globular; and the surface of the disc is either naked, without other inequality than that of being lightly dotted, as in leontodon, &c.; hairy, covered with upright hairs, as in carduus, &c.; or chaffy, covered with linear, awl-shaped, compressed, upright paleæ or chaffy substances, separating the florets, as in anthemis, achillea, &c.

Character of a floret.*

Calva. When present, a small perianthium with generally five clefts, sitting upon the top of the germen, and afterwards becoming the crown of the seed.

COROLLA. One petal, tube very narrow, long, seated on the germen, with generally three or five clefts or teeth: And is either tubular, with the border funnelled or bell-shaped, five-cleft, the segments reflexed and expanding; or ligulate (from ligula, a strap or fillet), having a short tube with border linear, flat, turned outward, and the top entire,

^{*} The character here given is of a monoclinian floret.

with three or five teeth, lopped. In some genera, the corolla in some of the species is wanting, as in artemisia and gnaphalium.

- STAMINA. Filaments five, capillary, very short, inserted in the neck of the corollula. The antheræ five, erect, linear, joined at the sides so as to form a hollow cylinder with five teeth, and as long as the border of the floret.
- PISTILLUM. Germen oblong, placed under the floret, upon the common receptacle. The style thread-shaped, erect, as long as the stamina, passing through the cylinder formed by the antheræ. The stigma two parts, the parts rolled back, and expanding.
- Pericarpium. Properly none, though in some genera there is a coreaceous or leathery crust over the seed, as in osteospermum and strumpfia.
- Semina. Single, oblong, often with four edges, generally narrower at the base, and are crowned either with a feather (pappus), or with the perianthium, or hath no crown; if with a feather, it is either sitting, or placed on footstalks (stipes), consisting of many radii placed in a circle, which are either simple, radiate, or branching; if with a perianthium, it is small, permanent, with generally five teeth.

Obs. Compound flowers are of the following sorts:

1. Tubular monoclinian florets both in the disc and ray.

2. Tubular monoclinians in the disc; tubular females in the ray.

Tubular monoclinians in the disc; tubular neutrals in the ray.
 Tubular monoclinians in the disc; ligulated monoclinians in the ray.

5. Tubular monoclinians in the disc; ligulated females in the ray.

Obs. The disposition of the sexes varying, occasions the following distinctions: It is called a tubular monoclinian floret, if stamina and pistillum are both present; a tubular masculine floret, if furnished with stamina but no pistillum or stigma; a tubular femenine floret, if a pistillum without stamina; and a tubular neuter floret, if neither stamina nor pistillum. If the corolla of the floret is ligulate, then it is called a ligulate floret, and either monoclinian, masculine, feminine, or neuter, according to the foregoing distinctions.—Besides the above description, compound flowers, from the difference of their structure, admit of further divisions, which gives rise to the orders.

When all the florets are tulular, that is, consist of hollow, tubular, funnel-shaped petals, they are called flosculi, and the whole flower is called flos flosculus. This term seems opposed to radiate flowers, where the flowers of the radius differ in form from those of the disc. See the note to centaurea.

10 Hieracium

11 Hyoseris

13 Lactucat

12 Kleinia

This class contains six orders.

ORDER I. POLYGAMIA ÆQUALIS.

(EQUAL POLYGAMY.)

It is called equal because all the florets are monoclinian, and none of them radiate (except atractylis).

No of

Species in

Brit. 9

Brit. 1

Brit. 3

No	Genera.	Growth. Spec	ies. Native of	Britain.	
	1st. Semifloscu	lous* flowers corols li	of Tournefort w gulated.	ith all the	
		Receptac	le chaffy.		
1	Catananche	h g	Crete, Greece		
2	Cichorium		Europe	Brit. 1	
	Geropogon	h 3			
	Hypochæris	h 4	Europe	Brit. 3	
	Scolymus	h 2	Spain, Italy		
6	Seriola	h 4	Crete, Italy, E	tna	
	1 .	Receptacle vi	llous or hairy.		
7	Andryola	h 3	France		
Receptacle naked.					
8	Chondrilla	h 3	Germany		
9	Crepis	h 16		Brit. 8	

35

9

10

h

h

h

Alps, Cape

India, Canada

Virginia

^{*} Semiflosculous flowers of Tournefort, means such florets as are flat above, and tubular or hollow below, as dandelion, goat's-leard, hawkweed, &c. and correspond with the ligulati of Linnæus; the lingulati of Pontedera; the planipetali of Boerhaave and Ray; the cichoracei and acanacæ of Cæsalpinus; and the lactescentes of Morison.

⁺ Lactuca sativa (garden lettuce) as observed by Dr. Carradorn, shews great sensitive irritability at certain periods of its growth, for when it is in flower or in seed, if it be gently touched with the finger, a blade of grass, or any pointed body, it will emit a milky liquor, in the form of very minute drops; but this phenomenon is said to occur only in the small amplexicaul leaves of the branches, or the leaf-lets of the calyx.

No	Genera.	Growth.	Nº of species.	Native of	Species in Britain.
14	Lapsana	h	5	Portugal	Brit. 1
	Leontodon*	h	10	Europe	Brit. 4
	Picris	h	4	taly, France	Brit. 2
17	Prenanthes	h	19	Japan, &c.	Brit. 1
18	Scorzonera	h		Spain, &c.	
19	Sonchus†	s & h	13 1	Alps, Siberia 📝	Brit. 4
20	Tragopogon	h	14	Virginia, E. Ind	lies Brit. 2

2d. Headed flowers,

That is, connected on the summit of the footstalk into a knob or head.

21	Arctium‡	h	3	Europe	Brit. 1
22	Atractylis	h	8		
23	Barnadesia	S	1	America	
24	Carduus .	h	38	Syria, Virginia	Brit. 11
25	Carlina	h		Pyrenean	Brit. 1
26	Carthamus	s & h	10	Crete, Egypt	
27	Cnicus§'	h	9	Europe, Spain	
28	Cynara	h	4	Italy	*
29	Onopordon	h	5	Arabia	Brit. 1
30	Serratula	h	15	Alps, &c.	Brit. 3

^{*} Leontodon taraxacum (dandelion, or lion's tooth) is said to be good in complaints of the liver, and promotes urine. It is sometimes called wild cichory, or endive. The young leaves are eaten by the French as a salad; and the root dried and pounded is said to be used by the French as a substitute for coffee, to which it assimilates both in scent and flavour.

⁺The common sow-thistle (sonchus oleraceus) is described as having downy peduncles, and smooth calyxes:—And there is another sort very similar in external appearance, that have downy peduncles, and hairy calyxes; but Dr. Murray says this latter is a distinct species, which he calls sonclus tenerimus.

[‡] The stems of the arctium lappa (burdock) stripped of the skin (before the flowers appear) and boiled, are eaten as asparagus; and are even eaten raw with oil and vinegar. And most of the thistle kind (carduus) may be used in the same way.

[§] Cnicus acarna seems, by Linnæus, to be intended for the carduus benedictus, or blessed thistle, and Mr. Miller is of the same opinion; it also appears so on examination; but in the Pharmacopæia Edinburgensis, printed in 1783, it is said to be centaurea benedicta; and Mr. Aiton, in his Hortus Kewensis, printed in 1789, makes it the same.

^{||} The esculent part of the cynara scolymus (common artichoke) is the receptacle, and the fleshy part of the leaves of the calyx; as in onopordon acanthium the receptacle and young stems are eat as artichokes.

Nº Genera.

Nº of Growth. species.

Native of

Species in Britain.

3d. Disc-like flowers,

That is, placed on a surface like a disc; as the disc of the sun, moon, &c.

Receptacle naked.

31	Adenostemma	h	1

32 Ageratum h 2 America

33 Cacalia s & h 27 Alps, Africa 34 Chrysocoma s & h 13 France, Africa

35 Ethulia h 5 India

36 Eupatorium h 29 Ceylon, Brazils, &c. Brit. 1

37 Spilanthus* h 7 Ceylon

Receptacle chaffy.

38 Athanasia	. 5 S	20	Cape, &c.	Brit. 1
39 Bidens	h		America	Brit. 3
40 Calea	h	4	Jamaica	

41 Santolina s 4 Spain, Alps 42 Stæhelina s 8 Africa

Receptacle hairy or bristly.

43 Pteronia s 17 Æthiopia 44 Tarconanthus s 3 Cape

ORDER II. POLYGAMIA SUPERFLUA.

(SUPERFLUOUS POLYGAMY.)

Having the florets of the disc monoclinian, and those of the radius or circumference female, which are considered as superfluous.

1st. Disc-like flowers.

Receptacle naked.

45 Artemisia+

s & h 29 Æthiopia, China

Brit. 5

^{*} The spilanthus acmella is very famous in the island of Ceylon for curing the stone and nephritic complaints; the leaves dried, and the seeds, are said to be most effectual, used by infusion; but the root, stalk, and branches are also used.

*Universal Magazine for June, 1752, p. 251.

[†]The mova, so famous in the East for curing the gout, by cauterizing the part affected, is the lanugo or down of the leaves of a species of Indian mugwort (artemisia chinensis).—See note to alcali, in the Index. Artemisia absinthium (common

			Nº o		Species in
No	Genera.	Growth.	specie	s. Native of	Britain.
46	Baccharis	S	8	America, Africa	
47	Carpesium	h	2	Italy, China	
	Conyza	s & h	25	China, &c.	Brit. 1
49	Gotula	h	13	Spain, &c.	
50	Gnaphalium	s & h	59	Alps, India	Brit. 6
51	Tanacetum	s & h	7	Siberia, Africa	Brit. 1
			9		
		Recept	tacle	chaffy.	

52 Anacyclus h 4 Crete

s & h 16 Austria, &c. 53 Xeranthemum

2d. Semiflosculous flowers, rather two-lipped.

Receptacle naked.

54 Perdicium 5 Alps, Magellan

3d. Radiate flowers.*

Receptacle naked.

55 Arnica	h	11	Africa, Japan	
56 Aster†	s & h	38	Siberia, China	Brit. 1
57 Bellis	h	2	Spain	Brit. 1
58 Bellium	h	2	India	
59 Cineraria	s & h	26	Siberia, Cape	Brit. 2
60. Chrysanthemum	s & h	24	Alps, India, &c.	Brit. 3
61 Doronicum	h	3	Alps	Brit. 1
62 Erigeron	h	22	Alps, America	Brit. 2
63 Helenium	h	1	America	

wormwood) is used by the common people in Wales instead of hops, and will destroy acescency in beer when grown hard. It is said the leaves steeped in boiling water, and repeatedly applied to a recent bruise, remove the pain, and prevent swelling and discoloration of the part. Artemisia annua (a species of mugwort) in decoction, is the base of all the colours which are given to the Turkey leather. To dye red, cochineal, in powder, is mixed with the decoction; and alum is added, to fix the colour.

^{*} See radiate flowers described in a note under the head of distinction of flowers.

⁺ The asters are a very numerous family; Linnæus makes thirty-eight relatives, under different distinctions; Aiton enumerates forty-two; and Donn, who hath the care of the botanic garden at Cambridge, mentions sixty.

No

82 Zinnia

Genera.

Native of

Growth. species.

Species in

Britain.

	Inula*	h	29	Arabia, Germany	Brit. 4
65	Matricaria	h	6	Europe	Brit. 4
66	Mutisia	h	1	New Granada	
67	Pectis	- h	3		
	Senecio	s & h	59	Egypt, Siberia	Brit. 8
69	Solidago	h	14		Brit. 2
70	Tagetes	h	3	Mexico	-
71	Tussilago	h	12	Alps, Japan	Brit. 3
72	Unxia	h	11	Surinam	
	*	-			
		Recep	tacl	e chaffy.	
72	Achillea+	h	21	Frunt Alna Custo	Brit. 2
				Egypt, Alps, Crete	Ditt. 2
-	Am'ellus	s&h	2	Cape	
75	Anthemis	s & h	18	Alps, America	Brit. 5
76	Buphthalmum	s & h	11	America, &c.	
77	Eclipta	h	4	Virginia	
78	Leycera	s	3	Æthiopia	
	Sigesbeckia	h			
	Tridax	h	1	Vera-Crux	
	Verbesina	s & h	11	China, Virginia	

ORDER III. POLYGAMIA FRUSTRANEA.

Peru

(FRUSTRANEOUS POLYGAMY.)

Having the florets of the disc. monoclinian, and those of the radius neuter ‡; hence called frustraneous. All radiate.

83 Gaillardia s 1 Louisiana

· h

^{*} In inula the two bristles fixed to the lower part of each lip, is the essential character.

⁺ Achillea ageratum (sweet maudlin) is a culinary herb, used in stuffing flesh meat, which gives it a pleasant flavour; the flower is yellow.—Of late it became very scarce, and the achillea alpina was substituted in its stead, and sold for sweet maudlin, but hath a different flavour, and probably different qualities, and the flower is white.

Miller's Dictionary.

⁺ The florets in the radius are described as female in the Gen. Plant.; but some part being defective, and consequently barren, they are called neuter.

[§] Gaillardia (from M. Gaillard) pulchella, is a new genus mentioned by M. Troujeroux in the French academy of sciences for 1786, it flowers from the middle of July to the end of October, and if it can be made double by cultivation, will supersede the China-aster; it appears by the plate to be a beautiful shrubby plant, with numerous flowers.

No	Genera.	Nº of Growth. species	Native of	Species in Britain.
	46. *	Receptacle ra	ther naked.	
	Gorteria Sclerocarpus	s & h 12	Africa Africa	
		Receptacle	bristly.	
	Centaurea*. Zægæa	h 67	Alps, Asia Cape	Brit. 3
		Receptacle	chaffy.	•
88	Coreopsis	h 12	Virginia, &c.	
89	Helianthus	h 13		
90	Osmites	s 4	Cape	
91	Rudbeckia	h 6	Canada, Carolina	

ORDER IV. POLYGAMIA NECESSARIA.

(NECESSARY POLYGAMY.)

Having the florets of the disc male, and those of the radius female; hence called necessary.

Receptacle naked.

92	Baltimora	h	1	Maryland
93	Calendula			France, &c.
94	Filago	h	7	France, Germany Brit. 3
	Hippia	s & h	3	America
-96	Micropus	h	2	Spain
97	Milleria	h.	2	Panama
98	Osteospermum	h	15	Africa, America
	Othonna	s & h	26	Africa, France

^{*} In centaurea the scales of the calyx, and the feathers of the seeds, differ in different species; and the florets of the radius differing from those of the disc as to sex and size, apparently brings it under the description of a radiate flower; but as the florets are all tubular, Linnæus hath not called it radiate, but tubulous of different forms.—The flowers of centaurea cyanus (blue-bottle) make a good blue, which, with the addition of a little alun, becomes permanent.

105 Silphium

No.	Genera.	Frowth, s	Nº of pecies.	Native of Species in Britain.
		Recep	otacle	hairy.
	Arctotis Eriocephalus	s & h		Æthiopia, &c. Africa
		Recep	tacle	chaffy.
102	Chrysogonum	h	1	Virginia
103	Melampodium*	h	2	America, Vera-Crux
104	Polymnia	h	7	Canada, Abyssinia
	Silphium	h	8	America

ORDER V. POLYGAMIA SEGREGATA.

(SEPARATE POLYGAMY.)

Such flowers as have many partial or lesser calyxes containing one or more florets, and placed within a common calyx, by which the florets are separated.

	0	One floret.
106 Echinops 107 Steebe	h h	4 Italy 9 Africa
	Th	iree florets.
108 Jungia		1 America
	Fo	our florets.
109 Elephantopus	h	2 E. & W. Indies
	Fi	ive florets.
110 Gundelia	h	1 America
	Eig	ight florets.
111 Sphæranthus	h	3 India, Africa, China

^{*} Melampodium was the name given by Pliny to black helebore, which, accord-to the Edinb. Dispens., is now helleborus niger.

No Genera.	N° of Growth. species.	Native of	Species in Britain.
	Many florets	S.	

112 Œdera Cape S 113 Craspedia h 1

ORDER VI. MONOGAMIA.

(MONOGAMY.)

Containing simple flowers with the antheræ united.

114	Corymbium	h	4	Æthiopia	
115	Jasione	h	1	Europe	Brit. 1
116	Impatiens*	h		China	Brit. 1
	Lobelia	h	42	Ceylon, &c.	Brit. 2
118	Seriphium	S	4	Æthiopia	
	Shawia		1	10.00	
120	Strumpfia	s	1	America	
121	Viola†	s & h	29	America, &c.	Brit. 6

Panorama for Sept. 1803.

^{*} Impatiens noli tangere (touch me not) receives its name from its taper pods, when ripe, bursting on being touched; and twisting spirally like a screw, leap from the stalk, and cast out the seeds with great elasticity. - Miller's Dict. See note to momordica.

[†] In Europe the flower of the common violet always hangs down, in the Indies it is generally upright. In the Synopsis of British Plants, published in Latin by J. Symons, in 1798, the genus viola is removed to the class pentandria.—And Dr. Smith dismisses the whole of this order monogamia, and places it in the class pentandria, because the union of the anthers is not constant.

CLASS XX. GYNANDRIA.*

(FEMININE MALES.)

The flowers of this class are distinguished by having the stamina placed upon the style, or rather, upon a columnar receptacle lengthened out into the form of a style, supporting both the stamina and pistillum.

In examining and comparing the characters of this class, it is more necessary to attend to the pistillum before the stamina, in order to attain a distinct idea of the latter.

All the flowers of this class have a very singular appearance, owing to the uncommon disposition of the sexes.

The first order (diandria) of this class is natural, and its genera (formerly distinguished by the root) Linnæus distinguisheth by the nectarium alone.

The flowers also of this order are very singular, having the following description:

- CALYX. A spatha protruding a spadix, and the flowers have no perianthium.
- COROLLA. Five petals, of which the two inner generally approach so as to form an helmet, the outer are larger, and nearly equal; the lower lip of the helmet constitutes a nectarium, and hath the appearance of a sixth petal; and the upper lip is incorporated with the style of the pistillum.
- STAMINA. Always two, the filaments very short, supporting two antheræ, narrower downwards, naked, and divisible:

 The antheræ are generally enclosed by little cells, open underneath, and covered by a fold of the upper lip of the nectarium.

^{*} The name of this class means woman-man, in allusion to the singular circumstance of the stamina growing upon the pistillum; so that the male and female are united, and do not stand separate as in other flowers; and is therefore translated feminine males; and is the only class in which the flowers ought, with any prepriety, to bear the name of hermaphrodites.

PISTILLUM. Germen always below the corolla, oblong, and twisted like a screw. Style single, very short, forming one substance with the inner margin of the upper lip of the nectarium, so as both style and stigma are scarce to be perceived.

Pericarpium. A capsule, one cell, three valves, opening at the angles under the keel-shaped sutures, and joined both at top and bottom.

SEMINA. Very small, like saw-dust, very numerous, fixed (without footstalks) to a linear receptacle, at each valve.

This class contains nine orders.

ORDER I. DIANDRIA.*

(TWO MALES.)

Obs. It is observed, that though the stamina in this first order are only considered as two, yet each of them appears to be composed of a great number of elastic fibres united together, each fibre supporting its own proper anthera; these fibres branch out into lesser, each supporting at its point an extreme minute anthera.

N	Genera.	Growth.	Nº o specie		Species in Britain.
	Arethusa	h	7	Virginia, Cape	70.
	Cypripedium	h	3	Lapland, Japan	Brit. 1
-	Disa	h	4	Cape	
	Epidendrum+	s		E. & W. Indies	
5	Forstera	h	1	New Zealand	
6	Gunnera	s	1	Cape	
7	Limodorum	h	3	Jamaica	
8	Ophrys	h	28	Alps	Brit. 13

^{*} The plants of this order are possessed of restorative qualities, which chiefly belong to the roots: they are acrid when fresh, but lose that quality when dry, or by warm water.

[†] The venelloes, which is an ingredient in chocolate, is the pod of the epiden-drum vanilla. Most of the species are parasitical.

No	Genera.	Growth.	Nº of species			Species in Britain.
9	Orchis*	h	50	Italy, Asia	et ion	Brit. 11
10	Satyrium	h	15	Cape	¥5	Brit. 4
11	Serapias	h	10	Cape		Brit. 3

ORDER II. TRIANDRIA.

(THREE MALES.)

One-female.

12	Ferraria+	h	2	Cape
13	Salacia	S	1	China
14	Sisyrinchium	h	2	Bermuda
15	Stilago	S	1	India

ORDER III. TETRANDRIA.

(FOUR MALES.)

One-female.

16 Nepenthes

h 1 Ceylon

ORDER IV. PENTANDRIA.

(FIVE MALES.)

One-female.

17	Ayenia	h	3	Jamaica
18	Gluta	S	- 1	Java

^{*}The flowers of the different species of orchis and ophrys are very various; oft resembling different kinds of animals and insects, which have given British names to many of the species, according to their several representations.—Salep is prepared from the orchis; the bulbs of the orchis mascula are chiefly used, but some of the palmated bulbs are said to answer equally as well, especially the orchis latifolia; they may be thus prepared,—first to be washed clean, then dipped in hot water in order to separate the brown skin that covers them, which may be rubbed off by a brush or coarse cloth; they are then to be spread on a tin plate, and placed in an hot oven from six to ten minutes, in which time they will lose their whiteness, and acquire a transparency; afterwards are to be dried in the air for use, which will require several days; or may be dried with a gentle heat in a few hours. The time for gathering is when the stalk is ready to fall, for then the new bulb (of which salep is made) is arrived at maturity. In the Synopsis of British plants, published in Latin by J. Symons, 1798, the genus orchis is removed to the class diandria.

[†] Ferraria only vegetates every second or third year, though the root remains firm in the ground.

No Genera.

N° of Growth. species. Native of

Species in Britain.

Three-female.

19 Passiflora*

s 28 Brasils, &c.

ORDER V. HEXANDRIA.

(SIX MALES.)

Six-female.

20 Aristolochia s

s & h 21 France, India

Brit. 1

One-female.

21 Pistia

h 1 Asia, Africa

ORDER VI. OCTANDRIA.

(EIGHT MALES.)

22 Scopolia

t 1 Java

ORDER VII. DECANDRIA.

(TEN MALES.)

One-female.

23 Helicteres†

s 6 Jamaica, Carthagena

24 Kleinhovia t 1 E. Indies

^{*} The fruit of the passion flower is not yet discovered to be of any use, except the passiflora laurifolia (called water lemon), which Mr. Miller says is commonly used in fever, &c. as a cooler.—The passiflora carulea, from Brazil, is the hardiest and grows the highest of any of them, in which the germen, when the flower decays, swells to a large oval fruit, the size of a moderate plum.—The plants are all climbers, and the flowers in general continue but one day.

 $[\]dagger$ Helicteris (screw-tree) called so because the capsules are twisted together like a screw.

ORDER VIII. DODECANDRIA.

(TWELVE MALES.)

No	Genera.	N° of Growth. species.	Native of	Species in Britain.

One-female.

25 Cytinus

1 Spain

ORDER IX. POLYANDRIA.

(MANY MALES.)

One-female.

27 Xylopia	s s	2	America	
1		Spat	he.	
28 Ambrosinia 29 Arum* 30 Calla 31 Dracontium 32 Pothos	h h s s	<u>9</u> 5	Palermo in Turkey Virginia, &c. Æthiopia W. Indies America	Brit, 1

Leaf.

99	Zosterat	h	2	Holland	Brit. 1
UU	ZJUSICIAI.	11	dept	110mmin	351100 3

^{*} Arum muscivorum (fly-eater). The flower stinks like carrion, by which the flies are allured to lay their eggs, but are prevented from escaping by hairs pointing inwards, and thus perish in the flower; from whence the name.—Sup. Plant. See note to stapelia.—See wake robin (arum maculatum) in Index of British names.

[†] The zostera marina (grass-wrack) is very plentiful in the Zuyder Zee in Holland, and is of great use in constructing their banks: when the lighters are laden with it, the fumes which arise will affect the watermen with violent pain in the eyes, and even with temporary blindness.

CLASS XXI. MONŒCIA.

(ONE HOUSE.)

This class consists of diclinian (two bed) plants, (viz.) of such genera as have male and female flowers distinct and separate from each other, on the same plant, which Linnæus also calls androgynous* plants.

But it is to be observed, that florets contained within a common calyx, though agreeing in this disposition of the sexes, do not belong to this class; which caution is necessary to exclude several species of genera of the umbellate and compound flowers, which are sometimes androgynous, but have united antheræ. There are also a few other plants dispersed in the several classes, which properly belong to this class, but as they are only species agreeing with the generic character under which they are placed, they are suffered to remain; as callitriche verna, plantago uniflora, rumex spinosus, glycine monoica, arum triphyllum, mercurialis ambigua.

This class contains eleven orders,

Founded on the number, union, and situation of the stamina in the male flowers.

ORDER I. MONANDRIA.

(ONE MALE.)

No	Genera.	Growth.	No of species.	. Native of	Species in Britain.
2 3	Balanophora Ceratocarpus Chara Elaterium	h h h	4	Tartary Europe Carthagena	Brit. 4

^{*}See androgynous under Distinction of flowers.

No

Genera.

No of

Growth, species.

Native of

Species in

Britain.

6	Myristica* Phyllachne Zannichellia	t h h	2 1 1	W. Indies Terra del Fuego Dantzic Brit. 1	
Amentum.					
8	Ægoprigon	t	1	Surinam	
9	Artocarpus† Casuarina	t	2	Batavia, Otaheite, Ceylon	
10	Casuarina	S	2	India	
11	Cynomorium‡	h	1	Jamaica, Malta	
12	Radermachia	t	1	January and the second	

ORDER II DIANDRIA.

(TWO MALES.)

13 Anguria 14 Lemna§ 15 Sapium	h h h	_	America Europe	Brit. 4
--------------------------------------	-------------	---	-------------------	---------

ORDER III. TRIANDRIA.

(THREE MALES.)

16	Axyris	s & h	4	Tartary, Siberia
17	Glochidion	h	1	4

^{*} Myristica (nutmeg) was heretofore placed in the class and order polyandria, monogynia, but it is now found with certainty to belong to this class and order. The spice called mace is the second coat or covering of the nutmeg, next to the shell. There are two sorts of nutmegs sold in the shops by the name of male and female; the famale is in common use, and in shape of an olive, either roundish or oval; the male is long and cylindric, and has less of the aromatic flavour, and is more subject to be worm-eaten, and which the Dutch call the wild nutmeg.

[†] Artocarpus incisa (the bread fruit). The fruit of this tree is used while it is green, in which state it is roasted till the outside becomes scorched and black: the outer part is then rasped off, and the inner part, which is soft and white, like the crumb of new bread, is used for food. It is very wholesome and nutritious, but in taste comes nearer to a sweet potatoe, or Jerusalem artichoke, than to wheaten bread.

[‡] In the cynomorium coccineum (the Maltese fungus) the whole plant is an amentum.

[§] Lemna minor is called duck's meat, from ducks being fond of it; and it is said the gold fishes from China are very fond of it.

		N∘ o	f	Species in			
No Genera.		pecie		Britain.			
18 Hernandia	Ś	2	India				
19 Omphalia	S	2	Jamaica				
20 Phyllanthus*	s & h	7	Jamaica, India				
21 Sparganium	h	2	Europe	Brit. 2			
22 Tragia	s & h	6	India, Virginia				
23 Typha	h	2	Europe	Brit. 2			
	-	. 7					
	G	lun	na.				
24 Coix†	h	1.	India				
25 Olyra	h	1	Jamaica				
26 Scleria‡	h	1					
27 Tripsacum	h .	2	America				
28 Zea§	h	1	America				
	An	neni	tum.				
29 Carex	h	45	India, Lapland	Brit. 38			

ORDER IV. TETRANDRIA.

(FOUR MALES.)

						/
30	Aucuba	s	1	Japan		,
31	Betula	t	7	Virginia		Brit. 3
32	Boehmeria	h	1	A. T. C.		
33	Buxus¶	s	1	Europe		Brit. 1
	Cicca	t	1	India		
35	Empleurum	S	1	Cape		
	-	-				

^{*} See note to Xylophylla.

[†] Coix lacrima (Job's tears) is frequently cultivated in Spain and Portugal, and the seeds ground for a coarse sort of bread.

[‡] Scleria hath either one or three stamina.

[§] Zea mays (Indian corn) hath several varieties.

^{||} The Laplanders make great use of the carex vesicaria (bladder carex) to stuff in their shoes in winter to keep out cold, and in summer to keep their feet from sweating; they also stuff their gloves with it to preserve the hands.

 $[\]P$ Buxus sempervirens (box tree) is said by some to have the same virtues as the guajacum officinale.

No	Genera.	Growth.	No of species.	Native of	Species in Britain.
	Littorella Morus*	h t		Dantzic China, Amer	Brit. 1
38	Serpicula Urtica‡	h s&h	2 I	ndia Canada, Cap	

ORDER V. PENTANDRIA.

(FIVE MALES.)

	Amaranthus	h	24	Ganges, &c.	Brit. 1
41	Ambrosia	h	4	Ganges, &c. Virginia	
42	Chayote	h	1		
	Clibadium		1	Surinam	
44	Iva	* s & h	2	America	
45	Leea	S	2	Cape, India	
46	Melicytus	S	1		
	Nephelium	S	1	India	*
48	Parthenium	h	2	Jamaica	
	Xanthium	s & h	5	E. Indies	Brit. 1

ORDER VI. HEXANDRIA.

(SIX MALES.)

Calyx glume, none:

50	Bactris		1
51	Pometia	h	.1

^{*} Mr. Evelyn, in his Sylva, says that the timber of the mulberry tree (morus) will last in water as long as the most solid oak; and that it suffers no kind of vermin to breed on it, whether standing or felled, nor does it harbour any caterpline except the silk-worm. The greatest part of the paper in Japan and China is made of the bark of the mulberry paper-tree (morus papyrifera), but besides this, they use the bamboo reed, the cotton shrub, hemp, and the straw of wheat and rice, &c. In general only the bark of trees and shrubs is used, but of bamboo and cotton shrub the woody part is employed: but the best and most esteemed paper is made from cotton.

[†] The three British species of urtica are the urtica pilulifera (the Roman stinging nettle), urtica usens (the annual stinging nettle), and urtica divica (the perennial stinging nettle): and their stinging is said to be performed in the same way as in insects; by a bag at the base, and a perforation near the point, through which is ejected the deleterious fluid.

No Genera. Growth. Species. Native of Britain.

52 Zizania* h 3 Jamaica, N. America

Calyx glume, one-flowered.

53 Pharus h 1 Jamaica

ORDER VII. HEPTANDRIA.

(SEVEN MALES.)

54 Guettarda

t 1 Jamaica

ORDER VIII. POLYANDRIA.

(MANY MALES, -MORE THAN SEVEN.)

55	Begonia	h	4	India, Cape	
56	Ceratophillum	t & h		Europe	Brit. 2
	Fagus†	t	3	Italy	Brit. 2
58	Liquidambar	t	2	Virginia	
59	Myriophyllum	h	2	Europe	Brit. 2
60	Poterium	h	3	Europe	Brit. 1
	Quercus‡	t	19	Molucca, &c.	Brit. 1

^{*} Zizania aquatica (wild rice) is a grass produced on the banks of the lakes of N. America, its seed is larger than rice, and nearly equal in flavour, and is much sought for by the inhabitants for food.

Linnæus Amæni. Acade.

⁺ Evelyn, in his Sylva, says that the leaves of the beech (fagus) being gathered about the fall, afford the best and easiest bed mattresses in the world; and are much used in Dauphine and Switzerland. He also cites Juvenal, who says "Sylva domus, cubilia frondes."

[†] Kermes (a species of insect called coccus infectorius) is found on an evergreen oak (quercus coccifera), and was much used in dyeing before cochineal was known. See scleranthus and cactus). Both this and cochineal were for a long time considered as a grain; hence clothes dyed with these drugs were said to be dyed in grain.—Quercus suber is the cork tree, which Mr. Millér says requires stripping of its external bark (out of which they cut corks) every eight or ten years, or the health of the tree, which would otherwise sooner perish;—But Mr. Dillon (in his travels through Spain, printed in 1782) says that they strip off the bark every four years as far as a white sap, which they leave on the tree; a liquid humour afterwards issues out, which thickens with the sun and air, and forms a new bark in about four years.—See note to spondias. Quercus nigra (black oak) is so called in Pensylvania, New Jersey, New York, and New England. Mr. Bartram (in his travels through America, printed in 1792) says that he measured several black oaks that were eight, nine, ten, and eleven feet diameter, five feet above the ground,

No	Genera.	Growth.	Nº of Species		Species in Britain.
63	Sagittaria Theligonum Xylosma	h h		America, China Italy	Brit. 1
		Amentu	ım im	bricated.	
66	Carpinus Corylus	s s	3	America Europe America	Brit. 1 Brit. 1
67	Juglans*	t Ament		America lobular.	
68	Platanus	t		E. & W. Indies	

ORDER IX. MONADELPHIA.

(ONE BROTHERHOOD.)

Stamina united at the base.

69 Acalypha h 5 Virginia, I	ndia
70 Croton† s & h 23 Japan, Am	erica, Cape
71 Cupania s 1 America	7
72 Dalechampia s 2 America	
73 Heritiera s 1 Zeylon	

from whence they ascended perfectly straight, with a gradual taper, forty or fifty feet to the limbs; the bark (called the quercitron bark) is found to afford a valuable yellow dye; discovered by Edward Bancroft, M. D. F. R. S. who obtained an exclusive privilege for importing, using, and vending it. Professor Martin is of opinion that our common English oak (quercus robur) produces by much the best timber of any of the species; the leaves are deciduous, have no foot-stalks, and the acorns generally grow single, or at most two together, on long foot-stalks.—There is also an oak, not uncommon in England, which hath the leaves on foot-stalks, and the acorns in clusters, sitting close to the branch; but the timber is much inferior. In some counties the woodmen call it durmast.

* It is said that if a seedling plant of the walnut (juglans), or the mulberry (morus), or any other trees that are many years before they bear fruit, are ingrafted with scions taken from a fruit-bearing tree of the same kind, that they will bear fruit in a very few years.

† In China are many plantations of the croton sebiferum (tallow tree) of which the Chinese make their candles, which are of a superior quality; this tree is there called latchoo, and is remarkable for the beauty of its appearance; it is the size of an apple tree, having scarlet leaves edged with yellow, and blossoms of a pale purple.—Macartney's Embassy, printed in 1705. The stone of the fruit is surrounded by a white pulp, which hath all the properties of true tallow, both as to consistence, colour, and even smell.

		N	of of	Species in
No	Genera.	Growth. sp	ecies.	Native of Britain.
74	Hippomane*	t t	3	W. Indies
	Hura	S	1	Mexico
76	Jatropha+	s & h	9	America, Africa, &c.
77	Plukenesia	s	1	India
78	Ricinus‡	h	4	E. & W. Indies
	Sterculia	S	3	India
80	Stillingia	S	1	Carolina
		A_{I}	nent	um.
81	Cupressus§	t.	6	Crete, Japan, Levant
82	Gnetum	S	-1	India / P
83	Pinus	t	12	Canada, India Brit. 3
84	Thuja	t	4	Canada, E. & W. Indies

- *The manchineel tree (hippomane mancinella) is one of the most poisonous trees that grows; not only the fruit, but the wood and every part is noxious. The Indians use the milk or juice to poison their arrows.
- † The root of the manihot or manioe (jatropha manihot), properly prepared, is much used in the W. Indies for bread, then called cassada, and esteemed very wholesome; although in its recent state it is said to be a strong poison: but the sort that grows in Africa is often eaten raw without any ill effect, and from the starch of the root is made a granulated powder, called tapioca, which, dissolved in hot water, is said to be very nourishing.
- ‡ An oil, called castor oil, in the West Indies, is expressed from the seed of the ricinus communis, formerly called palma christi, or agnus castus.
- § The wood of cypress (cupressus sempervirens) is almost incorruptible either in air or water. The coffins in which the Athenians used to bury their heroes; Thue cydides says, were made of this wood; as were likewise the chests containing the Egyptian mummies.—See note to ficus. The doors of St. Peter's church, at Rome, were originally of the same wood, but after lasting eleven hundred years, without any visible tendency to decay, they were removed by order of Pope Eugenius the 4th, and gates of brass substituted in their place. Milne's Bot. Dict.
- \parallel Venice turpentine is from the larch tree (pinus larix); Burgundy pitch is from the \hat{fr} (pinus abies).

