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## PRINCIPIA BOTANICA:

Or, a Concise and Easy

## INTRODUCTION

## TO THE <br> SEXUAL BOTANY OF LINN AEUS.

## Containing

THE GENERA;
THEIR MODE OFF GHOWTH (AS TREE, SHRUB, OR HERB);
THE KNOWN NUMBER OF SPECJES TO EACH GENUS;
WHERE PRINCIPALLY NATIVE; AND
THE NUMBER INDLGENOUS TO THESBRITISH ISLES:

## 3 Intanger infot cauthat Jorm,

UNDER EACH CLASS AND ORDER;

## And <br> digested alphabetically under sju riacad GENERIC DISTINCTIONS. <br> Together with

## THREE INDEXE

1. Of the LINNなAN GENERA accented, with the BRITISH NAMESY wivy
II. Of such TRIVIAL NAMES as were the GENERA of OLD AUTHORS.
III. Of the BRITISH NAMES, with the LINN EAN GENERA; to whighBRARY are added the SPECIFIC NAMES.

ALSO
A TABLE OF VEGETABLE DRUGS, NOT IN THE INDEXES.

NEW YORK
BOTANICAL
QARDEN
©he Chin exition, ratereted and enlarget,
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................ . . Kings, iv. 33.

N EWARK:
Printed and sold by M. Hage. Sold also by Messrs. LONGMAN, HURST, REES, and ORME, Paternoster Row, LONDON, and all other Booksellers.
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# 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 Darwoin.


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$\qquad$ $4 x+0.8$

## PREFACE.

Iт 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葛 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 a
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

[^0]so deep and lasting impressions in the mind, as the works themselves ; and no part of Natural History is more inviting than the science of Botamy, 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 Na ture 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, \&cc.-Dr. Morsro, 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.

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\text { Trans, of the R. S. Edinb. vol. } 2 .
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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. ${ }^{*}$

[^1]It is hoped also some able enquirer into Na ture, 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.

\author{
Elston, <br> 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 chamœmorus (cloud-berry), and the raccinum oxycoccos (cranberry) are found on peat bogs.


## ADVERTISEMENT.

 In this Edition, the errors of the former are corrected; the number of genera is taken from the sth 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, monocia, diocia, 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 1734, which includes all the genera and species of Linnæus the elder, andLinneus 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 gynun. dria.

## 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 Linnæus, 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

[^2]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 $\dagger$

Therefore to investigate a plant, we must first find the class and order to which it belongs, $\downarrow$ 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

\footnotetext{

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

|  | Classes. | Classes. | Classes. |
| :---: | :---: | :---: | :---: |
| 1 | Monandria. . .... 44 | 10 Decandria .... 511 | 19 Syngenesia .... 1165 |
| 2 | Diandria......... 255 | 11 Dodecandria .. 164 | 20 Gynandria...... 275 |
| 3 | Triandria ...... 618 | 12 Icosandia .... 293 | 21 Monocia ...... 374 |
| 4 | Tetrandria ...... 391 | 13 Polyandria .... 336 | 22 Dioccia ........ 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 |  |
|  | Enneandria .... 28 | 18 Polyadelphia .. 65 | Total.. 10080 |

By this table it appears that, in the vegetable system, nature seems most to delight 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 alsd 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.
$\ddagger$ 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.

ist, The CALYX. 2d, The COROLLA.<br>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. $\dagger$

[^3]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, $\dagger$ 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. $\ddagger$

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


#### Abstract

* 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.


$\dagger$ See germen under pistillum.

[^4]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 carpimus, \&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 Howers 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, $\dagger$ 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).

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

[^5]+ See spadix under receptaculum.

7th. Volva* (from its infolding or involving) the proper calyx to fungusses being membranaceous, and surromnding the stalk or pillar before their expansion.
N. B. It is often difficult to distinguish the calyx from the bractece (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, passifora, \&e.; (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 bracica, 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, \&ic.; and it is said to be above, when it is placed above the germen, as in lonicera, ribes, crategus, \&c. In respect to duration, the corolla either continues till the fruit is ripe, as in mymphaca; or falls off at the first opening of the

[^6]flower, as in actor, 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 campamula, cucumis, and others.

There is also a part which, Linnæus 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, \&cc. $\uparrow$ 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 variefies 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 tropeolum, 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 cither 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, \&ce.

[^7]3d. Stamineous nectaria, such as attend the stamina, and are either scated upon the antheræ, as in adenanthera; or upon the filaments, as in laurus, dictamnus, campamula, \&ic.

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 passiffora, lychnis, 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 clevate 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, threadshaped, 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

[^8](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 bave many petals) as also in a few other plants. But in the class polyandriu, 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 antheræ 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, \&cc. 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 flament, 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

[^9]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 seedvessel; 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.

[^10]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 PERICARPIUM (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.

1st. Capsula, (a little chest or casket) which is frequently succulent whilst green, but when ripe, is a dry husky seedvessel, 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, \&cc. 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.

[^11]2d. Siligua (a pod) is a pericarpium of two valves; but as some are long, others round or broad, Linnaus 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, \&cc.; the silicula (a little siliqua) is a roundish pod, either flat, or spherical, and the length and breadth nearly equal, as in lunaria, drabu, 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, \&ic.

5th. Drupa (from drupæ, 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, \&ic.; and when the drupa is seated below the calyx, it is furnished with an umbilicus, like the pomum.

6th. Ромum (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,

[^12]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, \&e.

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 solamum, \&cc. and are generally placed on footstalks, attached to receptacles within the pulp, as in ribes, \&cc. 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.

[^13]Sth. Stobrlus* (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 middie of the cone, as in pinus, thuya, cupressus, \&ic.
VI. The SEMINA, $\dagger$ (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, testure, appendage, \&c. A seed, properly so called, consists of the five following parts; to which is added the nut and propago.

* Though Linnæus calls strolilus 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 coniferce, amount to seven, (viz.) cupressus, ephedra, equisetum, juniperus, pinus, taxus, and thrya, to which may be added lanksia: 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.
$\uparrow$ Plants, in analogy to animals, may properly be said to be viviparous and oviparous; seeds are vegetable eggs, and buds the living feetusses, or infant plants; some also are only viviparous, others only oviparous.-The foccundity 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 clecampane, 3000 ; of sunflouer, 4000 ; of poppy, 32000 ; of a spike of cat's tail, 10000 and upwards; a single fruit or seed vessel of tobarco 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 echinops ritro, geum rivale, and in many of the mallows: but it doth not appear from his experiments that antheræ were reproduced, yet he mentions that some of the flowers bore seeds. Royal Academy of Sciences, Paris, 1786.

1st. 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 Сotyledons (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, $\dagger$ as in grasses and in cuscuta, \&ce.; 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 Arillus, 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;

[^14]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 calyx, (caliculous) adhering to the top of the seed, like a little crown, and assisting to disperse it by flying, as in scabiosu, 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, gnaphatium, \&cc. 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 luctuca, 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

[^15]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, woaria, \&cc. 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 recep-tacle.-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 zeheat, barley, rye, \&c.

6 th. 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

OFTIIE

## 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-micked; 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.

[^16]
## Essential Character.

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

Рорру.

* 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.

Kough 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.

Dubious.
7 P. Somniferum. Calyxes and capsules smooth, leaves stem-clasping, gashed.

Somniferous.
8 P. Cambricum. Capsules smooth, oblong, stem manyflowered, 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 mudicaule 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 flowerst 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.

1st. Aggregate, properly so called, consisting of such flowers as are formed by the union of several lesser flowers or florets, placed on partial peduncles, $\ddagger$ 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 net.-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 eelandine, larbary, \&c. and in these plants the colour is more fixed, and apt for dying.
$\pm$ 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 fiowers where each floret hath its proper calyx, that is also a perianthium.

2d. Compound aggregate, consisting also of several lesser Howers 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 Horet.

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; $\dagger$ but the essential character of a regular floret consists in the anthere being united so as to form a cylinder, and having a single seed placed upon the receptacle zander 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. $\ddagger$ It is

[^17][^18][^19]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 gencra, that have radiated fowers, 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 glu$m a$; (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, \&cc.

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 phanix, or simple, as in narcissus, \&c.: In this last case

[^20]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. Verticileus,* (a verticil, or whirl) when the flowers are placed in whirls at each joint, round the common stalk ; $\dagger$ 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, \&cc. 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 planes 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 fascicled 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.

Sd. Spica, (a spike) when the flowers, having no partial peduncles, are arranged altemately 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: Linnæus 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 diff $u$ se, 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, \&tc.

Under this head of Inflorescence may be explained Luxuriant 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.

1st. 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, ixc. 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.

[^21]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 Howers 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

[^22]All doulle 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 Howers only; monoclinian plants are such as bear monoclinian flowers only. Androgymus (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 Hlowers, 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 syngenesia, where polygamy gives rise to the orders of the compound flowers.

## 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, \&cc.

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 paits issue from different

[^23]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 (alittle root) is the stringy or fibrous part of the root, descending from the candex; 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. Caulis (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.

[^24]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, \&cc.

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 divsions 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, $\dagger$ (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 bractece, and come under the term fulcra, and often afford essential marks Cor 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. Peduncerlus, the footstalk or support of a flower.
3d. Stiptla, (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, ts in the fig and mulberry; or on the outside, as in the birth, lime, and papilionaceous 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

[^25]Buter 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. Bractee, (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 bractece 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.

[^26]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.*

Estivation. 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

[^27]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; $\dagger$ though in general the true specific character is constant and unchangeable, arising ouly 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. $\ddagger$-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,

[^28]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 Bud (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.

[^29]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.

[^30]
## TABLE

of

## CLASSES AND ORDERS:

According to the Systema Vegetabilium and Supplementum, Plantarum, \&s.
CLASSES. ORDERS.

1 MONANDRIA..... 1 Monogynia. 2 Digynia.
2 DYANDRIA....... 1 Monogynia. 2 Digynia. 3Trigynia.
3 TRIANDRIA. .... 1 Monogynia. 2 Digynia. 3 Trigynia.
4 TETRANDRIA. .. 1 Monogynia. 2 Digynia. 3 Tetragynia.

5 PENTANDRIA. .. 1 Monogynia. 2 Digynia. 3 Trigynia. 4Tetragynia. 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 Hexagynia.
10 DECANDRIA. .. 1 Monogynia. 2 Digynia. 3 Trigynia. 4 Pentagynia. 5 Decagynia.

CLASSES.
ORDERS.
11 DODECANDRIA. 1 Monogynia. 2 Digynia. 3Trigynia. 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.
4. DIDYNAMIA..... 1 Gymnospermia. 2 Angiospermia.

15 TETRADYNAMIA. 1 Siliquosa. 2 Siliculosa.
16 MONADELPHIA. 1 Triandria. 2 Pentandria. 3 Hep tandria. 4 Octandria. 5 Enneandria. 6 Decandria. 7 Endecandria. 8 Dodecandria. 9 Polyandria.

7 DIADELPHIA. .. 1 Pentandria. 2 Hexandria. 3 Oc tandria. 4 Decandria.

38 POLYADELPHIA. 1 Pentandria. 2 Icosandria. 3 Polyandria.

19 SYNGENESIA. .. 1 Polygamia æqualis. 2 Polygamia supertlua. 3 Polygamia frustranea. 4 Polygamia necessaria. 5 Polygamia segregata. 6 Monogamia.
£0 GYNANDRIA. .. 1 Diandria. 2Triandria. 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 sth 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 growti; 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 ather writers: The difference between trees and herbs is-very-

G
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, tropcolum, beta, origanum, lavateı $a_{\text {, }}$ \&c.-Milne's Botan. Dict.

## CLASSES, ORDERS,

AND

## GENERA :

According to the SEXUAL SYSTEM of LINNEUS.

## CLASS I. MONANDRIA.

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(ONE FERTILE* STAMEN OR MALE, HAVING THE ANTHERA.)
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Consisting of such plants as bear monoclinian flowers, fur* nished 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.

[^31]
## 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 | Genera. <br> Growth. <br> species. |  |  | Native of | Species in |
| :---: | :--- | :---: | :--- | :--- | :--- |
| Britain. |  |  |  |  |  |

[^32]

## CLASS II. DIANDRIA.*

(TWO STAMINA, OR MALES.)
Containing three orders.
ORDER I. MONOGYNIA.

(ONE FEMALE.)