Former botanists, before Linnæus, distinguished the *fir* from the *pine*, by the insertion of the leaves; those of the *fir* are produced singly from the branches; those of the *pine* grow by twos, threes, or fives, out of a little sheath that surrounds their base, and when fitted together, they form a cylinder.—Linnæus hath included both sorts under one *genus* (pinus), but hath made the same distinction in the *species* as above; except having added the *cedar* and *larch* to the same *genus*, the leaves of which proceed from a sheath, but growing in bunches, he calls *fascicled*.—Great varieties proceed from the seeds of the several species of the *pine* and *fir*.

Pinus pinea (the stone pine) hath in general only two leaves in a sheath, but a few intermixed have three.—The kernels of this pine are said to be frequently used in the winter desserts of the table both in France and Italy.

The kernels of the pine are used in medicine, and sometimes for food; and it is said in Lapland a nourishing bread is made of the pounded bark.

ORDER X. SYNGENESIA.

(CONFEDERATE MALES.)

Stamina united at the top.

No	Genera.	Grow	Nº h. spec		Species in Britain.
	1 2	Calyx five	-cleft,	or five-toothed.	
85	Bryonia*	b	11	Africa, Crete	Brit. 1
	Cucumis+	h	13	,	
87	Cucurbita	h	7	America	
88	Momordic	at h	8	India, America	
89	Sicyos	h	3		-11
90	Tricosanth	nes h	4	China	

ORDER XI. GYNANDRIA.

(FEMININE MALES.)

The stamina growing on a sort of style, or imperfect pistillum.

Calyx five-leaved.

91 Andrachne

h 2 Italy

Calyx six-leaved.

92 Agyneia

s 2 China

^{*} The young tops of white bryony (bryonia alba) may be boiled and eaten as hop tops, or asparagus. See note to arctium.

[†] The drug coloquintida, or colocinth, is the pulp of a species of cucumis, called cucumis colocynthes.

^{*}Momordica elaterium (spurting cucumber) receives its English name from being of the shape of a cucumber, but less. Like many other plants it is endued with a remarkable elastic force for the dispersion of the seed, which force, in some plants, is resident in the calyx, as in oates, and many of the ferns, &c.; in others, in the pappus (down), as in centaurea, crupina, &c.; and in others, in the capsule or pericarpium, as in nomordica elaterium, which, when ripe, by touching the stalk near the capsule, or raising up the capsule so as to disturb the end of the stalk, it is immediately detached a little within the capsule, and, in a surprising manuer, the seeds and part of the juice are thrown out to a considerable distance with great violence: which seems to be owing to the elasticity of confined air; which, as Virgil says, "Qùa data porta, ruit." See note to impatiens, and to the semina of plants

CLASS XXII. DIŒCIA.

(TWO HOUSES.)

This class consists of such genera, as have male and female flowers distinct on two separate plants.

OBSERVATION.

There are many plants which have male and female flowers distinct on two separate roots, yet are not admitted to this class, because they are only species of some particular genus, which agree in all other instances with the generic character to which they belong; as valeriana, (triandria); rhamnus, rhus, lonicera, phylica, (pentandria); rumex, (hexandria); laurus, (enneandria); guilandina, cucuhalis, lychnis, phytolacca, gypsophyla, (decandria); spiræa, rubus, (icosandria); clematis, thalictrum, (polyandria); napæa, (monadelphia); gnaphalium, (syngenesia); carex, urtica, morus, (monœcia).

It may also be observed, that none of the species of the rough-leaved plants of Ray, in class and order pentandria, monogynia, or in the classes didynamia, tetradynamia, and diadelphia; have any of the species been found to have distinct sexes on different plants.

This class contains fourteen orders,

Founded on the number, union, and situation of the stamina in the male flowers.

ORDER I. MONANDRIA.

(ONE MALE.)

No	Genera.	Growth.	Nº of species	Native of	Species in Britain.
1	Ascarina	h	1	• · · · · · · · · · · · · · · · · · · ·	
2	Najas Keura	h	1	Europe	
3	Keura	t	1	· _ ·	

Nº.	Genera.	N° of Growth. species.	Native of	Species in Britain.
4	Pandanus*	t&s 2 {	Ceylon, Nicob odorious)	ar (most
ŏ	Phelypæe	1	ict i	

ORDER II. DIANDRIA.

(TWO MALES.)

Spatha.

6 Cecropia 7 Vallisneria†	s h	1	Jamaica Italy	
	- Z	1men	tum.	
8 Brosimum o Salixt	t & s	1 45	Jamaica Egypt, Lapland	Brit. 40

ORDER III. TRIANDRIA.

(THREE .MALES.)

10 Caturus 11 Empetrum 12 Maba 13 Osyris	S S S	2	E. & W. Indies Europe Tonga Tabu Italy, Japan	Brit. 1		
Amentum.						
14 Excecaria 15 Restio§	s & h	1 9	Amboyna Cape, &c.			

^{*} Pandanus leram (Nicobar bread-fruit) is said to be of the palm kind.

[†] The male vallisneria spiralis, being always under water, hath a very short stalk, on the top of which its flowers are produced, and when nearly arrived at maturity, they are separated from the stalk, and come unopened to the surface of the water; soon afterwards they expand themselves, and swim about the female flowers, which are blown at the same time, and lie on the surface of the water to receive the farina. The female flowers have long spiral stalks, which, relaxing, permit them to rise to the surface, and remaining there in full dress, receive the visits of the male; and in a few days return again under water.

[‡] Salix herbacæa, as Dr. Smith remarks, is the least of all shrubs, for although the stems are only an inch, or inch and half long, they are truly woody and perennial. Found on the highest mountains of Scotland, Cumberland, and Wales.

[§] Many of the houses at or about the Cape of Good Hope, are covered with a sort of dark coloured reed (restio tectorum).

ORDER IV. TETRANDRIA.

(FOUR MALES.)

No	Genera.	Growth.	No of species.	Native of	Species in Britain.	
16	Brucea*	S	1 A	byssinia		
17	Hippophæ	S		anada	Brit. 1	
18	Montinia	. S	1, C			
19	Trophis	S	2 J:	amaica, Asia		
20	Viscum	S	9 C	ape	Brit. 1	
Involucrum.						
21	Batis	S	1 Ja	amaica		
		A	mentun	ı.		
22	Myricat	S	7 A	Ethiopia, America	Brit. 1	

ORDER V. PENTANDRIA.

(FIVE MALES.)

23	Acnida	h	1	Virginia
24	Antidesma	t	1	India
25	Astronium	8	1	Jamaica
26	Canarium	S	1	India
27	Cannabist	h	1	India

^{*}The bark of the root of the brucea antidysenterica (called by the natives wooginoos) is a specific for the dysentery. The specific name antidysenterica was given by Sir Joseph Banks, but L. Heritier hath changed the name to brucea ferruginea. Bruce's Travels, 1790, vol. v.

N. B. The new red bark called angustura bark is supposed to be the production of the brucea.—Observations on the angustura bark, by Augustus Everad Brand, 1791. But it hath been since said, that it seems to be neither the production of the magnolia glauca nor grandiflora; nor the brucea.——Dr. Simmons's Medical facts, 1791.

[†] The substance which is obtained from the female plant of candleberry myrtle (myrica cerifera) is from the covering of the berries, which is a granulated, white, unctuous substance; and after twice boiling, becomes a transparent green, and is a medium between wax and tallow. The leaves of the plant emit a grateful odour when bruised.

[‡] A female hemp hath sometimes had one or two male flowers, and consequently good seed, from which some persons have doubted of the sexes of plants. The only two intoxicating articles of which the Kaffers in Africa have any knowledge, are tobacco and hemp (cannabis sativa). The effects produced from smoking hemp are said to be fully as narcotic as opium.—Barrow's Travels in Africa, printed 1801.

		03 111	0 j 1	No o		Species in
N_0	Genera.	G	rowth.	Specie	es. Native of	Britain.
28	Flevillea		h	2	W. Indies	
29	Humulus*		h	1	Europe	Brit. 1
30	Iresine		h	1	Virginia, Jamaica	75
	Pistaciat		. t	5	Chios	
32	Spinacia		h	2	Siberia	
33	Zanonia		h	1	India, Malabria	
34	Zanthoxylo	n	S	2	Virginia, Jamaica	0.00

ORDER VI. HEXANDRIA.

(SIX MALES.)

Calyx six-leaved.

35 Dioscorea	h 12	India
36 Rajania		America
37 Smilax‡	s & h 14	Spain, Ceylon, N. Amer.
38 Tamus	h 3	Crete, Cape Brit. 1

ORDER VII. OCTANDRIA.

(EIGHT MALES.)

Calyx four-parted, or four-toothed.

39 40	Margaritaria Rhodiola	s h	1	Surinam, Europe	Brit. 1		
Amentum.							
41	Populus§	t	11	Italy, &c.	Brit. 3		

^{*} Hop-binds properly macerated in water, like hemp, will make cloth or paper. The part of the hop which is used as a bitter, is the leafy calyx of the female, which is expanded and lengthened.

⁺ Mastich (a resin) is from the pistacia lentiscus.

[‡] The large tuberous roots of the smilax China, properly prepared, afford a nourishing food to the Indians.

[§] The blossoms of the *populus nigra* (black poplar) yield by pressure an oil, or resin, which consolidates in the usual temperature of the atmosphere, and which, when made into candles, is found to give a light cheaper than that of tallow, and more brilliant than that of wax.—It is a native of Britain, and flowers in April.

ORDER VIII. ENNEANDRIA.

(NINE MALES.)

N°	Genera.	No of Growth. species.	Native of	Species in Britain.	
Calyx three-leaved.					
	Hydrocharis Mercurialis		Europe Africa, Spain	Brit. 1 Brit. 2	

ORDER IX. DECANDRIA.

(TEN MALES.)

Calyx five-leaved, or five-cleft.

44	Carica	S	2	India
45	Coriaria	S	2	France
46	Kiggelaria	t	1	Æthiopia
47	Schinus	S	2	Peru

ORDER X. DODECANDRIA.

(TWELVE MALES.)

48	Datisca	· h	2	Crete
49	Euclea	t		Cape
50	Menispermum	S	11	America, Japan

ORDER XI. ICOSANDRIA.

(TWENTY MALES.)

51 Flacourtia s 1

ORDER XII. POLYANDRIA.

(MANY MALES.)

52 Cliffortia s 18 Cape, &c. 53 Hedycarya s 1 New Zealand

ORDER XIII. MONADELPHIA.

(ONE BROTHERHOOD.)

Stamina united at the base.

54	Adelia	S	3	America
55	Cissampelos	s & h	5	America

, No	Genera.	Growth.	No of species.	Native of	Species in Britain.	
56	Napæa	h	2 V	'irginia		
57	Taxus*	t	4 A	Imerica	Brit. 1	
Male amentum.						
58	Ephedra	S	2 5	pain		
59	Juniperus†	8	10 .H	Barbadoes,	China Brit. 1	

ORDER XIV. SYNGENESIA.

(CONFEDERATE MALES.)

Stamina united at the top.

Calyx six-leaved.

60 Ruscust

s 5 Italy, Spain

Brit. 1

ORDER XV. GYNANDRIA.

(FEMININE MALES.)

The stamina growing on a sort of style, or imperfect pistillum.

Calyx five-leaved.

61 Clutia

9 Africa

Ruscus aculeatus, . . Leaves flower-bearing above, naked.
. . . . hypophyllum, Leaves flower-bearing underneath, naked.
. . . . hypoglossum, Leaves flower-bearing above, under a foliole or leaflet, called by Linnæus under-tongue.

..... androgynus,.. Leaves flower-bearing on the margin. racemosus, ... Raceme terminal, monoclinian.

^{*} Taxus baccata (the common yew tree) is very deleterious to cattle, but they will not eat the young shoots as they grow, but only when cut off and beginning to wither, as they then lose part of their acrimony, but there is often sufficient poison left in them to destroy the animal.

Phytologia.

⁺ Ohibanum (a gum resin) is from a species of juniperus, called juniperus lycia; and the sandarack resin is from the juniperus communis, which being dissolved in oil of turpentine, or linseed oil, or spirit of wine, is the common varnish; and being reduced to powder, is the pounce commonly used. The cedar of Bermudas (juniperus bermudiana) in which black-lead pecils are enclosed, is not eaten by any insect.

[†] The ruscus is a very singular plant as to its mode of flowering, which I shall instance in the ruscus aculeatus, which is the only British species of this genus ji appears to have its flower protruded from about the middle of the upper surface of the leaf, yet hath a perfect peduncle, which is connected with the wood of the branch, at the bosom of the leaf; but being covered with the exterior coat, or epidermis of the leaf, is scarcely visible to the eye, but is very apparent in the ruscus hypoglossum. Linnæus enumerates five species, viz.:

CLASS XXIII. POLYGAMIA.

(POLYGAMIES.)

This class consists of such genera as have monoclinian flowers, and also either male or female flowers, or both, distinct, either on the same, or on different plants: so that to be of this class, a plant ought to have some of its flowers monoclinian, to distinguish it from those of the classes monæcia and diæcia. Yet there are a few exceptions, as in the third distinction under the second order, and in the third order.

The polygamy of moniclinians and males on the same plant is also observable in several of the umbelliferous plants (pentaudigyn.), particularly carrot, sanicle, hog's fennel, coriander, chervil, shepherd's needle, alisander, bastard parsley, and carui.—These plants therefore, strictly, ought to have been arranged under this class; but Linnæus more properly judged the natural umbelliferous character to be prevalent.

This class contains three orders.

ORDER I. MONŒCIA.

(ONE HOUSE.)

Having the polygamy on the same plant.

N. Genera.

Nº of Growth. Species.

Native of

Species in Britain

1st. Male monoclinians, and female monoclinians.*

Spatha.

1 Musat

h 3 India

^{*} Called so from the sex that is predominant, as a male monoclinian hath the female abortive or ineffectual; and a female monoclinian the male. For it is to be observed, that the monoclinian flower commonly fails in one sex, whence the male or female flower becomes necessary.

⁺The banana (musa sapientum) is a fruit much esteemed by the Indians; in the island of Madeira it is called the forbidden fruit, and is thought a crime to cut it with a knife, because, after dissection, they fancy it represents our Saviour's crucifixion, and that they thereby wound his sacred image. The plantain tree (musa paradisiaca) will rise fifteen or twenty feet, and generally flowers within the year, and the leaves, when the plant is in full vigour, are often eight feet long, and

Species in

No	Genera.	Growth.	species	Native of	Britain.
	2d.	Mono	clinia	ns and males.	.*
2	Acer*	t	17	Crete, Japan, Amer.	Brit. 2
3	Celtis	t	3	France, E. & W. Indi	es
4	Gouania	s	1	Domingo	
5	Griselinia	S	1		
	Mimosa†	S	55	Africa, America	
7	Ophioxylum	S	1	Ceylon	
8	Pennantia		1		
	Terminalia‡	S	2	France, E. Indies	6.3
10	Valantia	h	8	Europe	Brit. 1
11	Veratrum	h	3	Russia	

near three broad; but when it hath once flowered, the stem soon dies to the ground. The fruit of both these trees is used for bread in the West Indies, and both have equally large leaves. Dr. Milne says the most antient authors called the fruit of the banana a fig; and it is supposed from the leaves of these trees our first parents in Paradise made for themselves aprons.

* Acer saccharinum (the sugar maple) grows in North America, and is very common in Canada, where there are two kinds, one called the swamp maple, from its growing on low ground; the other, the mountain or curled maple, from its growing on high ground, and the wood being variegated with little stripes and curls. The former yields most sap in proportion to its size, but the sap does not afford so much sugar as the curled kind; a pound of sugar may be obtained from two or three gallons of the curled maple, but it will take six or seven gallons of the swamp maple to procure the same quantity. A maple tree of about twenty inches in diameter, will commonly yield sap for five pounds of sugar each year.

Travels through North America, by Isaac Weld, junr .- 1799.

†The drug terra japonica is not an earth, but a concreted vegetable juice, partly gammy and partly resinous, from the mimosa catechu, and other plants. Gumarabic is also from the mimosa nilotica. The gum-arabic which comes in the way of trade, is not collected on trees, as is commonly imagined; it is found by digging cavities at the foot of the old trees, particularly of the mimosa nilotica and senegal, where large masses of the gum which have exsuded from the roots, perhaps during some ages, and which are detached from the base of the tree, are then discovered. Though this gum bears the name of gum-arabic, it is chiefly obtained from Abyssinia. The species of mimosa are with the greatest difficulty combined with the character of the genus. Some with calyx and corolla four-cleft, five-cleft, manypetaled, petalless.—Some with stamens four, five, ten, very many, rather two brotherhood.—Some with legume membranous, winged, berried, jointed; the seeds also vary in shape. See note to sensitive plants, in the Index.

‡ Benzoinum (Benjamin) is a resin from terminalia benzoin, and is sometimes called assa-dulsis, in opposition to assa-fætida.—Edin. Phar. Former botanists thought the laurus benzoin to be the true benzoin, but Linnæus detected the error, and thought it to be the terminalia benzoin; but, according to Mr. Dryander, Linnæus is also mistaken, for he evidently finds it to be a species of the styrax, and gives a particular description of the tree growing in Sumatra.

Phil. Trans. part 2d. vol. 78, for 1787.

No	Genera.	No Growth. Spec	of ies. Native of	Species in Britain.			
	Gluma.						
12	Ægilops	h 4	Spain, Italy	Brit. 1			
13	Andropogon	h 25	India, America				
14	Apluda	h 4	E. & W. Indies				
	Cenchrus	s & h 9	Italy				
16	Holchus*	h 13	India	Brit. 2			
17	Ischæmum	s 2	China				
18	Manisuris	h 1	India				
19	Spinifex	h 1	E. Indies				
Umbelled.							
20	Hermas	h . 5	Cape				
Amentum.							
21	Brabeium	s 1	Cape				
3d. Monoclinians and females.							
22	Atriplex†		Siberia	Brit. 8			
23		t 4					
	Virgilia						
	Wedelia	1	30 100				
	Parietaria	h 8	Portugal, Crete,	&c. Brit. 1			
Ath Monoclinians and males and females							

4th. Monoclinians and males and females.

27 Breynia

h

ORDER II. DIŒCIA.

(TWO HOUSES.)

Having the polygamy on two plants.

1st. Monoclinians and males.

28 Chrysitrix (glume) h Cape

Italy, Virginia, E. Indies 29 Diospyros 5

Virginia 30 Nyssa

^{*} Indian millet (holchus sorghum) is much cultivated in Egypt under the name of doura.

⁺ Atriplex without the female flower is chenopodium, and chenopodium with the female flower is atriplex; therefore there is the greatest affinity between them. This genus is omitted in the 8th edit, of Gen. Plant.

C

No	Genera.	Growth. spe	ecies	. Native of	Britain.		
31	Panax* (umb	eld) s&h	5	China, America			
	Stilbe		3	Cape			
2d. Monoclinians and females.							
33	Fraxinus+	t t	4	America	Brit. 1		
34	Gleditsia‡	t	2	America			
3d. Androgynous and males.							

35 Anthospermum s & h 3 Æthiopia

Umbelled.

36 Arctopus

1 Africa

No calyx.

37 Pisonia

s 2 W. Indies

ORDER III. TRICECIA.

(THREE HOUSES.)

Having the polygamy on three plants.

Androgynous, male, and female, on three plants.

38 Ceratonia

t 1 Spain

^{*} The roots of fennel (anethum fæniculum) is said to be a good succedaneum for ginseng (panax quinquefolia). Dispensatorium Fuldense, 1791.

⁺ Manna, from Calabria, is a concreted juice chiefly from a species of ash, called fraxinus rotundifolia. This is the sort at present most used, though formerly that obtained from the hedysarum alhagi was in great esteem, called Syrian or Persian nanna, which granulated like mastick. Manna is also obtained in Spain from the old branches of the cistus ladiniferus.

[‡] In gleditsia, the monoclinians and males are on the same plant, and the females on another.

[§] Amber tree (anthospermum) is called so from its fragrant odour: real amber being ranked as a fossil bitumen; though perhaps originally might have been of vegetable production.

^{||} Ceratonia siliqua (the carob tree) called by former botanists siliqua; which, Mr. Bruce says, in Africa is called knara, from the country where it grows. It bears a long, flat, brown-coloured pod, the seeds of which are so nearly of a size, as scarcely to vary in weight; hence they became a weight for gold, called carat,

Nº Genera.

No of Growth. Species.

Native of

Species in Britain.

39 Ficus*

s 17 Europe, India

carrat, or caract, from the Greek word kerateon (siliqua).—In Britain the term is used to express the degree of fineness, pure gold being fixed at twenty four carats; if therefore two parts are alloy (which is about the standard of the current gold) it is said to be twenty-two carats fine.—The term is also borrowed as a weight for precious stones, containing four grains.

* Linnæus saith he hath removed ficus (fig tree) from the class cryptogamia to the class polygamia, being convinced of the structure of the fructification, the umbilicus of the receptacle in some being open. Therefore the fruit of the ficus is not a pericarpium, but a receptacle, the interior sides of which support the flowers, which are enclosed within it.

Mr. Lee says, the flowers in our common fig trees are female only, but that formerly known by the name of eaprificus hath male flowers; and another, called erinosyne (which is androgynous) hath both male and female flowers distinct, though lodged within the same receptacle.—Here, then, we have the triectous polygamy explained; and if descriptions of De la Hire may be trusted, there are figs which contain monoclinian flowers; which makes a fourth habitation for the sexes.

As these trees, in warm climates, bear some male and others female flowers, immured on all sides by the fruit, the manner of their fecundation was very unintelligible, until Tournefort, Pontedera, and Linnaeus, discovered that a kind of gnat, of a black colour, was produced in the male figs; and, at a certain time, made their escape, and carrying the fecundating dust on their wings, and penetrating the female fig, thus impregnated the flowers. The figs of this country being all female, their seeds are not prolific; and therefore can only be propagated by layers, suckers, or cuttings.

See Milne's Bot. Dict. under caprification.

Ficus religiosa (the banian tree) is said by some to bear no flowers or fruit, or very small, and is very remarkable; shoots from the boughs of which, tending to the earth, take root and grow up again like the mother plant, and spreading themselves far around, will afford shelter for a regiment of soldiers under its branches, whose leaves are ever-green. Under these the Banians and Gentoos frequently place their idols, and perform religious ceremonies. Ficus sycomorus (the Egyptian sycomore) adorns the banks of the Nile, and produces a fig which grows on the trunk of the tree, and not at the end of the branches, which, though somewhat dry, is eaten. This tree becomes very large and tufted; it seldom grows straight, but is generally bent and twisted; its branches extending very horizontally, afford excellent shelter; its leaves are divided, and its wood, impregnated with bitter juice, is not subjected to be worm eaten. This sycomore grows several ages.—(Translation of Savary's letters on Egypt, 1799). The word is derived from the (Translation of Savary's letters on Egypt, 1799). The word is derived from the Greek, meaning fig-multerry, and Linneus, retaining the name, calls it fieus sycomorus (fig fig-mulberry); and this is said to be the wood of which the Egyptians made their coffins, as not being liable to decay. Our English sycomore, which is the acer pseudo-platinus of Linnæus, perhaps obtained its name from some slight, resemblance to the leaves of the antient syco-morus. See note to cupressus.

CLASS XXIV. CRYPTOGAMIA.*

(CLANDESTINE MARRIAGES.)

This class consists of such genera in which the parts of fructification, either from their minuteness, or particular structure or situation, are imperfectly visible, or entirely concealed.

This class contains four orders,

ORDER I. FILICES.

(FERNS.)

Containing such plants as bear their fruit on spikes, or in spots or lines on the under surface of the leaves, though sometimes at the root.—It admits of the following character: The calyx, a scale growing out of the leaf, opening on one side, under which are pedunculate globules, each encompassed by an elastic ring, which, breaking with violence, scatters a powder. But as there are no certain distinctions in the fructification sufficient to establish the genera, Linnæus hath arranged them according to the form and situation thereof, under the leaves or fronds⁴.

Nº of

Species in

N	Genera.	Growth.	specie	s. Native of	Britain.
	1:	st. Fru	ctifice	ition spiked.	R1(2-2)
1	Equisetum‡	h	7	Europe	Brit. 6
2	Onoclea	h	2	Virginia	
3	Ophioglossum§	h	9	America, Japan	Brit. 1
	Osmunda	h	21	Cape, Virg. Ceylon	Brit. 4

^{*} The plants of this class are often of a dangerous quality.

⁴ Fronds .- See note to palmæ.

In general the fructification in this order of ferns is on the back of the leaf, but there are some exceptions.—In equisetum (horse-tail) it is in a spike, each fructification being orbiculated, and gaping at its many-valved base. Hedwig has determined the flowers of horse-tail and adder's-tongue to be monoclinian.

[§] Ophioglossum vulgatum (adder's-tongue) is the only English species; it hath no visible flower, but is easily known by its spike or tongue (whence the name) growing on the lower part of the leaf, and extending to about the same length, containing many small seeds.

			No of		Species in			
No	Genera.	Growth.	species	s. Native of	Britain.			
	2nd. Fru	ectificat	ions o	on the leaf, beneath.				
5	Acrostichum	h	35	N. & S. America	Brit. 2			
6	Adianthum*	h	27	Africa, &c.	Brit. 2			
7	Asplenium	h.	28	America, &c.	Brit. 8			
	Blechnum	- h	6	Virginia, Japan				
9	Hemionitis .	h	4	Jamaica, Japan				
10	Lonchitis	h	4	Jamaica				
11	Polypodium†	h	78		Brit. 15			
	Pteris‡	h	23	W. Indies	Brit. 1			
13	Trichomanes	h	15	Canary, China	Brit. 2			
	3d. Fructifications radical.							
14	Isoetes	h	2	Europe	Brit. 1			
15	Marsilea	h	3	Italy				
16	Pilularia	h	1	Europe	Brit. 1			

ORDER II. MUSCI.

(MOSSES.)

These are distinguished according as the antheræ (generally without filaments) are or are not under a catyptra (vail or covering); as they are placed on the same plant with the female, or on a different plant (called one bed or two beds), and asthe females are aggregate or solitary. This division, Linnæus tells us, is according to Dellenius.

^{*} Adianthum capillus veneris (Venus's hair) is supposed to be an ingredient in the syrup of capillaire, which you have at the coffee houses in London mixed with water;—from whence the name.

⁺ The tartarian lamb, which is esteemed a vegetable curiosity, is only the root of a species of fern (called by Linnæus polypodium baromez, signifying a lamb), which is thick and covered with a soft dense yellow wool; and it sometimes happens that a part of the root is pushed out of the ground in its horizontal situation by some of the under branches, which gives the appearance of legs, and is hence said to resemble a lamb.—See a print of it in Philos. Trans. vol. 2.—and also in Dr. Hunter's edit. of Evelyn's Sylva, printed in 1786. It is also said in Gordon's Geog. Gram. that it destroys all vegetables within its reach, and if the skin or rind is dressed with the wool on, as a lamb skin, it is difficult to distinguish them, and that many of the Muscovites use the skin instead of furs, for the lining of their vests. The down or wool is used for stopping hemotrhages, and is called golden moss.

^{*} Pteris aquilina (common fern or bracken), the roots of which are much used as bread in New Zealand.— Cook's voyage. And in our dispensatories they are said to be aperient and anthelmintic.

After the falling of the outer vail or covering, the antherse are found to be covered with another little hood, called by Linnæus operculum, which may be considered as a capsule, or perhaps, more properly, a receptacle, supporting the flower and fruit; for within the same little hood in buxbaumia, Linnæus saith he hath observed real antherse hanging by filaments, opening at the top, and letting fall the pollen, and that the seeds lay at the bottom; but this wants further confirmation, as the male and female flowers have always been thought to be distinct.

The seeds of moss are little naked bodies without coat or cotyledon; and when mosses are dried, they will revive again with moisture.

Nº Genera.		Growth.	Nº or Specie		Species in Britain.
	1st.	Without	t caly	ptra, (a vail).	
17	Lycopodium*	h	29	Alps, Japan, &c.	Brit. 6
	Porella Sphagnum	h h	3	Pensilvania Alps	Brit. 3

2d. With calyptra, two bed.

20	Barbula	h	-1		
21	Dicranium	h	1		
	Grimmia	h	1	and the state of t	
23	Koelreutera	h	1		
24	Meesia	h	1		
25	Mnium	h .	20	Europe	Brit. 20
26	Neckera	h	1		
27	Pohlia	h	1		

^{*}The semina licopodii (commonly called witch-meal) are like a fine powder, and possess very extraordinary properties.—It is almost impossible to wet it; a quantity of it strewed upon a basin of water, not only swims upon the surface without being wet, but it prevents other bodies from being wet which are plunged into the water through it; so that a piece of money, or other solid body, may be taken from the bottom of the basin by the naked hand, without wetting the hand; which is one of the tricks commonly shewn by the jugglers in Bavaria: This meal covers the hand, and descending along with it to the bottom of the basin, defends it from the water. This substance has the appearance of an exceeding fine, light, and very moveable yellow powder, and it is very inflammable; so much so, that being blown out of a quill into the flame of a candle, it flashes like gunpowder; and it is made use of in this manner in the theatres for imitating lightning.

Count Rumford's Essays, vol. ii. p. 448.

No	Genera.	Growth.	Nº of species.	Native of	Species in Britain.
29 30 31	Polytrichum Splachnum Timmia Tortula Weissia	h h h h		lps, Magellan weden	Brit. 3 Brit. 2

3d. With calyptra, one bed.

33	Bryum	h	37	Alps, &c. Sweden, Italy	Brit. 35
34	Buxbaumia	h	2.	Sweden, Italy	
35	Fissidens	h	1		
36	Fontinalis	h	4	Europe	Brit. 4
37	Hypnum	h	50	Europe, Jamaica	Brit. 41
38	Leersia	h	1	and again to be a	
	Phascum	h	5	Europe	Brit. 4
40	Tetraphis	h	1	manager and made	
41	Trichostomum	h	1		
42	Webera	h	1		

ORDER III. ALGÆ.

(FLAGS.)

The fructification of these plants is so obscure, as not to admit of a precise arrangement; the root, stem, and leaf, seem as one. They are only divided into terrestrial, and aquatic.

Linnæus hath taken his method from Michelius.

1st. Terrestrial.

43	Anthoceros	. h	3	Italy	Brit. 1
44	Blasia	h	1	Europe	Brit. 1
	Byssus	h	14	Italy	Brit. 14
46	Claydonia	h	1	ON DADAYS TO BE	al soft drains of the
47	Jungermannia	h	33	Alps, &c.	Brit. 30

No	Genera.	Growth.	No of species.	Native of	Species in Britain.
48	Lepra	h	1		
	Lichen*	s & h	130 {	Lapland, Carleland	pe, } Brit. 112
50	Marchantia	h	- 7	Europe, W.	Indies Brit. 4
	Riccia	h		Europe	Brit. 4
52	Targionia	h	1	Italy	Brit. F
53	-Verrucaria	h	1		
	4	2d.	Aque	atic.+	
54	Conferva‡	h	21	Europe	Brit. 21

* In the Systema Vegetabilium of Linnæus (edit. 14), one hundred and thirty species of lichen (liver-wort) are enumerated; and for the more easily ascertaining them, they are ranked under different distinctions (as are several other species to genera, where they are numerous); 1st. leprosi tuberculati (leprous tubercled); 2d. leprosi scutellati, such as have the appearance of little shields; 3d. imbrication having small leaves lying over each other like tiles; 4th. foliacei, consisting of one continued leafy substance; 5th. coriacei, consisting of several leafy substances like leather; 6th. umbilicati, hollowed like the navel, and dirty as with soot; 7th. scyphifera, cup-bearing; 8th. fruticulosi, shrubbyish; 9th. filamentosi, thready, these mostly hang from the boughs of trees, hence the name of tree moss. The lichenrangiferinus, of the 8th. division, is the chief food of the rein-deer in Lapland, during winter.-This plant is very plentiful all over Lapland, vegetates beneath the snow, and is of a pure white, Nature's favourite colour in the northern regions. Several of the lichens, when dried, powdered, and steeped in urine, are used for dying reds and purple; as the lichen roccella of the 8th. division, called orchilla, very common in Spain and the Canary Islands; the lichen pertusus, with warts perforated, of the 1st. division; and the lichen tartarius, of the 2d. division, very common in Derbyshire. The lichen icelandicus (Iceland liver-wort) of the 4th. division, is a highly nutritious substance; it requires a previous maceration in hot water, to take out the bitterness and laxative quality, it is then boiled with a fresh quantity of water, to give out its mucilage, and is afterwards mixed with broth or milk; boiled with milk alone, it affords a wholesome and palatable nourishment to the Icelanders. It is here chiefly used, from its demulcent quality, by invalids and convalescents.

† Mr. Corrêa de Serra hath shewn that the submersed alga, instead of pollergor farina, are furnished with a mucus; and with vesicles instead of anthera. Phil. Trans. for 1796, part 2.

‡ The conferva bulbosa was preserved dry for eighteen months, and which then resembled nothing but a small heap of greyish dust; this, however, after the vase, which enclosed it was filled with water, gradually resumed its green colour, its little tubes filling up again, and new filaments growing. This was not a resurrection merely in appearance, like that of dry mosses, after they are wetted again, but real and complete, like that of certain animals.—(Read to the Philomathic Society of Paris in 1797, by Girod Chantrans). The conferva ægagropila is found loose in many lakes, in a globular form, from the size of a walnut to that of a melona

No Genera.	Growth. species. Native of	Species in Britain.
55 Fueus	h 58 Europe, Italy	Brit. 58
56 Tremella*	h 11 Europe	Brit. 8
57 Ulva	h 15 Europe	Brit. 15

ORDER IV. FUNGI.+

(FUNGUSSES.)

Linnæus tells us he rather chose to make his divisions in this order according to Dellenius, than from Michelius: because the first is plain to every one, but the latter requires too nice an inspection; yet Michelius hath thrown great light on this tribe of vegetables, as also on mosses and flags. The generic character is therefore only taken from their external forms. They are generally erect.

1st, Hatted,

58 Agaricus‡ h 39 Europe Brit. 28

much resembling the balls of hair found in the stomachs of cows; it hath no adherence to any thing, but rolls from one part of the lake to another. The conferva wagabunda dwells on the European seas, travelling along in the midst of the waves; these may not improperly be called itinerant vegetables.—In a similar manner the fucus natans strikes no roots into the earth, but floats on the sea in very extensive masses, and may be said to be a plant of passage, as it is wafted about by the winds.—(Botwic Garden, 4to. edit. p. 170). M. Vaucker, of Geneva, hath lately published an history of the fresh-water confervæ, relating to its fructification, and bath found out no less than six different modes of generation.