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

1st. Flowers beneath, one-petaled, regular.
1 Arouna (cor. none) h 1
2 Chionanthus s 2 South Carolina
3 Eranthemum s 4 Ethiopia
4 Jasminum s 9 India
5 Ligustrum s. 2
6 Nyctanthest s 1. India
7 Olea $\ddagger \quad$ s 6 Spain
8 Phillyrea s 3 Europe
9 Sciuris h 1
10 Syringa s 3 Persia

[^33]+ Nyctanthes sambac (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.
$\ddagger$ The European olive (olea Europœa) 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. Growth. \begin{tabular}{c}
No of <br>
species.

 Native of $\quad$

Species in <br>
Britain.
\end{tabular}

## 2d. Flowers beneath, one petaled, irregular. <br> Fruit capsuled.

| 11 Calceolaria | h 3 | Peru |  |
| :---: | :---: | :---: | :---: |
| 12 Dianthera | h 7 | America |  |
| 13 Gratiola | h 6 | Alps, America |  |
| 14 Justicia | s \& h 30 | Ceylon, \&c. |  |
| 15 Pæderota | h 5 | 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. 9 |
| 20 Wulfenia | 1 | Carinthia |  |

## 3d. Flowers beneath, one-petaled, irregular. <br> Fruit seed-naked.

$\left.\begin{array}{lllll}21 & \text { Amethystea } & \text { h } & 1 & \text { Siberia } \\ & \\ 22 & \text { Collinsonia } \dagger & \text { h } & 1 & \text { Virginia, Canada }\end{array}\right)$

* In utricularia (bladder-wort) the roots are loaded with membranaceous bladders.
$\dagger \mathrm{It}$ hath been observed in many plants, as in lilium, ruta, dictamnus albus, saxifragu, 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, migella, damuscena, spartium scoparium, and some others, the lady seems to make the first advance, by bowing first to one or more of her huslands for a day or two, and then to the others. But what is still more remarkable; the common berberry hath six etect 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.

[^34]

* 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 (circæa lutetiana) was much celebrated in the mys: teries of witchcraft, and for the impious purpose of raising the devil. It grows amidst the mouldering bones and decayed coffins in the ruinouis vaults of Sleaford church, in Lincolnshire.

Botanic Gurden.
$\ddagger$ 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-letle 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 cuca. (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 nutmeg 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 Genileman'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. TRIANDRIA.

(THREE STAMINA OR MALES.)

Containing three orders.

## ORDER I. MONOGYNIA.

(ONE FEMALE.)

| No | Genera. | Growth. | No of species. | Native of | Species in Britain. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1st. Flowers above. |  |  |  |
| 1 | Antholyza | h | 7 | Africa |  |
| 2 | Aristea | h |  | Cape of Good Hope |  |
| 3 | Crocus* | h | 1 | Europe | Brit. 1 |
| 4 | Comocladia | s | 1 | Jamaica |  |
| 5 | Dilatris | h |  | Cape |  |
| 6 | Gladiolus | h | 24 | Europe, Africa |  |
| 7 | Iris | h | 45 | Europe, China | Brit. 2 |
| 8 | Txia | s \& h | 24 | Alps, Africa |  |
| 9 | Macrolobium | h | 1 |  |  |
| 10 | Marica | h | 1 |  |  |
| 11 | Melothria | h | 1 | Virginia |  |
| 12 | Moræa | h | 12 | Africa |  |
| 13 | Oxybathus |  |  | Peru |  |
| 14 | Rohrra | h | 1 |  |  |
| 15 | Tapura | h | 1 |  |  |
| 16 | Tonsella | h | 1 |  |  |

[^35]N.B. This plant hath many varieties.

| No | Genera. | Growth. | No of species | . |
| :---: | :---: | :---: | :---: | :---: |
| 17 | Valeriana* | h | 21 | France, China, \& c |
| 18 | Witsenia | h | 1 | Maura |
|  |  | 2 d . | Flower | rs beneath. |
| 19 | Callisia | h | 1 | America |
| 20 | Cneorum | s | 1 | Spain |
| 21 | Commelina | h | 9 | W. Indies, Africa |
| 22 | Comocladia | s | 2 | America |
| 93 | Hippocratea | h | 1 | America |
| 24 | Loettingia | h | 1 | Spain |
| 25 | Olax | t | 1 | Ceylon |
| 26 | Ortegia |  | 2 | Spain |
| 27 | Polycnemum | h | 1 | France, Italy |
| 28 | Rotala | h | 1 | E. Indies |
| 29 | Rumphia | s | 1 | Amboyna |
| 30 | Syena | h | 1 |  |
| 31 | Tamarindust | t | 1 | E. and W. Indies |
| 32 | Wachendorfia | h | 3 | Africa |
| 33 | Willichia | h | 1 | Mexico |
| 34 | Xiphidium | h | 1 |  |
| 35 | Xyris |  | 1 | India |

Species it Britain.
Brit. 4
2d. Flowers beneath.
h 1 America
s 1 Spain
h 9 W. Indies, Africa
s 2 Ámerica
$h \quad 1$ America
h 1 Spain
1 Ceylon
2 Spain
France, Italy
E. Indies

1 E. and W. Indies
3 Africa
1 Mexico
1 India

3d. Flowers grassy, with valvelets of the calyx-glume.

| 36 | Cyperus $\ddagger$ | h | 32 | Jamaica, Egypt, \&cc. | Brit. 1 <br> Brit. 2 |
| :--- | :--- | ---: | ---: | :--- | ---: |
| 37 | Eriophorum | h | 5 | Europe |  |
| 38 | Fuirena | h | 1 | Surinnam |  |
| 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 |  |
| 43 | Schœenus | h | 13 | Europe | Brit. 7 |
| 44 | Scirpus | h | 41 | America | Brit. 13 |
| 45 | Spartina | h | 1 |  |  |

[^36]
# ORDER II. DIGYNIA.* 

(TWO FEMALES.)

No Genera. Growth. \begin{tabular}{c}
No of <br>
species. Native of

 

Species in <br>
Britain.
\end{tabular}

## 1st. Flowers one-flowered, straggling.

| 46 Agrostis | h 26 | Europe | Brit. 8 |
| :---: | :---: | :---: | :---: |
| 47 Alopecurus | h 8 | Europe, Indies | Brit. 6 |
| 48 Anthistiria $\dagger$ | h | India |  |
| 49 Aristida | h 6 | Jamaica |  |
| 50 Bobartia | h | India |  |
| 51 Cornucopiæ | 2 | Smyrna |  |
| 52 Dactylis | h 5 | Virginia | Brit. 2 |
| 53 Lagurus | h 2 | Italy |  |
| 54 Milium | h 8 | Europe | Brit. 2 |
| 55 Muhlenbergia | h 1 |  |  |
| 56 Panicum $\ddagger$ | 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 | 9 | Europe | Brit. 1 |

[^37]| No | Genera. | Growth. | $\begin{aligned} & \text { No of } \\ & \text { species. } \end{aligned}$ | Native of | Species in Britain, |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2d. Flowers two-flowered, straggling. |  |  |  |  |  |
| 63 | Aira | h | 13 | Europe | Brit. 7 |
| 64 | Melica* | h |  | Europe | Brit |
| 65 | Perotis | h |  | E. Indies |  |

3d. Flowers many-flowered, straggling.

| 66 Avena $\dagger$ | 21 | Siberia | Brit. 6 |
| :---: | :---: | :---: | :---: |
| 67 Arundo $\ddagger$ | s \& h 6 | Europe | Brit. 4 |
| 68 Briza | h 5 | Europe | Brit. 2 |
| 69 Bromus | h 26 | Europe | Brit, 12 |
| 70 Festuca§ | h 19 | Europe | Brit. 11 |
| 71 Poa | h 34 | Europe | Brit. 14 |
| 72 Uniola | h | 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 syphondylium, 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 be-
tween the other two florets, gives the essential character.
$\dagger$ 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.
$\ddagger$ 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'slaies. 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 fuitans (flote fesure grass) are gathered yearly in Poland, and from thence sentinto 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. \begin{tabular}{c}
No of <br>
Growth. species,

 Native of $\quad$

Species in <br>
Britain.
\end{tabular}

4th. Flowers spikes, with receptacle awled.

| 73 Cynosurus | h | 13 | Europe | Brit. 3 |
| :--- | ---: | ---: | :--- | ---: |
| 74 Elymus | h | 10 | Europe, America | Brit. 3 |
| 75 Hordeum* | h | 8 | Italy | Brit. 3 |
| 76 Lappago | h | l | Europe | Brit. 4 |
| 77 Lolium | h | 4 | Europe |  |
| 78 Secale | h | 4 | Asia, Europe | Brit. 3 |

ORDER III. TRIGYNIA,
(ThREE FEMALES.)

## 1st. Flowers beneath.

80 Eriocaulon<br>h 5 Brazils<br>Brit. 1<br>81 Holosteum<br>h 4 Jamaica<br>82 Koenigia<br>h 1 Iceland

* French, or pearl larley, 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 cifferent 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 hylernum) 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 eolipile 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, till 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.

| No | Genera, | Growth. | $\begin{gathered} \text { No of } \\ \text { species } \end{gathered}$ | Native of | Species is Britain. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 83 | Lechea |  | 9 | Canada |  |
|  | Meborea (co | none) | h 1 |  |  |
| 85 | Minuartia | h | 3 | Spain |  |
| 86 | Mollugo | h |  | Ceylon, \&c. |  |
| 87 | Montia | h | 1 |  | Brit. 1 |
| 85 | Polycarpon | h | 2 | Italy | Brit. 1 |
| 89 | Queria | h | 2 | Spain |  |
|  | Triplaris | s |  | 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 Genera. | $\mathrm{N}^{\circ}$ of |
| :---: |
| Growth. species. Native of |
| Species in |
| Britaim |

1st. Flowers one-petaled, one-seeded, berieatt.
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.) 1
2d. Flowers one-petaled, one-seeded, above, aggregate.

| 8 Allionia |  | 2 | America | Brit. ${ }^{\text {a }}$ |
| :---: | :---: | :---: | :---: | :---: |
| 9 Cephalanthus | s | 1 | W. Indies |  |
| 10 Dipsacus | h | 4 | France |  |
| 11 Knautia | h | 4 | Archipelago |  |
| 12 Labatia | h | 1 |  |  |
| 13 Scabiosa | h | 34 | Italy, \&c. | Brit. 3 |

sd. Flowers one-petaled, one-fruited, $\uparrow$ beneath.
14. Egiphila
15 Aquartia
s 1 Martinico
s 1. America

[^38]| No | Genera. | Growth. | $\begin{aligned} & \text { No of } \\ & \text { species. } \end{aligned}$ | Native of | Species in Britain. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 16 | Blæria | s | 5 | Cape of G. Hope |  |
| 17 | Buddleia | s | 4 | W. Indies |  |
| 18 | Callicarpa | $s$ | 3 | Virginia, Japan |  |
| 19 | Centanculus | h | 1 |  | Brit. 1 |
| $\underline{\square}$ | Exacum | h | 4 | India |  |
| 21 | Lasiostoma | h | 1 |  |  |
| 22 | Myrmecia | h | 1 |  |  |
| 23 | Penæa | s | 8 | Athiopia |  |
| 24 | Plantago | h | 24 | Europe | Brit. 6 |
| 25 | Polypremum | h | 1 | Carolina |  |
| 20 | Scoparia | h | 3 | America |  |

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

| 27 | Catesbæa | s | 1 | Carolina |
| :--- | :--- | :---: | :--- | :--- |
| 28 Chomelia | s | 1 |  |  |
| 29 Embelia | s | 1 |  |  |
| 30 Hediotis | s \& h | 6 | Ceylon |  |
| 31 Hossmannia | s | 1 |  |  |
| 32 Ixora | s | 3 | India, America |  |
| 33 Mannettia | h | 1 | Mexico |  |
| 34. Mitchella | s | 1 | Carolina |  |
| 35 Oldenlandia* | h | 10 | America, Cape, \&c. |  |
| 36 Pavetta | s | 2 | India |  |
| 37 Petesia | s | 0 | Jamaica |  |
| 38 | Sanguisorba $\dagger$ | h | 3 | Canada |

5th. Flowers one-petaled, two-grained $\ddagger \ddagger$ beneath.

| 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.
$\dagger$ In sanguisorva officinalis (common wild burnet) are found small red tubercles on the reot, which dyers frequently use instead of cochineal; and it is said they ate also found on the roots of pimpinella saxifraga, (burnet saxifrage).
$\ddagger$ 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.