- * That substance that hangs down from the beams in wine vaults, is a species of tremella, which, being dried, becomes a tough membranous matter of a fungus smell; it seems to be of a middle nature between mushroom and star jelly, another species of tremella.—Though Linnaeus makes star jelly (tremella nostoc) a fungus, yet others suppose it to be voided by herons after having eaten frogs; and limbs of frogs are said sometimes to be found amongst it. But in Bewick's history of British birds, vol. ii, printed in 1804, it is said to be believed to be the remains of half digested worms, slugs, &c. which the gulls have discharged from their overloaded stomachs; and it is said these birds, when shot, have been found when dying to disgorge a substance of the like kind.—It is called star jelly, or star shot, being supposed by the vulgar to be dropped by the meteor, called a falling star.
- † Those circles or curves we often see on the ground, called fairy-rings, seem yery imperfectly understood: they have long been supposed to be caused by lightning; but now are conjectured to be caused by that species of fungi that grows upon them; which either by some means radiating from a centre, or growing in circles and curves, as directed by nature, produce the above phænomenon.
- ‡ M. Willemet (a member of the academy of Dijon in France) considers the **agaric* on trees as the superabundance of a vegetable juice that exists in the tree, or as a morbid matter which is in a state of depuration; consequently excludes it as a fungus. See note to mushroom, in the Index.

Species in

No	Genera.	Growth.	Species	Native of	, DE	Britain.
60	Boletus Hydnum Phallus	h h h	21 5 3	China Italy Europe	В	Brit. 13 Brit. 3 Brit. 3
-		2d. H	Taving	g no hat.		>
		47.41	1000			
	Carpobolus	h	1			
	Clathrus	h	4	Sweden		rit. 4
	Clavaria*	h	13	Europe	E	Brit. 8
65	Cyathus	h	1		100	
66	Heluella	\mathbf{h}	2	Europe		Brit. 2
67	Lycoperdon†	h	19	Bohemia		Brit. 15
68	Mucor	h	15	Upsal	- P	Brit. 11
69	Næmaspora	h	1	- 1		
	Peziza	h	11	France	B	rit. 9
71	Poronia	h	1 .			, 1
79	Puccinia	h	1			
73	Sphæria	h	1			
	Stemonitis	h	1			
75	Thælæphora	h	1	Art Is all training		
-	y state and the		*			17 100
		1. 12	Andrew Market		S. OF THE LOT	

^{*} Many fabulous accounts have been propagated of a vegetable fly in the Caribee islands; but from Dr. Watson and Sir John Hill it appears to be only a species of fingus, which Sir John calls clavaria sobolifera, but by Linnæus clavaria mittaris, which delights to grow on putrid animal substances, and hath been sometimes found on the husk of some of the species of the genus cicada in the chrysalis state, which then lie buried under dead leaves to wait their change; and when nearly arrived at maturity, will sometimes move with the fungus on the husk; hence imagination hath pictured them flying with a sprig upon their backs.

[†] Truffle (lycoperdon tuber) is a subteraneous vegetable, consisting of a solid tubercle without stalk or root, covered with a rough blackish coat; they never appear above ground, but lie about half a foot beneath the surface, and generally great numbers are found in the same place, of different sizes, sometimes even to weigh a pound. In France and Italy they are esteemed great delicacies, and are found by the smell with dogs and swine, probably by their possessing somewhat of an animal scent.—(See note to zoophytes). A few truffles are sometimes found about Selborne, in Hampshire, and are sold at 2s. 6d. per pound.

APPENDIX.

Consisting of such plants, which though capable of being arranged in the several classes of the system, yet on account of their singular structure, Linnæus hath rather chose to place apart in an appendix, under the head of PALMÆ, containing such genera as have a spadix and spatha, (i.e.) whose flowers and fruit are produced on that particular receptacle or seat, called a spadix, protruded from a common calyx in form of a sheath, called spatha; and consists of trees and shrubs only.—These terms were originally only applied to palms, but now are applied to narcissus, snowdrop, orchis, &c.

PALMÆ.*

(PALMS SPATHED, THREE-PETALED.)

N° of Genera. Growth. species. Native of

Species in Britain,

1st. Fan-leaved, (two houses.)

Drupa.

1 Borassus† s 1 Malabar 2 Chamærops‡ s 2 Spain

* Palms have always a simple stem, not branched, bearing leaves at the top, resembling those of fern, being a composition of a leaf and a branch, or where the leaves are confounded with the stem and branches, called frondes; and the corolla hath always three petals, or three deep divisions.

It is remarkable that if the male flowers of the palm are got at a proper time and dried, the pollen will be prolific if kept a year or upwards; and the same hath been observed of the male pistacia.

† The leaves of the Borassus flabelliformis (Malabar palm, or Palmira), and of another palm called tallipot or talpot (licuala spinosa), are used on the coast of Asia and in Ceylon instead of paper. They require no other preparation than merely to be separated, and cut even with a knife, and are written upon, while fresh, with a sharp steel or stylus. The characters are afterwards rubbed over with charcoal, or some other black substance, which gives them the distinctness of an engraving. The same leaves are also used for umbrellas; and one of the licuala is said to be generally large enough to shelter six persons from the rain. Thunberg's Travels.

‡ Of the palmetto there are two species; first, the chamærops humilis (the dwarf palmetto), which gave rise to the name; the second is the palmetto royal, which will rise to 50, 60, or sometimes to 100 feet, which Linnæus calls chamætops excelsa.

Nº Genera. Growth species. Native of Britain.

3 Corypha* (monoclin.) s 2 India, Barbadoes
4 Rhaphis s 2 China
5 Thrinax s 1 Jamaica

2d. Feather-leaved, (Two houses.)

Drupa.

6 Elæis s 1 Guinea 7 Phœnix† t 2 India, Arabia, &c.

Feather-leaved, (one house.)

Drupa.

 8 Areca‡
 t
 2 India

 9 Cocos§
 t
 3 Guinea, India

 10 Cycas||
 t
 2 India

 11 Elate
 t
 1 India

- *The umbrella palm tree (corypha umbraculifera) it is said will grow about thirty-five years before it flowers, but as soon as that is over, it dies. The Plantaria tree will sometimes be one hundred years before it flowers, but afterwards it soon perisheth. The lavatera arborea will stand several winters, and grow to the size of a common pear tree, but when it hath once flowered, no art can prevent its perishing at the approach of winter.—See note to agave.
- + Phanix dactylifera (date or dactyl tree) is a very durable tree; but if it happens to be injuired by some instrument so as to cause a decay, it is cut down at the root, and is then burnt on the spot; and its ashes are covered with a layer of earth, from the middle of which a new shoot soon arises, and becomes strong in a few years: as the Greek word for this palm is phanix, it is probable that the fabulous history of the Arabian bird of that name reviving from its ashes, is founded on this circumstance.—(Travels by the Abbe Mariti—printed in English, 1791). Which seems to have been an hierogliphic emblem of the destruction and resuscitation of all things. It is an observation that where date trees grow, water is always found near. The fruit is an egg-shaped berry, inclosing a hard seed.
- ‡ The areca nut (areca catechu) is much used in the East for chewing along with the leaf of the betel.—(See betel.) In Bengal it is called sooparee.
- § From the cocoa-nut tree (cocos nucifera), besides the great use made of the husk, the shell, the kernel, and the milky substance in the centre, is made the wine-called palm wine; and an agreeable liquor is also extracted from the blossoms called toddy; which, after being fermented and distilled, is called rack, or arrack; which is said to be preferable to the rack made of rice or sugar.

|| Cycas circinalis, - see note to sago in Table of Vegetable Drugs.

N°	Genera.	Growth.	Nº of species.	Native of		Species in Britain
12	Nipa	t	1	Amboyna		
13 7	Zamia	t	5	Kafferland	in Africa	

3d. Twice feather-leaved, (one house.)

Drupa.

14 Caryota s 1 India 15 Licuala* (monoclin.) t 1 Amboyna, Ceylon From the Supplement.

16 Mauritia s 1 Surinam

17 Ginkgo t 1 Japan 18 Arenga† t 1 Moluccas

^{*} Licuala spinosa (the tallipot tree).-See note to borassus.

⁺ C. Labillardiere read a memoir (in the national institute of France, in 1801) on a new species of palm called arenga, from the word areng, a name given to it in the Moluccas. He calls it the arenga saccharifera. It rises about 60 feet (English); the alated leaves are 16 to 20 feet long, the leaflets are dentaled at their extremity, and have one or two appendices at their base. The leaf-stalks are large at their base, and furnished with long black threads, with which the Malays make very durable ropes and cables. The leaf-stalks serve to construct their habitations, and the leaves to cover the roof. A saccharine liquor is obtained from this palm, by making incisions; and by proper management the tree will produce this liquor more than half the year. By simple evaporation it gives a kind of sugar, of the colour and consistence of chocolate newly made, but which is capable of further refining. The nuts of the young fruits make good confectionary, and the pith of the trunk yields excellent sago.

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^{*}Russelia and vahlia are described by Mr. Murray, in his Systema Vegetalilium, as different plants; but Mr. Dryander assures us they are in reality the same.

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^{*} Vahlia-see russelia.

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TRIVIAL NAMES

AS WERE

THE GENERA OF OLD AUTHORS.

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A'bsus
Abútilon
Acánga
Acánthium
Acárna
Acetábulum
Acetósa
Acetosélla
Achilæ'a

Achilæ'a
Achyrántha
Acídoton
Acinodéndron
A'cinos
Acicanthéra
Acmélla
Adhadóta
Adíantum

Musk-seed Fir

Southern-wood Wormwood Four-leaved cassia Indian mallow

Cotton thistle Blessed thistle Joint cupmoss Sorrel

Wood sorrel Milfoil, yarrow

Box-leaved adelia American gooseberry Wild, or stone basil

Malabar nut Black maiden hair Hibiscus Pinus Artemisia

Artemisia Cassia Sida

Bromelia Onopordon Cnicus Peziza

Rumex
S Rumex
Coxalis

Chrysanthemum Illecebrum Adelia

Melastoma
Thymus
Rhexia
Spilanthus
Justicia

Asplenium

Æ'gilops	Prickly-cupped oak	Quercus
Æginétia	Broom rape	Orobanche
Æthíopis	Æthiop -	Salvia
Agállocha	Wood aloes	Excoecaria
Agástachys		Carex
Agératum	Sweet maudlin	Achillea
Agéria	/	Pæderota
Agnus Castus	Chaste tree	Vitex
Agrimonoídes	Base agrimony	Agrimonia
Ahóvai		Cerbera
Ajácis		Delphinium
Aizoon	Yellow stone crop	Sedum
Alatérnus	False phyllirea	Rhamnus
A'lcea	Mallow hollyhock	Malva
Alhági	French honeysuckle	Hedysarum
Alicastrum	Bread-nut tree of Jamaic	a Brosimum
Alkekéngi	Winter cherry	Physalis
Alliária	Sauce alone	Erysimum
Ally'sson	Madwort of Galen	Marrubium
A'lnus	Alder	Betula
Aloides	Water aloe, or water soldie	
Alopecurum	Fox-tail grass	Hypnum
Alsinástrum		Elatine
Altáica	Annual Control	Sibbaldia
Aly'pum	Blue daisy	Globularia
Amalágo	Rough-leaved pepper	Piper
Amaranthoides	Amaranth	Axyris
Amarélla	Autumnal gentian	Gentiana -
Amelánchier		Mespilus
A 11/1: 1		Pyrus
Amellóides		Cineraria C. 1
Améllus	The state of the s	Calea Aster
A'mmi		
	Bishop's weed	Sison
Ammódytes Amómum		Astragalus
Ampelóprasum		Sison
Amsónia		Allium
i i i i i i i i i i i i i i i i i i i	Farenameen annine	Tabernæmontana Sadum
Anacámpseros {	Evergreen orpine Round-leaved purslain	Sedum Portulaca
Anagállis	Pimpernel, water	
Anánas	Pine apple	Veronica Bramelia
	I the apple	Bromelia

Anándria	Colt's-foot	Tussilago
Anblátum		Lathræa
Andráchne	Oriental strawberry tree	Arbutus
Andrógynus	2	Ruscus
Androsæ'mum	Tutsan, or park-leaves	Hypericum
Androsáceus	Part of the last	Agaricus
Angúina	Serpent cucumber	Trichosanthes
Angúria	Water melon	Cucumis
A'nil	Indigo	Indigofera
Anísum	Anise	Pimpinella
Anserina		Potentilla
	3. 44	Potentilla Antirrhinum
Anteuphórbium	l and the second	Cacalia
Anthélmia	Worm grass	Spigelia
A'nthora	,, o., g. ass	Aconitum
Anthriscus	Purple hedge parsley §	
	- in pro meng, pan meg	Tordylium Scandix
Aparine	Clivers, or hairiff	Galium
	Cross-wort	Valantia
A'phaca	Yellow vetching	Lathyrus
Aphtósus	z ettou ettotting	Lichen
A'pios	Knobbed-rooted liquorices	
P-00	vetch	Glycine
A'pula	Coton	Myosotis
Aquifélium on 7	-	
Acuifólium*	Holly	Ilex
A'rbor tristis	Sorrowful tree	Nyctanthes
Archangélica	Archangel	Angelica
Arctostáphylos	227 0746778	Vaccinium
Aréira		Schinus
Arenária	Sandwort	Stellaria
Argemóne	Prickly poppy	Papaver
Argúsia	2 . tonig pappy	Messerschimidia
A'ria	Aria theophrasti	Ćrategus
Arisarum	Friar's cowl	Arum
Aristélla		Slipa
Armeníaca	Apricot	Prunus
	Thrift, or sea pink	Statice
Arméria {	Deptford pink	Dianthus
	Lobel's catch-fly	Silene
1		

^{*} See Skinner's Etimo. Ling. Anglicanæ.

Armorácia	Horse radish	Cochlearia
Arúncus		Spiræa
Asclépium		Thapsia
Ascolónicum	Eschalots	Allium
A'scyron	St. Peter's or John's wort	Hypericum
Assafœ'tida	Assafætida	Ferula
Asteríscus	Base chrysanthemum	Silphium
Atamásco	Atamasco lily	Amaryllis
Athanásiæ		Othonna
Atríplicis		Chenopodium
Aublétia	Cut-leaved rose vervain	Verbena
Aurántium	Orange	Citrus
Aurícula	Auricula	Primula
	1	Primula Peziza
Auriculária		Hedyotis
Avellána	Hazel nut	Corylus
Azadiráchta	Bead tree	Melia
Azárolus	Azarole	Cratægus
Azédarach	Bead tree	Melia
220000000000000000000000000000000000000		
B		
Badúcca		Capparis
Bæómyces		Lichen
Bæóthryon		Scirpus
Balánghas		Sterculia
Balsámea	Balsam of Canada	Pinus
Balsámina	Balsam	Impatiens
		Momordica
Balsamíta	Costmary	Tanacetum
		Chrysanthemum
Bálsamum	and the second second	Toluifera
Bámbos	Bambu cane	Arundo
Barba Jóvis	Jupiter's beard	Anthyllis
Barbárea	Winter cress	Erysimum
Báromez	Tartarian lamb	Polypodium
Bart'ramia		Triumfetta
Basílicum		Ocymum
Bássii		Ambrosinia
Batátas	Spanish potatoe	Convolvulus
Beccabunga	Brooklime	Veronica
Béhen	White behen	Cucubalus
		Silene
		Centaurea

Belladónna Deadly nightshade f Atropa \ Amaryllis Doronicum Bellidiástrum Middle daisy Osmites Bénghas Gluta Ficus Benjamina Bénzoe Croton Benjamin tree Bénzoin Laurus Benjamin tree 1 Terminalia Erica Bergána Bermudíanum Sisyrinchium Base ricinus Bernárdia AdeliaBétle Betle Piper Betónica Justitia Bétulinum Ægopricon Bétulus Hornbeam Carpinus Coreopsis Bídens Tickseed sunflower Bíhai. Banana Heliconia Averrhoa Bilímbi Polygonum Bistórta Bistort, or snake-weed Verbascum Blattária Moth mullein Hieracium Blattarioídes Ruellia Bléchnum Blítum Amaranthus Blite Bóna Nox Ipomoea Smilax Bonaróta Rock germander Pæderota Guilandina Bónduc Nicker tree Bonduccélla Guilandina Chenopodium Bonus Henricus Garden mercury Bay tree of Carolina Borbónia Verbesina Bosvallea Pyrus Botryápium [Chenopodium Bótrys Oak of Jerusalem Teucrium Fuz, or puff ball Bovísta Lycoperdon Ehretia Bourréria Capparis Bréynia Rumex Británnica Poa

Protea

Andromeda

Brizoídes

Bruníades

Bryantha

Bryópteris Lycopodium Búceras Bucida Bulbocástanum Pig, or earth nut Bunium f Ixia Bulbocódium l Narcissus Búnius (Æthusa L Stilago Bursa Pastóris Thlaspi Shepherd's purse Caapéba Cissampelos Theobroma Cacáo Chocolate nut Cytisus Cájan Pigeon pea Chrysophyllum Caínito Star apple Cákile Bunias Cálaba Calaba plum Calophyllum Muntingia Calabúra f Agrostis Calamagnóstis Arundo Calamintha Calamint Melissa Cálamus Sweet rush Acorus Calceolária Stipper Viola Calcéolus, Ladies' slipper Cypripedium Star thistle Centaurea Calcitrápa Caléndula Marigold Arctotis Callicórnia Leysera Callocócca Cordia Caly'cina Festugo Cámara American viburnum Lantana Cámeu-clits-see Quamoclits Cámmarum Variegated monk's hood Aconitum Campánula Bell-flower Canarina Campechiánum Logwood Hæmatoxylum Campechiénse Solanum Cámphora Camphor tree Laurus

Candel of the Indians

Base hemp

Rhizophora

Convolvulus

Ceropegia

Althæa Tragia Urtica Datisca

Cantábrica

Cándel

Candelábrum

Cannábina

	-	
Cantaréllus		
	is Maiden hair	Agaricus
Caprifólium	Honey-suckle	Adianthum
Cáput Gálli		Lonicera
Cáput Medúsa	e' Medusa's head	Hedysarum
onput intedustr	zazedusa s neda	{ Euphorbia
Caracálla		l Elymus
Caragána		Phaseolus
Carámbola	Sensitive tree	Robinia
Carándas	Sensitive tree	Averrhoa
Cardamines	,	Carissa
Cardamómum	Cardamum	Lepidium
Cardíaca	Mother-wort	Amomum
		Leonurus
Cardinális 4	Cardinal flower, or water	Lobelia L
Carduélis	L gladiole	2
Carduncéllus		Arctium
Cardúnculus	Cardoon	Carthamus
Cárica	Caraoon	Cynara
Carolínum		Ficus
Caróta	Cannot	Menispermum
Carpática	Carrot	Daucus
Carpíneus		Campanula
Cárni	C	Lichen
Caryophy'llus	Caraway	Carum
Caryophy nus Caroliniána	Carnation	Dianthus
		Verbena
Carpóbolus Casapvilla	D 7 C 1 .1 .	Lycoperdon
Cascarílla Cássia	Bark of elutheria Base cinnamon	Croton
Cassine	Base cinnamon	Laurus
	South-sea tea	Ilex
Cassinóides	Cl	Viburnum
Castánea	Chestnut	Fagus
Catálpa		Bignonia
Catáppa Catária		Terminalia
Cátarla	Cat-mint, or nep	Nepeta
Cátechu	Terra japonica	§ Mimosa
Céduna	0.1	l Areca
Cédrus	Cedar	Pinus
Céiba Coléain	Silk cotton-tree	Bombax
Celósia	G 1 .	Iresine
Cémbra	Cembro pine	Pinus
Centauréum	Centaury	Centaurea

1		
Centaurium	Lesser centaury	Gentiana
Centauroídes		Gnicus
		L Centaurea
Cépa	Onion	Allium
Cepæ'a		Sedum
Cérasus	Cherry	Prunus
Ceratoídes		Axyris
Ceratónia		Mimosa
Chærefólium	Garden chervil	Scandix
Cérris		Quercus
Cervária		Athamanta
Cerviána		Pharnaceum
Cervicária	•	Campanula
Cervinum		Lycoperdon
Céterach	Spleen-wort	Asplenium
Chamæbúxus*	Low box	Polygala
Chamæcistus		Rhododendron
Chamæcrista		Cassia
ChamæCypariss	us Lavender cotton	Santolina
Chamæ'drys		Veronica
	Germander	LTeucrium
Chamæjásme		Stellera
Chamæ'lea	Widow wail	Tragia
Chamæ Méspilu	s Dwarf medlar	Mespilus
Chamæmílla	Dwarf, or sea chamæmile	Matricaria
Chamæ Móly		Allium
Chamæmórus	Cloud-berry	Rubus
Chamæpénse		Stæhelina
Chamæpithys	Ground pine	Teucrium
Chamæsy'ce		Euphorbia
Champáca		Michelia
Charácias		Euphorbia
Charántia		Momordica
Cháte	Hairy cucumber	Cucumis
Chéiri	Wall flower	Cheiranthus
Cheiránthus		Manulea
Chenópoda	G1.	Marchantia
Chína	China root	Smilax
Chinénsis		Valeriana
Chirónium		Laserpitium

^{*} Chamæ is from the Greek, and means low, humble, or tending to the ground.

Chloróxylon		Laurus
Chordorrhíza		Carex
Chrysanthum		Rhododendron
Chrysógonum		Leontice
Chytracúlia		Myrtus
Cícer		Astragalus
Cícera	Chickling vetch	Lathyrus
Cichorácea	S Total	Centaurea
Cícla		Beta
Cinerária		Centaurea
Cinnamómum	Cinnamon	Laurus'
Cistóides		Tribulus
Citrúllus	Water melon, or citrul	Cucurbita
Clandestina	Great purple herb bane	Lathræa
Cláva Hérculis	F. F. W. C. C.	Zanthoxylum
Clavénnæ		Achillea
Claytónia		Osmunda
Clématis		Mutisia
Cly'menum	Chickling vetch	Lathyrus
Cneórum	S *****	Convolvulus
	0.1	Daphne
Cóbbe		Rhus
Coccífera	Scarlet-grain, or kermes oa.	
Cóculus	India-berry	Menispermum
Cœ'li Rósa	~	Agrostemma
Cœ'cius	Dewberry, bramble	Rubus
Colocásia	Great Egyptian arum	Arum
0-1-1-1: 1	Coloquintida, or bitter	
Colocy'nthis {	gourd	Cucumis
Cólpoon		Euonymus
•	· · · · · · · · · · · · · · · · · · ·	Thesium
Colubrina	19	Stychnos
Colúrna	Byzantine nut	Corylus
Comaáurea	Goldy locks	Chrysocoma
Comínia	•	Rhus
Conóides		Silene
Consólida	Wound-wort	Delphinium
Contrajérva	Contrayerva	Dorslenia
Convólvulus		Polygonum
Conyzóides	Base hemp agrimony	Ageratum
Copállinum	Gum copal	Rhus
Coracánus	*	Cynosurus
		V

Corállinus	Liver-wort	Lichen
Corallodéndrum	Coral tree	Erythrina
Coralloídes	Liver-wort	Clavaria
Corallorhíza		Ophrys
Cordifólia		Cissus
Coriária		Rhus
Corindum	Heart-seed	Cardiospermun
Córis		Hypericum
Corónaria	Wild lichnis, or rose campion	Agrostemma
C /		Cochlearia
Corónopus	swine's cress }	Cocincaria
Cóta		Anthemis
Cótinus	Venice sumach	Rhus
Cotoneáster	Dwarf medlar	Mespilus
Cótula	May weed	Anthemis
Cotylédon		Saxifraga
Courbaril	Locust tree	Hymenæa
Crácca		Vicia
Crísta		Casalpina
Crista Castrénsis	Camp crest	Hypnum
Crísta Galli	Cock's comb	Rhinanthus
	{	Erithrina
		Hedysarum
Crocáta	Drop-wort hemlock	Oenanthus
Crocátus	T. T.	Lichen
Crocody'lium	Centaury without stems	Centaurea
Crossopétalum		Rhacoma
Cruciáta	Cross-wort	Valantia
Crupína		Centaurea
Crux Andreæ'		Ascyrum
Crus Córvi		Panicum
Crus Gálli	ſ	Panicum
	1	Cratægus
Cúbeba	Cubebs	Piper
Cuculária		Valantia
Cucullária	Fumuterræ with naked stalk	Fumaria
Cujéta	Calabash tree	Crescentia
Culílaban	8 N. 1	Laurus
Cunónia	Persian corn flag	Antholyza
Cuphéa		Lythrum
Cúrcas	Physic nut	Jatropha
Curúru	- 1,5 10	Paullinia

4		
Cy'anus	Blue bottle	Centaurea
Cycádis	1	Zamia
Cydónia	Quince tree	Pyrus that
Cymbalária	Ivy-leaved wall snapdragor	2 Antirrhinum
Cyminum	Cumin	Cuminum
a [Lesser hemlock, or fool's	7
Cynápium {	parsley	AEthusa
Cynaroides	amond.	Protea August
Cynocrámbe	Dog's cabbage	Theligonum
Cynophallóphor	a	Capparis
Cy'nops		Plantago
Cynósbati		Ribes
Cyparissias		Euphorbia
Cytisoídes		Anthyllis
J		
D		
Dabóecia		Andromeda
Dáctylon		Panicum
Daléa	·	Psoralea
10000	month only	Eupatorium
Dalibárda		Rubus
Damascéna		Nigella
Damasónium	Star-headed water plantain	Alisma
Dandelíon	1	Tragopogon
Dens Cánis	Dog's-tooth violet	Erythronium
Dicéra		Elæocarpus
Dictámnus	Dittany	Origanum
Diervilla	, satisful	Lonicera
Disérmas		Salvia-
Dónax		Arundo
Dória	Golden rod	Senecio
Dorónicum		Senecio
Dortmanna	Water gladiole	Lobelia
Dory'cnium	ſ	Convolvulus
ALL CO	Shrub trefoil	Lotus
Drába		Cochlearia
Dráco	-1	Dracæna
	Hardy Lander of	Pterocarpos
Dracontium		Arum
Dracunculus f	Dragon-wort, or tarragon	Artemisia
3 63000		Arum
Drakéna		Dorstenia

2 F

Dryméia		Carex
Dryópteris		Polypodium
Dudáim	the state of the s	Cucumis
Dulcamára {	Bitter, sweet, or woody nightshade	}Solanum
The little and the		
E . Market		
E'benum	Ebony	Diospyros
E'benus	North Control	Aspalathus
E'bulus	Dwarf alder	Sambucus
Ecastaphy'llum		Pterocarpus
Ecbólium		Justitia
Echinus		Statice
Echioídes	Ox-tongue	Picris
Eglantéria	Eglantine	Rosa
Elatérium	Spurting cucumber	Momordica
Elatine		Antirrhinum
		Campanula
Elégia		Restio
Elemífera	Gum elemi	Amyris
Eléngi		Mimusops
E'lephas	Elephant's head	Rhinanthus
Ellísia	Employee North-Lorenteen	Duranta
Elutéria		Clutia
E'mblica	Sea-side laurel	Phylanthus
E'mbolus		Mucor
E'merus	Scorpion senna	Coronilla
Endívia	Endive	Cichoreum
Entáda		Mimosa
Ephémerum	Virginia spider-wort	Lysimachia
Epidéndrum	to the terminal	Lycoperdon
Epiglóttis		Astragalus
Epipáctis		Astrantia
Epipogíum		Satyrium
Epithymum	Dodder of thyme	Cuscuta
Eragróstis		f Poa
		l Briza
Erinácea	Spanish hedge-hog thorn	Anthyllis
Erínus		Campanula
The second second	IN ENTRY HIM A SHOOT-MOTHER	Lobelia
Eriópila	Ser - RADUEN	Duroia
Erisíthales		Cnicus
		1 = 1

4	1 1	
Erúca	Rocket	Brassica
Erucágo	Square-podded rocket of Montpelier	Runing
9	L Montpelier	J Dullias
Erucastrum		Brassica
Erulaceum		Laserpitium
Ervília	Bitter vetch	Ervum
Ery'siphe	0.0	Mucor
Erythrina	Fish-bane	Piscidia
E'sculus		Quercus
Esula	Great spurge	Euphorbia
Euódia		Fagara
Eupatória	Hemp agrimony	Agrimonia
Eupatorioides		Kuhnia
Exacoídes		Gentiana
in the particular		
F		
Fába	Bean	Vicia
Fabágo	Bean caper	Zygophyllum
Fabárius Fabárius		Cucubalus
Fagineus		Lichen
Fagopy'rum	Buck or beech wheat; bran	
Falcária		Sium
Falcáta		Adenanthera
Vertific	Moon trefoil	Medicago
Falx		Melica
Fárfara	Common colt's-foot	Tussilago
Farsétia		Cheiranthus
Fávus		Boletus
Ferulágo	T. STORY STORY	Ferula
Ficária	Pile-wort	Ranunculus
Ficoides	Base fig marigold	Cacalia
Ficus I'ndica	Indian fig	Cactus
Filipéndula	Drop-wort	Spiræa
Filix Mas	Male fern	Polypodium
Filix Fœ'mina	Female fern	Polypodium
Filum		Fucus
Fistula	Cassia fistula	Cassia
Flámmula J	Flamula jovis	Clematis
	Small spear-wort	Ranunculus
Flávium	The state of the s	Allium
Flos A'eris		Epidendrum
Flos A'quæ	The state of the s	Byssus

Flos Cucúli { Cuckoo flower, or ragged robin	Lychnis
Flos-Jóvis	Agrostemma
Foeniculum Fennel	Anethum
Fænum Græ'cum Fenugreek	Trigonella
Frángula { Black, or berry-bearing alder	
Friséa Fumána	Thesium Cistus

T		Cistus
Fumána		Cistus
A COLUMN	The state of the s	
G		
O 1/		N.T.
Galáctia		Mariana
Galánga	Galangal	Maranta
		Kaempferia
Galáxia		Ixia
Gálbanum	Galbanum	Bubon
Gále	Gale, or sweet willow	Myrica
Galeóbdolon	Yellow archángel	Galeopsis
Genistoídes		Sophora
Gentianóídes	Base gentian	Sarothra
Gerascánthus		Cordia
Gerbéra	The Property of the Parket of	Arnica
Géum	Kidney-wort	Saxifraga
Gingídium	artimity were	Daucus
Githágo	Cockle, or popple	Agrostemma
Gláucium	Yellow-horned poppy	Chelidonium
Glaux	remow normed poppy	Astragalus
Gloriósa	Adam's needle	Yucca
Gmeline		Cortusa
Gillenne		Hieracium
Carlonan		Chatam
Gnémon		Gnetum
Gnídia	777 7 7 7 7	Passerina
Gnídium	Flax-leaved laurel	Daphne
Granatum	Pomegranate	Punica
Grandarúca	47	Justicia
	Grains of Paradise	Amomum
	Gooseberry	Ribes
Grossularioídes		Melastoma
Gry'llus	V2	Andropogon
Guazúma	Base cedar of Jamaica	Theobroma
Gútta	Gamboge, or camboge	Cambogia

	N/
Halicácaba	Erica
Halicácabum	Cardiospermum
Halimóides	Portulaça
Hálimus Shrubby sea orach	Atriplex
Halléri	Arabis
Halodéndron	Robinia
Hármala Wild Syrian rue	Peganum
Háspan	Cyperus
Hedy'pnois	Hyoseris
Heistéria	Polygala
Helénium Elecampane	Inula
Heleonástes	Carex
Helianthemum { Little sun-flower, o	^r }Cistus
dwarf cistus	
Hélix (Common ivy	Hedera
\{\Dwarf yellow, or rose	Salix
willow	Journ .
Hemionitis Mule's fern	Asplenium
Hepática Noble liver-wort	Anemone
Hérba Vénti	Phlomis
Hieracioides Base hawkweed	Picris
Hippo-castanum Horse chestnut	Æsculus
Hippo-marathum Horse fennel	Seseli
Hirculus Urine-wort	Saxifraga
Holoschóenus	Scirpus
Holóstea Stitch-wort	Stelleria
Horminum \[\begin{cases} \text{Purple-topped sage, of clary} \\ \text{clary} \end{cases}	Salvia
Cour. 9	
Hóspita	Kleinhovia
Hyacinthoídes	Aletris
Hybánthus	Viola
Hydnóra	Aphyteia
Hydropiper \ \ \ Water pepper, or arse-sme	
Water-wort	Elatine
Hypericoides St. Peter's wort	Ascyrum
Hypnoides Lady's cushion	Saxifraga
Hypocistis Rape of Cistus	Cytinus
Hypoglóssum Tongue laurel	Ruseus
Hypophyllocarpodéndrum	Protea
Hypophy'llum	Ruscus
Hypópithys	Monotropa

Hypóxilon Hyssópifólia Hysteróphorus

Base feverfuge

Hy'strix

Clavaria Lythrum Parthenium Aristida Elymus Barleria Aspalathus

Jabotápita Jácea Jacobæ'a Jalápa

Knap, or knob-weed Rag-wort S True jalep White jalep

Jánipha Jámbos

Jamboo apple

I'beris Icáco Tlex.