| No. Genera. | wth. |  | . Native of | Species in Britain. |
| :---: | :---: | :---: | :---: | :---: |
| 6th. Flowers one-petaled, two-grained, above, starred.* |  |  |  |  |
| 41 Asperula | h |  | Europe | Brit. 2 |
| 42 Crucianella | h |  | France, Italy |  |
| 43 Diodia | h | 1 | Virgina |  |
| 44 Galium | h |  | Europe | Brit. 11 |
| 45 Knoxia | h |  | Ceylon |  |
| 46 Rubia | h |  | France, Italy | Brit. 1 |
| 47 Scherardia | h |  | Europe | Brit. 1 |
| 48 Siderodendrum | h | 1 |  |  |
| 49 Spermacoce | h |  | Carolina |  |

7th. Flowers one-petaled, four-grained, beneath.
50 Siphonanthus s 1 India

8th. Flowers four-petaled, beneath.

| 51 Ammannia | h | 5 | Jamaica |  |
| :--- | ---: | :--- | :--- | :--- |
| 52 Banksia | h | 6 | New Holland |  |
| 53 Blackburnia | h | 1 |  |  |
| 54 Curtisia | s | 1 | Cape |  |
| 55 Epimedium | h | 1 | Alps | Brit. 1 |
| 56 Fagara | s | 5 | Jamaica |  |
| 57 Hartogia | s | 1 | Cape |  |
| 58 Monetia |  | 1 |  |  |
| 59 Orixa |  | 1 | Japan |  |
| 60 Othera | s | 1 | Japan |  |
| 61 Ptelea | s | 2 | America |  |
| 62 Rhacoma | s | 1 | Jamaica |  |
| 63 Samara | s | 1 | E. Indies |  |
| 64 Skimmia |  | 1 | Japan |  |

[^39]No Genera. Growth. \begin{tabular}{l}
No of <br>
Species. Native of

 

Species in <br>
Britaiti
\end{tabular}

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. Hollaud |
| 68 | Ludwigia | h | 3 | Virginia |
| 69 | Santalum | t | 1 | India |
| 70 | Trapa | h | 2 | Europe |

## 10th. Flowers incomplete, beneath.

| 71 | Alchemilla | h | 4 | Sweden |  |
| :--- | :--- | ---: | :--- | :--- | :--- |
| 72 | Camphorosma | s | 5 | Spain, Italy |  |
| 73 Cometes | h | 1 | Surat |  |  |
| 74 Dorstenia | h | 4 | America |  |  |
| 75 Krameria | s | 1 |  |  |  |
| 76 Louichea | h | 1 | Japan |  |  |
| 77 Nigrina |  | 1 | Jarindies |  |  |
| 78 | Rivina | s | 4 | W. Inine |  |
| 79 | Salvadora | s | 1 | Persian Gulf |  |
| 80 Struthiola | s | 3 | Cape |  |  |

## 11th. Flowers incomplete, above.

| 81 Ácæna | s | 1 | Mexico |
| :---: | :---: | :---: | :---: |
| 82 Elæagnus | s | 9 | Spain, Japarr |
| 83 Gonocarpus |  | 1 | Japan |
| 84 Isnardia | h | 1 | China, America |
| Sirium | s |  |  |

[^40]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 cinchone officinalis, and the cornus mascula is the cornelian cherry; which some persons are fond of eating, as having an agreeable acid.

## ORDER II. DIGYNIA. <br> (TWO FEMALES.)

| No | Genera. | Growth. | $\mathrm{N}^{\mathrm{o}}$ of Species | . Native of | Species in Britain. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| \$6 | Alphanes | h | 1 |  | Brit. 1 |
| 87 | Bufonia | h | 1 |  | Brit. 1 |
| 88 | Cruzita |  |  | Spain, America |  |
| 89 | Cuscuta* | h |  | Virginia, Europe | Brit. 1 |
| 90 | Galopina |  | 1 |  |  |
| 91 | Gomozia |  | 1 | Granada |  |
| 92 | Hamamelis | s |  | Virginia |  |
| 93 | Hypecoum | h | 3 | Archipelago |  |
| 94 | Nertera | h | 1 |  |  |

## ORDER III. TETRAGYNIA.

 (FOUR FEMALES.)| 95 | Coldenia | h | 1 | India |
| :--- | :--- | ---: | :--- | ---: |
| 96 | Ilex $\dagger$ | t | 10 | Asia |
| 97 | Myginda | s | 1 | America |$\quad$ 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.* <br> (ONE FEMALE.) <br> $\mathrm{N}^{\circ}$ of <br> No Genera. Growth. Species. Native of Species in

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

| 1 | Mirabilis | h | 3 | Mexico |
| :--- | :--- | ---: | ---: | :--- |
| 2 Plumbago | h | 4 | Spain, Italy, Zeylon |  |
| 3 Weigela |  | 1 | Japan |  |
| 4. Xystris | s | 1 |  |  |

- 2d. Flowers one-petaled, beneath, two-seeded. Rough-leaved.
5 Cerinthe h 2 Europe
6 Messerschimidia s\&h 2 Dauria
3d. Flowers one-petaled, beneath, four-seeded.
Rough-leaved.

| 7 | Anchusa | h | 8 | America | Brit. 1 |
| ---: | :--- | ---: | ---: | :--- | ---: |
| 8 Asperugo | h | 2 | Egypt | Brit. 1 |  |
| 9 Borago | h | 5 | Africa, India | Brit. 1 |  |
| 10 | Cynoglossum | h | 14 | Virginia, Peru | Brit. 1 |
| 11 Echium | s \& h 16 | Italy, \&cc. | Brit. 2 |  |  |
| 12 Heliotropium | s \& h 17 | Europe, India, Peru |  |  |  |

[^41]| No | Genera. | Growth | $\begin{aligned} & \text { No of } \\ & \text { species. } \end{aligned}$ | Native of | Species in Britain, |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 13 | Lithospermum | h | 13 | Europe, Peru | Brit. 3 |
| 14 | Lycopsis | h | 7 | Virginia, Egypt | Brit. 1 |
| 15 | Myosotis | h \& s | 9 | Virginia, Peru | Brit. 1 |
| 16 | Onosma | h | 3 | Sibe:ia, India |  |
| 17 | Pulmonaria* | h | 6 | Siberia | Brit. ${ }^{2}$ |
| 18 | Symphytum |  | 3 | India | Brit. $\%$ |

## 4th. Flowers one-petaled, beneath, five-secded.

19 Nolana
h
5 Peru

## 5th. Flowers one-pctaled, beneath, seed-covered. Capsules.

| 20 Allamanda | h | 1 | Surinam |  |
| :--- | ---: | ---: | :--- | ---: |
| 21 Anagallis | h | 6 | Europe, Peru | rit. Q |
| 22 Androsace | h | 6 | Austria |  |
| 23 Aretia | s | 3 | Swiss, Alps |  |
| 24 Azalea | s | 6 | India, Lapland | Brit. 1. |
| 25 Brossæa | s | 1 | America |  |
| 26 Chironia | s | 10 | Cape |  |
| 27 Convelvulust | h | 68 | W. Indies, Peru, \&c. | Brit. 3 |
| 28 Coris | h | 1 | Europe |  |
| 29 Cortusa | h | Q | Alps |  |
| 30 Cyclamen $\ddagger$ | h | 4 | Europe, India |  |
| 31 Datura§ | h | 8 | China, Peru | Brit. 1 |
| 32 Diapensia | h | 1 | Lapland |  |

[^42]+ Convolvulus jalapa (jalap) receives its name from Jalapa, a town in New Spain in South America, where it was first discovered - Convolvulus scammonia (scammony) is also a cathartic, and much of the same nature as jalap, but rather stronger. The cornbind that is so very troublesome a weed in gardens and the fields, and pemetrates so very deep into the ground, is the smaller cornbind, convolvulus arvensis.
$\ddagger$ 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. | $\begin{aligned} & \text { Novof of } \\ & \text { species. } \end{aligned}$ | . Native of | Species in |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 33 | Dodecatheon* | h | 1 | Virginia |  |
| 34 | Dorœena |  | 1 | Japan |  |
| 35 | Epacris | h | 3 | New Zealand |  |
| 36 | Galax | h | 1 | Virginia |  |
| -37 | Geniostoma | h | 1 |  |  |
| 38 | Hottonia | h | 2 | India | Brit. 1 |
| 39 | Hydrophillum | h | 2 | Virginia, Canada |  |
| 40 | Hyoscyamus $\dagger$ |  | 7 | Syria | Brit. 1 |
| 41 | Ipomoea | h | 28 | E. \& W. Indies, Peru |  |
| 42 | Lisianthus | s | 9 | Jamaica, Peru |  |
| 43 | Lysimachia | h | 10 | Levant, Japan | Brit. 4 |
| 44 | Menyanthes $\ddagger$ | h | 4 | Ceylon, | Brit. 2 |
| 45 | Nicotiana§ | h \& s | 10 | America, Peru |  |
| 46 | Ophiorhiza | h | 2 | E. Indies, America |  |
| 47 | Oribasia | h | 1 |  |  |
| 48 | Patagonula | s | 1 | America |  |
| 49 | Phlox | h | 11 | America, Peru |  |
| 50 | Porana | s | 1 | E. Indies |  |
| 51 | Polemonium | h | 5 | America | Brit. 1 |
| 52 | Primula\\| | h | 13 | Europe | Brit. 3 |

* In the beautiful flower of the dodecathean 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 bractece, page 33.
$\dagger$ 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.
$\ddagger$ Bucklean, boglean, or logbane (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 taluacum (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

| K゙o | - Genera. | Growth. | $\mathrm{N}^{\mathrm{o}}$ of species. | Native of | Species ins Britaìn |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 53 | 3 Retzia | s | 1 | Cape |  |
| 54 | 4. Sheffieldia | h | 1 |  |  |
| 55 | 5 Soldanella | h | 1 | Alps |  |
| 56 | 6 Spigelia | h | 2 | Maryland |  |
| 57 | 7 Stephanium | h | 1 |  |  |
| 58 | 8 Theophrasta | s | 1 | America |  |
| 59 | 9 Verbascum | h | 12 | Italy, Phenicia | Brit. 5 |
| 60 | Uncaria | h | 1 |  |  |
| Follicles.* |  |  |  |  |  |
| 61 | 1 Cameraria | s | 2 | W. Indies |  |
| 62 | Ceropegia | h | 4 | Malabar |  |
| 63 | Echites |  | 21 | W. Indies, Peru, Jama |  |
| 64 | 4 . Nerium | h | 10 | Ceylon, Peru |  |
| 65 | Plumeria | s | 4 | W. Indies |  |
| 66 | 6 Tabernæmont |  | 10 | E. \& W. Indies, Peru |  |
| 67 | 7 Vinca | s \& h | 5 | Madagascar | Brit. 2 |
| Berries. |  |  |  |  |  |
| 68 | 8 Arduina | s | 1 | Cape |  |
| 69 | 9 Atropa | s \& h | 10 | Europe, Peru | Brit. |
| 70 | Bassovia | h | 1 |  |  |
| 71 | 1 Bertiera | h | 1 |  |  |
| 79 | Bladhia |  | 3 | Japan, 8c. |  |
| 73 | 3 Blunsfelsia | 5 | 1 A | America |  |
| 74 | 4 Camax | hr | 1 |  |  |
| 75 | 5 Capsicum $\dagger$ | h \& s | 7 | E. \& W. Indies, Peru |  |

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 add's to the perfection of the flower.