Cocoa plum Evergreen oak

I'nga Inophy'llum

Insectórius I'ntsia

I'ntybus Jolithus

Jonquilla Jonthlaspi 1 pecacuánhæ Wild cichory

Jonquil Treacle mustard Base ipecacuana

I'ria I'rio Ischáemum I'sora

Jujúba Julácea Juláceum Juliána Jungermánnia Junipérinus

I'va I'xina Cock's-foot grass Screw tree

Ochua Centaurea Senecio Convolvulus Mirabilis Jatropha Eugenia Lepidium Chrysobalanus Quercus Mimosa Calophyllum Rhamnus Mimosa Cichorium Byssus Narcissus Clypeola Euphorbia Viola Cyperus Sisymbrium Andropogon Helicteres Rhamnus Jungermannia Hypnum Satureja Mnium

Lichen

Teucrium

Crameria

K Káki Diospyros Káli glass-wort Salfola Kálmanum Hypericum Kálmii Hieracium Lobelia Kánki Mimusops Stemless wild pine Káratas Bromelia Foreign colt's-foot Kléinia Cacalia Kolpínia Lapsana Láblab Dolichos Labrúsca Vitis Labúrnum Trefoil tree Cytisus Croton Lacciferum Job's tears Coix Lácryma Jóbi Ládanum Galeopsis Lagópus Plantago Pliant mealy tree Lántana Viburnum Lapathifólium Polygonum Burdock Láppa Arctium Nephelium Lappáceum [Myosotis Láppula Triumfetta Lárix Pinus Larch tree Láthyris Euphorbia Lathyroídes Orobus Vicia Lobelia Lauréntia Lauréola Spurge laurel Daphne Láuro-Cérasus Cherry laurel Prunus Lavénia Verbesina Lebbék Mimosa Léns Ervum Lentils Lentágo Rhus

Mastick, or lentisk

Pistachia

Phlomis

Leontice'

Leontice

Filago

Lentiscus

Leontopetaloídes

Leontopódium

Leontopétalum Lion's leaf

Leonitis

Leonúrus		Phlomis
Lepidocarpodén	dron	Protea
Leptáurea		Zoegea
Leptóstachys		Carex
Leucadéndron		Melaleuca
Leucadenaron	[Chrysanthemum with	I dollar
Leucánthemum	white rays, or ox-	Chrysanthemum
Leucantiiciiuii	eye daisy	The state of the s
Lougadiahin	c ege dailing	Carex
Leucoglóchin	Milk, or white wood	Signonia >
Leucóxylon		Vitex
Levisánus		Protea
	T	Ligusticum
Levisticum	Lovage	
Libánotis		Athamanta Casharra
	. 2011 010 17	Cachrys
T 1 /1		Cistus
Lichenoídes		Mucor
Lígtu		Alstroemeria
Linophy'llum		Thesium
Liliágo	AULT THE STREET	Anthericum
Liliástrum	Savoy spider-wort	Anthericum
Lilio-hyacinthus	Lily hyacinth	Scilla
Lúna		Cynosurus
Limónia		Campanula
Limónium	Sea lavender	Statice
Linária	Toad flax	Antirrhinum
Lingúa		(Ranunculus
1 201 (11)	The state of the s	Othonna
		Serapias
Linoídes		Chironia
Linósyris		Chrysocoma
Línum-Stellátum	V - 10 1 7 7 W	Lysimachia
Línza		Ulva
Líppii welle M		Cistus
Lobélia		Campala
Eline - smill	cCorn sallad or lamb's) == 1
Locusta	{Corn sallad, or lamb's lettuce	} Valeriana
Loesélii		Sisymbrium
Lonchitis		Polypodium
Loniceroídes		Loranthus
Lopánthus		Hyssopus
Patrona		as Josepher

Rhamnus Lotus Wild jujube tree Nymphæa Lotus of Egypt Lotus, supposed of Homer, \\
or Indian date plum Diospyros Antholyza Lucidor Momordica Lúffa Rumex Lunária Osmunda Trifolium Lupináster Humulus Lúpulus HopReseda Lutéola Wild woad Erinus Base lychnis Lychnidea f Verbascum Lychnitis Phlomis Juniperus Olibanum Ly'cia Aconitum Lycóctonum Wolf's peach Solanum Lycopérsicum Petesia Lygistum Swietenia Mahágoni Mahogany Maháleb Prunus Origanum Marjoram Majorána Melastoma Indian leaf Malabáthrica Stewartia Malacodéndron Malope Base mallow Malácoides Malamíris Piper Grewia Malocócca Pyrus Málus AppleHibiscus Malvavíscus Berry-bearing hibiscus Manchineel Mancinélla Hippomane Mandrágora Mandrake Atropa Cerbera Mánghas Mángle Mangrove, or mangle Rhizophora Garcinia Mangostan Mangostána Amaranthus Mangostánus Hibiscus Mánihot Jatropha Cassava Ricinus Mappa Acrostichum Marántæ

Marántina Mariána

2 G

Globba

Clitoria

3.5 1/	0 11 1 11 11 11	Carduus
Mariánus	Spotted milk thistle	
Mariscus		Schoenus
Mármelos	7.7	Cratæva
Mártagon	Martagon lily	Lilium
Máru		Origanum
Marrubiástrum		Leonurus
Marum	Common marum	Teucrium
Mastichina	Mastich thyme	Thymus
Matrélla		Agrostis
Matthíoli	Bear's-ear sanicle	Cortusa
Máura		Antholiza
Maurocénia	Hottentot cherry	Cassine
Máx		Phaseolus
Máys	Indian, or Turkey wheat	Zea
Méadia	American cowslip	Dodecatheon
Média	Mock privet	Phillyria
Médium	A Service of Sold	Convolvulus
	Canterbury bell	Campanula
Meleágris	Weeping widow	Fritillaria
Melánium	1	Lythrum
Melanóphleum		Sideroxylon
Mélilot	Melilot	Trifolium
Mehttifólia		Besleria
Mélo	Melon	Cucumis
Melocáctus	Melon thistle	Cactus
Melóngena	Egg plant	Solanum
Melópepo	Buckler gourd	Cucurbita
Mercuriális	Backet goard	Tragia
Meriana		Antholyza
Merianélla	Cape corn flag	Antholyza
Métel	Cupe corn jug	Datura
Metópium	2007	Rhus
Méum	Smignal	Æthusa
Mezéreum	Spignel Mezereon	Daphne
Micránthus	Mezereon	Rhamnus
7 4 1 1	· ·	and the same of th
Microcos		Grewia
Micheliánus	71.45.77	Scirpus
Miliáceus	Millet, or panic grass {	Scirpus Panicum
7.4:11 0.4		
Milleflórum	7 517 6 17	Gnaphalium
Millefólium	Milfoil, or yarrow	Achillea
Mítra		Helvella

Markala		Onhiomhian
Mitréola		Ophiorrhiza
Mnematéia		Ehrharta Phallus
Mokusin		
Monócera	70 77 . 77	Visnea
Moldávica	Moldavian balm	Dracocephalum
Mólle	Peruvian mastich	Schinus
Mollúgo	71.45 7 1.7 717 0	Galium
Móly	Moly, with lily flowers	Allium
Mómbin	Brasilian plum	Spondias
Monniéria	0.000	Gratiola
Monórchis		Ophrys
Morgsána		Zygophyllum
Moringa	San	Guilandina
Mório	Salep	Orchis
Móschata	Nutmeg	Myristica
Mórsus Ránæ	Frog's bit	Hydrocharis
Moschatéllina	f Tuberose moschatel, or	Adova
Moschatenna	\ \ hollow root .	Huona
Moschéutos	" see a go go hands and	Hibiscus
Mucéda	PLU DINATE OR ASSET	Mucor
Mullugo	L myste	Pharnaceum
Múngo		Phaseolus
Múngos		Ophiorrhiza
Múrex	Contract of the contract of th	Pedalium
Murucúja	Passion flower	Passiflora
Muscári	Musk hyacinth	Hyacinthus
	Fly-trap	Dionæa
	Catch-fly	Silene
Mussénda	, , , , , , , , , , , , , , , , , , , ,	Gardenia
Mutellina		Phellandrium
M 100	Myrobalans, or Jamaica hog plum) a
Myrobálanus {	hog plum	Spondias
Myrsinítes	nog pount	Euphorbia
Myrtíllus	Bilberry	Vaccinium
My'stax	20000119	Hugonia
Myúrus		Manisuris
My'xa		Cordia
J 23.W		, o o z di i
N		refresh (C
Nápeca		Rhamnus
Napéllus	Monk's hood	Aconitum
Nápenus		Brassica
Nápus	Navew	Diassica

Nárdus	Nard, or spikenard	Andropogon
Nastúrtium	Cress	Sysymbrium
Nátrix		Ononis
Negúndo		Vitex
110841140		Acer
Nelúmbo	Indian water lily	Nymphæa
Nemolápathum	3	Rumex
Népeta	Wild cat mint	Melissa
Nepetélla	and the state of t	Nepeta
Nídus A'vis	Bird's nest	Ophrys
Nigellástum	Fennel flower of Crete	Garidella
Nigrina		Gerardia
Nil	Blue bind-weed	Convolvulus
Nínsi		Sium
Nirurí		Phylanthus
Nissólia	Crimson grass vetch	Lathyrus
Nissoliána		Vicia
Nissoliánum		Teucrium
Nóbla	Base shrubby hare's-ear	Dhyllia
	Touch not, or yellow bal-	1
Noli tángere {	Touch not, or yellow bal- samine	Impatiens
Nóstoc		Tremella
Núga		Guilandina
Nummulária	Money-wort	Lysimachia
Nummulárius		Evolutus
Nux Vómica		Strychnos
Nycteléa		Ellisia
	Lesser water lily, with fringed flowers	} Menyanthes
Nymphoides {	fringed flowers	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
0		
O'chrus	Winged pea	Pisum
O'culus Cati	Cat's eye	Gnaphalium
O'culus Christi	Christ's eye	Inula
Ocymoides		Saponaria
Odontítes	Red meadow eye-bright	Euphrasia
Oenóplia		Rhamnus
Oenothéræ	4 - 1	Geranium
Oleánder	Rose bay	Nerium
Oleoídes		Rhamnus
		Daphne
Ollária		Lecythis

Olusatrum AlexanderSmyrnium Oly'mpicum Hypericum O'mphalodes Spring navel-wort Cynoglossum Onobry'chis Saint foin Hedysarum \ Vetching Astragalus Onites Origanum Ophioglossoídes Clavaria Opobálsamum Amyris Opóponax Pastinaca O'pulus Marsh elder Viburnum Opúntia Indian fig Cactus Orchioides Hyacinthus Orellána Anotta, or arnotta Bixa Oreoselínum Mountain parsley Athamantha Orientále Sicymbrium O'rnus Ash Fraxinus Oróntium Antirrhinum Lamium O'rvala Osbéckii Verbascum Ostráthium Master-wort **Imperatoria** O'strya Hop horn-beam Carpinus Otítes J. Cucubalus l Polypodium Oxycédrus Greater Spanish juniper Juniperus Oxycóccos Cranberry Vaccinium Padaliánches Doronicum Pádus Bird cherry Prunus Paliúrus Christ's thorn Rhamnus Pánaces Heracleum Papáya Papaw tree Carica Papy'rus Egyptian paper Cyperus Parálias Euphorbia Paréira Cissampelos Paréllus Lichen Parony'chia Mountain knot grass Illecebrum Párra Sisymbrium Parsónsia Lythrum Parthénium Feverfuge Matricaria Paschális Lichen Passerina Stellera Tragus's sparrow-wort

		~~.
Passerino		Erica
Patiéntia	Monk's rhubarb	Rumex
Pávia	Scarlet horse chestnut	Æsculus
	Venus's comb, or shep-	la m
Pécten {	herd's needle	Scandix
Dadwanain	nera s necate	Hyoseris
Pedy'pnois	Chaines Coming hatabat	11 y OSCIIS
Pelecínus {	Clusius's foreign hatchet	Biserula
	vetch .	
Pémphis		Lythrum
Penæ'a	Tree milk-wort	Polygala
Pentacárpos		Hibiscus
Pentagónia		Campanula
Pentstémon		Chelone
Péplis		Euphorbia
Péplus		Euphorbia
Pépo	Pumpion	Cucurbita
Péragua	1 unipeon	Cassine
Peréskia	Plad annla	Cactus
	Blad apple	Lonicera
Pericly'menum	Trumpet honeysuckle	Laurus
Pérsea	Avocado pear	
Pérsica	Peach	Amygdalus
Persicaria	Persicaria	Polygonum
Personata		Arctium
Pes Cápræ		Convolvulus
TOWN TENT		Oxalis
Pes Tígridis	Tiger's-foot	Ipomoea .
Petasítes	Pestilent wort	Tussilago
Petroselinum	Parsley	Apium
Phænopy'rum		Mespilus
Phæ'um		Geranium
Phegópteris		Polypodium
Phéllos		Quercus
Phelypæ'a		Lathræa
Phlegmária		Lycopodium
Phlómidis		Clerodendrum
Phu	Garden valerian	Valeriana
	Garaen vaterian	Cactus
Phyllanthus		Erica
Physódes	,	
Phytéuma	0 11 1	Reseda
70/ **	Crested rampions	Lobelia
Pícæ		Polypodium
Pícea		Pinus

Picroídes		Scorzonera
Pilosélla	Creeping mouse-ear	Hieracium
Piménta	All-spice	Myrtus
Pimpinelloídes	T	Seseli
Pinea		Euphorbia
and the second		Pinus
Pinéti	Towns code and as	Helvella
Pínguin	Wild ananas	Bromelia
Piperélla		Thymus
Piperíta	for a mar adversal to	Fagara
a species.	Pepper-mint	Mentha
Pistolóchia	Spanish birthwort	Aristolochia
Pitajáya	Pitajaya of California	Cactus
Pithyúsa	2 wayaya ay canyarma	Euphorbia
Plantagineum		Doronicum
Plantáginis		Manulea
Plantágo		Alisma
Platonoídes	2017	Acer
Polygonóides		Calligonum
Pneumonánthe	The same of the same of	Gentiana
Podagrária	The second section is not a	Ægopodium
Pólium	Mountain poley	Teucrium
	7/1-11	
Polifólia {	rosmary	Andromeda
Polluéria	, , , , , , , , , , , , , , , , , , , ,	Pyrus
Polygónatum	Solomon's seal	Convallaria
Polytrichoides		Mnium
Porophy'llum		Cacalia
D.		
Pomponium		
Pompónium Pontána		Lilium
Pontána	Leek	Lilium Hypochæris
Pontána Pórrum	Leek Water purslain	Lilium Hypochæris Allium
Pontána Pórrum Pórtula	Leek Water purslain	Lilium Hypochæris Allium Peplis
Pontána Pórrum Pórtula Portulacária	Water purslain	Lilium Hypochæris Allium Peplis Claytonia
Pontána Pórrum Pórtula Portulacária Portulacástrum		Lilium Hypochæris Allium Peplis Claytonia Sesuvium
Pontána Pórrum Pórtula Portulacária Portulacástrum Portulacoídes	Water purslain	Lilium Hypochæris Allium Peplis Claytonia Sesuvium Atriplex
Pontána Pórrum Pórtula Portulacária Portulacástrum Portulacoídes Posopósa	Water purslain	Lilium Hypochæris Allium Peplis Claytonia Sesuvium Atriplex Carica
Pontána Pórrum Pórtula Portulacária Portulacástrum Portulacoídes Posopósa Potatórum	Water purslain	Lilium Hypochæris Allium Peplis Claytonia Sesuvium Atriplex Carica Strychnos
Pontána Pórrum Pórtula Portulacária Portulacástrum Portulacoídes Posopósa Potatórum Prínus	Water purslain	Lilium Hypochæris Allium Peplis Claytonia Sesuvium Atriplex Carica Strychnos Quercus
Pontána Pórrum Pórtula Portulacária Portulacástrum Portulacoídes Posopósa Potatórum Prínus Prinus	Water purslain	Lilium Hypochæris Allium Peplis Claytonia Sesuvium Atriplex Carica Strychnos Quercus Barleria
Pontána Pórrum Pórtula Portulacária Portulacástrum Portulacoídes Posopósa Potatórum Prínus Prionítis Prótium	Water purslain Horse purslain	Lilium Hypochæris Allium Peplis Claytonia Sesuvium Atriplex Carica Strychnos Quercus Barleria Amyris
Pontána Pórrum Pórtula Portulacária Portulacástrum Portulacoídes Posopósa Potatórum Prínus Prionítis Prótium	Water purslain	Lilium Hypochæris Allium Peplis Claytonia Sesuvium Atriplex Carica Strychnos Quercus Barleria

Pséudo-Acorus	Yellow water flag	Iris
Proudo Cancien	m Amomum plinii	Solanum
Pséudo-China	False China root	Senecio
rseudo-Ciina		
70 / 7 00 /		Smilax
Pséudo-Cypérus		Carex
Pséudo-Cy'tisus		Vella
Pséudo-Dictámr	nus Base dittany	Marrubium
Pséudo-Narcissu		Narcissus
Pséudo-Pithys		Teucrium
4	(Greater manle, or)	
Pséudo-Plátanus	$\left\{ egin{array}{ll} Greater & maple, & or \ English & sycomore \ \end{array} ight.$	Acer
Pséudo-Psídium	(English sycomore)	Eugenia
Psycódes	277	Orchis
Psy'llium	Flea-wort	Plantago
Psyllóphora		Carex
Ptármica	Sneeze-wort	Achillea
Pteránthus		Camphorosma
Pterocéphala	Scabious	Scabiosa
Pteróta	, , , , , , , , , , , , , , , , , , ,	Fagara
Pulégium	Pennyroyal	Mentha
Pulicária	Manch Hea hand	Inula
	Marsh flea-bane	
Pulsatilla	Pasque flower	Anemone
Pumílea	J. Min. To I Post I for	Turnera
	Pyracantha	Mespilus
Py'rethrum	Pellitory of Spain	Anthemis
		- BURGING II
Q		
Quámoclit	Indian Pink	Ipomoea
Quércinus	Oak agaric	Agaricus
Querentus	Oun agarte	218011000
R		
10	477 7 7 7	
Rádiola	{ All seed, or least rup-}	Linum
	- 000.0 000.0	
Rangiferinus	Reindeer liver-wort	Lichen
Rápa	Turnep	Brassica
•		p 15
Raphanistrum	{White flowered charlock, with jointed pods }	Kapnanus
Rapuncoloídes	1,000	Campanula
	Rampione	Campanula
Rapúnculus .	Rampions	
Rhabárbarum	Rhubarb	Rheum
Rhagadioloídes		Hyoseris
Rhagadíolus		Lapsana

Rhamnoides Hippophæ Sea buckthorn Rhapóntica Centaurea Centaury Rheum Rhapónticum Rapontic Red field poppy Papaver Rhóeás Rheum Ribes Adelia Ricinélla Base ricinus Croton Rícino-carpos Cynoglossum Rindéra Stoebe Rinocerótis Echinops Róbur OakQuercus Orchal Lichen Roccélla Hibiscus Rosa Sinénsis China rose Rhodiola Rósea Rose root Calamus Rótang Gardenia Rothmánnia f Codon Royéni Cactus Morinda Róyoc Asplenium Rúta Murária Wall rue Dracocephalum Ruyschiána Sabdaríffa Hibiscus Sabina Sabine Juniperus Willow-herb, or purple \ Lythrum Salicária loosestrife Salsílla Alstroemeria Sálsula Phaca Sámbac Nyctanthes Arabian jasmine Sambúcina Aquilicia Poterium Sanguisórba Pterocarpos Santólinus Santólina Achillea Santónica French wormwood Artemisia f Gentiana Saponária Sapindus Soap apple Sápota Achras Sapota Cæsalpina Sappán Penæa Sarcocólla Sarcocómphalus Rhamnus Smilax Sarsaparilla Sarsaparilla

2 H

Sássafras	Sassafras tree	Laurus
Saxífraga	V	(Pimpinella
in a little of the later of the	in the interest of	Gypsophyla
		Silene
Saxífragus		Cucubalus
Scabiósa	Scabious	Centaurea
Scammónia	Scammony	Convolvulus
Scariola		Lactuca
Scéptrum		Digitalis
Scéptrum Caroli	ánum	Pedicularis
Scéptrum Gusta		Protea
Scherardiána	C	Malva
Schinoides		Schrebera
Schobéri		Nitraria
Schoenánthus	Camel's hay, or sweet rush	
Schoenoides	Camers may, or sweet rush	Phleum
Schoenóprasum	Cives, or chives	Allium
Scilláris Scilláris	Cives, or chives	Ixia
Sciuroídes		
THE RESERVE OF THE PARTY OF THE	Clame	Hypnum
Sclaréa	Clary	Salvia
Scolopéndrium	Hart's tongue	Asplenium
Scólymus	Artichoke	Cynara
Scopária	Summer cypress, or bel- videre	Chenopodium
The same	\ videre .	
0 (1)		Melaleuca
Scopólia		Hyoscyamus
Scordioídes		Sideritis
Scordíum	Scordium	Teucrium
Scordótis		Nepeta
Scorodónia	Wood sage	Teucrium
- 1		Scrophularia
	Great round-headed	
Scorodóprasum	{ Turkey garlic, or	Allium
	rocambole	
Scórpius		Spartium
Scurrula		Loranthus
Sebesténa	Assyrian plum	Cordia
Secálinus		Bromus
Secamone		Pepiploca
Securidáca	Hatchet vetch	Coronilla
Sedoídes		Saxifraga
	<	Penthorum
	the second secon	C r cumoram

	and the second second	
Selágo	Upright fir moss	Lycopodium
Sénega	200000000000000000000000000000000000000	Polygala
Sénegal		Mimosa
Sénna	Senna of the shops	Cassia
Seriána	I do south an sulface has	Paullinia
Séridis		Centaurea
Serpentária	Virginia snake root	Aristolochia
Serpy'llum	Mother of thyme	Thymus
Serrária	make Assumption	Protea
Sesamoides		Reseda
Sésban		Æschynomene
Sicyoídes	Single-seeded cucumber	Cissus
Siláus	Single decated cardamoer	Peucedanum
Síler	Mountain laser-wort	Laserpitium
	CC 1 C. T.1.2.3	1
Síliqua	bread	Ceratonia
Siliquástrum	Judas tree	Cersis
Simarúba	Juans 1700	Quassia
Siríboa	The state of the s	Piper
Sísarum	Skirret	Sium
		Iris
Sisyrinchium Smilácina	Double-bulbed iris	
Sóda	C - J	Cissampelos Salsola
soua	Soda	Saisoia
Sója	Soy, or kidney-bean of	Dolichos
Solanácea	\ India \	
1		Atropa
Solándra	C 7 . 77 . 77 .	Hydrocotyle
Soldanélla	Sea cole-wort; soldanella	Convolvulus
Sophéra	7711	Cassia
Sóphia	Flix-weed	Sisymbrium
Sorghum	Greater, or Indian millet	Holcus
Spadicea	- 3	Festuca
Sparganophora	SOUTH AND A STATE OF	Ethulia
Spéculum	Venus's looking-glass	Campanula
Spélta		Triticum
Sphondy'lium	Cow parsnep	Heracleum
Spica	Spike, or lavender	Lavandula
Spicant	The state of the s	Osmunda
Spina Christi	Christ's thorn	Rhamnus
Squamária		Lathræa
Stáchydis	The state of the s	Psoralea
Stæ'chas	French lavender	Gnaphalium

Xeranthemum Stæhelína Delphinium Staphiságria Stavesacre Loranthus Stélis Centaurea Stoébe Cassidone, or French Lavandula Stoéchas lavender Datura Thorn apple Stramónium Pistia Water milfoil Stratiótes Pinus Stróbus-Weymouth pine Osmunda Struthiópteris Struthium Gypsophila Liquidamber Styracíflua Hedysarum Styracifólium Cork tree Quercus Súber Scabiosa Devil's bit Succisa Spartium Supranulium Egyptian sycomore Ficus Sycomórus Symphoricarpus Shrubby St. Peter's wort Lonicera

Т

Tabácum. TobaccoNicotiana Satyrium Tabuláre Tæ'da Pinus Cassia Tágera Othonna Tagétes Tamarisci Jungermannia Ricinus Tanárius Cratæva Tápia Garlic pear Taráxací Hieracium Taráxacum Dandelion Leontodon Daphne Tartonráira Tarton raire Tátula Datura Tazétta Polianthus narcissus Narcissus Base orpine Andrachne Telephioídes Teléphium Orpine Sedum Tenagéia Juneus Téndo Fucus Terebinthus Turpentine tree Pistacia Ternatéa Clitoria Tetragonothéca Polymnia Tétrahit Base hemp Galeopsis Tétralix Erica.

Téucrium		Veronica
Thalictroídes	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Anemone
Thápsi		Digitalis
Thapsoides	T.	Verbascum
Thápsus	White Mullein	Verbascum
Théezans	y : More Lizerpeepte	Rhamnus
Thely'pteris		Polypodium
Thevétia		Cerbera
Thomæ'a		Nardus
Thóra	Kidney-leaved crowfoot	Ranunculus
Thumbérgia	maney-reaved crowsoon	Gardenia
	I Samony with monticil	
Thy'mbra	{ Savory, with verticil- } late flowers	Satureja
Thymeláea	Samo Han	Daphne
Thymifólia	Spurge flax	
	(20) (10)	Lythrum
Thyoides	J. 10 - COR-TON DELINEY	Cupressus
Tiglium	interest and	Croton -
Tinus	Laurestinus	Viburnum
Tirucálli	n	Euphorbia
Tithymaloides	Base spurge	Euphorbia
Tóra		Cassia
Tótta		Protea
Tournefortii	Amber tree	Gundelia
Toxicodéndron	Poison tree	Rhus
Trachélium	Throat-wort	Campanula
Tragacántha	Goat's thorn	Astragalus
Tragódes		Fagara
Tragoriganum		Thymus
Tragus		Salsola
	nosum Maiden hair	Asplenium
Trichomanoídes		Asplenium
Triónum	Kelmia, or Venice mallow	Hibiscus
Tripólium	P. C. Adamson St. Long.	Aster
Tripteris		Valeriana
Trixago		Rhinanthus
Troglodytárum		Musa
Tsiámpaca		Michelia
Túber	Truffles	Lycoperdon
Tuberária		Cistus
Tuberósa		Polianthes
Túna	Indian fig, or prickly pear	
Túpa	- Promy Pour	Lobelia

Túrbith Turpéthum 'Turríta Typhalæ'a Ty'phinum	Turbith	Sesseli Convolvulus Arabis Urena Rhus
u Ulmâria	Meadow sweet	Spiræa
Una Críspa U'nedo	Spanish red-worts	Ribes Arbutus
U'nguis Cati	Cat's claw	Mimosa
Uragóga Urinária		Myginda Phylanthus
Urtícæ		Begonia
U'snea	Tree moss	Lichen
Uva U'rsi	{ Spanish red-worts, or bear berries	Arbutus
Uvaria	Iris uvaria	Aletris
Uvedália Uvífera		Polymnia Coccoloba
***		1 2 3
Vaccária		Saponaria
Valentina		(Coronilla
	5 4 10 1 2 10 0	Anthemis Anacyclus
Valerándi	{ Round-leaved water pimpinel	Samolus
Vanílla	Vanilla	Epidendrum
Vascária Verbenáca		Saponaria Salvia
Verbesína	A million time of any long	Cotula
Vérnix Verútum	Poison, or varnish tree	Rhus Centaurea
Vesicária	\{\begin{aligned} Mad-wort, with bladdery pods \end{aligned}	
771 - 1771 (1971)	Heart seed	Brassica
Victoriális Vincetóxicum	N	Allium Asclepias
Viórna	{ Leathery flowered vir- gin's bower	Clematis
Virgáurea	Golden rod	Solidago
, ingaurca	Couch Tou	Donuago

Virginicum		Lepedium
Viscária		Lychnis
Visnága	Visnaga, or tooth pick	Daucus
Vitálba	Traveller's joy	Clematis
Vitaliána	Traveller's joy	Aretia
Viticella	Winning horner	Clematis
	Virgin's bower	
Vitis Idaea	Whortle berry	Vaccinium
Vulnerária	{ Kidney vetch, or lady's finger	, -
Vulpína		Vitis
Vulvária	Wild stinking orach	Chenopodium
		, 1
w	7	
Wedélia		Polymnia
7, 00001100		
x	2	
Xíphium	Bulbous iris	Iris
Xylósteum	Fly honeysuckle	Lonicera
Y		
Yervamóra	Golden rod tree	Bosea
Z		
2		
Zacintha	{ Wart cichory, or nipple- wort	Lansana
	L wort	
Zanónia		Commelina
Zeocr'ithon		Hordeum
Zerúmbet	Wild ginger	Amomum
Zeugites		Apluda
Zeylánica		Nama
Zibethínus		Durio
Zingiber	Ginger	Amomum
Zizy'phus	Jujube tree	Rhamnus
Zuzy'gium		Myrtus
Zy'gis	Spanish thyme	Thymus
7 8.0	Spaces orgino	A LI Y LILLO

ale for into Lights A Prolle

A BELE (the Dutch name) Abelmosk; or musk seed Acacia, true; or Egyptian thorn Mimosu nilotica Acacia, false; or locust tree Acacia, German Acacia, three-thorned; or ho- Gleditsia triacanthos Acajou; or cashew nut Acanthus, Corinthian; or brank ursine Acmella Aconite Aconite, Winter Acrostic; or fork fern Adam's needle Adder's wort; or bistort Adder's, or serpent's tongue Adonis, common Agaric Agaric of the oak Agaric (Pharmaco. Edinb.) Agnus castus; or chaste tree Agnus castus; oil tree; or palma Christi 21

Populus alba Hibiscus abelmoschus Robinia pseud-acacia Prunus

Anacardium occidentale

Acanthus spinosus

Spilanthus acmella Aconitum Helleborus hyemalis Acrostichum septentrionale Yucca gloriosa Polygonum bistorta Ophioglossum vulgatum Adonis autumnatis Agaricus Agaricus quercinus Boletus igniarius Vitex agnus castus

Ricinus communis

Agrimony, common Agrimony, hemp Agrimony, base hemp Agrimony, naked-headed hemp Verbesina Agrimony, water hemp Ague tree; or sassafras Aikraw Alaternus Alaternus, base Betula alnus Alder Alder, black, or berry-bearing Alecost; or costmary Alehoof; gill; or ground ivy Alexanders Alcali, or sal-kali* Salsoli kali Alcali, or sal-kali, jointed Alhenna, or henna; or alcanna Alkekengi Allgood; good Henry; or Eng- \ Chenopodium bonus Henlish garden mercury Allheal, clown's; or woundwort

Agrimonia eupatoria Eupatorium cannábinum Ageratum cony'zoídes Bidens tripartita Laurus sassafras Rhamnus alaternus Phylica ericoides Rhamnus frangula Tanacetum balsamita Glechóma hederácea Smyrnium olusátrum Salivornia herbacea * Lithospermum orientale Lawsonia inermis Physalis alkekengi Stachys palustris

* A fixed alkali may be extracted from all vegetables; but fumuterræ and wormwood will yield the greatest quantity, and fir the least; one thousand pounds of fumuterræ yielded about two hundred and nineteen pounds of ashes, and seventynine of salt; the same quantity of wormwood ninety-seven pounds and a half of ashes, and seventy-three of salt; the same quantity of fir yielded only three pounds and a half of ashes, and half a pound of salt. Irish Royal Academy, 1791.

The ashes imported from Spain and Russia are said to be the purest and best, and when only in a fine powder, are called pulverine or barilla, but when made into hard lumps, are called rochetta; and M. Lavoisier (in his Elements of Chemistry) says that all vegetables yield more or less salt or pot-ash, in consequence of combustion, which is more or less saturated with carbonic acid; but as this substance cannot be procured but by means of processes capable of furnishing oxygen and azote, such as combustion, or by means of nitric acid; it is therefore as yet uncertain whether it previously existed already formed in the vegetable, or whether it be a produce from these operations.—To obtain the salt or pot-ash, pour about a pound of ashes on a quart of soft hot water, which let stand for a week, frequently stirred; then pour off the water, and if the ashes taste salt, pour on a little more water; then evaporate the water in a shallow vessel, and the salt will remain.-To make pure pot-ash, dissolve this salt in water, then add two or three times its weight of quick lime, filtrate the liquor, and evaporate it in close vessels; by this means it is almost entirely deprived of its carbonic acid, and is soluble in alkohol. Pearl-ash is pot-ash refined by calcination. See note to soda, in the Index.

Allheal, Hercules's Allseed; or least rupture-wort All-spice; or Jamaica pepper All-spice, Virginian Alligator; or Avocado pear Almond Almond, Æthiopian or African Almond, dwarf Aloe, * leaf-pierced Aloe, cobweb Aloe, socotrine Aloe, hepatic Aloe, common American Aloe, water; or water soldier Aloes, wood; or calamba Althæa frutex; or Syrian mallow Alysson, rough-leaved; or awlwort Subularia aquatica Amaranthus; or flower-gentle Amaranth, globe Amaranthus tricolor Amaryllis, superb Amber tree Amellus of Virgil Amomum Plinii Amomum, German Anacardium Andrachne; or oriental straw- Arbutus andrachne Anemone, common garden Anemone, wood

Ananas; or pine apple

Angelica+

Heracleum pánaces Linum radiola Myrtus pimenta Calycanthus floridus Laurus persea Amygdalus communis Brabeium stelluifolium Amygdalus nana Aloe perfoliata Aloe pumila arachnoides Aloe spicata Aloe perfoliata Agave Americana Stratiotes albídes Excoecaria agállocha Hibiscus Syriacus Amaranthus Gomphrena Amaranthus tricolor Amaryllis vittata Anthospermum Æthiopicum Aster amellus Sison ammi Solanum pseudo-capsicum Sison amomum Anacardium orientale Anemone hortensis

Anemone silvestris Bromelia ananas

Angelica archangelica

^{*} Aloe perfoliata has many varieties; which see in Aiton's Hortus Kewensis;which Donn, in his catalogue of plants, called Hortus Cantabrigiensis, makes different species. Perfoliata means when the stem or stalk grows through the leaf.

[†] Angelica is in high esteem in Lapland, they devour it with much avidity as a great delicacy; they eat leaves, stalks, and roots, either raw, or boiled in milk .- It is deemed a very great antiscorbutic, and carminative. Acerbi's Travels in Lapland, printed in 1802.

Angelica, berry-bearing Angelica tree 'Angelica, wild; or goutwort Anise Anise tree of China Anotta; or annatto Apeiba of the Basilians Apple Apple, Adam's; or orange Apple, bitter; or coloquintida Apple, blad; or W. Indian goose- Cactus pereskia Apple, jamboo Apple, custard Apple, love* Apple, love, of the antients Apple, mad Apple, male balsam Apple, May; or duck's foot Apple, pine; or ananas Apple, purple Apple, soap Apple, sour Apple, star Apple, sugar Apple, sweet Apple, thorn; or stramonium Apple, water Apricot Arbor vitæ, American Arbor vitæ, China Arbor tristis; or sorrowful tree Arbutus, upright Arbutus, trailing Archil; or orchilla

Aralia racemosa Aralia spinosa Ægopodium padagraria Pimpinella anisum Illicium anisatum Bixa orellana Sloanea Pyrus malus Citrus aurantium Cucumis colocynthis

Eugenia jambos Annona reticulata Solanum lycopersicum Atropa mandrágora Solanum insanum Momordica balsamina Podophyllum peltatum Bromelia ananas Annona asiatica Sapindus saponaria Annona muricata Chrysophyllum cainito Annona africana Annona squamosa Datura stramonium Annona palustris Prunus armeniaca† Thuia occidentalis Thuia orientalis Nyctanthes arbor tristis Arbutus unedo Arbutus uva ursi Lichen roccella

^{*} At Sidney, in New Holland, they brewed beer from India corn, properly malted, and bittered with the leaves and stalks of the love-apple (solanum lycopersicum), or, as it was commonly called in the settlement, the Cape gooseberry; which was found to succeed very well. Collins's Account of N.S. Wales, 2d. ed. 1804, p. 334.

[†] Prunus armeniaca, a supposed native of Armenia.

Archangel; or dead nettle Archangel, yellow Aria theophrasti; or white beam Arnotta; or anotta Arrow-head Arrow-headed grass

Arrow-root, Indian

Arse-smart; or water pepper Arse-smart, spotted; or persicaria Polygonum persicaria Artichoke Artichoke, Jerusalem Arum, African Arum, great Egyptian Arum, floating

Asarabacca, common; or wild Asarum europæum

Ash, common

Ash, mountain; or wicken, or Sorbus aucuparia

Ash, poison; or varnish tree Ash, sweet or ground; or goutwort Ægopodium podagraria Asparagus, common Asparagus, climbing Asp, or aspen tree Asphodel, yellow; or king's-spear Asphodelus luteus

Asphodel, African low Asphodel, Scottish Aster; or starwort Aster, China

Avens; or herb bennet Avocado; or alligator pear Auricula; or bear's ear Auricula, borage-leaved

Auricula-tree

Awlwort; or rough-leaved alysson Subularia aquatica

Azarole service tree

Azerita

Bachelor's button Bachelor's button; lychnis; or campion

Lamium album Galeopsis galeóbdolon Cratægus aria Bixa orellána Sagittaria Triglochin palustre Thalia geniculata Maranta arundinacea Polygonum hydropiper Cynara scolymus Helianthus tuberosus Calla Æthiopica Arum colocasia Orontium aquaticum

Fraxinus excelsior

Rhus vernix Asparagus officinalis Medeola aspáragoides Populus tremula Anthericum asphódeloides Anthericum calyculatum Aster

Aster chinensis Geum urbanum Laurus persea Primula auricula Verbascum myconi Asclepias gigantea Cratægus azárolus Prunus

Lychnis dioica Lychnis dioica

Balm of Gilead Balm of Gilead, false Balsam, common garden Balsam copaibi Balsam of Canada Balsam of Mecca Balsam, nettle Balsam of Peru Balsam of Tolu Balsam tree, succulent-leaved Balsam tree Balsamine, female; or immortal \[Impatiens balsamina Balsamine, yellow; or noli me tangere Bambu cane Banana; or the forbidden fruit Bane-berries; or herb christopher Banian tree Bardana; or burdock Barilla—see Soda Bark, true Jesuit's, or Peruvian Bark, false Jesuit's Bark of Elutheria; or cascarilla Bark, angustura Bark, Winter's Bark, quercitron Barley, common spring Barren-wort Basil

Basil, common field

Basil, Syrian field

Balm, common

Basil, stone

Basil, American field

Basil, wild; or mother of thyme

Batata; or Spanish potatoe

Balm, Moldavian; or Turkey

Amyris gileadensis Dracocephalum canariense Impatiens balsamina Copaifera officinalis Pinus balsamea Amyris opobalsamum Melittis melissophyllum Myroxylon peruiferum Toluitera bálsamum Clusia flavia Pistacia

Impatiens noli me tangere Arundo bambos Musa sapientum Actæa spicata Ficus religioso

Arctium lappa

Cinchóna officinalis* Iva frutescens Croton cascarilla Brucea antidysentérica Wintera aromatica Quercus nigra Hordeum vulgare Epimedium alpinum Ocymum basilicum Clinopodium vulgare Monarda clinopodia Ziziphora tenuior Thymus aeinos Thymus serpillum Convolvulus batatas Melissa officinalis Dracocephalum moldávica

^{*} A root hath lately been discovered in Peru, called radix rhat-anguia, or radix rhataniae, and is said to be superior in all cases to the cinchona; but the generic character seems not yet to be known.

Balm, Molucca Balm, Indian; or Oswego tea

Bay tree, common; or laurel of

the antients

Bay, Loblolly

Bay, dwarf; or spurge laurel

Bay, sweet-flowering

Bead tree

Beam, white; or aria theophrasti

Bean, kidney, of India; or soy

Bean, kidney, or French Bean, scarlet kidney

Bean tree, kidney Bean tree of America

Bean, caper

Bean, Egyptian; or peltated water lily Nymphaa nelumbo

Bean trefoil-tree

Bean trefoil-tree, stinking Bear-berries; or uva ursi

Bear-bind Bear's breech

Bear's ear; or auricula Bear's ear sanicle

Bear's paw

Bear's foot; or setter-wort

Beard, man's

Beard, old man's; or traveller's joy Clematis vitalba

Beech wheat Beech, common Beech, purple-leaved

Beet, common Bee-flower

Behen, white; or spatling poppy

Bell flower Bell, Canterbury Bell pepper

Bells, hare

Moluccella Monarda didyma

Laurus nobilis

Gordonia lasianthus Daphne laureola Magnolia glauca

Melia azédarach

Cratægus, aria Vicia faba

Dolichos soja Phaseolus vulgaris

Phaseolus coccineus Glycine frutescens

Erythrina carnea Zygophyllum fabágo

Cytisus laburnum Anagyris fætida Arbutus uva ursi Convolvulus sepium

Acanthus

Primula auricula

Cortusa

Arctopus echinatus Helleborus fætidus Andropogon

Polygonum fagopyrum* Fagus silvatica

Fagus silvatica (purpurea)

Beta vulgaris Ophrys

Cucubalus behen Campanula

Campanula medium .

Capsicum

Hyacinthus non-scriptus

^{*} Phagos is greek for the beech, and puros is greek for wheat; it is called beech wheat from the similarity of the seed. See wheat, buck.

Bella-donna; or deadly nightshade Atropa belladonna Belvidere; or Summer cypress Chenopodium scoparia Jatropa gossypitolia Belly-ache weed

Ben—see Behen

Berberry, common*; or pipe- Berberis vulgaris ridge bush

Bergamot, oil of Bermudiana

Betle -

Betony

Betony, Paul's Betony, water Big barley

Bilberry ; or whortle berry, blue Vaccinium myrtillus

Bilberry, red Bindweed, great Bindweed, black Bindweed, rough

Bindweed, small gravel

Birch of Jamaica

Bird cherry; or cherry laurel

Bird's eye Bird's foot

Bird's foot trefoil; or lamb-toes

Bird's foot trefoil Bird's-nest

Bird's-nest, purple

Birth-wort Bishop's weed, common

Bisfort; or adder's wort

Citrus+ Sisyrinchium bermudianum

Piper betle Betonica officinalis

Veronica officinalis Scrophularia betonicifolia

Hordeum hexastichon Vaccinium vitis idæa Convolvulus sepium Polygonum convolvulus Smitax aspera

Convolvulus arvensis Betula alba

Pistacia

Prunus lauro-cerasus Primula farinosa Ornithopus

Lotus ornithopodioides Trifolium ornithopodioides Ophrys nidus avis

Orchis abortiva Aristolochia Ammi majus Polygonum bistorta

* Sir Joseph Banks in his account of the disease in corn, called by farmers the blight, the mildew, and the rust, is of opinion that they are owing to a fungus; and says, if a berberry bush is near a field of corn, it may infect the whole; for as that shrub is subject to a kind of rust resembling the blight, the farina of its fungus may be carried by the wind to the pores of the corn.

⁺ See note to citrus.

[‡] It is said the bilberry is frequently used on the Continent for colouring white wines, which, with the help of a little alum to give a roughness, make them pass for red port wines. The stamina of this shrub form a very beautiful dome.

Bistort, small Polygonum viviparum Bitter-sweet; or woody nightshade Solanum dulcamara Bitter-wort Gentiana Blackberry; or bramble Rubus fruticosus Bladder-wort; or water milfoil Utricularia vulgaris Blattaria; or moth mullein Verbascum blattaria Blind man's ball; or puff ball Lycoperdon bovista Montia fontana Blite; or strawberry spinach Blitum capitatum Blite, amaranth Amaranthus blitum Blood-flower; twy-blade; Hæmanthus coccineus African tulip Hæmatoxylon campechia-Blood-wood; or logwood Blood-wort Rumex sanguineus Blue bottle; or blue bonnet; or Centaurea cyanus Cyanus Blue bottle, mountain perennial Centaurea montana Bogbane; or marsh trefoil Menyanthes trifoliata Bogberry; or bogwort; or cran-Vaccinium oxycoccos berry Bohon upas—see Upas Bonny of Carolina; or oily grain Sesamum orientale Brassica oleracea (sabel-Borecole (a variety) lica) Borage, common Borago officinalis Box Buxus sempervirens Box, African Myrsine Africana Box, low Polygala chamæbuxus Boxthorn, willow-leaved Lycium barbarum Boxthorn, American Randia aculeata Bracken; or brakes; or common fern Pteris aquilina Bramble; or blackberry Rubus fruticosus Polygonum fagopyrum Brank; or beech wheat Brank ursine; or Corinthian acan Acanthus spinosus Brasil; or fernambuck Pterocarpus Brasiletto tree Cæsalpinia Bread fruit, Otaheite Artocarpus incisa Bread fruit, Nicobar Pandanus leram Bread, or plantain tree; or banana Musa sapientum

Brosimum alicastrum

Saxifraga

Break-stone; or saxifrage Break-stone parsley; or parsley piert Aphanes arvensis Briar, sweet Briar, hep; or dog rose Briget in her bravery; or scarlet lychnis; or knight's cross Brimstone, or sulphur wort; or hog's fennel Brocoli (a variety) Brooklime; or water speedwell Broom, common besomt Broom, white Spanish Broom, African Broom, dyer's; or greenwood; or wood waxen Broom, arrow-shape jointed Bioom, rape Broom, rape, with great purple \{\} Lathraa Bruise-wort; or soap-wort Bryony, white Bryony, black Buckbean—see Bogbane Buck's horn, plantain Buck's horn, warted Buckthorn, common Buckthorn, sea (willow-leaved) Buck-wheat-see Beech wheat Buckee, Hottentot Bug-bane

Bugle, common

Bugloss, small wild

madwort

Bugloss, small wild;

goose grass;

Bugloss, broad-leaved, evergreen

Bugloss

Rosa rubiginosa Rosa canina Lychnis chalcedonica Peucedanum officinale Brassica oleracea (italica) Veronica beccabunga* Spartium scoparium Spartium monospermum Aspalathus Genista tinctoria Genista sagittalis Orobanche Saponaria officinalis Bryonia alba Tamus communis Plantago coronopifólia Cochlearia Rhamnus catharticus Hippophæ rhamnoides Diosma Cimicifuga fatida

Ajuga reptans Anchusa Anchusa sempervirens Lycopsis arvensis

Asperugo procumbens

or great

or German

^{*} Beccabunga seems a harsh specific name, but was formerly the name of the plant; it is derived from the Flemish becc-pungen (mouth smart), from its pungent quality.

⁺ At Ghent, Antwerp, &c. the flower buds of common broom are pickled as enpers-

Bugloss, viper's, common Bullace tree, W.Indian Bullace tree Burdock; or bardana* Burdock, lesser British Bur marigold Burnet, garden, or common Burnet, greater wild Burnet saxifrage Burning thorny plant Bur reed, great Butcher's broom; or knee holly Butter bur Butter-cup; golden-cup; crow-foot, corn Butter-wort; or Yorkshire sanicle Pinguicula vulgaris Button tree Button weed Button wood

Echium vulgare Chrysophyllum glabrum Prunus insititia Arctium lappa Xanthium strumarium Bidens frondosa Poterium sanguisorba Sanguisorba officinalis Pimpinella saxifraga Euphorbia officinarum Sparganium erectum Ruscus acuteatus Tussilago petasites

Ranunculus arvensis Conocarpus erecta Spermacore. Cephalanthus occidentalis Lychnis dioica

Button, bachelor's

Cabbage, common Cabbage, dog's; or dog's mercury Theligonum cynocrambe Cabbage, sea; or sea kale Cabbage, savoy Cabbage, red Cabbage, turnep-rooted Cabbage-bark tree Cabbage-bark tree, base Cabbage tree; or Palmetto roy

al; or lance-wood Areca oleracea Cabbage tree, W. Indian Cabbage tree; or foreign colt's-foot Cacalia kleinia Cacao; or cocoa; or chocolate nut Theobrema cucao

Brassica oleracea Crambe maritima Brassica oleracea (sabauda Brassica oleracea (rubra) Brassica oleracea (napobrassica) Geoffroya spinosa Geoffroya inermis Corypha umbraculifera

^{*} The bardana, which acquired so much celebrity by the late Dr Hill, for the cure of the gout, and the sort he preferred, was the wool y-headed hurdock, being a variety from arctium lappa, the common burdock Universal Magazine for April, 1758.

Carica

Calabash; or gourd Cucurbita Calabash; or gourd tree Crescentia cucurbitina Excoecaria agallocha Calamba; or lignum aloes Calamint, common Melissa calamintha Calamint; or balm cat-mint Melissa nepeta Calamint, water Mentha gentilis Calamus aromaticus; or sweet Acorus calamus flag, or rush Tribulus Caltrops Caltrops, water Trapa natans Calves' snout; or toad flax Antirrhinum linaria Cameoclits—see Quamoclits Cammock; or petty whin; Ononis rest harrow Hamatoxylon campechia-Campeachy wood; or logwood numLaurus camphora Camphor tree Agrostemma coronaria Campion, rose; or wild lychnis Campion Lychnis Campion, viscous; or catchfly Silene muscipula Candle of the Indians Rhizophora candel Candia lion's foot Catananche lutea Candy-tuft Iberis umbellata Candy-tuft, perennial Iberis sempervirens Candy-tuft tree Iberis semperflorens Cane, bambu; or walking cane Arundo bambos Canna indica Cane, or shot, Indian Cane, or reed Arundo Cane, sugar Saccharum officinarum Canella albatree; or white cinamon Canella alba Caper bush, common Capparis spinosa Carat, or caract tree Ceratonia siliqua Caraway; or carui Carum carui Carduus benedictus Cnicus acarna Cardoon Cynara cardunculus Cardinal flower; or water gladiole Lobelia cardinalis

Carnation tree; or foreign colt'sfoot
Carob tree; or St. John's bread
Ceratonia siliqua

Carnation, Spanish; or flower fence Poinciana pulcherrima

Carnation; or clove July flower.

Ficus carica

Dianthus caryophyllus

Carrot, wild Carrot, garden Carrot, candy* Carrot, deadly; or scorching fennel Thapsia villosa Carui; or caraway Cascarilla; or bark of Eleutheria Croton cascarilla Cashew nut; or acajou Cassada; or cassava; or manihot Jutropha manihot Cassina; or yapon Cassia lignea Cassia, poet's Cassia of the shops Cassidony; or French lavender Cassio-berry bush Catechu; or terra japonica Catalpa Catchfly, or fly-trap Catchfly Catchfly, dog's-bane Catchfly, lobels Catchfly; or viscous campion Catmint; or nep Catmint, or calamint, wild Cat's-foot; or ground ivy

Cat's-foot Cats-tail; or reed mace Caterpillars; or scorpion grass Cauliflower, or cole flower (a | Brassica oleracea (botryvariety) Cedar, red Virginian Cedar of Jamaica, base Cedar, white Cedar of Bermudas Cedar of Busaco in Portugal Cedar of Libanus

Celandine, common or greater

Cat's-eye

Daucus sylvestris Daucus carota Athamanta cretensis Carum carui Anacardium occidentale Cassine paragua Laurus cassia Osyris alba Cassia fistula Lavandula stæchas Viburnum lævigatum Mimosa catechu Bignonia catalpa Dionæa muscipula Silene muscipula Apocymum androsæmifolium

Silene armeria Lychnis viscaria Nepeta cataria Melissa nepeta Glechoma hederacea Gnaphalium occulus cati Gnaphalium dioicum Typha latifolia Scorpiurus vermiculata Juniperus Virginiana

Theobroma guazuma Cupressus thyoides Juniperus bermudiana Cupressus pendula Pinus cedrus Chelidonium majus

^{*} The seeds of candy carrot are said, by Dr. Brook, to be used in making Venice treacte and mithridate.

Celandine, cut-leaved (a variety) Celandine, lesser; or pile-wort Celandine tree Celery—see Selery Cereus, common creeping Centaury Centaury without stems Centaury, lesser Centaury, yellow perfoliate Ceterach. Chamæmile,* common Chamæmile, field Chamæmile, dwarf, or sea Champignon; or esculent mushroom Char; or sedge Charity; Greek valerian; or Jacob's ladder Charlock; or ketlock Charlock, white-flowered, with Raphanus raphanistrum jointed pods Chaste tree; or agnus castus Chay root; or E. India madder Cheese rennet; or ladies' bed straw Galium verum Cherry tree Cherry, Barbadoes Cherry, bird

Cherry laurel, or common laurel

Cherry, dwarf; or uprighthoney-

Cherry, Hottentot; or Cape ph

Cherry, Winter common

Cherry, black

Cherry, cornelian

lyrea

Cherry, Alpine

Chervil, garden

Chelidonium majus Ranunculus ficaria Bocconia frutescens

Cactus cereus flageliformis

Centaurea Centaurea crocodilium Gentiana centaurium Chlora perfoliata Asplenium ceterach Anthemis nobilis Anthemis arvensis Matricaria chamæmilla

Agaricus compestris

Carex divisa

Polemonium caruleum

Sinapis arvensis

Vitex agnus-castus Oldenlandia umbellata Prunus cerasus Malpighia glabra Prunus avium Prunus cerasus nigra Prunus lauro-cerasus Cornus mascula

Lonicera carulea

· Cassine maurocenia

Physalis alkehengi Lonicera alpigena Scandix charefolium

^{*} Chamæmile is generally spelt chamomile, but as it is derived from the Greek word chamai (humi crescens), it ought to be chamamile. - See note to may-weed.

Chervil, or cicely, wild; or cow parsley Chestnut Chestnut, dwarf American; chinquapin Chestnut, horse Chestnut, scarlet horse Chestnut, Indian rose Chiches; or Chich pea; or ravances Chichling-vetch Chickweed, common Chickweed, African Chickweed, berry-bearing Chickweed, great; or stitchwort Chickweed, mountain Chickweed, mouse ear Chickweed, sea Chickweed, small water China root China root, false China rose Chinquapin; or dwarf American Fagus pumila

Chirimoya; or sweet sop Chocolate nut; or cacao Christmas rose; or black hellebore Helleborus niger Christopher, common herb Christ's thorn* Chrysanthemum, base Chrysanthemum, hard-seeded Ciboules; or Welsh onion Cichory†

Charophyllum sylvestre

Fagus castanea

Fagus pumila

Æsculus hippo-castanum

Æsculus pavia Mesua ferrea

Cicer arietinum

Lathyrus cicera Alsine media Mollugo verticillata Cucubalus baccifera Stellera holostea Moehringia muscosa Cerastium dichotomum Arenaria peploídes Montia fontana Smilax china Senecio pseudo-china Hibiscus rosa-sinensis

Annona squamosa Theobroma cacao Actæa spicata Rhamnus paliurus Silphium asteriscus Osteospermum Allium cepa (cambrica) Cichorium intybus

^{*} Christ's thorn (rhamnus paliurus) is so called from a supposition that his crown of thorns was made from this shrub, which is very common in Judea.

[†] It is said, in the Monthly Magazine for May, 1809, that in many parts of Germany and Holland, they adulterate their coffee, by mixing therewith cichory foot (cichorium intybus) dried and ground, which renders it of higher colour, and stronger flavour; for which purpose the wild kind is said to be the best. - The French use the roots of dandelion.

Cichory, yellow; or base hawkweed Picris hieracioides

Cichory, gum

Cichory, wart; or zacintha Cicuta; or water hemlock

Cicely; or fool's parsley

Cicely, sweet; myrrhis; or wild \ Scandix odorata myrrh

Cicely, or chervil, wild

Cinnamon tree

Cinnamon, white or wild

Cinnamon, base Cinquefoil

Cinquefoil, marsh Cinquefoil, shrub

Cistus, gum; or rock rose

Cistus, marsh; or wild rosmary

Cistus, rape of

Cistus, nettle-leaved

Cistus, dwarf; or little sunflower

Citrul; or water melon Cives; or chives

Clary

Clary, purple-topped—see Sage

Clary, Pyrænean Clivers; goosegrass; or hairiff

Cloud-berry

Clove July flower Clove tree

Clover, common

Clover, English red; or cow-grass Clover, white; or honeysuckle Trifolium repens

grass

Cobweb aloe Cobweb sedum

Cocculus indicus (India berry) Cochinil fig; or nopal

Cockscomb; rattle; or lousewort Pedicularis palustris

Cockscomb amaranth Cockscomb; or yellow rattle

Cockshead; or saintfoin

Chondrilla juncea Lapsana zacintha Cicuta virosa Athusa cynapium

Charophyllum sylvestre Laurus cinnamomum

Canella alba Laurus cassia Potentilla

Comarum palustre Potentilla fruticosa

Cistus ladaniferus Ledum palustre

Cistus, lesser marsh; or base heath Andromeda polifolia Cytinus hypocistis Turnera cistoides

Cistus helianthemum Citrus medica

Cucurbita citrullus Allium schænoprasum

Salvia sclarea

Horminum pyrenaicum Galium aperine Rubus chamæmorus Dianthus caryophyllus Caryophyllus aromaticus Trifolium pratense

Trifolium alpestre

Aloe pumila arachnoides Sempervivum arachnoideum Menispermum cocculus Cactus cochinillifer Celosia cristata

Rhinanthus crista-galli Hedysarum onobrychis

Cockle; or popple Coco nut palm Cocoa plum Codlings and cream Coffee, Arabian Coffee, W. Indian Colewort, rape, &c. Colewort, sea Colewort, sea

Colocasia; or great Egyptian arum Arum colocasia Coloquintida; or bitter apple Colt's-foot, common,

Colt's-foot, Alpine

Colt's-foot, foreign; or cabbage, Cacalia kleinia or carnation tree

Columbine, common Columbine, feathered; or meadow

Comfrey, common; or consound greater

Consound, middle; or bugle Consound, lesser; or self-heal Consound, least; or daisy

Consound, red

Consound, Saracen's; or wound- Solidago virgo aurea

Consound, true Saracen's Consound, marsh Consound, royal Consound, golden Contrayerva

Contrayerva of Hermandes Convolvulus; or bindweed

Convolvulus, scarlet Convolvulus major

Coral tree; or dog-wood of Jamaica Erythrina corallodendrum

Coral-wort; or tooth-wort

Agrostemma githago Cocos nucifera Chrysobalanus icaco Epilobium hirsutum Coffea arabica Coffea occidentalis Brassica napus Crambe maritima Convolvulus soldanella

Cucumis colocinthis Tussilago farfara Cacalia suaveolens

Aquilegia vulgaris

Thalictrum aquilegifolium

Symphytum officinale

Ajuga reptans Prunella vulgaris Bellis perennis Tormentilla erecta

Senecio sarracénicus Comarum palustre Delphinium consolida Cistus ladaniferus Dorstenia contrayerva

PassifloraConvolvulus Ipomoea coccinea

Convolvulus purpureus Dentaria bulbifera

^{*} Consound (consolida), a name formerly given to certain vulnerary plants, from their power of conglutinating and consolidating the parts; as symphytum (comfrey) was called consolida major, or greater consound, &c.

Coriander

Cork tree

Corn-bind; or devil's-gut Corn, Guinea; or Indian millet Corn, Indian; or maze Corn flag; or gladiole, common Corn marigold; or guills Corn poppy Corn salad; or lamb's lettuce Cornel; or dog berry Cornelian cherry Costmary; or alecost* Coronopus; or swine's cress Cotton plant, + common Levant Cotton tree Cotton, lavender, common Cotton tree, silk Cotton grass, common Cotton weed; or cudweed Courbaril; or locust tree Cow-grass; or English red clover Trifolium alpestre Cow-quakes; or quake grass Cow-itch; or cowage Cowslip (a variety) Cowslip, American; or meadia Cowslip; or sage of Jerusalem; \ Pulmonaria officinalis or spotted lungwort Cow-weed; or wild chervil

Crab tree; or apple tree

Crab, small Siberian

Coriandrum sativum Quercus suber Spondias mombin Convolvulus arvensis Holcus sorghum Zea mays Gladiolus communis Chrysanthemum segetum Papaver rhoeas Valeriana locusta Cornus sanguinea Cornus mascula Tanacetum balsamita Cochlearia coronopus Gossypium herbaceum Gossypium arboreum Santolina chamæ cyparissus Bombax gossypinum Eriophorum polystachion Gnaphalium margaritaceum Hymenæa courbaril BrizaDolichos pruriens Primula veris (officinalis) Dodecatheon meadia

Charophyllum sylvestre

Pyrus malus baccata

Pyrus malus

* Costmary, formerly called costus maria, receives its name from its aromatic quality, similar to the costus arabicus; it is also sometimes called alecost, from the pleasant flavour it gives to that liquor by infusion;—and it is said that the essential oil is of great use in France, to cure all wounds and bruises.

⁺ Beside the herbaceous and arboreous cotton (which see under gossypium), there is also an animal cotton, which is spun by a worm (in the same manner as silkworms) known in America by the name of manioc, or indigo worm, and encloses itself in a white cotton ball; which is said to have many advantages over the vegetable cotton. Edin. Rev. vol. iii. p. 89, printed in 1806.

Crackling, or sandbox tree* Crake, or crow berries; or black] berried heath Cranberry Crane's bill Creeper, or ivy, Virginian; or five-leaved Canada vine Cress, garden Cress, Virginian, or Indian Cress, Indian; or nasturtion Cress, Sciatica Cress, Spanish Cress, swine's Cress, wall; or tower mustard Cress, warted Cress, water Cress, winter Cross, St. Andrew's Cross, Jerusalem; or knight's cross; or scarlet cross; or flower of Constantinople Crosswort; or mug-weed Crocus; or saffron Crocus, common yellow spring Crow, or crake berries; or blackberried heath Crow-foot; golden cup; or but ter cup, corn Crow-foot, geranium

Crown imperial Cubebs Cuckow flower; or lady's smock Cuckow flower; or ragged robin Cuckow pink; or wake robin Cucumber Cucumber, asses, spurting, or wild Momordica elatérium

Crow-sike

Hura crepitans Empetrum nigrum Vaccinium oxycoccos

Geranium

Hedera quinquefolia

Lepidium sativum Lepidium virginicum Tropæolum majus Iberis nudicaulis Vella annua Cochlearia coronopus Turritis Cochlearia Sisymbrium nasturtium Erysimum barbarea Ascyrum crux-andrea

Lychnis chalcedonica

Valantia cruciata Crocus sativus Crocus sativus vernus Empetrum nigrum

Ranunculus arvensis

Geranium pratense Conferva rivularis Fritillaria imperialis Piper cubeba Cardamine pratensis Lychnis flos cuculi Arum maculatum Cucumis sativus

^{*} Crackling or sandbox tree, so called from the capsules bursting with a loud explosion; and being large and woody, consisting of many cells, are used as sandboxes.

Momordica luffa Cucumber, Egyptian Trichosanthes anguina Cucumber, serpent Cucumber, single-seeded Sicyos angulata Cucumber, small creeping Melothria pendula Gnaphalium margaritaceum Cudweed; or cotton weed Cudweed, common; or herbimpious Filago germanica Micropus supinus Cudweed, base Cullions (round roots) **Orchis** Orchis pyramidalis Cullions, soldier's Cumin Cuminum cyminum Lagacia cuminoídes Cumin, base or wild Currant; or Corinth* Ribes Currant; + or Corinth, foreign \ Vitis vinifera (corinthiaca dried (a variety) Currant-leaved Virginian gelder Spiraa opulifolia rose Mangifera indica Curry, Indian Cussion, lady's Saxifraga hypnoides Cussion, sea; sea pink; or thrift Statice armeria Cypress, common upright Cupressus sempervirens Cypress, summer; or belvedere Chenopodium scoparia Cyclamen, common; or sow bread Cyclamen europæum Cyanus; or blue bottle Centaurea cyanus Cytisus secundus clutii; or Itali-

an cytisus

Daffodil Daffodil, sea; or lesser white squill Pancratium maritimum Daisy, common or least Daisy, blue globe Daisy, hen and chicken Daisy, greater; or ox eye

Narcissus pseudo-narcissus Bellis perennis Globularia alypum Bellis perennis prolifera Chrysanthemum leucanthe-

Cytisus sessilifolius

^{*} In Brook's History of the Island of St. Helena, printed in 1808, p. 18, it is said that the gooseberry and currant bushes turn to evergreens, and do not bear fruit.

⁺ This currant is the staple commodity of Zante; the annual export of which amounts, on an average, to 8,000,000 lbs. Cephalonia and the Morea jointly furnish about the same quantity; the greater part of which is said to be consumed in Great Britain.

Daisy, middle Doronicum bellidiastrum Daisy, Michaelmas; or aster Damson tree (a variety) Prunus domestica Damson tree, W. Indian Chrysophyllum glabrum Dandelion, or dent-de-lion, common Leontodon taraxacum Dane-wort; wall-wort; or dwarf \ Sambucus ebulus Darnel; or rye grass Lolium perenne Darnel, annual Lolium temulentum Date, or dactyl tree;* or greater \ Phanix dactylifera Devil in a bush; or fennel flower Nigella damascena Devil's-bit Scabiosa succisa Devil's-bit, yellow Leontodon autumnale Devil's-gut; or cornbind Convolvulus arvensis Dewberry bush Rubus cæsius. Dyer's weed; or wild woad Reseda luteola Dyer's weed; or dyer's broom Genista tinctoria Dill Anethum graveolens Dittander; or pepper-wort Lepidium latifolium Dittany, white; or fraxinella Dictamnus albus Dittany of Crete† Origanum dictamnus Marrubium pseudodictam-Dittany, base Dock Rumex $\overline{\operatorname{Dr. Tinker's weed}}; \text{ or fever root; } Triosteum perfoliatum}$ or false ipecacuana

^{*} The Africans have a superstitious tradition, that when the Virgin Mary was in travail, it was near a date tree; and when in pain, she exclaimed "O that I had some dates!" and immediately the letter O became marked on the stone of the fruit.—It seems all date-stones have a circular mark on them, like the letter O.

[†] No plant hath been so highly extolled by the antients, as the dittany of Crete; viz. by Theophrastus, Hippocrates, Plutarch, Cicero, Dioscorides, &c. It is peculiar to the island of Crete (now Candia), and is not found native in any other country; and the inhabitants at present apply it with success on many occasions. An infusion of the dried leaf with a little sugar, yields a liquor more pleasing to the palate, and more finely flavoured than tea. It immediately removes languor of the stomach, and restores it after digestion.

Letters on Greece by M. Savary, printed 1788.

Virgil celebrates this plant as a vulnerary, and gives a particular description of it under the name dictamnus, called so from its growing on Mount Dicte, as on Mount Ida; both being in the island of Crete. Æn. xii, l. 411.

Dodder,* European Dodder of thyme Dog's-bane

Dog's-bane, base

Dog-wood; cornel; or gatter tree Cornus sanguinea Dog-stones; or satyrion

Dogwood of Jamaica; or coral tree Erythrina corallodendrum Dogwood tree; or fish bane

Dog's-tooth violet

Dorycnium of Montalier

Dove's foot; or crow-foot geranium Geranium pratense

Doura; or Indian millet

Dragons. Dragons, spotted Dragon's head

Dragon wort; or tarragon Drauk; or corn broom grass Dropwort; or filipendula

Dropwort, hemlock Dropwort, water Duck-meat

Duck-meat, starry; or star grass Duck's-foot; or May apple

Dulse

Dwale; or common deadly night-

Durion

Cuscuta europæa Cuscuta epithymum Apocynum

f Cynanchum Asclepias syriaca

Orchis

Piscidia erythrina Erythronium dens-canis Convolvulus dorycnium

Holcus sorghum Dracontium

Arum dracunculus Dracocephalum Artemisia dracunculus

Bromus arvensis Spiraa filipendula Oenanthe crocata

Oenanthe fistulosa Lemna minor Callitriche

Podophyllum peltatum Fucus palmatus

Atropa belladonna

Durio zibethinus

E

Ebeny Ebeny wood, true Ebeny, false Ebeny of the Alps; or laburnum Ebeny, mountain Edders

Ebenus cretica Diospyros ebenum Poinciana pulcherrima Cytisus laburnum Bauhinia acuminata Arum peregrinum

^{*} Dodder (cuscuta) is a very singular plant, it takes root from seed like other plants; but soon perishes if it is not near some other plant to support it, around which it twines and entangles itself in a very complicated manner; the root then soon withers away, and it is supported by the plant around which it twines; hence called a parasitical plant: it has no leaves. - See cuscuta.

Egg plant Eglantine rose Elder tree Elder, dwarf; or danewort Elder, marsh Elecampane; or yellow startwort Elecampane, base Elemi tree, gum Elephant's foot Elephant's head; cock's comb; or yellow rattle-grass

Elichrysum, base Æthiopian Eller; or alder Elm, common

Elm, witch (a variety with broad- \ Ulmus campestris latifolia

Eleutheria—see Cascarilla Endive Eryngo; or sea holly Eryngo, common Eschalot; or shalot Evergreen

Everlasting, or eternal flower

Everlasting; or globe amaranth Euonymus, common; or spindle tree Euonymus europæus Euonymus, base Euonymus, base; or staff tree

Eye-bright, common

Fat hen; or wild orach Featherfew—see Feverfuge Felwort; or gentian, yellow Fennel Fennel, horse

Solanum melongena Rosa eglanteria Sambucus nigra Sambucus ebulus Viburnum opulus Inula helenium Helenium autumnale Amyris elemifera Elephantopus scaber

Rhinanthus christa galli

Stoebe æthiopica Betula alnus Ulmus campestris

Cichorium endivia Eryngium* maritimum Eryngium campestre Allium ascalonicum Aizoon

Gnaphalium Xeranthemum Gomphræna

Kiggelaria africana Celastrus

Euphrasia officinalis Elaterium; or spurting cucumber Momordica elaterium

Chenopodium viride

Gentiana lutea Anethum fæniculum Seseli hippomarathrum

^{*}The flowers of eryngium grow in a head on a common receptacle, somewhat similar to the burdock; and as they ripen, the stalks and head change to different colours, some to blue, others to purple, &c. which make a beautiful appearance.

Fennel, hog's; or sulphur wort Fennel, scorching; or deadly carrot Thapsia villosa Fennel, sea; or samphire Fennel flower; or devil in a bush Nigella damascena Fennel flower of Crete Fennel, giant Fenugreek, common Fernambuck; or Brasil Fern, male; or polypody Fern, female Fern, flowering; or Osmund royal Osmunda regalis Fern, common or true mule's Fern, common; or bracken Fern, mule's or moon; or mule-Fern, fork; or acrostic Fern, sweet Feverfuge, common Feverfuge, base; or wild wormwood Parthenium hysterophorus Fever root; Dr. Tinker's weed; or false ipecacuana Fever weed Fiddle dock Fiddle wood Ficoides

Ficoides, diamond; or ice plant

Fig marigold Fig, common Fig, Indian, common Fig tree, Indian* Fig, Bengal Fig, Indian; or prickly pear Fig, infernal; or prickly poppy Fig, Pharaoh's; or true sycomore Fig, Pharaoh's

Peucedanum officinale Crithmum maritimum Garidella nigellastrum Ferula Trigonella fænum græcum Pterocarpus Polypodium filix mas Polypodium filix femina Asplinium hemionitis Pteris aquilina

Hemionitis

Acrostichum septentrionale Scandix odorata Matricaria parthenium

Triosteum perfoliatum

Eringium fætidum Rumex pulcher Citharexylon Cacalia ficoides Mesembryanthemum stallinum Mesembryanthemum Ficus carica Cactus opuntia Ficus indica Ficus benghalensis Cactus tuna Argemone mexicana Ficus sycomorus Musa

* Ficus indica (Indian fig-tree) is a large tree rising with opposite branches on all sides, with long egged leaves; each branch emits a slender flexile depending appendage from its summit like a cord, which roots into the earth and rises again.

Sloan's Hist. of Jamaica.

This seems the same tree as the ficus religiosa.—See note to ficus.