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* See follicle under pericarpium; as also lerry and drupe.
```

$\dagger$ Capsicum anmuum (Guinea pepper) hath many varieties.-In Ceylor they have a red pepper called chilly, which it is said makes cayenne, or Kiang pepper.-Buz 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 bealth. See note to cayenne pepper in index.

| No | Genera. G | Growth. | $\begin{aligned} & \text { No of } \\ & \text { species. } \end{aligned}$ | Native of | Species its Britain. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 76 | Carissa | s | 2 | India |  |
| 77 | Cerbera | s | 3 | Brazils |  |
| 73 | Cestrum | s | 11 | W. Indies, Peru |  |
|  | Chrysophyllum | m t | 3 | W. Indies |  |
| 80 | Cordia | s | 6 | W. Indies |  |
| 81 | Cryptostomum | m h | 1 |  |  |
| 82 | Ehretia | t | 4 | W. Indies |  |
| 83 | Ellisia | h | 1 | Virginia |  |
| 84 | Fagrea |  | 1 | Zeylon |  |
|  | Gynopogon | s | I |  |  |
| 86 | Jacquinia | s. \& h | 3 | America |  |
| 87 | Laugeria | s | 3 | America, Pert |  |
|  | Lightfootia | h | 3 |  |  |
| 89 | Lycium | s | 16 | Spain, Africa, Pert |  |
| 90 | Menais | s | 1 | America . |  |
| 91 | Myrsine | s | 1 | Africa |  |
| 92 | Pæderia | s | 1 | India |  |
| 93 | Physalis* | h | 14 | Spain, Peru |  |
| 94 | Randia | s | 4 | America, Peru |  |
| 95 | Rauvolfia | s | 5 | W. Indies, Peru |  |
| 96 | Schwenkfeldia | a | 1 |  |  |
| 97 | Sideroxilon | t | 9 | Ethiopia |  |
| 98 | Solanum $\dagger$ | h \& s | 85 | America, Peru, \&c. | Brit. 2 |
| 99 | Strychnost | t | 4 | India, Peru |  |
| 100 | Toumefortia | s \& h | 13 | W. Indies, Peru |  |
| 101 | Varronia | s | 6 | America |  |

[^43]No Genera. Growth. species. Native of \begin{tabular}{c}
No of

 

Species in <br>
Britain。
\end{tabular}

## Drupes.

| 102 Ardisia | s | 1 | Madaira |
| :--- | :---: | :--- | :--- |
| 103. Ignatia | h | i | India |
| 104. Tektona* | t | 1 | Ceylon, E. Indies |

6th. Flowers one-petaled, above. Capsules.

| 105 | Bacopa | h | 1 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 106 | Bellonia | s | 1 | America |  |
| 107 | Campanula $\dagger$ | h | 68 | America, Peru | Brit. 8 |
| 108 | Chimarrhis | h | 1 |  |  |
| 109 | Cinchona | s | 13 | Peru |  |
| 110 | Macrocneum | s | 4 | Jamaica, Peru |  |
| 111 | Phyteuma | h | 6 | Europe | Brit. 1 |
| 112 | Portlandia | s | 4 | Jamaica, Peru |  |
| 113 | Roella | s \& h | 5 | Africa |  |
| 114 | Rondeletia | s | 4 | W. Indies, Asia |  |
| 115 | Samolus | h | 1 | Europe | Brit. 1 |
| 116 | Trachelium | h | 3 | Italy |  |
| 117 | Virecta |  | 1 |  |  |
| 118 | Jeffersonia $\ddagger$ | s | 1 | Georgia |  |

## Berries,

| 119 | Bæobotrys |  | 1 |  |
| :--- | :--- | ---: | ---: | :--- |
| 120 | Cephrelis | s | 1 |  |
| 101 | Chiococca | s | 3 | Jamaica, Perui |
| 122 | Coffea§ | s | 12 | Arabia, W. Indies, 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.
$\dagger$ 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.
$\ddagger$ 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 formes having four clefts, berries one-seeded; the latter five clefts, two-seeded.

| No | Genera. | Growth. | $\mathrm{N}^{\mathrm{N}}$ of species. | - Native of | Species in Britain. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Gardenia* | s | 11 | India, Coromandel, |  |
|  | Genipa | s | 9 | America, Peru |  |
| 126 | Hamellia | s | 1 | America |  |
| 127 | Lonicera | 9 | 16 | Alps, \&ic. | Brit. 1 |
| 128 | Matthiola | s | 1 | America |  |
| 129 | Morinda | s \& h | 9 | America |  |
| 130 | Mussæenda | s | 2 | India |  |
| 131 | Plocama | s | 1 | Canary Islands |  |
| 132 | Psychotria $\dagger$ | h | 30 | Jamaica, Asia, Peru |  |
| 133 | Triosteum | h | 2 | America |  |
| Drupes. |  |  |  |  |  |
| 134 | Scævola | s |  | India |  |

7th. Flowers three-petaled, above。 Capsules.
135 Strelitzia $\quad$ s 1 Cape

8th. Flowers five-petaled, beneatlo
Capsules.

| 136 | Calodendrim | t | 1 | Cape |
| :---: | :---: | :---: | :---: | :---: |
|  | Cedrela $\ddagger$ | s | 1 | America |
| 138 | Claytonia | s | 3 | Virginia, Siberia |
| 139 | Diosma§̧ | 8 | 18 | Africa, \&c. |
| 140 | Hovenia |  | 1 | Japan |
| 141 | Itea | s | 1 | Virginia |
| 142 | Roridula | s | 1 | Cape |
| 143 | Sauvagesia | h | 1 | Jamaica |

[^44]$\ddagger$ This genus cedrela is very similar to swietenia.
§This genus diosma is various in sex, nectaries, and capsules.

| No | Grow | No of species. | Native of | Species in |
| :---: | :---: | :---: | :---: | :---: |
| Berries. |  |  |  |  |
| 144 | Aquilicia |  | India |  |
| 145 | Ceanothus |  | America, Asia, Africa |  |
| 14.6 | Celastrus | 16 Vi | Virginia, Æthiopia |  |
| 147 | Euonymus | 7 Vi | Virginia, Japan | Brit |
| 148 | Hirtella | Ba | Basil |  |
| 149 | Rhamnus* | 27 Eu | Europe, Judea, Alps | Brit |
| 150 | Vitis $\dagger$ | 11 Eu | Europe, Japan |  |
| 151 | Mangifera, $\ddagger$ drupe t | In | India |  |
| 152 | Corynocarpus, nut h | Ne | New Zealand |  |
| 153 | Brunia, seed 1 | Af | Africa |  |
| 154 | Kuhnia, seed 1 | W | W. Indies |  |
| 155 | Nauclea, seed 1 t\& s | Or | Oriental |  |
| 156 | Ruyschia | 1 |  |  |
| 157 | Caroxylon, seed 1 | 1 |  |  |
| $158$ | Elæodendron, drupe | 1 Or | Oriental |  |

9th. Flowers five-petaled, above.

| 159 | Argophillum | h | 1 |
| :--- | ---: | :--- | :--- |
| New Caledonia |  |  |  |
| 160 Carpodctus | h | 1 |  |
| 161 Conocarpus, seed 1 s | 3 | W. Indies |  |


#### Abstract

* From the berries of the common luckthorn (rhamnus catharticus) is made a wery fine green colour, called by the French, verd-de-vessie, much esteemed by miniature painters.-Rhamnus theezans is used by the lower people in China instead of tea.-The fruit of the rhamnus zizyphus, (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 adrance 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. ]


[^46]| No | Genera。 G | $\begin{gathered} \stackrel{\text { No of }}{\text { Growth. }} \text { species. } \end{gathered}$ | Native of | Species in Britain. |
| :---: | :---: | :---: | :---: | :---: |
| 162 | Cyrilla, capsules | s 1 | Carolina |  |
| 163 | Escallonia | h | America |  |
| 164 | Gronovia, capsules | h | Vera Crux |  |
| 165 | Hedera, berry | 2 | Canada | Brit. 1 |
| 166 | Heliconia, capsules | es h 4 | Cape |  |
| 167 | Lagoecia, seeds 2 | h | Crete |  |
| 168 | Phylica, berry | 12 | Cape, \&c. |  |
| 169 | Plectronia, berry | \$ 1 | Cape |  |
| 170 | Portulacaria | h |  |  |
| 171 | Ribes,* berry | $\text { s }\left\{\begin{array}{l} \text { curr. } \\ \text { goos. } \end{array}\right\} 6$ | America | curr. 3 |

10th. Flowers incomplete, beneath.
172 Achyranthes, seed 1s 9 India
173 Celosia, capsule h 11 China
174 Chenolea, capsule 1
175 Glaux, capsule h 1 Sea-side Brit. 1
176 Hedycrea, drupe s 1
177 Illecebrum, caps, s\&h 19 E. Indies, Canada Brit. 1
11th. Flowers incomplete, above.
178 Thesium, seed 1 h 17 Alps, \&c. Brit. 1

ORDER II. DIGYNIA.
(two females.)
1 st. Flowers one-petaled, beneath.
179 Melodinus, berry s 1 New Caledonia

180 Rochefortia . 1
181 Schrebera s 1 Cape
182 Steris, berry s 1 Java

[^47]| No | Genera. <br> Growth. species. | Native of | Species in <br> Britain. |
| :--- | :---: | ---: | :--- |
| Follicles*. |  |  |  |

## * See follicle under pericarpium,

+ Apocynum androscomifolium is called the catchfly apocynum, or dogs-lane, from its power in catching small flies by the converging of the anthers, and is thus in part described by Linneeus ; 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 it 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.


## $\ddagger$ Periploca is from the Greek, and means round embracing.

§ Stapelia hirsuta (African swallow-wort) hath a foeted odour 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 corcl ; and according to Dioscorides obtained its name from Gentius a king of Illyria, who discovered its virtues: though sometimes the ranunculus 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.

| No | Genera. | No of <br> Growth. species. | Native of |
| :---: | :---: | :---: | :---: |
| 2d. |  | Flozers five-petaled, above. |  |


| 197 | Anabasis, berry | 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 |

4th. Flowers incomplete.

| 204 Beta | h | 3 | France, Germany | Brit. 1 |
| :--- | ---: | ---: | :--- | :--- |
| 205 Bosea | s | Canaries |  |  |
| 206 Chenopodium* | s h 20 | Europe | Brit. 9 |  |
| 207 Gomphrena | h | 8 | India, Brasil |  |
| 208 Herniaria | s \& h | 4 | Spain | Brit. 2 |
| 209 Microtea | h | 1 |  |  |
| 210 Salsola | s \& h | 16 | Europe | Brit. 2 |
| 211 Ulmus | t | 6 | America | Brit. 1 |

5th. Flowers five-petaled, above, troo-seeded, umbelled. $\dagger$ A. With an universal and partial involucre.

| 212 Astrantia | h | 5 | Alps |  |
| :--- | :--- | :--- | :--- | :--- |
| 213 Danaa | h | 1 | Alps |  |
| 214 Eryngium | h | 9 | Alps | Brit. 2 |

## * Chenopodium-see atriplex.

$\uparrow$ 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, dicecia, 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.

| Na | Genera. |  |  | Growth of |
| :--- | ---: | ---: | ---: | ---: |
| Npecies. | Native of | Species in <br> Britain. |  |  |
| 215 | Hydrocotyle | h | 13 | America, China | Brit. 1

Flowers radiate; * florets of the disc abortive.

| 219 Artedia | h | 1 | Libanus |  |
| :--- | :--- | :--- | :--- | :--- |
| 220 Caucalis | h | 7 | India | Brit. 2 |
| 221 Daucus | h | 6 | Europe | Brit. 1 |
| 222 Echinophora | h | 2 | Apulia | Brit. 1 |
| 223 Heracleum | h | 7 | Siberia, Alps | Brit. 2 |

Flowers radiate; florets of the radius abortive.
224 Oenanthe $\dagger$ Brit. 5

Flowers radiate, all fertile.
225. Tordylium, h 7 Syria, Crete Brit. 3

Flowers flosculous $; \downarrow$ florets of the disc abortive.
226 Laserpitium h 14 Europe