Fig, cochinil; or nopal Figwort

Filbert nut

Filipendula; or dropwort Fingrigo, prickly

Finochia; or Azorean fennel

Fir, spruce

Fir, silver

Fir, balm of Gilead Fir-moss, upright

Fish-bane; or dogwood tree

Flags Flag

Flag, African corn Flag, yellow water

Flag, corn; or gladiole, common

Flag, Persian corn

Flag, sweet; or calamus aromaticus Acorus calamus

Flammula jovis

Flax, or line, common

Flax, Carolina Flax, toad

Flax, New Zealand Flea-bane, greater Flea-bane, lesser blue Flea-bane, marsh Flea-bane, middle

Flea-bane, shrubby African

Flea-wort Flix-weed

Flower of Constantinople;

knight's cross, &c. Flower-gentle; or amaranth

Flower of an hour Flower de luce

Flower-fence of Barbadoes; or Poinciana pulcherrima

Spanish carnation Flower-fence, base Fluellin; or speedwell Fly, dog's-bane catch Fly-bane; or catch-fly Cactus cochinilliser Scrophularia

Corylus avellana (alba; vel rubra

Spiræa filipendula Pisonia aculeata

Anethum segitum Pinus abies Pinus picea

Pinus balsamea Lycopodium selago Piscidia erythrina

AlgaIris

Antholiza Iris pseudacorus

Gladiolus communis Antholiza cunonia

Clematis flamula Linum usitatissimum

Polypremum procumbens Antirrhinum linaria

Phormium tenax Conyza squarrosa Erigeron acre Inula pulicaria Inula dysenterica Tarchonanthus

Plantago psyllium Sisymbrium sophia

Lychnis chalcedonica

Amaranthus Hibiscus trionum Iris germanica

Adenanthera pavonina

Veromea Apocynum androsæmifolium Silene muscipula

Fly-trap; or catch-fly Fly-eater Fly, vegetable Forbidden fruit; or banana Four o'clock flower; or white jalap Mirabilis jalapa Foxglove Frankincense; or incense-wort Frankincense tree; or Virginia Pinus tada three-leaved pine Fraxinella; or white dittany Fringe tree Fritillary Fritillary, cock's comb; African swallow-wort;

crassa minor Fritillaria crassa major Frog's-bit Friar's cowl Fumuterræ,* common Furze; gorse; or whin Fustic tree† Fuz-ball; or puff-ball Fungusses

Dionæa muscipula Arum muscivorum Clavaria militaris Musa sapientum Digitalis purpurea Gnaphalium odoratissimum

Dictamnus albus Chionanthus virginica Fritillaria

or fritillaria > Stapelia variegata

Stapelia hirsuta Hydrocharis morsus-ranæ Arum arisarum Fumaria officinalis Ulex europæus Morus tinctoria Lycoperdon bovista Fungi

Galangale, larger Galangale, lesser Garavances, Spanish; or chich pea Cicer arietinum Garlic Garlic, crow or wild Garlic pear Garlic, great round-headed; or Turkey; or rocambole Gatter tree; or dogwood Gentian; or felwort, yellow Gentian, base Gentian, marsh; or swertia

Gentianella

Gale; sweet gale; or Dutch myrtle Myrica gale Cyperus Kampfæria galanga Allium sativum Allium vineale Cratæva tapia

> Allium scorodoprasum

Cornus Gentiana lutea Sarothra gentianoides Swertia perennis Gentiana acaulis

^{*} See Skinner's dict.

⁺ Fustic dyes a yellow.

Gerard, herb; or goutwort Germander Germander, rock Gill; or ground ivy Gilly flower--see July flower Ginger, wild, of Arabia Ginger Ginseng; or ninzin Gladiole; or corn flag, common Gladiole, water Gladiole, water; or flowering rush Butomus umbellatus Gladiole, water; or cardinal flower Lobelia cardinalis Gladwin, stinking Glass-wort; or kali Glass-wort, jointed; or kali Glass-wort, berry-bearing Globe daisy, blue Globe flower Globe, ranunculus Goat's-beard, common Goat's-beard, garden; or salsafy Goat's-stones, greater Goat's-stones, lesser Goat's-thorn; or tragacanth Gold of pleasure Golden-cup; butter-cup; crow-foot* Golden-rod; or woundwort Goldylocks Goldylocks Goldylocks, African

Good Henry; all-good; or English garden mercury Gooseberry

Gooseberry, American

Gooseberry, W. Indian; or blad

Goose-foot; or wild orach Goosegrass; clivers; or hairiff

Ægopodium podagraria Teucrium chamædrys Veronica teucrium Glechoma hederacea

Costus arabicus Amomum zingiber Panax quinquefolia Gladiolus communis Lobelia dortmanna Iris fætidissima Salsola kali Salicornia herbacea Anabasis Globularia alypum Sphæranthus indicus Trollius europæus Tragopogon pratense Tragopogon porrifolium Satyrium hircinum Orchis Astragalus tragacantha Myagrum sativum

Ranunculus arvensis

Solidago virga-aurea Chrysocoma comaaurea Gnaphalium Athanasia Chenopodium bonus Hen-

Ribes grossularia Melastoma grossularioides

Cactus pereskia

Chenopodium viride Galium aperine

^{*} See note to ranunculus.

Goosegrass; or wild tansey Goosegrass, great; small wild bugloss; or German madwort Goose tongue; or sneeze-wort Go to bed at noon; or goat's beard Tragopogon pratense Gorse; furze'; or whin Gourd; or calabash Gourd; or calabash tree Gourd, sour, of Æthiopia; monkey's bread Gourd, Jonah's Gourd, buckler; or squash Goutwort; or herb-gerard; or] wild angelica; or sweet ash J Grace, herb of; or rue Grain*—see wheat, barley, &c. Grains of Paradise Grain, oily; or bonny Grain, scarlet; or kermes oak Grain, scarlet; or cochinil Granadilla Grape, or vine tree Grape-wort Grape, sea; or shrubby horse-tail Grape, sea-side; or mangrove Grass, arrow-headed Grass, brown-bent, or dog's

Grass, corn broom; or drauk

Grass, striped canary; or ribbon

Grass, cat's-tail

Grass, canary

Grass, cotton

Grass, darnel, annual

Grass, cock's-foot

Asperugo procumbens Achillea ptarmica Ulex europœus Cucurbita Crescentia cucurbitina Adansonia digitata Cucurbita melopepo Egopodium podagraria Ruta graveolens

Potentilla anserina

Amomum granum Paradisi Sesamum orientale Quercus coccifera Cactus cochinillifer Passiflora maliformis Vitis vinifera UvariaEphedra Coccoloba uvifera TriglochinAgrostis canina Bromus arvensis Phleum pratense Dactylis Grass, cow, or marl; or English \ Trifolium pratense

Phalaris canariencis

Phalaris arundinaceat Eriophorum polystachion Lolium temulentum

^{*} Grain, with respect to corn, ought to be spelled grane, as it is derived from the latin word granum; and it then will conform with the word granary, where corn is deposited.

⁺ See note to phalaris.

Grass, darnel; or rye, or ray grass Lolium perenne Grass, dog's; or couch; or quick; \ Triticum repens

or twitch Grass, dog's-tail Grass, feather

Grass, fescue Grass, fox-tail

Grass, fox-tail, of the Indies

Grass, hard Grass, hair Grass, hare's-tail Grass, lyme

Grass, marl*—see Cow grass

Grass, mat

Grass, smooth-stalked meadow Grass, rough-stalked meadow

Grass, millet Grass, oat Grass, panic Grass of Parnassus Grass, pepper Grass, poley

Grass, purple

Grass, quake; or cow-quakes Grass, rope, or melic

Grass, rush

Grass, sedge; or Cyperus grass Grass, silk+

Grass, star

Grass, sea

Grass, scorpion; or caterpillars

Grass, scurvy Grass, Timothy

Cynosurus Stipa pennata Festuca

Alopecurus pratensis Alopecurus indicus

Ægilops ... Aira

Lagurus ovatus

Elymus

Nardus stricta Poa pratensis Poa trivialis Milium effusum Aristida Panicum miliaceum

Parnassia palustris Pilularia globulifera

Lythrum

Medicago polymorpha (arabica)

BrizaMelica Schoenus Carex divisa Panicum sericeum Callitriche verna et au-

tumnalis Ruppia maritima Scorpiurus vermiculata Cochlearia officinalis

Phleum pratense

^{*} Marl grass is much cultivated in some parts of Somersetshire; called so from its growing well on marly land.

⁺ Silk grass (panicum sericeum) may be spun as fine as silk, and is used for various purposes, but chiefly for ropes and fishing lines.—It grows in the island of Tobago.—See Universal Mag. for June, 1749.

Grass, toad Grass, vernal, sweet-scented Grass, wrack Grass, worm Gravel-bind Green-wood; or dyer's broom Green-sauce; or sorrel Grim the collier Gromwel, common Gromwel, German Groundsel Groundsel, common Groundsel, Bolonian Groundsel tree; or plowman's Baccharis halimifolia Groundsel tree, with a ficoides leaf Cacalia ficoides Guava; or guayava; or bay plum

Bufonia tenuifolia Anthoxanthum odoratum Zostera marina Spigelia anthelmia Convolvulus Genista tinctoria Rumex acetosa Hieracium aurantiacum Lithospermum officinale Stellera Senecio Senecio vulgaris Erigeron boloniense

Psidium pyriferum Chrysanthemum segetum Chondrilla juncea

Guills; or corn marigold

Gum succory

Hag-berries; or bird cherry · Hairiff; * elivers; or goosegrass Halimus; or shrubby sea orach Hare-bells Hare's-ear Hare's-ear, base shrubby; or sim- Phyllis nobla Hare's-foot trefoil Hare's lettuce or sowthistle Hard-head; or knapweed Hart's-tongue spleen-wort Hart-wort, French; or wild spignel Seseli glaucum Hart-wort, common

Prunus padus Galium aparine Atriplex halimus Hyacinthus non-scriptus Bupleurum tenuissimum

Trifolium arvense Sonchus oleraceus Centaurea nigra Asplinium scolopendrium+ Tordylium officinale

^{*} A very remarkable case is recorded in the Monthly Magazine for July, 1809, p. 573, of the cure of a cancer; by taking first a mercurial purge, and then twice a day, between meals, drinking about quarter of a pint of the juice of hairiff; part of the juice being mixed with hog's lard, and kept constantly applied to the wound, along with some of the leaves bruised .- In six months the cure was completed.

[†] Asplinium scolopendrium hath many varieties .- Aiton's Hort. Kew.

Hart-wort of Syria Hart-wort, shrubby Harmel; or wild Assyrian rue Hassagay tree Hawkweed Hawkweed, base Hawkweed, base; or yellow cichory Picris hieracioides Hawkweed, trailing, crookedseeded; or yellow eye Hawkweed, woolly; or downy sowthistle Haw-thorn; quick; or white thorn Cratagus oxyacantha Haw-thorn, black American Hay, Burgundian; or lucern Hay, camel's; or sweet rush Hazel nut Hazel, witch, Virginian Hazel, witch; or hop hornbeam Heart's-ease; or pansy Heart-pea Heart seed Heath; or ling, common Heath, base; or lesser marsh cistus Andromeda polifolia Heath, black-berried; or crow, or crake berries Heath, mountain Heath, low pine Heath peas; or bitter vetch Heath, sea Hedge-hog trefoil Hellcbore Hellebore, black; or christmas rose Helleborus niger Hellebore, fennel-leaved black; \ or perennial Adonis Hellebore, white

bear's foot; or setterwort Helleborine; or base hellebore

Helmet-flower; monk's hood;

or wolf's-bane

Hellebore, base

Tordylium syriacum Bupleurum fruticosum Peganum harmala Curtisia faginea Hieraceum Crepis Hyoseris Andryala lanata Viburuum prunifolium Medicago sativa Andropogon schoenanthus Corylus avellana Hamamelis virginiaca Carpinus ostrya Viola tricolor Cardiospermum corindum Brassica vesicaria Erica vulgaris Empetrum nigrum Saxifraga nivalis Coris monspeliensis-Orobus Frankenia lævis Medicago polymorpha (intertexta) Helleborus Adonis vernalis Veratrum album Limodorum Hellebore, black; helleboraster; Helleborus foetidus

Serapias

Aconitum napellus

Conium maculatum Hemlock, common spotted Helxine—see Beech wheat Hemlock, great broad-leaved base Ligusticum peloponense Æthusa cynapium Hemlock, lesser; or fool's parsley. Cicuta virosa Hemlock, water Oenanthe crocata Hemlock, water dropwort Cannabis sativa Hemp Hemp, base Datisca cannabina Hemp, base, or nettle hemp Galeopsis tetrahit Hemp agrimony Eupatorium cannabinum Ageratum conyzoides Hemp agrimony, base Hemp agrimony, naked-headed \ Verbesina Indian Crotalaria juncea Hemp, sunn, or China Bidens tripartita Hemp agrimony, water Hemp, Virginian Acnida cannabina Hen-bane; or hog-bean, common Hyoscyamus niger Nicotiana tabacum Henbane, yellow; or tobacco Henna; or alhenna; or Egyptian Lawsonia inermis privet Hen-weed, Guinea Petiveria alliacea Hepatica; or noble liverwort Anemone hepatica Hep, or hip tree; or dog rose Rosa canina Herb-bane Orobanche Herb-bane, great purple Lathraa clandestina Herb-bennet; or avens, common Geum urbanum Herb-Christopher; or bane-berries Acta racemosa Herb-Gerard; or goutwort Ægopodium podagraria Herb of grace; or rue Ruta graveolens Herb-impious; or cudweed Filago germanica Herb-mastick; or mastick thyme Satureia thymbra Herb-Paris; true-love; or one-berry Paris quadrifolia Herb-Paris of Canada; or three-Trillium cernuum leaved nightshade Herb-Robert Geranium Robertianum Herb-Trinity; or pansy Viola tricolor Herb-twopence; or moneywort Lysimachia nummularia Herb, willow; or French willow

Herb, willow; or purple loosestrife Lythrum salicaria

Herb, willow; or loosestrife

Hercules's club

Epilobium latifolium

culis

Lysimachia ephemerum Zanthoxylum clava HerHeron's bill Erodium Juglans alba Hiccory nut or Verbascum thapsusHigh-taper; white mullein; cow's lungwort Hog-bean; or henbane Hyoscyamus niger Hog-weed, American Boerhaavia Hollow-root; or tuberous moschatel Adoxa moschatellina Holly common*; or holm Ilex aquifolium+ Ilex aquifolium ferox Holly, hedge-hog (a variety) Holly, Dahoon Ilex cassine Holly, knee; or butcher's broom; Ruscus aculeatus or Alexandrian laurel Eryngium maritimum Holly, sea; or eryngo! Hollyhock; hollyoak; or rose Alcea rosea mallow Honesty; moonwort; or satin flower Lunaria annua Honewort; or corn parsley Sison segetum Melianthus, major & minor Honey flower Honey locust; or three-thorned Gleditsia triacanthos Honeysuckle; or woodbind, com-Lonicera periclymenum Honeysuckle, upright, with red berries; or dwarf Alpine \ Lonicera alpigena cherry Honeysuckle, fly Lonicera xylosteum Halleria lucida Honeysuckle, African fly Honeysuckle, American upright Azalea viscosa Honeysuckle, French Hedysarum alhagi Honeysuckle, trumpet Lonicera sempervirens Honeysuckle, grass; or white clover Trifolium repens Bauhinia divaricata Honeysuckle, Jamaica Cerinthe Honey-wort Humulus lupulus Hop

^{*}The bark of the common holly fermented, and afterwards washed from the woody fibres, makes the common birdlime. It is also said the bark of the birch were makes good birdlime; but Pliny says the Italians made it from the berries of the misletoe: so that it appears to be a very antient method of carehing birds.

⁺ See aquifolium, in Index to Trivial Names.

Hop hornbeam; or witch hazel Carpinus ostrya Horehound, common Marrubium vulgare Horehound, base Stachys germanica Horehound, base; or ironwort Sideritis Ballota nigra Horehound, black Horehound, common water Lycopus europeus Hornbean*; or hard bean Carpinus betulus Hornwort, common Ceratophyllum demersum Horse-foot Buxbaumia Horse-tail Equisetum Horse-tail, shrubby; or sea grape Ephedra Hound's-tongue, common Cynoglossum officinale Houseleek, cobweb Sempervivum arachnoideum Houseleek, common Sempervivum tectorum Houseleek, lesser; or orpine Sedum telephium Houseleek, small annual Tillæa muscosa Houseleek, water, of Egypt Pistia stratiotes Hyacinth HyacinthusHyacinth, African blue umbellated Crinum africanum Hyacinth, musk Hyacinthus muscari Hyacinth, grape Hyacinthus botryoides Hyacinth, lily Scilla lilio hyacinthus Hyacinth, Peruvian Scilla peruviana Hyacinth, starry Scilla amæna Hyacinth, Indian; or tuberose Polyanthes tuberosa Hyssop, common. Hyssopus officinalis Hyssop, hedge Gratiola hyssopioides Hyssop, hedge; or grass-poley Lythrum hyssopifolia Hyssop, mountain ThymbraSpiræa hypericifolia Hypericum frutex

Jacinth—see Hyacinth

Jaca-tree

Jack in a box

Jack by the hedge; or sauce alone Erysimum alliaria

Jacob's ladder; Greek valerian;

Polemonium caruleum

or charity

places, wrongly, called hornbeam.

* Hornbean receives its name from the hardness of the seed or nut; it is in many

Jalap, true Jalap, white; or mechoacanna Japan earth—see Catechu Jasmine, common white Jasmine, yellow Indian Jasmine, Arabian; or sambac Jasmine, base Jasmine, Cape Jasmine, African ilex-leaved Jasmine, fennel-leaved Jasmine, or lilac, Persian Jasmine, red Jasmine, scarlet; or trumpet flower Bignonia radicans

Ice plant; or diamond ficoides

Jasmine, yellow Carolina

Jasmine, common yellow Italian

Jew's ear Immortal flower

Immortal eagle flower; or female balsamine Incense-wort; or frankincense

Indian arrow-root

Indian leaf Indian shot; or cane Indian berry, cocculus

Indigo, common

Ipecacuanha, base

Indigo, base; or Jupiter's beard, of America

Inga Job's tears Johnsonia Jonquil

Ipecacuanha; or Brasilian root

Convolvulus jalápa Mirabilis jalápa

Jasminum officinale Jasminum odoratissimum Nyctanthes sambac Cestrum nocturnum Gardenia florida Lantana africana Ipomoea rubra Syringa persica Plumeria rubra Jasminum fruticans Bignonia semper virens

Mesembryanthemum crystallinum Peziza auricula Gomphræna

Impatiens balsamina

Gnaphalium odoratissimum Maranta arundinacea Thalia geniculata Melastoma malabathrica Canna indica Menispermum cocculus* Indigofera anil, and tinc-

Amorpha fruticosa

Mimosa inga Coix lacryma Callicarpa americana Narcissus jonquillă Psychotria emetica Viola ipecacuanha

^{*}The berries of the menispermum cocculus are used to intoxicate fish.

[†] Indigofera anil is said to be the wild indigo; the tinctoria is the true indigo.

Asclepias curassavica Ipecacuanha, base Euphorbia ipecacuanha Ipecacuanha, base Ipecacuanha, false; fever root; Triosteum perfoliatum or Dr. Tinker's weed Iris florentina Iris, or orris, Florentine Iris, Calcedonian Iris susiana Iris, bulbous, or Persian Iris xiphium Iris, Persian, or dwarf Iris persica Iris, snake's-head; or hermodactyl Iris tuberosa Iris, uvaria Aletris uvaria Iris, with a double bulb, called] Iris sisyrinchium Spanish nut Iron-wood Sideroxylum Iron-wort; or base horehound Sideritis Jucca—see Manihot Judas tree (see Red-bud tree) Cercis siliquastrum Jujube tree, blunt-leaved Rhamnus jujuba Jujube tree, common, with shin-Rhamnus zizyphus ing leaves July-flower, clove Dianthus caryophyllus July-flower, queen's; rocket; or Hesperis matronalis dame's violet July-flower, stock Cheiranthus Junctianella—see Gentianella Junquil—see Jonquil Juniper, common Juniperus communis Jupiter's beard; or silver bush Anthyllis barva jovis Jupiter's beard, American; Amorpha fruticosa base indigo Jupiter's distaff Salvia Ivy, common Hedera helix ground; gill; alehoof;] Glechoma hederacea turn-hoof; or cat's foot Ivy tree; or dwarf laurel Ralmia | America lvy; or creeper of Virginia Hedera quinquefolia

K

Kale, or cabbage, sea Kali; or glasswort Kali, Egyptian Crambe maritima
Salsola kali
Mesembryanthemum nodiflorum

Kali, sal; alkali; jointed glass-Salicornia herbacea wort; or kelp Karatto (a variety) Agava americana Cicuta Kex Kedlock; or charlock Sinapis arvensis Quercus coccifera Kermes oak Saxifraga geum Kidney-wort Ketmia; or Venice mallow Hibiscus trionum King's spear; Aaron's rod; Asphodelus luteus yellow asphodel Kleinia; or foreign colt's-foot Cacalia kleinia Knapweed; knobweed; matfel-Centaurea nigra lon; or hardhead Centaurea spinosa Knapweed, thorny Scleranthus annuus Knawel; or German knot-grass Knee holm; knee holly; Ruscus aculeatus butcher's broom Rubus Knot-berries Polygonum aviculare Knot-grass Polygonum maritimum Knot-grass, sea Knot-grass, German; or knawel Scleranthus annuus Knot-grass, mountain Illecebrum paronychia Knot-grass, verticillate Illecebrum verticillatum

Laburnum; ebeny of the Alps; Cytisus laburnum or trefoil tree Ladder, Jacob's; Greek valerian; Polemonium cæruleum or charity Lad's-love; or southern-wood Artemisia abrotanum Lady's bed-straw; or cheese rennet Galium verum Clematis Lady's bower Lady's comb; Venus's comb; or Scandix pecten Saxifraga hypnoides Lady's cushion Anthyllis vulneraria Lady's finger; or kidney vetch Alchemilla vulgaris Lady's mantle, common Lady's mantle, silver-edged Alchemilla alpina Lychnis sibirica Lady's ruffle Tamus communis Lady's seal; or black bryony Cypripedium calceolus Lady's slipper Lady's smock; or cuckow flower Cardamine pratensis

Lady's traces, treble Lamb's lettuce; or corn salad Lamb's-toes; or bird's-foot trefoil Lotus ornithopodioides Lance-wood—see Cabbage tree Larch tree Lark-heel; or lark-spur Lark-heel, bee Lark-heel, perennial Laser-wort; or sermountain Lavender; or false spikenard Lavender, sea; or limonium Lavender cotton, common Lavender, French; stickadore; or cassidone Laver Laurel, China Laurel, cherry*; or common laurel Prunus lauro-cerasus Laurel of the antients; or com- Laurus nobilis mon bay Laurel; or bay of Alexandria Laurel, dwarf; or ivy tree of America Laurel, Portugal Laurel, flax-leaved Laurel, sea-side Laurel, spurge Laurel, tongue; or tongue blade

Laurestinus

Valeriana locusta Pinus larix Delphinium Delphinium elatum Delphinium grandiflorum Laserpitum siler Lavandula spica

Ophrys spiralis

Statice limonium Santolina · chamæ-cyparis-

Lavandula stæchas Stilago bunias

Ruscus racemosus† Kalmia latifolia

Prunus lusitanica Daphne gnidium Phyllanthus emblica Daphne laureola Ruscus hypoglossum Viburnum tinus

^{*} Cherry-laurel is said to be called so because it may be grafted on a cherry. The distilled water from the leaves of the cherry-laurel, is perhaps the most sudden poison we are acquainted with in this country; two spoonfulls of it will destroy a large dog in about ten minutes .- In smaller doses it is said to produce intoxication; that there is reason to believe it acts in the same manner as opium and vinous spirit, but the dose is not so well ascertained. A pint of water distilled from 14 lbs. of black cherry stones bruised, hath the same deleterious effect. It is probable apricot kernels, peach leaves, walnut leaves, and whatever possesses the kernel flavour, may See note to oenanthe crocata. have similar qualities .- Botanic Garden.

⁺ Ruscus racemosus is supposed to be the plant with which the antients crowned their victors and poets; the stalks being very pliable, may be easily twined into coronets for that purpose, and the leaves seem to represent those on antient busts. Miller's Dict.

Lead-wort, common Leather-flower Leather-wood Leek Lemon tree-see Limon Lemon, water Lentils Lentisk; or mastick Lentisk; or mastick, Peruvian Leopard's bane Leopard's bane, German Lettuce, common Lettuce, hare's; or sowthistle Lettuce, lamb's; or corn salad Lettuce, wild Life, tree of; or arbor vitæ Life, tree of, Chinese Lignum aloes; calamba; or xylo- Excacaria agallocha Lignum vitæ; or pockwood

Lilac, common; or pipe tree Lilac, or jasmine, Persian Lily, common white Lily, African scarlet Lily, asphodel Lily, atamasco Lily, belladonna Lily, African blue Lily, St. Beuno's+; or savoy spi-} Anthericum liliastrum

Lily, conval; or lily of the valley Convallaria majalis Lily, day

Lily, Guernsey

Plumbago europæa Loranthus Dirca palústris Allium porrum

Passiflora laurifolia Ervum lens Pistacia lentiscus Schinus molle Doronicum Arnica montand Lactuca sativa Sonchus oleraceus Valeriana locusta Prenanthes muralis Thuja* occidentalis Thuja orientalis

Guaiacum officinale Syringa vulgaris Syringa persica Lilium candidum Amaryllis guttata Hemerocallis flava, & fulva Amaryllis atamasco Amaryllis belladonna Agapanthus umbellatus

Hemerocallis flava Amaryllis sarniensis

^{*} Thuja is sometimes with a y, as thuya.

⁺ Saint Beuno resided at Clynog, a little village ten miles south of Carnarvon in North Wales; he lived in the 7th century, was an abbot, and having great riches, built a church there, and also a grand mausoleum for his own interment, called St. Beuno's chapel: he was brother to St. Winifred, the genius of the famous well in Flintshire, who also lies interred in the church at Clynog. Hutton's Tour in North Wales, printed in 1803.

Lily, Jacobæa Lily, Japan and Ceylon Lily, Mexican

Lily, orange, bulb-bearing

Lily, Persian

Lily, yellow martagon Lily, purple martagon Lily, scarlet martagon Lily, crown imperial Lily, crown royal

Lily, daffodil Lily, hyacinth Lily, superb

Lily, water; or Egyptian bean

Lily, white water Lily, yellow water

Lily, Egyptian; or Egyptian lotus Nymphaa lotus Lily, lesser yellow water, with Menyanthes nymphoides

Lily, thorn Lily tree Lime tree Lime, brook

Lime, or linden tree

Limon tree

Limonium; or sea lavender Ling; or heath, common Lion's-foot, Candia Lion's-leaf

Lion's-tail Lipplehout; Hottentot cherry; Cassine maurocenia

or Cape phyllyrea Liquorice, true* Liquorice, wild

Liquorice, wild; or liquorice vetch Astragalus glycyphyllus Liquorice, wild; or sweet weed

Liquorice, wild; or knobbed- Glycine frutescens rooted liquorice vetch

Live-long; or common orpine

Amaryllis formosissime Amaryllis orientalis Amaryllis raginæ Lilium bulbiferum Fritillaria persica Lilium superbum Lilium martagon Lilium chalcedonicum Fritillaria imperialis Fritillaria regia Amaryllis (pancratium) Scilla lilio-hyacinthus Gloriosa superba Nymphæa nelumbo Nymphaa alba Nymphæa lutea

Catesbaa spinosa Liriodendron liliifera Citrus medica Veronica beccabunga $Talia\ europ lpha a$ Citrus medica (a variety)

Statice limonium Erica vulgaris Catananche lutea Leontice leontopetalum Leonurus

Glycyrrhiza glabra Abrus precatorius Capraria biflora

Sedum telephium

^{*} It is said the leaves of liquorice make a good tea.

Lichen corallinus Liver-wort Liver-wort, ash-coloured, ground Lichen caninus Liver-wort, marsh Anemone hepatica Liver-wort, noble; or hepatica Satyrium Lizard-flower Saururus cernuus Lizard's tail Lizard, or scorpion's tail; or pepper Piper Locker goulands; or globe ra-Trollius europaus Hymenæa courbaril Locust tree; or courbaril Robinia pseud-acacia Locust tree; or false acacia three-Locust tree, honey; Gleditsia triacanthos thorned acacia Hamatoxylon campechia-Logwood; or bloodwood Macron Mary Mary London pride; or none so pretty Saxifraga umbrosa Lysimachia Loosestrife Loosestrife, podded; or French Epilobium Loosestrife, purple; or willow herb Lythrum salicaria Lythrum salicaria Loosestrife, spiked Lythrum hyssopifolia Loosestrife, willow herb, Spanish Gaura biennis Loosestrife, yellow Virginian Celtis Lote; or nettle tree Nymphæa lotus Lotus of Egypt Diospyros lotus* Lotus, supposed of Homer Lotus, honey; or white clover Trifolium repens Ligusticum levisticum Lovage, common Passifiora fatida Love in a mist Amaranthus melancholicus Love lies a bleeding Lousewort; cockscomb; or rattle Pedicularis palustris Delphinium staphisagria Lousewort; or stavesacre Lousewort; cockscomb; or rat Rhinanthus cristagalli tle, yellow Lucern; Burgundy hay; or medick Medicago sativa Lungwort, common spotted; or Pulmonaria officinalis Jerusalem cowslip

^{*} Some think it was the diospyros lotus that gave the name and rise to the story of the Lotophagi in Homer; but others seem convinced it was the rhamnus lotus; for a description of which, see the memoirs of M. des Fontains, delivered to the Academy of Sciences at Paris, 1787.

Lungwort, cow's; white mullein; Verbascum thapsus or high taper Lungwort, golden; or golden · Hieracium murorum mouse-ear Lupinus Lupine Drosera Lustwort Lychnidia; or base lychnis Phlox Lychnis, scarlet*; or scarlet cross Lychnis chalcedonica Lychnis; campion; or bachelor's Lychnis dioica button Agrostemma coronaria Lychnis, wild; or rose campion

son' More in a best

Mace—see Nutmeg Mace, sweet—see Sweet Maudlin Mace, reed; or cat's-tail Machingboy; or fish spurge Madder+ Madder, E. India; or chay root Madder, little field Madder, petty Madder, petty Madder, crosswort; or meadow Madwort, with bladdery pods Madwort of Galen Madwort, German; wild bugloss; or great goosegrass Mad-flower; or flag Maho tree Mahogany Mahogany, Madeira; or vigniatico Laurus indica Maiden-hair, common Maiden-hair, Canada Maiden-hair, English black Maiden-hair, Tunbridge Maiden-hair, golden Maiden-hair, white; or wall rue

Typha latifolia Euphorbia hyberna Rubia tinctorum Oldenlandia umbellata Sherardia arvensis Rubia cordifolia Crucianella Galium boriale Alyssum vesicaria Marrubium alysson Asperugo procumbens

Antholiza

Hibiscus

Swietenia mahagoni Adianthum capillus veneris Adianthum pedatum Asplinium adiantum nigrum Trichomanes tunbrigense Polytrichum commune Asplinium ruta muraria

^{*} See Cross, Jerusalem.

⁺ Mr. Spencer Smith hath lately introduced that valuable plant Smyrna madder, which it is hoped will soon become naturalized in our soil.

Maiden-hair tree Maize; or Indian corn Mallow; or maul, common Mallow, African, or gooseberryleaved Mallow, base Mallow, Carolina Mallow, common Jew's Mallow, Indian yellow Mallow, Indian Mallow, marsh Mallow, musk Mallow, rose; or hollyhock Mallow, Syrian; or althæa frutex Mallow tree Mallow, varied-leaved Mallow, Portugal Mallow, vervain; or hollyhock Mallow, Venice; or ketmia Mammee Mammee, Sapota Manchineel tree*; or poison tree Mandraket Mango tree Mangostan Mangrove tree‡; or mangles Manihot; manihoc; jucca; or } Jatropha manihot cassada Manna seeds

Maple, greater; English syco-

more; or false plane

Maple, common

Zea mays Malva rotundifolia Malva capensis Malope malacoides Malva caroliniana Corchorus olitorius Sida abutilon Urena lobata Althœa officinalis Malva moschata Alcea rosea Hibiscus syriacus Lavatera arborea Lavatera trimestris Lavatera lusitanica Malva alcea Hibiscus trionum Mammea americana Achras sapota Hippomane mancinella Atropa mandragora

Ginkgo biloba

Acer campestris Acer pseudo-platanus

Mangifera indica

Festuca fluitans

Garcinia mangostana

Rhizophora mangle

^{*} The Spaniards call this tree manzanillo, deriving it from the Spanish word manzana (an apple) which the fruit of this tree very much resembles.

⁺ The fruit of the mandrake was by the antients called love apples, and we may infer the antiquity of the popular notion of its virtues from Gen. c. xxx, v. 14, &c. As to the root resembling the human form, is an artful fable to deceive the ignorant and credulous, who have sometimes been imposed upon with fictitious images shaped from the fresh roots of bryony, angelica, and other plants, pretending to be from the mandrake.

The bark of the mangrove tree is said to answer the same purposes in tanning as the oak bark.

Maple, sugar Maracock; or passion flower Mare's tail, common Marigold, common garden Marigold, African Marigold, corn Marigold, field Marigold, fig; or ficoides Marigold, fig, false; or groundsel tree with a ficoides leaf Marigold, French

Marigold, marsh Marjoram, knotted, or knobbed Marjoram, base Marjoram, Spanish

Marjoram, wild, or common Marjoram, pot; winter sweet; or Origanum heracleoticum

origany Martagon lily Marvel of Peru, common Marum, common Marum plant, Norfolk Marum, pennyroyal-scented Marum, Syrian, or Cretan Masterwort

Masterwort, black, or greater Mastich, herb; or mastich thyme Thymus mastichina Mastich, or lentisk, Peruvian

Mastich, or lentisk tree Matfellon; knapweed; or hard-1 head

Mat-weed Mat-weed, hooded Maudlin, sweet Mawseed

May, or May bush; or white thorn Cratagus oxyacantha May-weed; or mays* Anthemis cotula

Acer saccharinum Passiflora Hippuris vulgaris Calendula officinalis Tagetes erecta Chrysanthemum segetum Calendula arvensis Mesembryanthemum

Cacalia ficoides

Tagetes patula Caltha palustris Origanum majorana Origanum Urtica dodartii Origanum vulgare

Lilium martagon Mirabilis jalapa Teucrium marum Arundo arenaria Milissa fruticosa Origanum creticum Inperatoria ostruthium Astrantia Schinus molle Pistacia lentiscus

Centaurea nigra

Stipa tenacissima Lygeum spartum Achillea ageratum Papaver somniferum

^{*} Anthemis arvensis, and anthemis cotula, are both field plants; the first is the field chamamile, biennial and scentless, and the seeds crown-margined;-the other is the may-weed, or mays, and is annual, strong-scented, and the seeds naked; and if the hands are rubbed over with this plant, it is said to prevent bees from stinging.

Meadia; or American cowslip Meadow-sweet; or queen of the meadows Mealy tree, pliant; or wayfaring Mirabilis jalapa Mechoacanna; or white jalap Medick Medick; lucern; or Burgundy hay Medicago sativa Medick, sea Medlar Medlar of Louisiana Medusa's head Melancholy; or sorrowful tree Melilot Melon Melon, water; or citrul Melon thistle Mercury, dog's; or dog's cabbage Theligonum cynocrambe Mercury Mercury, English garden; all- Chenopodium bonus Hengood; or good Henry Meum; or spignel Mezereon Mignonette Milfoil; or yarrow Milfoil, or violet, water Milfoil, water Milfoil, water, or hooded; bladderwort Milk, or white wood

Milk-wort Milk-wort; or spurge Milk-wort, sea; or black salt-wort Glaux maritima Millet; or panic grass Millet, common Millet, Indian; or doura Milt-waste Mint, horse Mint, spear Mint, pepper Mint, cat; or nep

Dodecatheon meadea Spiraa ulmaria

Viburnum lantana

Medicago Medicago marina Mespilus

Diospyros virginiana Euphorbia caput medusæ Nyctanthes arbor tristis Trifolium melilotus offici-

Cucumis melo Cucurbita citrullus Cactus melocactus

Mercurialis

Æthusa meum Daphne mezereum Reseda odoratu Achillea millefolium Hottonia palustris Myriophyllum

Utricularia vulgaris

Bignonia leucoxylon PolygalaEuphorbia Panicum miliaceum Milium effusum Holcus sorghum Asplinium Mentha silvestris Mentha viridis Mentha piperita Nepeta cataria

Mouse-tail

Mint, balm-cat; or wild calamint Melissa nepeta Thlaspi campestre Methridate; or treacle mustard Misletoe,* common Viscum album Moly, with lily flowers; or yellow \ Allium moly garlic Spondias mombin Mombin; or Brasilian plum Money-wort; or herb two-pence Lysimachia nummulariæ Money-wort, base Sibthorpia europæa Monkey-bread; or sour gourd Adansonia digitata Monk's-head Leontodon Monk's-hood; or helmet flower Aconitum napellus Monk's-hood, variegated Aconitum cammarum Moon-seed Menispermum Moon trefoil; or tree medick Medicago arborea satin flower; or \ Lunaria annua Moon-wort; honesty Moor, or moss berries; or cran Vaccinium oxycoccos Morel Phallus esculentus Guilandina moringa Moringa Moschatel, tuberous; or hollow-root Adoxa moschatellina Mosses MusciPilularia globulifera Moss, pill; or pepper grass Moss tree Lichen usnea Moss, upright fir Lycopodium selago Moss, water Fontinalis Mother-wort Leonurus cardiaca Mould MucorMouse-ear Hieracium dubium Mouse-ear, creeping Hieracium pilosella Mouse-ear, golden; or golden Hieracium murorum lungwort Mouse-ear chickweed Cerastium semidecandrum Mouse-ear scorpion grass Mysotis scorpioides

Much-good; or mountain parsley Athamanta oreoselinum Mud-wort; or least water plantain Limosella aquatica

Myosurus minimus

^{*} Misletoe is a parasitical plant, and grows on the branches of trees, adhering thereto by the viscosity of its berries, which also serve for birdlime. Birdlime is also made from the inner bark of the holly.—See note to holly.