227 Peucedanum h 7 Alps, Japan
Flozers flosculous, all fertile.

| 228 Ammi | h | 3 | Europe |  |
| :--- | :---: | ---: | :--- | :--- |
| 299 Angelica | h | 5 | Archangel | Brit. 1 |
| 230 Anthamanta | h | 9 | Sicily, Crete, China | Brit. 1 |
| 231 Bubon | s h | 4 | Macedonia | Brit. 1 |
| 232 Bunium | h | 1 |  | Bthiopia |
| 233 Bupleurum | s \& h 17 | Ethit. |  |  |
| 234 Cachrys | h | 3 | Sicily |  |
| 235 Conium | h | 4. | Africa | Brit. 1 |

[^48]| $\mathbb{N}^{\text {d }}$ | Genera. | Growth. | $\begin{aligned} & \text { Noo of } \\ & \text { species. } \end{aligned}$ | Wative of | Species it Britaiti' |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 236 | Crithmum* | h | 3 | Pyrenean | Brit. 1 |
| 237 | Cuminum | h | 1 | Egypt |  |
| 238 | Ferula $\dagger$ | h | 9 | Europe, Canada |  |
|  | Haselquistia | h | 2 | Egypt |  |
| 240 | Ligusticum | h | 7 | Austria | Brit. ${ }_{3}$ |
| 241 | Selinum | h | 7 | Germany, Austria | Brit. 1 |
| 242 | Sison | h | 7 | Canada | Brit. 4 |
| 243 | Sium $\ddagger$ | k | 12 | Sicily, Japan | Brit. 3 |

в. Witl onty partial involucres; no universal.

Flowers subradiate; all fertile.
244 平thusa $\quad$ Brit. 2

Flowers radiate; florets of the disc abortive.

| 245 | Coriandrum | ha | 2 | Italy |
| :--- | :--- | ---: | :--- | ---: |
| 246 Scandix | h | 10 | Europe | Brit. i |
| Brit. 4 |  |  |  |  |

Flowers flosculous, all fertile.
247 Cicuta h Brit. 1
248 Imperatoria h 1 Alps Brit. 1
249 Phellandrium h Brit. 1 250 Seseli h 11 Europe

Flowers flosculous; florets of the disc abortive.
251 Chærophyllum s\&h 10 Europe
c. With no involucre; neither universal nor partial. Filowers flosculous; florets of the disc abortive.

| 252 Carum | h | 1 | Europe | Brit. |
| :--- | :--- | :--- | :--- | :--- |
| 253 Smyrnium | hr | 5 | Egypt | Brit. i |

[^49]$\ddagger$ Sium nodiflorum (creeping water parsnep).-See note to sisymbrium.


ORDER III. TRIGYNIA.
(THREE FEMALES.)
1st. Flowers above, five-cleft.

261 Sambucus
262 Viburnum
$\begin{array}{crll}\mathrm{t} \& \mathrm{~h} & 6 & \text { Canada } & \text { Brit. 2 } \\ \mathrm{s} & 19 & \text { Spain, America } & \text { Brit. 2 }\end{array}$
2d. Flowers beneath.

263 Basella
264 Pharnaceum
265 Reichelia
266 Xylophylla\|
h 3 India
h 13 Asia, Africa
h 1
2
Corols five-petaled.

[^50]| Genera. | Growth. | No of | Native of | Species ith |
| :---: | :---: | :---: | :---: | :---: |
| 269 Corrigiola | h | 1 | France |  |
| 270 Drypis | h | 1 I | Italy |  |
| 271 Rhus* | s | 26 | Italy, Spain, Americ |  |
| 272 Salmasia | h | 1 |  |  |
| 273 Sarothra | h | 1 | Virginia |  |
| 274 Semecarpus $\dagger$ | t | 1 | India |  |
| 275 Staphylea $\ddagger$ | s | 2 | Virginia | Brit. 1 |
| 276 Spathelia |  | 1 J | Jamaica |  |
| 277 Tamarix | s | 2 | France, Germany |  |
| 278 Telephium | h | 2 | France, Italy |  |
| 279 Turnera |  | 5 J | Jamaica |  |

## ORDER IV. TETRAGYNIA.

(four females.)


## ORDER V. PENTAGYNIA.

 (FIVE FEMALES.)1st. Flowers above.

| 282 | Aralia | s \& h | 7 | China |
| :--- | :---: | :---: | :---: | :---: |
| 283 Commersonia | h | 1 | Taheita |  |
| 284 Glossopetalum | s | 1 |  |  |

2nd. Flowers beneath.

| 285 Crassula | h | 51 | Ethiopia, \&c. |  |
| :--- | ---: | ---: | :--- | ---: |
| 286 Gisekia | h | 1 | E. Indies |  |
| 287 Statice | h | 22 | America | Brit. 3 |

[^51]§ See note in page 7 , under nectarium.

| No Genera. | Growth. Species. <br> No of |  | Native of | Species in <br> Britain. |
| :--- | :--- | :--- | :--- | :--- |
| Corols five-petaled. |  |  |  |  |

## ORDER VI. POLYGYNIA:

(MANY FEMALES.)

| 293 Myosurus $\dagger$ | h | 1 | Brit. 1 |
| :--- | :--- | :--- | :--- |
| 294 Shefflera | h | 1 |  |

[^52]
# CLASS VI. HEXANDRIA.* 

(SIX STAMINA OR MALES.)
Contäining five orders.

## ORDER I. MONOGYNIA.

## (ONE FEMALE.)

No Genera. Growth. \begin{tabular}{c}
No of <br>
species.

$\quad$ Native of $\quad$

Species in <br>
Britain.
\end{tabular}

1st. Flowers calycled, $\dagger$ furnished with calyx and corolla. Corols one-petaled.
1 Agapanthus h 1 Cape
2 Duroia 1 Surinam
Corols three-petaled, or three-parted.

3 Bromelia
4 Burmannia
5 Bursera
6 Hepetis
7 Lachenalia
8 Mnasium
9 Tillandsia $\ddagger$
10 Tradescantia
$\mathrm{h} \quad 7 \mathrm{~W}$. Indies
h. 2 Ceylon
s 1 W. Indies
h 1
1
h 1
h 7 America
h 8 Virginia, Malabar

[^53]| No | Genera. | No of <br> Growth. <br> Species. |  | Native of |
| :--- | :--- | ---: | :--- | ---: |$\quad$| Species in |
| :---: |
| Britain. |

Corols twelve-cleft.
22 Achras t 4 W . Indies

## 2d. Flowers spathen, or glumed.

23 Ehrharta
h 1 Africa
Corols above, six-petaled, or six-cleft.

| 24 Amaryllis | h | 12 | Spain, Italy, Cape |
| :--- | :--- | ---: | :--- |
| 25 Crinum | h | 11 | Africa, America, E. Indies |
| 26 Galanthus | h | 1 | Europe |
| 27 Hrit. r |  |  |  |
| 27 | Hanthus | 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.

[^54]|  | No |  |  |  |
| :--- | :---: | :---: | :--- | :---: |
| No | Genera. | Growth. species. | Native of | Species in <br> Britain. |
| 28 | Hypoxis | h | 13 | Virginia, \&c. |

Corols beneath, six-petaled.

| 34 Allium* | h | 42 | Europe, Canada | Brit. 7 |
| :--- | :--- | ---: | ---: | :--- | :--- |
| 35 Aphyllanthes | h | 1 | Montpelier |  |
| 36 Bulbocodium | h | 1 | Spain | Brit. 1 |
| 37 Sowerbia | h | 1 | New Holland |  |
| 38 Tulbagia | h | 2 | Cape |  |

3d. Flowers naked (withaut calyx.)
39 Phormium h 3 New Zealand
Corols above, six-petaled, or six-cleft.

| 40 Agave $\dagger$ | h | 4 | America |
| :--- | :---: | :--- | :--- |
| 41 Alstroemeria | t \& h | 5 | Italy, Peru |
| 42 Gethyllis | h | 4 | Cape |

[^55]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 juice will yield about one pound of soft extract.

| No | Genera. | No of Growth. species. | tive | Species in Britain. |
| :---: | :---: | :---: | :---: | :---: |
| Corols beneath, six-petaled, or six-cleft. |  |  |  |  |
| 43 | Albuca | h 5 C | Cape, Abyssinia |  |
| 44 | Aletris | h 4 C |  |  |
| 4.5 | Aloe** | 12 | Africa |  |
| 46 | Anthericum | s\& h 27 | Greece, Japan, \&c. | Brit. 3 |
| 47 | Asparagus | s\& h 13 | Cape, Asia | Brit. 1 |
| 48 | Asphodelus | , | Sicily |  |
| 49 | Convallaria | 11 | Japan, \&c. | Brit. 3 |
| 50 | Cyanella | h 3 C | Cape |  |
| 51 | Dracæna | t \& h 10 | Cape, Madeira |  |
| 52 | Erythronium | h 1 H | Hungary |  |
| 53 | Fritillaria $\dagger$ | h 6 P | Persia, Pyrenees | Brit. 1 |
| 54 | Gloriosa $\ddagger$ | 2 | Malabar |  |
| 55 | Hemerocallis | h 4 | Hungary, Japan |  |
| 56 | Hyacinthus§ | 16 | Italy, Austria, \&c. | Brit. 1 |
| 57 | Lindera | 1 | Japan |  |
| 58 | Lilium | 10 | Italy, America, Japan |  |
| 59 | Massonia | 4 | Cape |  |
| $60$ | Ornithogalum | 22 | Cape, Japan, \&c. | Brit. 9 |
| 61 | Polianthes | h 1 | India |  |
| 62 | Pollia |  |  |  |
| 63 | Scilla | 12 | Italy, Japan, Peru | Brit. 2 |
|  | 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.
$\dagger$ Fritillaria imperialis (crown imperial).-See note to bractece, page 33.*
$\ddagger$ Gloriosa superva (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. | $\underset{\text { Growth. species. }}{\substack{N^{\circ} \\ \hline}}$ | . Native of | Species in Britain. |
| :---: | :---: | :---: | :---: |
| 65 Uvularia | h 5 | Bohemia |  |
| 66 Yucca | 4 | America |  |
| 4th. Flowers incomplete. |  |  |  |
| 67 Acorus | h | Holland | Brit. 1 |
| 68 Calamus | h | India |  |
| 69 Juncus | h 22 | Europe | Brit. 15 |
| 70 Orontium | h 2 | Virginia, Japan |  |
| 71 Peplis | h 2 J | Jamaica | Brit. 1 |

## ORDER II. DIGYNIA.

## (TWO FEMALES.)

| 72 | Atraphaxis | s | 2 |
| :--- | :--- | :--- | :--- |
| Cape |  |  |  |
| 73 Falkia | h | 1 | Cape |
| 74 Gahnia | h | 1 |  |
| 75 Nectris | h | 1 |  |
| 76 Oryza | h | 1 | E. and W. Indies |

## ORDER III. TRIGYNIA.

(three females.)
1st. Flowers beneath.

| 77 Colchicum* | h | 3 | Spain |
| :--- | :--- | :--- | :--- |
| 78 Helonias | h | 2 | Pensil |

Brit. 1
h 2 Pensilvania
79 Madeola h 2 Africa, Virginia


#### Abstract

* The hermodactyls of the shops, is supposed to be the root of a species of colchicum, called colchicum variegatum. 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. ( $\mathrm{N} . \mathrm{b}$. This plant hath many varieties). See its cffects in an inveterate dropsy, in the Universal Museum for June, 1766. .


| No | Genera. | Growth | $\mathrm{N}^{\mathrm{o}}$ of species. | . Native of | Species in Britain. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 80 | Melanthium | h | 8 | Cape, America, |  |
| 81 | Rumex | s \& h | 31 | Egypt, Alps, \&c. | Brit. 11 |
| 82 | Scheuchzeria | h | 1 | Helvetia |  |
| 83 | Triglochin | h |  | Europe | Brit. 2 |
| 84 | Trillium | h | 3 | Canada |  |
| 85 | Wurmbea |  | I | Cape |  |

2d. Flowers above.
86 Flagellaria
s 1 Java

ORDER IV. TETRAGYNIA. (four females.)

87 Petiveria s 2 W. Indies

## ORDER V. POLYGYNIA. (many females.)

88 Alisma
h 8 Europe
Brit. 9

## CLASS VII. HEPTANDRIA.

(seven stamina or males.)
Containing four orders.

## ORDER I. MONOGYNIA.

(one female.)

| No Genera. | Growth. $\mathrm{N}^{0}$ of | Native of | Species in Britain. |
| :---: | :---: | :---: | :---: |
| 1 Esculus |  | Asia, America |  |
| 2 Disandra | h 1 | Eastern |  |
| 3 Petrocaria | s 1 |  |  |
| 4 Trientalis | 1 | Europe | Brit. 1 |

ORDER II. DIGYNIA.
(two females.)
$\check{5}$ Limeum h 2 Africa
ORDER III. TETRAGYNIA (FOUR FEMALES.)

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

## ORDER IV. HEPTAGYNIA.

(SEVEN females.)
8 Septas h 1 Cape

[^56]
# CLASS VIII. OCTANDRIA. 

(EIGHT STAMINA OR MALES.)
Containing four orders.

## ORDER I. MONOGYNIA.

 (one female.)

* Amyris opolalsamum is a native of Arabia, (of the same genus with the valm 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. | Growth. species $\begin{gathered}\mathrm{N}^{\mathrm{N}} \text { of }\end{gathered}$ | . Native of | Species in |
| :---: | :---: | :---: | :---: | :---: |
| 16 | Melicocca | s 1 | America |  |
| 17 | Melicope | h |  |  |
| 18 | Menecylon | 1 | Ceylon |  |
| 19 | CEnothera | s \& h 10 | America |  |
| 20 | Ophira | 1 | Africa |  |
| 21 | Osbeckia | 2 | Ceylon, China |  |
| 22 | Rhexia | h 5 | Virginia |  |
| 23 | Ximenia | 2 | America |  |
|  |  | Corols five-p | petaled. |  |
| 24 | 4 Bæckea | s 1 | China |  |
| 25 | 5 Ephielis | h |  |  |
| 26 | Hypelate | h 1 |  |  |
| 27 | Trigonis | 1 |  |  |
| 28 | Tropæolum | h 4 | Peru |  |
| Corols eight petals, or eight-cleft. |  |  |  |  |
| 29 | Chlora | h 4 | Italy | Brit. 1 |
| 30 | Fuchsia* | s \& h 3 | America |  |
| 31 | 1 Mimusops | 2 | India |  |

2d. Flowers incomplete.
Calyx four or five leaves, or four ar five cleft.
32 Athenæa, cal. 6 parts h 1
33 Cedrota, cal. 1 leaf 1

| 34 | Daphne | s | 17 | Alps, India | Brit. 2 |
| :--- | :--- | ---: | ---: | :--- | ---: |
| 35 | Dirca, no calyx | t | 1 | Virginia |  |
| 36 | Dodonæa | s | 2 | India |  |
| 37 | Gnidia | s | $\mathbf{1 1}$ | Africa |  |
| 38 Lachnæa | s | 2 | Ethiopia |  |  |
| 39 | Passerina | $\mathrm{s} \& \mathrm{~h}$ | 13 | Cape |  |
| 40 | Skinnera | h | 1 |  |  |
| 41 Stellera | h | 2 | Germany |  |  |
| 42 | Valentinia | h | 1 |  |  |
|  |  |  |  |  |  |

[^57]
## ORDER II. DIGYNIA.

(Two FEMALES.)

| N | Genera. | Growth. species. $\begin{gathered}\mathbf{N}^{\circ} \text { of }\end{gathered}$ Corols four | Native of -petaled. | $\begin{aligned} & \text { Species in } \\ & \text { Britain. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| 43 | Codia | 1 | Mountains |  |
| 44 | Galenia, cor. non | ne $\mathrm{s} \quad 2$ | Africa |  |
| 45 | Moehringia | h 1 |  |  |
| 46 | Schmiedelia | s 1 | E. Indies |  |
| 47 | Weimmannia | s 4 | Jamaica |  |
| ORDER III. TRIGYNIA. (three females.) |  |  |  |  |
| Corols four-petaled. |  |  |  |  |
| 48 | Cardiospermum | 2 | America |  |
| 49 | Paullinia | s 15 | E. \& W. Indies |  |
| 50 | Ponæa | h 1 |  |  |
| 51 | Sapindus | $\mathrm{t} \quad 4$ | E. \& W. Indies |  |
| Corols none. |  |  |  |  |
| 52 | Coccoloba | t 7 | Barbadoes |  |
| 53 | Polygonum* | s \& h 31 | America, E. Indies | Brit. 10 |
| ORDER IV. TETRAGYNIA. (fuUR females.) |  |  |  |  |
| Corols four-petaled. |  |  |  |  |
| 54 | Adoxa, 4 or 5 clef | eft h 1 | Dantzick | Brit. 1 |
| 55 | Elatine | $\mathrm{h} \quad 2$ | France | Brit. 1 |
| 56 | Haloragis | h 1 | New Caledonia |  |
| 57 | Paris | h 1 | Dantzick | Brit. 1 |

## CLASS IX. ENNEANDRIA.

(NINE STAMINA OR MALES.)
Containing three orders.
ORDER I. MONOGYNIA.
(ONE FEMALE.)
$\mathrm{N}^{\circ}$ of
Growth, species. Native of

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

| 1 | Anacardium* | t | 1 |
| :--- | :--- | ---: | :--- |
| E. \& W. Indies |  |  |  |
| 2 Cassyta | h | 2 | India |
| 3 Laurus $\dagger$ | s | 16 | India, Persia |
| 4. Tinus | s | 1 | W. Indies |
|  |  |  |  |
|  | ORDER II. TRIGYNIA. |  |  | (THREE FEMALES.)

5 Rheum h 7 China, Asia ORDER III. HEXAGYNIA.
(SIX FEMALES.)
6 Butomus h 1 Europe Brit. 1


#### Abstract

* 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. $\dagger$ 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 smatl 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 nolilis is the laurel of the antients, the berries of which are an article of commerce, and are esteemed carminative, $\& \mathrm{c}$.


# CLASS X. DECANDRIA. 

## (TEN STAMINA OR MALES.)

Containing five orders.

## ORDER I. MONOGYNIA.

(ONE FEMALE.)

No Genera. Growth. \begin{tabular}{c}
No of <br>
species.

$\quad$ Native of $\quad$

Species int <br>
Britain.
\end{tabular}

1st. Flowers many-petaled, irregular.

| 1 | Anagyris | s | 1 | 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 | Dictamnust | h | 2 | Cape, Germany |

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

[^58]| $\mathbb{N}^{\circ}$ | Gencta. | Growth. | $\mathrm{N}^{\circ}$ of species. | - Native of |
| :---: | :---: | :---: | :---: | :---: |
| 7 | Guilandina* | S | 5 | E. \& IV. Indies |
| 8 | Hymienxat | t | 1 | W. Indies |
|  | Myroxylont |  | 1 | Peru |
|  | Parkinsonia | $t$ | 1 | W. Indies |
|  | Poinciana§ | S | 3 | E. \& W. Indies |
|  | Rhodora | h | 1 |  |
|  | Sophora | s \& h | 13 | Levant, Cape, |
|  | Toluifera\& | t | 1 | S. America |

## 2d. Flowers many-petaled, equal.

| 15 Adenanthera | t | 2 | India |
| :---: | :---: | :---: | :---: |
| 16 Bergera | s | 1 | Africa |
| 17 Chalcas | s | 1 | India |
| 18 Clethra | s | 1 | Carolina |
| 19 Cynometra | s | 2 | India |
| 20 Dionæa ${ }^{\text {a }}$ | s | 1 | Carolina |
| 21 Ekebergia |  | 1 | Cape |
| 22 Fagonia | h | 3 | Crete, Spain, Arabia |
| 23 Guajacum\|||| | t | 3 | W. Indies, Africa |
| 24 Hæmatoxylon | t | 1 | Campechy |
| 25 Heisteria | s | 1 | Martinico |
| 26 Jussieua | s | 6 | Lima, India |
| 27 Ledum | s | 1 | Europe |
| 28 Limonia | s | 3 | India |


#### Abstract

* 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 hymencea courbaril.
$\ddagger$ 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 lalsam of tolu is from toluifera lalsamum.
II Dioña 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.

Hil Gum guajacum is from guajacum officinale.-See buxus.

| No | Genefa. | Growth. | $\begin{aligned} & \text { No of } \\ & \text { Species } \end{aligned}$ | sotive of | Species in Britain. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 29 | Melastoma | s | 15 | America, Malabar |  |
| 30 | Melia* | t | 2 | Syria, Spain, Ceylon |  |
| 31 | Monotropa | h | 2 | Canada | Brit. 1 |
| 32 | Murraya | s | 1 | E. Indies |  |
| 33 | Myrospermum | h | 1 |  |  |
| 34 | Petaloma |  | 1 |  |  |
| 85 | Prosopis | t | 1 | India |  |
| 36 | Pyrola | h | 6 | Europe | Brit. 3 |
| 37 | Quassia $\dagger$ | s | 2 | Surinam |  |
| 38 | Quisqualis | s | 1 I | India |  |
| 39 | Ruta | s | 5 | Batavia, Europe |  |
| 40 | Swietenia $\ddagger$ | t | 1 | America |  |
| 41 | Thryallis | s | ] | Brasil |  |
| 42 | Tribulus§ | h | 4 | Jamaica, France |  |
| 43 | Trichilia | s | 3 | Jamaica |  |
| 44 | Turrea | s | 1 E | E. Indies |  |
| 45 | Zigophillum | s \& h | 11 | Syria, \&c. |  |

* The meliä 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.
$\dagger$ 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 butter wood, or litter 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.


## $\ddagger$ 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 catlle with its strong prickles. The species is tribulas terrestris.


[^59]

## ORDER III. TRIGYNIA.

 (THREE FEMALES.)|  | Banisteria | s | 7 | W. Indies, Benga! |
| :---: | :---: | :---: | :---: | :---: |
|  | Erythroxylon, dru. | s | 2 | Jamaica |
| 77 | Garidella | h | 1 | Italy |
|  | Malpighia, berry | $t$ | 9 | W. Indies |
|  | Triopteris | s | 1 | Jamaica |

Capsules one-celled.

80 Arenaria 81 Stellaria
$\begin{array}{lrl}\text { h } & 26 & \text { Bavaria, Austria }\end{array} \quad \begin{aligned} & \text { Brit. } 8 \\ & \text { h } \\ & \text { Brit. } 3\end{aligned}$
Capsules three-celled.

| 82 Cherleri | h | 1 | Alps, | Brit. 1 |
| :--- | :--- | ---: | :--- | ---: |
| 83 Cucubalus | h | 15 | Siberia, Italy | Brit. 4 |
| 84 Deutzia |  | 1 | Japan |  |
| 85 Hiræa | s | 1 | Carthagena |  |
| 86 Silene§ | h | 37 | Crete, Egypt | Brit. 8 |

[^60]
## ORDER IV. PĖNTAGYNIA.



## ORDER V. DECAGYNIA.

(TEN FEMALES.)

| 102 Neurad | h | 1 | Egypt, Arabia |
| :--- | :---: | :---: | :--- | :--- |
| 103 Phytolacca | s \& h | 4 | America |


#### Abstract

* 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 nail 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.
$\dagger$ In bachelor's button (lychnis dioica) the male and female flowers grow on different plants.
$\ddagger$ 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.)
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This class, although its title is expressive of troelve 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 pr 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. species. Native of $\quad$| No of |
| :---: |
| Corols none. |

1 Asarum
2 Bocconia
3 Hudsonia
4. Tomex
h 3 Canada, Europe
Brit. 1
s 1 Jamaica
s 1 Virginia
1 Japan
Corols four-petaled, or four-cleft.

5 Apactis
6 Cratæva
7 Garcinia*

1 Japan
t 3 Indies
t 3 E. Indies

[^61]| 94 | DODECANDRIA. |  |
| :---: | :---: | :---: |
| No Genera, | $\begin{gathered} \text { No of } \\ \text { Growth, species. } \quad \text { Native of } \end{gathered}$ | Species in Britain. |
| 8 Halesia | s 2 Carolina |  |
| 9 Rhizophora* | s 6 India |  |
|  | Corols five-petaled. |  |
| 10 Camellat | t 1 America |  |
| 11 Dodecas | s 1 Surinam |  |
| 12 Eurya | 1 Japan |  |
| 13 Nitraria | s 1 Volga |  |
| 14 Peganum | h 2 Assyria |  |
| 15 Portulaca | h 10 Europe, America |  |
| 16 Triumfetta | s 4 Indies |  |
| 17 Vatica | s 1 China |  |
|  | Corols six-petaled. |  |
| 18 Banara | $h \quad 1$ |  |
| 19 Blakea | s 2 Jamaica |  |
| 20 Ginora | s 1 America |  |
| 21 Gethyllis | h 1, Africa |  |
| 22 Lythrum | s \& h 15 America, \&c. | Brit. 2 |
|  | Corols seven-petaled. |  |
| 23 Befaria | h 2 New Granada |  |
|  | Corols eight-cleft. |  |
| 24. Bassia | h 2 Malabar |  |
|  | Corols ten-petaled. |  |
| 25 Decumaria | 1 Barbary |  |

## ORDER II. DIGYNIA.

## (TWO FEMALES。)

Wo Genera. Growth. species. Native of \begin{tabular}{c}
$\mathrm{N}^{\circ}$ of

 

Species in <br>
Britain.
\end{tabular}

| 26 | Agrimonia* | h | 4 | Europe |
| :--- | :---: | :---: | :--- | :---: |$\quad$ Brit. 1

## ORDER III. TRIGYNIA.

(THREE FEMALES.)

| 28 | Euphorbia | s \& h 69 | Canaries, \&c. | Brit. 11 |
| :--- | ---: | ---: | :--- | ---: |
| 29 Pallasia $\ddagger$ | s | 1 | Caspian Sea |  |