Valantia cruciata Mug-weed; or cross-wort Artemisia vulgaris Mugwort, common Morus Mulberry tree Mulberry; or strawberry blite Blitum capitatum Dianthus superbus et dian-Mule, Fairchild's thus caryophillus Mule-wort; or moon or mule's fern Hemionitis Verbascum Mullein Mullein, black Verbascum nigrum Verbascum blattaria Mullein, moth; or blattaria Mullein, white; high taper; Verbascum thapsus cow's lungwort Mushroom Agaricus Mushroom, esculent; or cham-Agaricus campestris* pignon PezizaMushroom, cup AgaricusMushroom, fairy Erodium moschatum Musk, geranium Malva moschata Musk, mallow $Hibiscus\ abelmoschus$ Musk-seed Mustard Sinapis Sinapis arvensis Mustard, field; or charlock Mustard, base Cleome Mustard, buckler; or base mi- Biscutella thridate Erysimum officinale Mustard, hedge Mustard, mithridate of Dioscorides Lepidium perfoliatum Thlapsi campestre Mustard, mithridate; or treacle Mustard, base mithridate; or sci-Iberis atica cress Turritis Mustard, tower; or wall cress Arabis Mustard, base tower Myrrhis; or wild myrrh;

sweet Cicely

Myrtle

Charophyllum sylvestre

Myrtus

^{*} Agaricus deliciosus is said to deserve its name, as being the most delicious mushroom known, though its appearance is not very inviting; the colour being a dirty brown, and the juice of a deep orange, soon turning to a livid green, whereever the fungus is touched or bruised. This fungus is much admired throughout Province, but though a native of England and Scotland, is not known at our tables. Smith's Tour on the Continent, printed in 1793.

Myrtle, candleberry Myrtle, Dutch; or gale Myrica cerifera Myrica gale

Naked ladies; or meadow saffron Colchicum autumnale Narcissus tazetta Narcissus polyanthus Narcissus Narcissus Pancratium maritimum

Narcissus; or daffodil, sea Nard-see Spikenard Nard; or mat-grass Nard, Celtic Naseberry tree Nasturtion; or cress, Indian Navel-wort Navel-wort, base, or African

Navel-wort, spring, or perennial Cynoglossum omphalodes

Navel-wort, taller Venus's Navel-wort, lesser Venus's* Navel-wort, water; or

pennyroyal Navew; rape; or cole

Nectarine (a variety)

Nep; or catmint Nettle Nettle, balsam Nettle, dead; or Archangel Nettle, hedge, dead hemp Nettle, dead yellow Nettle, Roman

Nettle, shrubby hedge Nettle tree; or lote Net-work

Nickar tree Nightshade

Nightshade, American; or pork-

Nardus stricta Valeriana celtica Sloanea Trapæolum majus Cotyledon Crassula coccinea

Cynoglossum lusitanicum Cynoglossum linifolium

marsh \ Hydrocotyle vulgaris

Brassica napus Amygdalus persica (fructibus glabris) Nepeta cataria

Urtica Melittis melissophyllum Lamium album Galeopsis tetrahit Galeopsis galeobdolon Urtica pilulifera Prasium Celtis

Eriocaulon decangulare Guilandina bonduc Solanum

Phytolacca decandria

^{*} Venus's navel-worts receive the name from a hollow in the seeds being a supposed resemblance of the navel.

Nightshade, base Nightshade, deadly; or dwale Nightshade, common enchanter's Circa lutetiana Nightshade, Malabar Nightshade, three-leaved; or Ca- Trillium cernuum Nightshade, woody; or bitter-sweet Solanum dulcamara Nil; or American blue bindweed Nip; or stinking ragwort Nipple-wort; or wart-wort Nipple-wort; or cichory, warted Noli me tangere; or yellow bal-None so pretty; or London pride Nopal; or cochinil fig Nose-bleed; or yarrow Nostac—see Star-jelly Nut, Areca Nut tree, hazel Nut, bladder, English Nut, bladder; or whortle berry, African Nut, bladder, laurel-leaved Nut, cashew; or acajou Nut, chocolate Nut, Byzantine; or Spanish nut Nut, clearing Nut, coco, or palm Nut, earth, or pig Nut, fausel, or palm Nut, ground, of America Nut, hiccory Nut, Malabar

Rivina paniculata Atropa belladonna Basella

Convolvulus nil Senecio jacobæa Lapsana communis Lapsana zacintha

Impatiens noli tangere

Saxifraga punctata: Cactus cochenillifer Achillea

Areca catechu Corylus avellana* (silvestris, vel grandis) Staphylea pinnata

Royena

Ilex Anacardium occidentale Theobroma cacao Corylus colurna Strychnos potatorum Cocos nucifera Bunium bulbocastanum Areca and the thinking Arachis hypogaa upraduo Juglans alba Justicia adhadota Lathyrus pisifolia Jatropa curcas Croton

Nut, pea-earth

Nut, physic, or purging

Nut, physic, or purging

^{*} Corylus avellana hath its specific name from the town Avellina, in Naples; for in the district of that town are planted more nut trees than in any country whatever: it is said that the trade in nuts produces annually about £11,250 to the town of Avellina.

Nut, pistacia Nutmeg Nut, Spanish Nux-vomica

Pistacia vera Myristica moschata Iris sisyrinchium Strychnos nux-vomica

Quercus robur humilis

Quercus ilex (integrifolia)

Quercus robur

Oak, common Oak, dwarf (a variety) Oak, evergreen, common Oak of Cappadocia . Oak of Jerusalem Oak, poison; or varnish tree Oak, Indian; or teak-wood Oak, kermes; or grain oak Oak, live Oak, cork Oats, common, white, black, or Avena sativa brown (alba, nigra, fusca) Oats, animated Oats, common wild Oats, sea-side, of Carolina Oats, wild bearded

Ambrosia maritima Chenopodium botrys Rhus vernix Tectona grandis Quercus coccifera Quercus molucca Quercus suber Avena hispida Avena fatua Uniola Bromus Inula occulus Christi

Hibiscus esculentus Ricinus communis

Christi Oily grain*, called bonny in Ca-

Oil tree; agnus castus; or palma

Old man's beard; or traveller's joy Clematis vitalba Old man's head (a variety)

Oleander; or rose bay

Ocra; or Indian sorrel

Olibanum

Oleaster; or wild olive

Oleum rhodii+

Occulus Christi

Sesamum orientale

Dianthus deltoides Nerium oleander Juniperus lycina Elæagnus Aspalathus

^{*} Called oily grain, from the seeds of this plant yielding by expression a greater quantity of oil than almost any other known plant.—The Italian sesame is the astragalus sesameus.

⁺ That fine perfume, called oleum rhodii, is supposed to be the essential oil of 3 species of aspalathus.

Some think the oleum rhodii is an extract from the root of a species of convolvulus, either scoparius or floridus.

Olive, common* Olea europaa Olive, sweet-scented Olea fragrans Daphne oleoides Olive, spurge Olive, wild, of Barbadoes Bontia daphnoides One-berry; true love; or herb Paris Paris quadrifolia Onion Allium cepa Onion, many-bulbed+ Allium multibulbosum Onion, umbel-bearing Allium magicum Onion, sea; or squill Scilla maritima Onion, Welch Allium fistulosum Opulus; or marsh elder Viburnum opulus Orange tree, Seville Citrus aurantium Orange, China (a variety) Citrus aurantium (sinensis) Philadelphus coronarius Orange, mock Orchilla; or archil Lichen roccella Origany, pot; or winter sweet \ Origanum heracleoticum marjoram Origany of Crete; or Cretan ma-Origanum creticum Ornotta, see Anotta Bixa orellana Orpine; or live long Sedum telephium Orpine, base Andrachne telephioides Orpine, lesser Crassula Orpine, true, of Imperatus Telephium imperati Atriplex hortensis Orach, garden Orach, berry-bearing; or straw-Blitum capitatum berry blite

Quere. If it would affect the bite of a mad dog.

^{*} Olive oil is asserted to possess many excellent qualities; if the body is frequently smeared over with it, and the garment next the skin soaked in it, it will prevent the infection of the plague; it will prevent the bite of the scorpion, and other venomous reptiles; and it will keep of musquitoes.—In Tunis, if a person is bit by a scorpion, or other venomous reptile, the part is immediately scarified, and olive oil rubbed in as soon as possible, which arrests the progress of the venom.

Jackson's Commerce of the Mediterranean, printed in 1805.

[†] The many-bulbed onions are to be set whole at Spring, at about a foot distant; which do not run up to seed, but at the time of taking up, each onion will form a cluster of bulbs under ground from 2 or 3 to 6 or 7;—and will sometimes bear small onions at the top of the stalk, if they have not clustered below.

[‡] A small orange, called at the Cape of Good Hope naretje, and is distinguished, like the citron, by a protuberance at the upper end, is said to be superior in taste to every sort of oranges.

Ox-tongue

Oyster-green

Orach, creeping shrubby Orach, wild; goosefoot; or fat hen Chenopodium viride Orach, shrubby sea; or halimus Orris, or iris, Florence Osier Osier, yellow Osier, brown; or almond-leaved Osmund, royal; or flowering fern Oswego tea Ox-eye, foreign Ox-eye of old authors Ox-eye; or greater daisy Oxslips (a variety)

Atraphaxis inermis Atriplex halimus Iris florentina Salix viminalis Salix vitellina Sulix amygdalina Osmunda regalis Monarda didyma BuphthalmumAnthemis Chrysanthemum leucanthe-Primula veris (elatior) Picris echioides Ulva lactuca

Paddock; or toad-stool Paddock-pipe; or toad-pipe Pæony Pagils; paigles; or cowslips Painted ladies (a variety) Palm, greater; or date, or dactyl tree Palm, lesser or dwarf; or palmetto Chamarops humilis Palmetto royal; or cabbage tree Palm, coco nut Palm, fausel nut Palm, Malabar: called ampana and corimpana Palm, wild Malabar; called ka- } Elate silvestris tou-indel Palm, mountain, with largest leaves; called codda panna Palm, sugar

Palm, with bipinnate leaves;

called schunda panna Palma Christi; Agnus castus;

or oil tree

Agaracus Equisetum P α onia Primula veris (officinalis) Dianthus deltoides Phanix dactylifera Corypha umbraculifera Cocos nucifera Areca Borassus flabelliformis Corypha umbraculifera Arenga saccharifera Palm, with ringed stems; called \ Cycas circinalis Caryota urens

Ricinus communis

Pampelmoe; or shaddock (a variety) Citrus aurantium Pansy Papyrus, Chinese Papyrus, antient Egyptian Papaw tree Papaw tree of N. America Paradise, grains of Park-leaves; or tutsan Parsley; or petroseline Parsley, base Parsley, corn; or honewort Parsley, cow's—see Chervil

Parsley, dog's, or fool's; lesser \ Ethusa cynapium hemlock; or Cicely Parsley, knotted Parsley, Macedonian

Parsley, water; or smallage Parsley, milk

Parsley, mountain; or much-good Athamanta oreoselinum Parsley, purple-flowered hedge Parsley, stone

Parsley piert; break stone; percepier

Parsnep Parsnep, cow's Parsnep, prickly Parsnep, water, the greater Parsnep, water, the lesser Pasque-flower Passion-flower; or maracock Pastel; or woad, common Patience rhubarb

Pea* Pea, chich; or garavances

Viola tricolor Morus papyrifera Cyperus papyrus Carica papaya Annona triloba Amomum granum paradisi Hypericum androsæmum Apium petroselinum Caucalis Sison segetum

Tordylium nodosum Bubon macedonicum Apium graveolens Selinum sylvestre Tordylium anthriscus Bubon

or Aphanes arvensis

Pastinaca sativa Heracleum sphondylium Echinophora Sium latifolium Sium nodiflorum Anemone pulsatilla Passiflora Isatis tinctoria Rumex patientia Pisum sativum Cicer arietinum

^{*} Plants are not only nourished by the roots, but also by their leaves; those that have succulent leaves of open texture, such as peas, beans, turneps, potatoes, &c. imbibe much of their nourishment from the air; and therefore less impoverish the soil than wheat, barley, oats, rye, &c. whose leaves being of firmer texture, depend more upon the root for support.—And as it is confirmed by observation that oil is the principal food of plants, all those vegetables, whose seeds abound with oil, are great impoverishers of the soil, as rape, hemp, flax, &c.

Pea, or vetch, chichling Lathyrus Lathyrus pisifolia Pea, earth nut Lathyrus latifolia Pea, everlasting Cardiospermum corindum Pea, heart Pea, heath, or wood; or bitter vetch Orobus sylvaticus Pea, painted lady Lathyrus Cytisus cajan Pea, pigeon Sophora occidentalis Pea, sea-side pigeon Pea, sweet-scented Lathyrus odoratus Lathyrus tangitanus Pea, Tangier Pea, winged Pisum ochrus f Amygdalus persica* Peach | Fructibus lanuginosis Peach, wolf's Solanum lycopersicum Pear tree, common Pyrus communis. Pear, avocado, or alligator Laurus persea Pear, bachelor's Solanum mammosum Pear, garlic Cratæva tapia Pearl-wort Sagina procumbens Parietaria officinalis Pellitory, or parietary of the wall Pellitory of Spain Anthemis pyrethrum Pellitory of Spain, false Chrysanthemum frutescens Pellitory; or tooth-ach tree Zanthoxylum Pennyroyal Mentha pulegium Pennyroyal, stag, or narrow-Mentha cervina leaved upright Pennyroyal, Virginian Satureja or water \ Hydrocotyle vulgaris Penny-wort, marsh; navel-wort Penny-wort, or navel-wort, wall Cotyledon serrata

Bromelia pinguin
Chelone penstemon
Piper
Piper nigrum

Piper nigrum
Capsicum annuum
Capsicum grossum
Capsicum baccatum

Penguin; or wild ananas

Penstemon

Pepper, Guinea

Pepper, bell

Pepper, bird

Pepper Pepper, black

^{*} Amygdalus persica, called so from being supposed a native of Persia.

N.B. The peach and nectarine are considered as only varieties of the same species.

Pepper, bonnet Pepper, Cayenne* Pepper, Barbary Pepper, hen Pepper, Jamaica; or all-spice Pepper, Peruvian Pepper, long Pepper, wall; or stone-crop Pepper, water; or arse-smart Pepper-grass Pepper, pot Pepper tree Pepper-wort; poor-man's pep- \Lepidium latifolium per; or dittander Percepier; or parsley piert

Periwinkle, greater Periwinkle, lesser Periwinkle, Madagascar Persicaria; or spotted arse-smart Persicaria, Eastern Pestilent-wort Petroseline; or parsley Pheasant's eye, common Pheasant's eye pink (a variety)

Phillyrea, false Phillyrea of the Cape; or Hot- Cassine maurocenia

Phillyrea; or mock privet

tentot cherry Phu, setwall; or garden valerian Pile-wort; or lesser selandine Pimento; all-spice; or Jamaica

pepper Pimpinel, common Pimpinel, round-leaved water Pimpinel of the woods, yellow Pin-pillow; or pin-cushion Pineaster (a variety)

Capsicum Capsicum frutescens Capsicum Capsicum Myrtus pimenta Schinus molle Piper longum Sedum acre Polygonum hydropiper Piluraria globulifera Capsicum Vitis arborea

Aphanes arvensis Vinca major Vinca minor Vinca rosea Polygonum persicaria Polygonum orientale Tussilago petasites Apium petroselinum Adonis autumnalis Dianthus deltoides Phillyrea media

Rhamnus alaternus

Valeriana phu Ranunçulus ficaria

Myrtus pimenta

Anagallis arvensis Samolus valerandi Lysimachia nemorum Cactus curassavicus Pinus silvestris

^{*} Quere. Should it not rather be called Kiang pepper (a province in China), as it is said they have a shrub that bears a remarkably hot pepper, only fit for sauces? -see note to capsicum. The chief exports from Cayenne are said to be sugar and coffee.

Pine, frankincense Pine, Cembra Pine, Scotch Pine, stone Pine, Weymouth, or New England Pinus strobus Pine, ground, or dwarf Pine, stinking ground Pine, heath-low Pine apple, or ananas Pine apple, wild Pine apple, wild; or penguin Pink, wild sand Pink, China Pink, maiden Pink, Indian; or quamoclit Pink, matted Pink, mountain Pink, Indian Pink, Deptford Pink, sea; or thrift Pink, sea, the greater Pipe-tree*; or common lilac Pipe-tree, pudding Piperidge bush; or berberry Piquets; or piquettees (a carnation) Dianthus caryophyllus Pistacia nut Pishamin, or persimon plum Pistacia, black Virginian hazel- Hamamelis virginiea Pitch-tree Pitajaya of California Plane tree Plane tree, false; greater maple; or sycomore

Plant, burning thorny

Plant, humble sensitive

Plant, egg

Pinus tædæ Pinus cembra Pinus silvestris Pinus pinea Teucrium chamæpithys Camphorosma Coris monspeliensis Bromelia ananas Renealmia exaltata Bromelia penguin Dianthus Dianthus arenarius Dianthus chinensis. Dianthus deltoides Ipomoea quamoclit Dianthus virgineus Dianthus glaucus Spigelia marilandia Dianthus armeria Statice armeria Statice pseud-armeria Syringa vulgaris Cassia fistula Berberis vulgaris Pistacia vera Diospyros virginiana Pinus picea Cactus, pitajaya Platanus -Acer pseudo-platanus

Euphorbia

Mimosa pudica

Solanum melongeno

^{*} Pipe-tree, called so from the branches of this tree, when the pith is taken out, serving for pipes in syringes.

Plant, sensitive Plant, base sensitive Plant, self-moving Plantain, common broad Plantain; hartshorn; or buckshorn Plantago coronopus Plantain, rose Plantain, ribbed; or ribwort Plantain, star-headed water Plantain, least water; or mudwort Limosella aquatica Plantain tree; or bread tree Pliant mealy tree; or wayfaring tree Viburnum lantana Plum tree Plum, Calaba Plum, black American; cocoa; or maiden Plum, Assyrian; or Sebesten Plum, bay; or guava Plum, hog, Brasilian, or Jamaica Plum, Indian date Plum, pishamin, persimon, or pitchumon Poccoon, or puccoon Pockwood; or lignum vitæ Poison tree; or manchineel Poison tree Poison ash, or oak; or varnish tree Rhus vernix Poison berry Poison bush; or spurge Poley, mountain Poley grass; or hedge hyssop Polyanthus (a variety) Polyanthus narcissus Polypody Pomegranate Pompion Pond weed Pond weed; horn-leaf; or hornwort Ceratophyllum demersum

Mimosa Eschinomene Hedysarum gyrans Plantago major Plantago major (a variety Plantago lanceolata Alisma plantago Musa paradisiaca Prunus domestica Calophyllum calaba Chrysobalanus icaco

Cordia sebestena Psidium pyriferum Spondias myrobalanus Diospyros lotus

Diospyros virginiana

Sanguinaria canadensis Guaiacum officinale Hippomone manchinella Rhus toxicodendron Cestrum Euphorbia Teucrium polium Lythrum hyssopifolia Primula veris (elatior) Narcissus tazetta Polypodium Punica granatum Cucurbita pepo Potomogeton natans Zannichella palustris Artemisia pontica Populus

Populus tremula Poplar, Lombardy; or Po poplar Populus dilatata

Poplar

Pond weed, treble-headed Pontic; or Roman wormwood

Poplar, common; or aspen

Poplar, balsam; or tacamahaca Popple; or cockle Poppy Poppy, common corn Poppy, red horned* Poppy, yellow horned

Poppy, prickly; or fig infernal Poppy, spatling; or white behen

Pork weed; pork physic; or Phytolacca decandria Potatoe, common Potatoe, Indian; or yam Potatoe, or batata; Spanish Prick, or skewer wood; or spin-

dle tree Primrose, common Primrose, common night Primrose tree Primrose, peerless Prince's feather Privet; or primp Privet, Egyptian; or hennat Privet, evergreen Privet, mock; or phyllyrea Privy-saugh Prune; or plum Puccoon Puccoon, base Virginian Pudding pipe tree Puff-ball; or fuz-ball Pulegium; or pennyroyal Pulsatilla; or pasque flower Pumpkin (see Pompion)

Purging grane, oily

Purslain, common

Populus balsamifera Agrostemma githago Papaver Papaver rhoeas Chelidonium corniculatum Chelidonium glaucium Argemone Cucubalus behen

Solanum tuberosum

Dioscorea bulbifera Convolvulus batatas

Euonymus

Primula veris (acaulis) Oenothera biennis Oenothera fruticosa Narcissus odorus Amaranthus caudatus Ligustrum vulgare Lawsonia inermis Rhamnus alaternus PhillyreaLigustrum $Prunus\ domestica$ Sanguinaria canadensis Anchusa virginica Cassia fistula Lycoperdon bovista Mentha pulegium Anemone pulsatilla Cucurbita pepo Sesamum orientale $oldsymbol{P}$ ortulaca oleracea

^{*} A curious circumstance attends the horned poppy; when the flower fades, the pistillum or seed-vessel elongates to 10 or 12 inches, to contain more seed 3 whence the name.

⁺A powder is prepared from the leaves of Egyptian privet called alcanna, alkenna, or henna, in which the city of Cairo employs a considerable trade. It is much used by the Turks, as well as in Egypt, for colouring the nails and bair of a gold colour; in dying it gives a yellow colour with water, and red with vinegar.

Purslain, horse Purslain, sea Purslain, water Purslain tree Purslain tree, sea Pyracantha

Sesuvium portulacastrum Atriplex portulacoides Peplis portula Crassula cotyledon Atriplex halimus Mespilus pyracantha

Quake grass; or cow quakes Quamoclit; or Indian pink Queen of the meadows; or meadow sweet Quick; or white thorn Quicken; wicken; quick-beam; Sorbus aucuparia or mountain ash Quince tree Quill-wort

Briza Ipomoea quamoclit > Spirœa ulmaria Cratægus oxyacantha Pyrus cydonia Isoetes lacustris Cinchona officinalis

Quinquina; or Jesuit's bark

Radish, common esculent Radish, horse Radish, or cress, water Ragged Robin; or lychnis cuckow flower Ragwort, common; staggerwort; or nip Ragwort, African Ragwort, sea Ragworts of old authors Ragworts of old authors Rampions,* common esculent Rapions, horned Rampions, crested Rampions with scabious heads;] or hairy sheep scabious Ramsons; or bear's garlic

Raphanus sativus Cochlearea armoracia Sisymbrium nasturtium

Lychnis flos-cuculi

Senecio jacobæa

Cineraria maritima Senecio Solidago Campanula rapunculus Phyteuma orbicularis Lobelia phyteuma

Jasione montana Allium ursinum

^{*} Rampions, so called from the old Latin name rapunculus; the esculent part is the root, which, when young, is sliced and eat in salads, and is said to be very wholesome and nourishing.

Ranunculus; or crow-foot, com-Ranunculus asiaticus mon garden Ranunculus, globe; or locker > Trollius europæus goulands Brassica napus Rape, cole, or navew Rape, broom Orobanche Raspberry Rubus idaeus Raspberry, flowering Rubus odoratus Rattle; cockscomb; or lousewort Pedicularis palustris Rattle, yellow; cockscomb; or Rhinanthus crista-galli elephant's head Rattlesnake root, Senega Polygala senega Prenanthes altisima Rattlesnake root, Dr. Witt's Rattlesnake weed Eryugium aquaticum Red-bud tree; or Canada Judas tree Cercis canadensis Red-worts, Spanish; or straw-Arbutus unedo berry tree Arundo phragmitis Reed, common Reed, burr Sparganium Reed, Indian flowering Canna angustifolia Reed mace Typha latifolia Arundo arenaria Reed, sand* Rennet, cheese; or yellow ladies Galium verum Rest-harrow; petty whin; Ononis Rhamnus, base; or sea buckthorn Hippophae rhamnoides Rein deer liverwort Lichen rangiferinus Rhapontic Rheum rhaponticum Rhubarb Rheum Rhubarb, true Turkey Rheum palmatum Rhubarb, British Rumex britanica Rhubarb, monk's; or patience Rumex patientia Ribwort; or ribbed plantain Plantago lanceolata Oryza sativa Rice, wild Zizania aquatica Ricinus, base Croton Roan tree; mountain ash; or wicken Sorbus aucuparia

^{*} See note to Sea rush.

Robinson Crusoe's coat Robert herb Rocambole; or Turkey garlic Rock germander Rock rose Rocket Rocket, base or weld Rocket, corn Rocket, marsh Rocket, sea Rocket, square-podded of Mont-

pelier Rocket, water or wood Rocket, Winter

Rocket, wall Rocket; dame's violet; or queen's \ Hesperis matronalis July-flower

Rod, Aaron's; king's spear; or yellow asphodel

Rod, bloody Rod, golden Rod tree, golden; or yerva mora Rod, shepherd's; or teazel

Roe-buck berries Root, Indian arrow Root, China

Root, false China Root, fever; or Dr. Tinker's weed Triosteum perfoliatum

Root, rose Root, snake, of Virginia

Root, snake, black or wild of Virginia

Root, sweet; or liquorice

Rosa-solis Rose

Rose, China

Rose, Christmas; or black helle-

Rose, Gelder; or snowball tree Viburnum opulus (flore (a variety from marsh elder) pleno)

Cactus spinosissimus Geranium robertianum Allium scorodoprasum Veronica teucrium Cistus Brassica eruca Reseda lutea Bunias orientalis

Sisymbrium silvestre

Bunias orientalis Bunias erucago

Sisymbrium silvestre Sisymbrium Sisymbrium murale

Asphodelus luteus

Cornus sanguinea Solidago virga-aurea Bosea yerva-mora Dipsacus fullonum Rubus sexatilis Maranta arundinacea Smilax china

Senecio pseudochina Root, hollow; or tuberous mos- \ Adoxa moschatellina

Rhodiola rosea Aristolochia serpentaria

Actwa racemosa

Glycyrrhiza glabra Drosera rotundifolia Rosa

Hibiscus rosa (sinensis)

Helleborus niger

Rose, dog; or hep Rose, Virginian Gelder, with a currant leaf Rose, Japan or mutable Rose, Martinico; China rose Rose, musk Rose, rock Rose of Jericho Rose of Sharon* (see St. John's) Hypericum calycinum wort) Rose bay; or oleander Rose bay, dwarf or mountain Rose bay willow herb Rose mallow; or hollyhock Rose-root Rose-wood Rosmary (from ros-maris) Rosmary; or poet's cassia Rosmary, wild; or marsh cistus Rosmary, lesser wild Roucou Rue; or herb of grace Rue, dog's . Rue, goat's, common Rue, meadow; or feathered co- Thalictrum aquilegifolium lumbine Rue, common yellow meadow Rue, wall; or scent-wort Rue, wild Assyrian Ruffle, lady's Rupture-wort Rupture-wort, least; or all-seed Rush Rush, sea

Rosa canina Spiræa opulifolia Camellia japonica Hibiscus mutabilis Rosa moschata Cistus Anastatica hierochuntica Nerium oleander Rhododendrum hirsutum Epilobium angustifolium Alcea rosea Rhodiola rosea Aspalathus Rosmarinus officinalis Osyris alba Ledum palustre Andromeda polifolia Mitella Ruta graveolens Scrophularia canina Galega officinalis Thalictrum flavum Asplinium ruta muraria Peganum harmala

Luchnis Herniaria Linum radiola Juncus

Juncus acutust

^{*} Canticles, chap. ii. ver. 1.

⁺ Juneus acutus, and juneus inflexus, are both used in Holland for the support of the sea banks, as also for making baskets, mats, &c.; and are used in England (where they are also natives) for bottoming chairs, &c.—They grow from four to six or seven feet in hight; the first hath the panicle terminal, and the other lateral.—The sand reed (arundo arenaria) is also used for the above purposes; and in Iceland, the seed is dried and ground for bread.

Rush, bull Scirpus lacustris Juncus effusus Rush, soft or candle Rush, flowering; or water gladiole Butomus umbellatus Rush, lesser flowering Scheuchzeria palustris Rush, round black-headed, marsh, Schoenus nigricans Rush, sweet; or calamus aromaticus Acorus calamus Rye, common Secale cereale Lolium perenne Rye or ray grass; or wild rye

Sabin Sabin tree, Indian Saffron Saffron, base; or safflower Saffron, meadow; or naked ladies Saffron, mountain spring Sage, common garden Sage of virtue, narrow-leaved (a variety)

Sage, purple or red-topped Sage, wild or wood Sage, Indian wild Sage, Jerusalem; or sage tree St. John's bread; or carob tree St. John's wort,* common

St. John's wort of Constantino- Hypericum ascyron, or caple, or great-flowered; rose of Sharon St. John's wort, shrubby; or tutsan Hypericum androsamum

St. John's wort, warted St. John's wort, Chinese St. Peter's wort; or base St. John's wort

St. Peter's wort

Juniperus sabina Bauhinia aculeata Crocus sativus Carthamus tinctorius Colchicum autumnale Bulbocodium vernum Salvia officinalis

Salvia officinalis

Salvia horminum Teucrium scorodonia Lantana aculeata Phlomis fruticosa Cycas circinalis Ceratonia siliqua Hypericum perforatum

tycinumt

Hypericum balearicum Hypericum monogynum

Ascyrum hypericoides

Hypericum quadrangulare

^{*} It is called St. John's wort, as being formerly usual on the vigil of St. John to place sprigs of it at the entrance into houses, to keep out witches and evil spirits, as the Druids used to do with veronica.

⁺ Mr. Miller says it is the ascyron, and Mr. Aiton says it is the calycinum.

Lonicera symphoricarpus St. Peter's wort, shrubby Hedysarum onobrychis Saintfoin; or cock's head Calamus rotang Salack Orchis morio Salep Valeriana locusta Sallad, corn; or lamb's lettuce Sal-kali; or jointed glasswort Salicornia herbacea Salix caprea Sallow,* common Tragopogon porrifolium Salsify; or garden goat's-beard Salicornia herbacea Salt-wort, black; sea chickweed; \} Glaux maritima or milk-wort Sambac; or Arabian jasmine Nyctanthes sambac Samphire; or sea fennel Crithmum maritimum Inula crithmifolia Samphire, golden Sandbox, t or crackling tree; or Hura crepitans Jamaica walnut Sanicle Sanicula europæa [Tiarella cordifolia Sanicle, American Heuclera americana Sanicle, American base Mitella diphylla Sanicle, bear's ear Cortusa matthioli Sanicle, Yorkshire; or butterwort Pinguicula vulgaris Sandwort, Arenaria Sappadillo tree Sloanea Sappan-wood Cæsalpinia sappan Sapota Achras sapota Sapota mammee Achras mammosa Saracen's woundwort; or consound Solidago virga-aurea Saracen's woundwort; or Senecio sarracenicus sound, true Tragopogon porrifolium Sassafy (see Salsafy)

Lunaria annua

Satin flower; moon-wort;

honesty

The above was related by Mr. Graves, Paper-maker, at Mill-Bank near Warrington, in 1788.

+ See crackling tree.

^{*} A good brown paper may be made of the bark of sallow in its green state, and may be sold much cheaper than that made of old ropes; that made of ropes is sold at about 8s. 6d. per ream, that made of the withen may be sold at about 5s. 8d. per ream;—and pasteboard for book covers made of ropes, is sold at about £25 per ton (long hundred), that made from withen-bark may be sold at £17 per ton.

Orchis Satyrion; or dog-stones Sauce alone; or Jack by the hedge Erysimum alliaria Savin—see Sabin

Sanders, white or yellow

Sanders, red Savory, common Saw-wort

Saxifrage

Saxifrage, white or granulated

Saxifrage, Burnet Saxifrage, golden Saxifrage, meadow Scabious, common

Scabious, hairy sheep's; or rampions with scabious heads

Scallion; cibouls; or Welsh onion Allium cepa (cambrica) Scammony of Montpelier

Sciatica cress; or base mithri-

date mustard Scordium

Scorpion grass.; or caterpillars Scorpion grass, mouse-ear Scorpion's thorn; or gorse Screw tree

Scull or skull cap Scurvy grass; or spoon-wort Sea beard

Sea-fans (Zoophytes†)

{ Santalum album Sirium myrtifolium Pterocarpus santalinus Satureja hortensis Serratula Saxifraga* Saxifraga granulata

Pimpinella saxifraga Chrysosplenium Seseli saxifragum Scabiosa arvensis

Cynanchum acutum

Teucrium scordium Scorpiurus vermiculata Myosotis scorpioides Ulex europœus Helicteres isora Scutellaria Cochlearia officinalis Conferva rupestris

The sensitive plants (whose sensibility is not perfectly accounted for) seems to hold the connection between real plants and zoophytes, and the zoophytes between sensitive plants and real animals; but Dr. Darwin thinks the fungi consti-

^{*} Saxifraga (from saxum a stone, and frango to break), a name given to several plants, which are supposed to have the virtue of breaking or dissolving the stone in the human body.

⁺ Zoophytes mean animal plants; as corallines, sea-fans, spunge, &c. which are generally classed among animals.—As to the androsace (agaricus androsaceus), its place is not yet determined in natural history; Vitaliano Donati calls it a plant; Linnæus says it is a zoophyte, and gives it the name of tabularia acetabulum; according to the Abbe Alberto Fortis, it is one of the subaqueous productions of the valley of Slosella in Dalmatia, but he could not absolutely determine its character, though he could see no evident marks of its being a zoophyte.

Travels in Dalmatia, 4to. printed in 1788.