| 30 Reseda§ | h | 12 | France | Brit. 2 |
| 31 Tacca | h | 1 | E. Indies, Taheite |  |
| 32 Visnea | s | 1 | Canaries |  |

ORDER IV. PENTAGYNIA.
(Five Females.)
33 Glinus $\quad$ h 2 Spain
ORDER V. DODECAGYNIA.
(TWELVE FEMALES.)
34. Sempervivum s\& h 8 Canaries Brit. I

* In Agrimonia the stamens are very uncertain in number, are often under 12.
$\uparrow$ Heliocarpus, (sun-fruit) called so from the capsule being surrounded with threads representing rays,
$\ddagger$ Pallasia-see note to calligonum.
§ Scarce 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 OK MALES.)

The plants of this class furnish most of the eatable fruits ini 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, twerity or more, inserted also into the inner side of the calyx or corolla.

Obs. As the number of staminia in this class is not limitted, great attention muse be had to the above character, to distinguish it from the next class (potyandrio) Where the stamina are inserted into the receptacle.

This class contains five orders.

> ORDER I. MONOGYNIA.

## (ONE FEMALE.)



Species int Britain.

## Calyx above.

1 Cactus $\dagger$
s
1

* When the corolla is inserted into the calyx, it always consists of many petails ; 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 cochenillifer; and from cochineal the best carmine is extracted. (See celeranthus and quercus). The flower of the cactus grandiflorus (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 spiendid 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.

| No | Genera. | Growth. | $\begin{aligned} & \text { No of } \\ & \text { Species } \end{aligned}$ | f. Native of | Species in Britain. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 3 | Eugenia | s | 7 | Malacca, India |  |
| 4 | Fabricia | s | 1 | New Holland |  |
| 5 | Leptospermum* | * | 11 | New Holland |  |
| 6 | Metrosideros | s | 5 | New Holland |  |
| 7 | Myrtust - | s | 14 | Europe, Asia |  |
| 8 | Philadelphus | s | 4 | Verona, Carolina |  |
| 9 | Psidium | t | 3 | E. \& W. Indies |  |
| 10 | Punica $\ddagger$ | t | 2 | Spain, \&c. |  |

## Calyx beneath.

| 11 | Amygdalus | t | 4 | Persia, Jordan |
| :--- | :--- | ---: | ---: | :--- |
| 12 | Chrysobalanus | t | 1 | America |
| 13 | Plinia | t | 2 | Surinam |
| 14 | 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.
$\dagger$ The common myrtle (myrtus communis) hath many varieties.
$\ddagger$ The lalaustines 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 cherrics, and from whence Lucullus first brought them into Italy.

[^62]
## ORDER III. TRIGYNIA.

(THREE FEMALES.)

| No Genera. | Growth. | $\mathrm{N}^{\mathrm{N}}$ of species. | Native of | Species in Britain. |
| :---: | :---: | :---: | :---: | :---: |
| 17 Sesuvium | S | 1 | India |  |
| 18 Sorbus* | t | 3 | Europe | Brit. 3 |

## ORDER IV. PENTAGYNIA.

(five females.)

## Calyx above.

19 Mesembryanthemum $\dagger$ s\&h 50 Africa, \&c.
20 Mespilus
s 8 Canada
Brit. 1
21 Pyrus $\ddagger$
22 Tetragonia
s \& h $\quad 7$ Ethiopia

## Calyx beneath.

| 23 | Aizoon§ | h | 10 | Canaries |
| :--- | :---: | ---: | :--- | ---: |
| 24 | Spiræa | s \& h | 19 | Japan | Brit. \&

[^63]
## ORDER V. POLYGYNIA.

## (MANY FEMALES.)

$N^{\circ} \quad$ Genera. Growth. | No of |
| :---: |
| Species. |$\quad$ Native of $\quad$| Species in |
| :---: |
| Britain. |

## Calyx five-cleft.

| 25 Rosa* | s | 21 | France, Carolina | Brit. 5 |
| :--- | :---: | :---: | :---: | :---: |
| 26 Rubus | s \& h 20 | W. Indies, Canada | Brit. 5 |  |

## Calyx eight-cleft.

| 27 | Dryas | h | 2 | Kamschatka |
| :--- | :--- | :--- | :--- | :--- |$\quad$| Brit. 1 |
| :--- |
| 28 | Tormentillat $\quad$ h $\quad 2$ Europe $\quad$ Brit. 2

Calyx ten-cleft.

| 29 Calycanthus, scaly s \& h | 2 | Carolina, Virginia |  |  |
| :--- | :--- | :--- | :--- | :--- |
| 30 Comarum | h | 1 | Dantzick | Brit. 1 |
| 31 Fragaria $\ddagger$ | h | 3 | France | Brit. 2 |
| 32 Geum§ | h | S | Virginia | Brit. 2 |
| 33 Potentilla\\| | s \& h 31 | Canada, Norway | Brit. 8 |  |

[^64]$\ddagger$ Linnæus makes only three species of the strawlerry, (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, scariet 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 herl-bennet (geum) smell somewhat like cloves; hence this genus was known by the name of caryophillata in the time of Pliny.

II 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. <br> (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. | No of <br> Growth. <br> species. | Native of | Species in <br> Britain. |
| :--- | :--- | :---: | :--- | :--- |
|  |  | 1st. | One-petaled. |  |

## 2d, Three-petaled.

5 Trilix s 1 Carthagena

3d. Four-petaled.
Calyx nöne.
6 Rheedia
s 1. America
Calyx one-leaved.
7 Legnotis
h 1

| No | Genera. | $\begin{gathered} \begin{array}{c} \text { No of } \\ \text { Growth. species. } \end{array} \\ \text { Calyx two } \end{gathered}$ | Native of vo-leaved. | Species in Britain. |
| :---: | :---: | :---: | :---: | :---: |
| 8 | Chelidonium* | h 5 | Italy, Japan | Brit. 4 |
| 9 | Mammea | 1 | America |  |
| 10 | Papavert | 9 | Alps, Oriental | Brit. 6 |
| Calyx four-leaved, or four-cleft. |  |  |  |  |
| 11 | Actea $\ddagger$ | h 3 | America, Japan | Brit. 1 |
| 12 | Calophyllum | t 2 | India |  |
| 13 | Cambogia |  | India |  |
| 14 | Capparis§ | s 15 I | Italy, Ceylon, \&c. |  |
| 15 | Caryophyllus\\| | 1 | Molucco |  |
| 16 | Dicera | 1 |  |  |
| 17 | Grias | 1 | Jamaica |  |
| 18 | Sparmannia | 1 | Africa |  |
| 19 | Vallea | 1 |  |  |
|  | 4th. Five-petaled. |  |  |  |
|  | Capsules. |  |  |  |
| 20 | Bonnetia | 1 |  |  |
| 21 | Cistus ${ }^{\text {d }}$ | s \& h 49 | Cape, Syria, \&c. | Brit. 6 |
| 22 | Cleyera |  | Japan |  |
| 23 | Corchorus | s \& h 9 | Aleppo, E. \& W. |  |

[^65]$\ddagger$ The berries of actea are said to be of a very noxious quality.
§The capers that are used as a pickle, are the full grown flower-buds of the capparis spinosa; and are chiefly brought from Italy.
$\|$ The spice called cloves, are the flowers of the clove tree (caryophyllus aromaticus) got before expansion and dried.

[^66]| No Genera. | Growth. | $\mathrm{N}^{\circ}$ of species. | . Native of |  | Species in Britain. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 44 Loosa | h | 1 | Peru | , |  |
| 25 Lemniscia | h | 1 |  |  |  |
| 96 Mentzelia |  | 1 | America |  |  |
| 27 Myrodendrum | h | 1 |  |  |  |
| 28 Sarracenia | h | 2 | America |  |  |
| 29 Sloanea | s | 2 | Brasils |  |  |
| 30 Sterbeckia* | h |  |  |  |  |
| 81 Tiliat | t | 2 | America |  | Brit. 1 |
| 32 Vateria | s | 1 | India |  |  |

## Berries.

| 83 Ascium | h | 1 |  |
| :--- | :--- | :--- | :--- |
| 34 Vlæocarpus, drupe | s | 2 | India |
| 35 Muntingia | t | 1 | W. Indies |
| 36 Ochna | i | 2 | Africa, India |

## 5th. Six-petaled.

| 37 Argemone | h | 3 W. Indies, Armenia |  |
| :--- | :---: | :--- | :--- |
| 38 Lagerstremia | t | 2 | India |
| S9 Lecythis | s | 2 | America |
| 40 Theat $\left\{\begin{array}{l}\text { bohea, } \\ \text { viridis }\end{array}\right\}$ | s | 2 | China |

* Sterbeckia hath three or five petals.
+ 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 murh 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.
$\ddagger$ 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 cautious 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 Aiton 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 fragrans, 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 38,000,000 pounds of tea are consumed annually in England, Scotland, and Ireland; above 5,000,000 of which are said to be manufactured in England.

* Anotta or arnotta, called by the French roucou, is said to be the red succulent. eapsule 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.
+ Calligontm and pallacia, M. L. Heritier proves to be the same genus, which he stiles calligonum, with three species.

| No Genera. | Growth. | $\mathrm{N}^{\circ}$ of species. | - Native of | Species in Britain. |
| :---: | :---: | :---: | :---: | :---: |
| 52 Euryandra | S | 1 |  |  |
| 53 Fothergilla | t | 1 C | Carolina |  |
| 54. Lacis | h | 1 |  |  |
| 55 Pæonia* | s \& h | 8 I | Helvetia |  |
| 56 Trilocarpus | h | 1 |  |  |

## ORDER III. TRIGYNIA.

(THREE FEMALES.)

| 57 | Aconitum | h | 7 | Alps, Stiria, \&c. |
| :--- | :--- | :--- | :--- | :--- |
| 58. |  |  |  |  |
| 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 | s | 1 | W. Indies |

## ORDER V. PENTAGYNIA. (five females.)

| 63 | Aquilegia | h | 5 | Canada |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |
| 64 Brathys | s | 1 | New Cranada | Ber |
| 65 Nigella $\ddagger$ | h | 5 | France, Spain, \&c. |  |
| 66 Reaumuria | h | 1 | Egypt |  |

[^67]
## ORDER VI. HEXAGYNIA.



## ORDER VII. DECAGYNIA.

## (TEN FEMALES.)

68 Brasenia
h
1

## ORDER VIII. POLYGYNIA.

## (MANY FEMALES.)

## Calyxes none.

| 69 Atragene | s | 5 | Alps, Ceylon, Cape |  |
| :--- | ---: | ---: | :--- | ---: |
| 70 Anemone* | h | 28 | Alps, America | Brit. 4 |
| 71 Caltha | h | 1 | Europe | Brit. 1 |
| 72 Clematis | s | 15 | Virginia, Japan | Brit. 1 |
| 73 Helleborust | h | 5 | Italy | Brit. 2 |
| 74 Hydrastis | h | 1 | Canada |  |
| 75 Isopyrum | h | 3 | Siberia |  |
| 76 Thalictrum | h | 21 | Alps, Siberia, \&c. | Brit. 3 |
| 77 Trollius | h | 2 | Asia, Europe | Brit. 1 |

## Calyxes three-leaved.

78 Annona $\ddagger$
79 Liriodendron
t 9 Asia, Africa
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 hellelorus niger (Christmas rose) the petals are white till the seed is impregnated, they then change into green, forming a kind of calyx.
$\ddagger$ 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, inSouth America, (viz. annona squamnsa) called by the Spaniards chirimoya, and is said to be one of the most delicious fruits in the world, See note to garcinia.