Sea-grass Sea-weed Sedge; or char Sedum, cobweb Sedum, saxifrage Seed, heart Seed, heart Selery* (a variety) see Smallage Seleriac (a variety) Self-heal, common Senna of the shops Senna, bladder Senna, Ethiopian bladder Senna, jointed-podded bladder; Coronilla emerus or scorpion senna Sengreen; or snowy saxifrage Sensitive fern Sensitive plant Sensitive wood-sorrel Sensitive plant Sensitive plant Sensitive plant Sensitive plant, base Sensitive tree

Septfoil; or tormentil, common

Sermountain; or laserwort

Ruppia maritimá Fucus Carex divisa Sempervivum arachnoideum Saxifraga sedoides Brassica vesicaria Cardiospermum Iris pseud-acorus Apium graveolens (dulce) Apium graveolens Prunella vulgaris Cassia senna Colutea arborescens Colutea frutescens Saxifraga nivalis Onoclea sensibilis Smithia sensitiva Oxalis sensitiva Mimosa+ sensitiva and pu-Hedysarum girans Dionæa muscipula

Eschynomene Averrhoa carambola

Tormentilla erecta

Laserpitium siler

tute the istmus between the animal and vegetable kingdoms, as they partake of both. They can exist without light or much air; and the odour of a fungus when burning, smells like burning feathers, and they putrefy like animal flesh: and it is said a weak broth for an invalid, may be made by a little catchup mixed with thin gruel, with shred parsley and a little salt, so as to deceive the taste. It is also asserted by Van Humboldt, that he converted morels into fat, by sulphuric acid and water, which seems analogous to that formed from muscular flesh .- See Phytologia, p. 486 and 301.—Botanic Garden, p. 42.—See also Rousseau's Letters on the Elements of Botany, under the word truffle.—See note to lycoperdon.

^{*} Selery is generally spelt celery, but as it is derived from the Greek, it ought to Skinner's Etymolo. Ling. Anglicanæ. be selery.

⁺ Mimosa sensitiva and pudica are both sensitive plants, and are biennial; the first shews its sensibility, when touched, by the collapsing of the leaflets only; the second is called the humble sensitive, by the collapsing of the leaflets and footstalk.

Serpent's or adder's tongue Serpentine tree Service tree Service, maple-leaved, or wild Sesame; or oily grane Sesame, Italian Setwall, garden; or valerian Setterwort; bear's foot; or hel- Helliborus fætidus

Shaddock; or pampelmoe Shallot (see Eschalot)

Shave grass Shepherd's needle; or Venus's comb Scandix pecten

Shepherd's purse Shepherd's rod; or teazel Shepherd's rod, smaller Shot, Indian; or Indian cane

Sickle-wort Sidesaddle flower Silk cotton tree

Silk, Virginian Silver bush; or Jupiter's beard

Silver tree Silver weed

Simpla nobla; or base shrubby \ Phyllis nobla hare's ear

Skirret Sky flower Sloe tree Sloke

Smallage; or water parsley

Snail trefoil

Snake's head Snake weed Snake-root, Virginian Snake-root, black or wild of America Act a racemosa

Snake-wood Snap tree

Snap-dragon Snap-dragon of America Ophioglossum Ophyoxylum serpentinum Sorbus domestica

Cratægus torminalis Sesamum orientale Astragalus sesameus Valeriana phu

Citrus decumana Allium ascalonicum Equisetum hyemale

Thlaspi bursa pastoris Dipsacus fullonum Dipsacus pilosus Canna indica Coronilla Sarracena

Bombax gossipinum Periploca greeca Anthyllis barba jovis Protea argentea Potentilla argentea

Simpler's joy; or common vervain Verbena officinalis Sium sisarum Cineraria Prunus spinosa

> Apium graveolens Medicago polymorpha (scutellata)

Iris tuberosa Polygonum bistorta Aristolochia serpentaria

Ophioxylum serpentinum Justicia hyssopifolia Antirrhinum

Ruellia tuberosa

Sneeze-wort; or goose-tongue Sneeze-wort, Austrian

Snow-ball tree; or Gelder rose {

Snowberry bush Snowdrop Snowdrop, Summer Snowdrop tree Snowy mespilus

Soap apple, or berry

Soda* Soldanel

Soldier, water; or water aloe

Soldier's cullions Solomon's seal

Solomon's seal of America Sorgo; or Indian millet Sorrel; or green-sauce Sorrel, French or Roman

Sorrel, wild

Sorrel, Indian; or ocra

Sorrel, wood

Sorrel, sensitive wood Sorrel tree

Sorrowful, or melancholy tree Sour sop

Achillea ptarmica Xeranthemum annuum Viburnum opulus (flore

pleno) Chiococco racemosa

Galanthus nivalis Leucojum æstivum Halesia tetraptera Mespilus canadensis Sapindus saponaria

Soap-wort, or bruise-wort, common Saponaria officinalis Salsola soda Soldanella alpina

> Stratiotes aloides Orchis pyramidalis

Convallaria polygonatum Uvularia

Holcus sorghum Rumex acetosa Rumex scutatus Rumex acetosella Hibiscus esculentus Oxalis acetosella Oxalis sensitiva Andromeda arborea

Nyctanthes arbor tristis, Annona muricata

* Soda is an alkali extracted in the same manner as pot-ash alkali, but hath some very different properties; soda, as obtained from marine plants, is usually entirely saturated with carbonic acid, doth not attract the humidity of the atmosphere like pot-ash, but desiccates, and is converted into a white powder.-Lavoisier's Elements of Chemisty. It will not, therefore, make good pot ash, but is used in glass, &c.

Soda is now chiefly obtained from a mineral fixed alkali, found in Egypt, Persia, and Arabia; and in its crude state, in commerce, is called soda, or barilla. When it is obtained from vegetables, it is only from those which grow upon the sea side, or salt lakes, and especially from the plant kali, from whence the name, to which the Arabians add al (the) by way of eminence, as they do to the Koran, and we to the Bible.-It is a very curious fact, that the ashes of all plants growing at a distance from salt water, afford the vegetable alkali, or pot-ash (used for making glass, soap, &c.), while such as grow near the sea, or on borders of salt lakes, afford the fossil alkali, or soda; if, however, these same plants are cultivated in the interior of the country, they produce pot-ash only .- See note to alkali in the Index.

Southern-wood; or lad's-love Sow-bread Soy; or kidney bean of India Sparrow-wort Sparrow-wort, Tragus's Spear-wort, great Spear-wort, small Speerage—see Asparagus Speedwell Speedwell, male; or fluellin Speedwell, female Speedwell, water; or brooklime Spice-wood Spice, all; or pimento Spice, Virginian all Spider-wort Spider-wort, great Savoy; or St.]

Bruno's lily Spider-wort, Virginian Spignel, common; or meum Spignel, wild; or French hartwort Seleli Spignel, base Spikenard, Indian Spikenard, true Indian Spikenard, base French Spikenard, or nard, Celtic Spikenard, false; or lavender Spikenard, plowman's; or ground- Baccharis halimifolia

sel tree Spikenard, plowman's; or fleabane Coniza squarrosa Spikenard, wild; or asarabacca Spinach, common Spinach, rock Spinach, strawberry; or blite Spindle tree; or prick or skewer \ Euonymus

wood Spindle, or staff tree, climbing Spindle tree, base Spiræa frutex*

Artemisia abrotanum Cyclamen Dolichos soja Passerina Stellera passerina Ranunculus lingua Ranunculus flammula

Veronica Veronica officinalis Antirrhinum elatine Veronica beccabunga Laurus Myrtus pimenta Calycanthus floridus Anthericum

Anthericum liliastrum

Tradescantia virginica Æthusa meum Athamanta Nardus indica Andropogon nardus Nardus Valeriana celtica Lavendula spica

Asarum europæum Spinacia oleracea Beta maritima Blitum capitatum

Celastrus scandens Kiggellaria africana Spiraa salicifolia

^{*} The young shoots of the spiraa frutex being very tough and pliable, are often used for the tops of fishing rods.

Spiræa, African Spleen-wort, common Spleen-wort, rough Spleen-wort, rough Spoon-wort; or scurvy grass Spunge (a Zoophyte) Spunk Spurge; or milk-wort

Spurge, four-parted umbellated Euphorbia lathyris

French; or caper Spurge, common sun; or wart-wort Euphorbia helioscopia Spurge laurel; or dwarf bay Spurge olive

Spurry, or sperry,* common corn Spergula arvensis Squash; or buckler gourd

Squill; or sea onion Squill, lesser white; or sea daffodil Pancratium maritimum

Squinanch Staff or spindle tree, climbing Staff, shepherd's; or teazel

Stag's-horn tree

Stagger or staverwort; or ragwort Senecio jacobaa

Star of Bethlehem Star-flower, low and small

Star of Arabia and Constantinople Ornithogalum arabicum

Star of Naples Star grass; or starry duck meat

Star-wort; or aster Star-jelly; star-shot; or nostoc

Star-wort, base

Star-wort, trailing American Star-wort, yellow; or elecampane

Stavesacre; or lousewort

Stickadow; or French lavender

Delphinium staphisagra Lavendula stæchas Stitch-wort; or star-flower, greater Stellaria holostea

Diosma Asplenium ceterach Lonchitis hirsuta Polypodium asplenifolium Cochlearia officinalis

Agaracus \circ Euphorbia

Daphne laureola Daphne oleoides Cucurbita melopepo Scilla maritima Asperula cynanchica Celastrus scandens Dipsacus fullonum Rhus typhinum

Ornithogalum pyramidale Ornithogalum umbellatum†

Ornithogalum nutans Callitriche

Aster Tremella nostoc

Buphthalmum grandiflorum

Tradix procumbens Inula helenium

^{*} This plant is very much cultivated in Brabant, Holland, and Germany, as food for cattle, both when green and made into hay.

[†] Though Linnæus hath given it the spece of name of umbellatum, it ought to have been corymbosum, for that is its mode of flowering; it seems very careful of its embryo, by the flowers shutting up very close, early in the evening, and in bad weather.

Stitch-wort, lesser Stink-horns Stock July-flower Stock, annual, or ten-weeks Stonecrop; or wall pepper Stork's bill Stramonium; or thorn apple Stramonium, purple-stalked; or tatula Strawberry+ Strawberry, barren Strawberry, barren Strawberry blite; or spinach Strawberry tree, common‡ Strawberry tree, oriental Succory—see Cichory Sugar cane Sugar palm Sulphur-wort; or hog's fennel, Peucedanum officinale common Sultan flower; or sweet sultan Sumach Sumach, myrtle-leaved Sumach, tanner's Sumach, Venice Sundew Sun-flower, common annual

Sun-flower, perennial

Stellaria graminea Phallus impudicus Cheiranthus Cheiranthus annuus Sedum acre Pelargonium* Datura stramonium

Datura tatula

Fragaria vesca Fragaria sterilis Potentilla montpeliensis Blitum capitatum Arbutus unedo Arbutus andrachne

Saccharum officinarum Arenga saccharifera

Centaurea moschata Rhus Coriaria myrtifolia Coriaria ruscifolia Rhus cotinus Drosera Helianthus annuus Helianthus multiflorus Sun-flower, base or willow-leaved Helenium autumnale

^{*} Pelargonium grandiflorum (great-flowered) makes a very grand appearance, with leaves large, funnel-form.

⁺ Linnæus derived great benefit under the attacks of the gout, to which he was subject, from the use of strawberries; a plate of which he found greatly relieved him. He had a periodical return of the disorder for a few years afterwards, but always slighter and slighter by the use of his remedy; and, by perseverance, was at last actually cured.

Dr. Maton's edition of Pultney's View of the Writings of Linnæus, 1805.

[‡] The fruit of the common strawberry tree is eaten in Iceland, but is apt to have a lethargic effect: it is a beautiful evergreen tree, and flowers in Autumn, either red or white; and the fruit of the former year is then ripe, for the fruit is a whole year growing to perfection.

Sun-flower, small American

Sun-flower, small, of Carolina

Sun-flower, little; or dwarf cistus Sun-flower, Mariland tickseeded Sun-fruit Sunn, or sunn hemp

Supple jack Swallow-wort

Swallow-wort, African; or lesser \ Stapelia variegata coekscomb frittillary.

Sweet John; and sweet William Sweet sop; or chirimoya

Sweet sultan

Sweet William; and sweet John Sweet William, Indian; or quamoclit

Swine's cress Sycomore, true; or Pharaoh's

fig tree Sycomore or plane, false; greater maple*

Syringa; † or mock orange

Tacamahaca (a resin) Tallipot tree Tallow tree Tamarind tree Tamarisk Tansey, common Tansey, wild; or goose grass Tapioca Tare, or vetch with black seed Tarragon; or dragon-wort Tarton-raire Tartarian lamb

Rudbeckia hirtu Polymnia tetragonothecd Rudbeckia purpurea Cistus helianthemum Coreopsis verticillata Heliocarpus americana Crotalaria juncea Paullinia polyphylla Asclepias vincetoxicum

Dianthus barbatus Annona squamosa Centaurea, moschata Dianthus barbatus

Ipomoea quamoclit Cochlearia coronopus

Ficus sycomorus

Acer pseudo-platanus Philadelphus coronarius

Populus balsamifera Licuala spinosa Croton sebiferum Tamarindus indica Tamarix gallica Tanacetum vulgare Potentilla anserina Jatropha manihot Vicia sativa Artemisia dracunculus Daphne tartonraira Polypodium barometz

^{*} See note to ficus, p. 169.

⁺ Syringa was a name formerly given to the mock-orange; but as Linnaus has made that name the genus to lilac, it must now be exploded.

Tea tree, bohea Thea bohea Tea tree, green Thea viridis Tea, base Rhamnus theezans Tea, New Jersey Ceanothus americanus Tea, base China, with a leaf like Camellia japonica Jamaica pepper Tea, Labrador Ledum latifolium Tea, Oswego; or Indian balm Monarda didyma Tea, Paragua, South Sea, or Yapon Cassine paragua Tea of St. Domingo Capraria bisflora Tea, Siberia Rhododendron chrysanthum Teak-wood; or Indian oak Tectona grandis Teazel, fuller's; or shepherd's rod Dipsacus fullonum* Dipsacus pilosus Teazel, small Tent-wort; or wall rue Asplenium ruta muraria Terra japonica—see Catechu Thistle Carduus Thistle, common corn† Carduus arvensis Thistle, blessed; or carduus be- Cnicus acarna nedictus Thistle, carline,‡ common Carlina vulgaris Atractylis Thistle, distaff Thistle, distaff, yellow Carthamus lanatus Thistle, fish Carduus casabonæ Thistle, globe, common Echinops spinosus Scolymus Thistle, golden Cactus mammillaris Thistle, hedge-hog Thistle, lady's, spotted milk, or holy Carduus marianus Carduus palustris Thistle, marsh

^{*} Dipsacus fullonum (fuller's teasel or teazel) consists of two varieties: the one is the common teazel, which Mr. Aiton calls dipsacus sylvestris (but Dr. Murray gives that name to a different species), with the awns of the palea straight; the other is the cultivated teazel (dipsacus sativus), used by fullers for dressing their cloth, with the awns of the palea hooked or recurved.

⁺ The common corn thistle, according to Linnæus, is called a saw-wort (serratula arvensis); but, according to Curtis, and also Smith (who has lately published a Flora Britannica, 1801), it is brought back to its old name a thistle.—Carduus is distinguished from serratula by its hairy receptacle, bellied calyx, and its prickly scales, and by its stigma less two cleft.

^{*} Carline thistle is said to take its name from the Emperor Charles the Great, whose army was preserved from the plague by the use of the root of it.

Skinner's Etymolo. Ling. Anglicanæ.

Thistle, melancholy Thistle, melon Thistle, soft, or gentle Thistle, solstitial, or Barnaby

Thistle, sow; or hare's lettuce

Thistle, downy sow; or woolly \ Andryala lanata hawkweed

Thistle, torch

Thistle, woolly, or cotton Thistle, woolly-headed

Thongs Thorn apple Thorn, black Thorn, box Thorn, Christ's

Thorn, Egyptian; or acacia

Thorn, evergreen; or pyracantha Thorn, goat's; or tragacanth

Thorn, lily Thorn, purging

Thorn, scorpion's; or gorse Thorn, Spanish hedge-hog Thorn, white; or hawthorn

Thorny plant, burning Thorough wax

Three-leaved grass Thrift; or sea pink Throat-wort, greater Throat-wort, lesser

Throat-wort, blue umbelliferous

Thyme, common Thyme, lemon, (a variety) from

Thyme, dodder of

Thyme, mastich Thyme, mother of; wild thyme; Thymus serpyllum

Tickseed sun-flower

Tickseed Tiger's-foot

Tinker's (Dr.) weed; fever-root; Triosteum perfoliatum

Tithymale

Carduus helenioides Cactus melocactus Carduus dissectus Centaurea solstitialis Sonchus oleraceus

Cactus

Onopordum acanthium Carduus eriophorus Fucus loreus

Datura stramonium Prunus spinosa

Lycium

Rhamnus spina christi Mimosa nilotica

Mespilus pyracantha Astragalus tragacantha

Catesbæa spinosa Rhamnus catharticus Ulex europæus

Anthyllis erinacea Cratægus oxyacantha

Euphorbia Bupleurum rotundifolium

TrifoliumStatice armeria Campanula latifolia Campanula glomerata Trachelium cæruleum Thymus vulgaris

Thymus serpyllum Cuscuta epithymum Thymus mastichina

Coreopsis verticillata Corispermum Ipomoea pes tigridis

Euphorbia tithymaloides

Toad, or paddock-stool Toad-flax; or calve's snout Toad grass Tobacco Tolu tree, balsam of Tomatoes Tongue-blade; or tongue laurel Tooth-ache, or pellitory tree Tooth-pick; or visnaga Tooth-wort; or coral-wort Tooth-wort; or lead-wort Tormentil; or septfoil, common Touch me not; or yellow jasmine Touch me not; or spurting cu-Traveller's joy; or old man's beard Clematis vitalba

Tree everlasting Tree moss Trefoil Trefoil, bean tree Trefoil, common hare's foot Trefoil, stinking bean

Trefoil, hedge-hog

Trefoil, bird's-foot; or lamb toes Trefoil, bird's-foot Trefoil, winged bird's-foot Trefoil, marsh; or bog-bean Trefoil, moon Trefoil, shrub Trefoil of Montpelier, shrub Trefoil, snail Trefoil, thorny, of Candia Trefoil tree; or laburnum Trichomanes

True love; or herb paris

Agaricus Antirrhinum linaria Bufonia tenuifolia Nicotiana tabacum Toluifera balsamum Solanum peruvianum Ruscus hypoglossum Zanthoxylum clava herculis Daucus visnaga Dentaria bulbifera Plumbago europæaTormentilla erecta* Impatiens noli tangere Momordica elaterium

Gnaphalium arboreum Lichen usnea TrifoliumCytisus laburnum Trifolium arvense Anagyris fætida Medicago polymorpha (intertexta)

Lotus ornithopodioides Trifolium ornithopodioides Lotus tetragonolobus Menyanthes trifoliata Medicago arborea Ptelia trifoliata Lotus dorycnium Medicago prostrata Fagonia cretica Cytisus laburnum Asplenium trichomanes Paris quadrifolia

^{*} Black ink which smells like a rose, it is said may be obtained by a decoction of the tormentilla erecta; it is made in the usual method; the proportion is three drachms of vitriol to a decoction made with seven ounces of water. Annales de Chymie, 1791.

True love; or herb paris of America Trillium cernuum Truffles Lycoperdon tuber Trumpet flower; or scarlet jasmine Bignonia radicans Tube rose; or Indian hyacinth Polianthes tuberosa Tulip, common garden Tulipa gesneriana Tulip, wild yellow Tulipa sylvestris Tulip, African; or blood-flower Hæmanthus coccineus Tulip, checquered Fritillaria meleagris Tulip tree Liriodendrum tulipifera Tulip tree, laurel-leaved Magnolia grandiflora Tupelo tree Nyssa aquatica Turkey feather Ulva favonia Turk's cap; or martagon Lilium martagon Turk's head Cactus Turk's turban Ranunculus Turmeric Curcuma longa Turnep Brassica rapa Turnep, French Brassica napus Turn-hoof; or ground ivy Glechoma hederacea Turnsol; or wart-wort Heliotropium Turnsol, sweet-scented Heliotropium peruvianum Turpentine tree Pistacia terebinthus Turpeth garganic Thapsia garganica Tussubakki Camellia japonica Tutsan; or park leaves Hypericum androsænum Twopence, herb; or money-wort Lysimachia nummularia Twa, or twy blade Ophrys ovata Twy blade; or blood-flower Hamanthus coccineus Twining plants—see Class Diadelphia

V

Valerian, or setwall, garden
Valerian, Greek; Jacob's ladder;
or charity
Vanilla, or venelloe
Varnish tree; or poison ash or oak
Venus's comb; or shepherd's needle Scandix pecten
Venus's looking glass
Venus's navel-wort (see navel-wort)
Venus's hair
Venus's hair
Venus's system of the second of t

Vervain Vervain, common; or simpler's joy Verbena officinalis Vervain, mallow Vetch; or tare Vetch, axe, or hatchet Vetch, bitter Vetch, bitter; or heath peas Vetch, jointed-podded bitter Vetch, chichling Vetch, crimson grass Vetch, Clusius's foreign hatchet Vetch, horse-shoe Vetch, kidney; lady's finger; or Anthyllis vulneraria wound-wort Vetch, liquorice Vetch, knobbed-rooted liquorice Vetch, milk Vetch, base milk Vetch, Venetian bitter Vetch, medic Vetchling Vetchling, yellow Viburnum Viburnum, American Vine tree, common Vine, Canadian Vine, black; or black bryony Vine, climbing five-leaved, of Canada; or Virginian ivy, or

Vine, Spanish arbour Vine, white; or white bryony Violet, common Violet, bulbous; or snowdrop Violet, Calathian Violet, dame's; rocket; or queen's Hesperis matronalis July flower Violet, dog's-tooth

Violet, or milfoil, water Viper's grass Virgin's bower, purple

creeper

Verbena

Malva alcea Vicia sativa

Coronilla securidaca

Ervum ervilia Orobus sylvaticus Ervum lens

Lathyrus clymenum Lathyrus nissolia Bisserrula pelecinus

Hippocrepis

Astragalus glycyphyllos Glycine apios Astragalus Phaca Orobus Hedysarum Astragalus onobrychis Lathyrus aphaca Viburnum Lantana

Vitis vinifera Gaultheria procumbens Tamus communis

≻Hedera quinquefolia

Ipomoea tuberosa Bryonia alba Viola odorata Galanthus nivalis Gentiana pneumonanthe

Erythronium dens canis Hottonia palustris Scorzonera Clematis viticella

Viorna, leathery-flowered virgin's bower

Visnaga; or tooth-pick Umbrella tree

Upas, bohon*

Uva ursi; or bear berries

Urine-wort

Uraick—see Wrack

Clematis viorna

Daucus visnaga Magnolia tripetala

Cestrum

Arbutus uva ursi Saxifraga hirculus

Wagebroom Wake robin; or cuckow pink

Wall-flower Walnut tree

Walnut, Jamaica; sandbox tree; \ Hura crepitans

or crackling tree · Walnut, Virginian; or hiccory

Wall-wort; dane-wort; or dwarf elder

Wanhom Ware, sea Wart-wort

Wart-wort; or common sun spurge Euphorbia helioscopia

Wart-wort; or turnsol Wart-wort; or nipple-wort

Water-leaf Water-wort

Wayfaring, or pliant mealy tree Weed, sweet; or wild liquorice Weld; wold; or base rocket

Wheat, common lammast

Protea argentea Arum maculatum + Cheiranthus cheiri Juglans regia

Juglans alba

Sambucus ebulus

KampferiaFucus vesiculosus

Psoralia

HeliotropiumLapsana communis HydrophyllumElatine hydropiper Viburnum lantana Capraria biflora

Reseda lutea Triticum hybernum

^{*} The romantic stories of the excessive poison of the bohon upas, are said not to be well founded.

⁺ The root of the arum maculatum, which is a native of Britain, in its recent state is very acrimonious, but when thoroughly dried, becomes a farinaceous aliment, and may be made into wholesome bread; it is also prepared as a starch; and when dried and powdered, it is used by the French to wash the skin, as a cosmetic, which is sold at a high price under the name of Cypress powder: these roots are also said to possess a saponaceous quality, and have been used instead of soap, for washing linen. 1 See berberry.

Wheat, buck or beech; * brank; Polygonum fagopyrum or helxine Melampyrum pratense Wheat, meadow cow Wheat, Egyptian Triticum compositum Wheat, Trukey; or Indian maize Zea mays Whin; furze; or gorse Ulex europæus Whin, petty; cammock; or rest Ononis antiquorum Genista anglica Whin, petty; or small broom Crassula imbricata Whip-thong tree Fucus nodosus Whistles, sea White beam; white leaf tree; \ Cratagus aria or aria theophrasti Bignonia leucoxylon White, or milk wood Whitlow grass Draba Whitlow grass, common Draba verna Saxifraga tridactálites Whitlow grass, rue-leaved Whortle-berry; red-worts; Vaccinium myrtillus bilberry Whortle-berry; or bladder nut, Whortle-berry, with flowers single Vaccinium vitis idaea Whorts, bog or moor; or cran-Vaccinium oxycoccos Whorts, Spanish red; or strav Arbutus unedo berry tree Wicken; quickbeam; mountain Sorbus aucuparia ash; or roan tree Cneorum tricoccon Widow-wail Fritillaria meleagris Widow, weeping Willow Salix Epilobium angustifolium Willow, French; or willow herb Willow, golden, or yellow Salix vitellina Willow, spiked, of Theophrastus Spiraa salicifolia Myrica gale Willow, or gale, sweet Willow herb; or purple loosestrife Lythrum salicaria Willow herb; or yellow loosestrife Lysimachia vulgare

^{*} Buck wheat is probably a corruption for teech wheat, the seeds of each being similar, and from the old name fagopyrum.—See beech wheat.

Skinner's Etymolo. Ling. Anglicinæ.—Universal Mag. for Nov. 1786, p. 238.

Willow herb, rosebay Willow, weeping Wind-flower; or anemone Wind-seed Winter-berry

Winter-bloom Winter-green, common

Winter-green, ivy-flowering Winter-green, with chickweed

flowers

Woad; or pastel, common Woad, wild; or dyer's or yellow

Wolf's bane; or aconite Wolf's claw

Woodbind; or honeysuckle Woodbind, Spanish; or arbour

Wood of life; or lignum vitæ

Woodroof Wood-waxen; or dyer's broom

Wooginoos Worm-grass

Worm-seed, officinal

Wormwood

Wormwood, Roman or Pontic Wormwood, sea

Woundwort of Achilles Woundwort; or kidney vetch Woundwort, clown's; or allheal Woundwort; consound, Sara-

cen's; or golden rod Woundwort, true Saracen's

Wrack

Wrack; or uraick grass

Epilobium angustifolium Salix babylonica Anemone Arctotis aspera Prinos verticillatus Azalea

Pyrola rotundifolia Kalmia

Trientalis europæa

Isatis tinctoria

Reseda luteola

A conitumLycopodium

Lonicera periclymemum

} Ipomoea tuberosa

Guaiacum officinale Asperula odorata Genista tinctoria Brucea antidysenterica Spigelia anthelmia Artemisia santonica Artemisia absinthium Artemisia pontica Artemisia maritima

Wormwood, wild; or base fever- Parthenium hysterophorus

Achillea Anthyllis vulneraria Stachis palustris

Solidago virga aurea

Senecio sarracenicus Fucus

Yam, or yaum; or Indian po- Dioscorea sativa

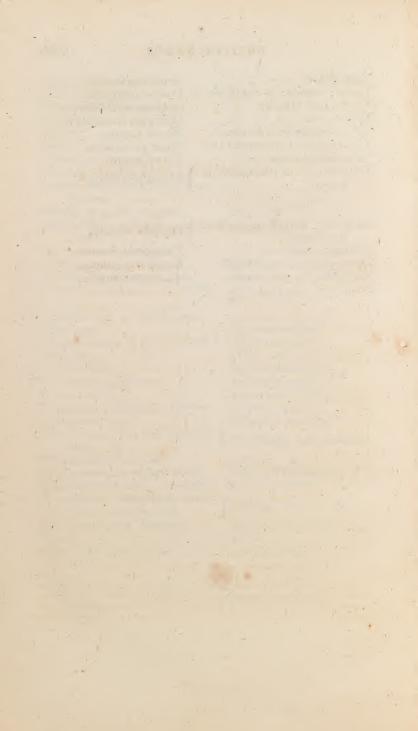
Zostera marina

Yam, Pelew Arum esculentum Yapon; cassina; or South sea tea Cassine paragua Yarrow (see Milfoil) Yellow-root Yellow-weed; or wild woad Yerva mora; or golden rod tree Yew-tree, common Yellow-wort; or perfoliate cen-

Achillea millifolium Hydrastis canadensis Reseda luteola Bosea yerva mora Taxus baccata Chlora perfoliata

Zacintha; warted nipple-wort; \ Lapsana zacintha Zedoary, round Zedoary, long; or galangal Zerumbet; or wild ginger Zoophytes—see page 305.

Kæmpferia rotunda Kæmpferia galanga Amomum zerumbet



A TABLE

OF

DRUGS, VEGETABLE

NOT IN THE INDEXES.

ANISEED Assafœtida (a resin) Balaustines; or pomegranate Bdellium (a gum resin) Benzoin, or Benjamin (a resin) Burgundy pitch (a resin) Camboge, or gamboge (a gum \ Cambogia gutta resin) Canella alba Caranna (a resin) Cardamom seed Cassia fistularis Cassia lignea Castor oil

Caoutchouc; * or gum elastic (a

Pimpinella anisum Ferula assafætida Panica granatum Malachra capitata [Laurus benzoin Terminalia benzoin Pinus abies Canella alba

Amomum cardamomum Cassia fistula Laurus cassia Ricinus communis Jatropha elastica

^{*} Caoutchouc is obtained from the inspissated juice of several other plants besides the jatropha elastica; as from a creeping plant in Prince of Wales's Island, and from another plant in Sumatra, called by W. Roxburg, M. D. urceola elastica .--The Abbe Rochon in his Voyage to Madagascar, printed 1791, says, they have a plant called finguere, a kind of wild fig-tree, which 'produces by incision a milky juice, which, when coagulated, becomes a true elastic gum, like the caoutchouc; that they make flambeaux of it which burn without wick, and give a good light in their nocturnal fishing :- and a fossil hath lately been discovered in the the East Indies exactly resembling the caoutchouc resin in all its principal properties (except that the cohesion of its parts is weaker); it is chiefly found amongst spars and lead-ores; a small quantity of which hath also been lately found in Derbyshire,

Cochinil (see Kermes) Colombo*

Cursuta+

Dragon's blood (a gum resin)

Elaterium

Euphorbium (a gum resin) Frankincence; or olibanum (a \ Juniperus lycia

Galbanum (a gum resin)

Gum ammoniacţ (a gum resin) Gum anime (a resin) Gum arabic (a gum)

Gum baubaul

Gum copal (a resin) Gum elemi§ (a resin)

Gum guajacum (a resin) Gum ladanum (a resin)

Gum lac (a resin)

Cactus cochinillifer

Gentiana purpurea { Dracana draco Pterocarpus draco

Momordica elaterium Euphorbia antiquorum

Bubon galbanum

Ferula

Hymenæa courbaril Mimosa nilotica

-Rhus copallinum Amyris elimifera Guajacum officinale Cistus ladaniferus Rhamnus ziziphus

and is supposed originally to be of vegetable production.—Amber and ambergris, though ranked amongst the fossil bitumen, are also supposed to proceed from vegetables.—Tar is also not only obtained from coal, but issues from copious springs, both in England and Germany.—Barilla or saphora is also found near Bombay, in a bed of ferrugineous clay, and is said to be well adapted for hard soap, medical uses, and plate glass.

* A tincture from the root of colombo is much recommended as an agreeable stomachic bitter.

+ Cursuta is a word which found its way into the Edinburgh Dispensatory, from a Norway ship once bringing a quantity of it to Edinburgh, where the root was used with good success as a bitter; and its etimology is supposed to be from a corruption of skar-site (mountain soot), the Norway name for gentiana purpurea. -It is a native of Savoy.

Smith's Tour on the Continent, v. iii. p. 157, printed 1793.

‡ The gum-ammoniac beetle, called in Morrocco dibben fashook, perforates the plant, and makes incisions, whence the gum oozes out; it seems to be nearly the same insect which Mr. Bruce calls zimb, or dog fly.

§ Bursera gummifera affords a resin no way different from the gum elemi of the

|| Mr. Robert Saunders, Surgeon at Boglepoor in Bengal, in his account of the vegetable and mineral productions of Boutan and Tibet, hath shewn that gum lac is the production or nidus of an insect, called coccos, or kermies lacca, on a species of rhamnus, which is imported into this country from the East Indies under three forms, which are called stick, seed, and shell lac; the first of these exhibits the substance in its natural state.

Gum sandarach, called pounce (a \ Juniperus communis resin) Gum senega (a gum) Gum tragacanth (a gum)

Hermodactyls Jew's ear

Kino (a gum)

Liquidamber; liquidstorax; gum sweet (a resin)

Mace Manna (a gum) Mastich (a resin) Myrobalans Myrrh (a gum resin)

Oleum rhodii Opobalsamum† Opium (a gum resin) Opoponax (a gum resin)

Origanum, oil of Pareira brava Pyrethrum

Sago (the pith of the palm tree) Sagapenum (a gum resin) Salep

Sarcocolla (a gum resin) Sarsaparilla

Sassafras Scammony (a gum resin)

Sebesten; or Assyrian plum Soldanel; or sea bindweed

Spike, oil of

Styrax; storax calamita; or Jew's frankincense (a resin)

Mimosa senegal Astragalus tragacantha* f Colchicum variegatum

Iris tuberosa Peziza auricula

or \ Liquidamber styraciflua

Myristica officinalis Fraxinus rotundifolia Pistacia lentiscus Spondias myrobalanus

AspalathusAmyris opobalsamum Papaver somniferum Pastinaca opoponax Origanum vulgare Cissampelos pareira Anthemis pyrethrum Cycas circinalist Ferula orientalis Orchis morio Penæa sarcocolla Smilax sarsaparilla Laurus sassafras Convolvulus scammonia Cordia sebestena Convolvulus soldanella

Lavandula spica Styrax officinalis

^{*} See note to astragalus.

⁺ See note to amyris.

[‡] Cycas is called a palm, but Linnæus hath placed it under the order filices, in the class cryptogamia; but Mr. Aiton places it amongst the palms.-The true sago powder is from the pith of the cycas circinalis; but what is often sold for such is only the starch of potatoes.

Terebinth; or chio turpentine Terra japonica ^{*} Turpeth-root Venice turpentine (a resin) Pistacia terebinthus Mimosa catechu Area catechu Convolvulus turpethum Pinus larix

FINIS.



ADDITIONAL NOTE TO MYRISTICA.

If you begin to grate a nutmeg at the stalk end, it will prove hollow throughout; whereas if you begin to grate it at the other end, it will prove sound and solid to the last. The centre of a nutmeg consists of several fibres issuing from the stalk only, without adhering to other parts of the fruit; that as the stalk is grated away, they fall out, and leave the nutmeg hollow.—Another caution worth knowing, is, that as the oil of nutmegs is very valuable, it is often extracted from the nuts that are exposed to sale, which renders them of little value; to discover which, force a pin into them, and if good, however dry they appear, the oil will be seen oozing out round the pin.

ERRATA.

	Page	49	for		read	Rohria.
	acted	56		Hediotis		Hedyotis.
		-	760,0	Hossmannie	a	Hoffmannia.
- 1	2. A.		39.0	Scherardia		Sherardia.
		80	3. , ,	Madeola		Medeola.
		91		Cheleri		Cherleria.
		94			dele	Gethyllis.
		110		Taligabea	read	Taligalia.
		111		Rhianthus		Rhinanthus.
		128		Monneria		Monnieria.
				Gotula		Cotula.
		162		Flevillea		Fevillea.

N.B. In the Table of Classes and Orders, at page 38, the 7th order to Pelyandria should be Decagynia, and an 8th order to be added called Polygynia; it will then agree with the class Polyandria.