No Genera. Growth, species. Native of | $\mathrm{N}^{0}$ of |
| :---: |
| Species ink |
| Britain. |

80 Magnolia
81 Michelia
82 Unona
83 Uvaria
84 Wintera

85 Houtuynia

86 Adonis
87 Aubletia
88 Dillenia
89 Ranunculus*

90 Illicium
t 4 Virginia
s 2 India
1
s 2 Ceylon, Java
s 2 Granada

## Calyxes four-leaved.

Calyxes five-leaved.
h 7 Cape, \&c.
Brit. 1
h 1
1 India
h 59 Crete, Asia, \&c. Brit. 12
Calyxes six-leaved.
s 2 China

[^68]
## 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 :

Calyx. 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.

[^69]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. Species. Native of $\quad$| No of |
| :---: |
| Species in |
| Britain. |

1st. Calyxes somerwhat five-cleft.

| Ajuga | h | 6 | Alps, Geneva | Brit. 2 |
| :---: | :---: | :---: | :---: | :---: |
| 2 Ballota | , | 5 | Siberia, America | Brit. 2 |
| 3 Betonica | h | 5 | India | Brit. 1 |
| 4 Galeopsis | h | 3 | Europe | Brit. 3 |
| 5 Gilecoma | h | 1 | Europe | Brit. 1 |
| 6 Hyptis | h | 1 |  |  |
| 7 Hyssopust | s \& h | 3 | China, Amer. Siberia |  |
| 8 Lamium | h | 8 | Italy | Brit. 3 |
| 9 Lavandula§ | s | 6 | Europe |  |
| 10 Leonmrus | , | 5 | Siberia, Tartary | Brit. 1 |
| 11 Marrubium | h | 11 | Spain, Africa, \&c. | Brit. 1 |

[^70]| No | Genera. | Growth. | $\mathrm{N}^{\circ}$ of Species | S. Native of | Species in Britain. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 12 | Mentha* | , | 20 | Canada, Austria | Brit. 12 |
| 13 | Moluccella | h | 3 | Syria |  |
| 14 | Nepeta | h | 18 | Italy, \&c. | Brit. 1 |
| 15 | Perilla | h | 1 | India |  |
| 16 | Phlomis | h | 13 | Ceylon, India |  |
|  | Satureja | s \& h | 8 | France, Greece |  |
| 18 | Sideritis | h | 13 | Canary, Syria |  |
|  | Stachys | h | 17 | Germany, Alps, \&c. | Brit. 4 |
| 20 | Teucrium | s \& h | 35 | America, \&c. | Brit. 4 |
| 2d. Calyxes two-lipped. |  |  |  |  |  |
| 21 | Cleonia | h | 1. | Portugal |  |
| 22 | Clinopodium | h | 3 | Americá | Brit. 1 |
| 23 | Dracocephalum | h | 13 | America, Siberia |  |
| 24 | Horminum | h | 1 | Pyrenia |  |
| 2.5 | Melissa | s \& h | 6 | Crete | Brit. 2 |
| 26 | Melittis | h | 1 | Germany | Brit. I |
| 27 | Ocymumt | h | 21 | India, America, \&c. |  |
| 28 | Origanum | h | 11 | Egypt, Syria, | Brit. 2 |
| 29 | Phryma | h | 2 | S. America |  |
| 30 | Prasium | s | 2 | Spain, Sicily |  |
| 31 | Prunella | h | 3 | Europe | Brit. 1 |

*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 Linnæ̈us; 1st. into spi^ed 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) Linnæus describes as one of the round-headed species, but My. Sole makes three varieties, viz. 1st. mentha piper ita 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.
$\dagger$ 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.

| A.0 $\quad$ Genera. | Nowth.Nofecies. Native of |  |  |  |
| :--- | :---: | ---: | :--- | ---: | | Species in |
| :---: |
| Britain. |

## ORDER II. ANGIOSPERMIA.

(SEED-COVERED.)
1st. Calyxes gaping.
\$6 Castilleja

37 Acanthus
38 Alectra
39 Dombeya
40 Hebenstretia
41 Obolaria
42 Orobanche
43 Torenia
h 2 New Granada
2d. Calyxes two-cleft.
Capsules.
h 10 Italy, Cape, \&c.
1
h 5 历thiopia
h 1 Virginia
h 9 Virginia Brit. 2 $h \quad 1$ Asia

## Berries.

44 Crescentia
45 Premna

46 Halleria

47 Lippia
48 Matourea
49 Selago
50 Taligabea

51 Lathræa
Capsules one-celled.
h 4 France
Brit. 1

| No Genera. | Growth species. Native of Capsules two-celled. | Species in Britain. |
| :---: | :---: | :---: |
| 52 Barleria | h 10 India, Jamaica |  |
| 53 Bartsia | h 5 Alps | Brit. 2 |
| 54 Euphrasia | h 7 Europe | Brit. ${ }^{\text {a }}$ |
| 55 Hemimeris | h 3 Cape |  |
| 56 Melampyrum | $h 5$ Europe | Brit. 4 |
| 57 Rhianthus | h 7 Cape, Virginia | Brit. 1 |
| 58 Schwalbia | 1 America |  |
| Capsules three-celled. |  |  |
| 59 Loecelia | 1 La-Vera-Crux |  |
|  | Drupes two-celled. |  |
| 60 Gmelina | s 1 Asia |  |
| 61 Lantana | 9 W. Indies, Africa |  |
|  | 5th. Calyxes five-cleft. Capsules one-celled. |  |
|  |  |  |
| 62 Avicennia | s 2 Martinico |  |
| 63 Browallia | h 3 S. America |  |
| 64 Conobea | h 1 |  |
| 65 Gloxinia | 1 S. America |  |
| 66 Limosella | h 2 Europe | Brit. 1 |
| 67 Lindernia | h 2 Virginia, Japan |  |
| 68 Myoporum | h 1 |  |
| 69 Piripea | h l |  |
| 70 Tozzia | h 1 Alps |  |
| 71 Vandellia | h 1 St. Thomas |  |
|  | Capsules troo-celled. |  |

72 Antirrhinum
73 Bignonia
74 Buchnera
75 Capraria*
h 47 America, Alps Brit. 10
t \&t s 22 America, India, Peru
h 9 America, Asia
s 5 W. Indies

[^71]

Capsules five-celled.

| 95 Craniolaria | \& \& h | 2 | W. Indies |
| :--- | :---: | :--- | :--- |
| 96 Martynia | h | 3 | S. America |

Nut one-celled
97 Amasonia h 1 Surinam
Nut tren-celled.
98 Pedalium h 1 Ceylon
Berry one-seeded.

| 99 Bontia | s | 1 | Antilles |
| :--- | :---: | :---: | :--- |
| 100 Clerodendron | s | 6 | India |
| 101 Cornutia | s | 1 | W. Indies |

[^72]

## Berry two-seeded.

Berry three-celled, dry.

Berry four-seeded.
s 7 Sicily, \&c.
Berry many-seeded.
108 Besleria

6th. Calyxes many-cleft.
Capsules two-celled.

110 Cymbaria
111 Hyobanche
112 Thunbergia

113 Melianthus
h 1 Dauria
h 1 Cape
h. 1 Cape

7th. Many-petaled.
h 2 ethiopia

[^73]
## 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.

[^74]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. $\dagger$

## (A SILIOUE.)

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

$\mathrm{N}^{\circ} \quad$ Genera. Growth. | $\mathrm{N}^{\circ}$ of |
| :---: |
| Species. |$\quad$ Native of $\quad$| Species in |
| :---: |
| Britain. |

1st. Calyx closed with leaflets longitudinally converging.

| 1 Arabis | h | 11 | Alps, Canada | Brit. 3 |
| :--- | :--- | :--- | :--- | :--- |
| 2 Brassica $\ddagger$ | 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.
$\ddagger$ Brassica (cabbage) greatly abounds in varieties, as lrocoli, caulifower, \&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. | $\mathrm{N}^{\circ}$ of Species. | Native of | Species in Britain. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Chamira |  | 1 |  |  |
|  | Cheiranthus | h | 20 | Alps | Brit. 3 |
| 5 | Dentaria | h | 3 | Italy | Brit. 1 |
| 6 | Erysimum | h | 6 | Barbary | Brit. 4 |
|  | Hesperis | h | 6 | Africa | Brit. 1 |
| 8 | Raphanus | h | 5 | Siberia | Brit. 1 |
| 9 | Ricotia | h | 1 | Egypt |  |
| 10 | Turritis | h | 3 | Alps | Brit. 2 |

## 2d. Calyx gaping with leaflets diverging abave.

| 11 Bunias | h | Egypt | Brit. 1 |
| :---: | :---: | :---: | :---: |
| 12 Cardamine* | h 15 | Virginia, Africa | Brit. 7 |
| 13 Cleome $\dagger$ | h 22 | Cape, Indies, Arabia |  |
| 14 Crambe | h | Spain, Tartary | Brit. 1 |
| 15 Heliophila | h | Cape, \&c. |  |
| 16 Isatis | h | Portugal, Egypt | Brit. 1 |
| 17 Sinapis $\ddagger$ | 17 | China, \&c. | Brit. 3 |
| 18 Sisymbrium§ | 29 | India, \&c. | Brit. 7 |

[^75] 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.
$\ddagger$ 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 scurvy; 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 indentures 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 Genera. Growth. \begin{tabular}{l}
$\mathrm{N}^{\circ}$ of <br>
species. Native of

$\quad$

Species in <br>
Britain.
\end{tabular}

1st, Silicle entire, not end-nicked at top.

| 19 | Draba | h | 9 | Alps |
| :--- | :--- | ---: | :--- | :--- |
| 20 Lunaria | h | 2 | Hungary | Brit. 3 |
| 21 Myagrum | h | 10 | Spain, \&cc. | Brit. 1 |
| 22 Subularia | h | 1 | Europe | Brit. 1 |
| 23 Vella | h | 2 | Spain | Brit. 1 |

2d. Silicle end-nicked at top.

| 24 Alyssum | s \& h 17 | Spain, Alps, Crete |  |  |
| :--- | :--- | :--- | :--- | :--- |
| 25 Anstatica* | h | 1 | Jericho, Syria |  |
| 26 Biscutella | h | 6 | Italy |  |
| 27 Clypeola | h | 3 | Italy |  |
| 28 Cochlearia | h | 8 | Denmark, Greenland Brit. 6 |  |
| 29 Iberis | s h 13 | Gibraltar, \&c. | Brit. 2 |  |
| 30 Lepidium | h | 20 | America, Alps | Brit. 4 |
| 31 Peltaria | h | 2 | Cape |  |
| 32 Thlaspi | h | 12 | Alps, Europe | Brit. 6 |

[^76]
## 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 :
Calyx. 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, $t$ 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.

[^77]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. TRIANDRIA.

(Three stamina or males.)

| No Genera. | Growth. | $\mathrm{N}^{\mathrm{o}}$ of species. | Native of | Species in Britain. |
| :---: | :---: | :---: | :---: | :---: |
| 1 Aphyteia | h | 1 | Cape |  |
| 2 Galaxia |  | 2 |  |  |

## ORDER II. PENTANDRIA.

(FIVE STAMINA OR MAIES.)

## One female.

| 3 Buettneria | h | 3 | Carthage |  |
| :--- | ---: | ---: | :--- | ---: |
| 4 Erodium | $\mathrm{s} \& \mathrm{~h}$ | 12 | Italy, \&c. | Brit. 3 |
| 5 Hydnora |  | 1 |  |  |
| 6 Lerchea | s | 1 | E. Indies |  |
| 7 Ochroma | h | 1 |  |  |
| 8 Symphonia | t | 1 | Surinam |  |
| 9 Ticorea | h | 1 |  |  |
| 10 Triguera | s | 1 |  |  |
| 11 Waltheria | s | 3 | E. \& W. Indies |  |

[^78]| No Genera. | No of <br> Growth. species. | Native of |
| :---: | :---: | :---: | | Species it |
| :---: |
| Britain. |

## ORDER III. HEPTANDRIA.

(seven stamina or males.)
14 Pelargonium s \& h 94 Africa

## ORDER IV. OCTANDRIA. <br> (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。 <br> (nine stamina or males.)

| 19 Dryandra |  | 1 | Cape |
| :--- | :--- | :--- | :--- |
| 20 | Quararibea | h | 1 |

ORDER VI. DECANDRIA.
(TEN StAMiNA OR MALES.)

One female.

| 21 Aquilarea | h | i |  |
| :--- | :---: | :---: | :---: |
| 22 Ciponima* | s | 1 |  |
| 23 Connarus | s | 1 | India |
| 24 Chinodendron | h | 1 |  |

[^79]| No | Genera. |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Nrowth. | No of |  | Species in |  |
| Britain. |  |  |  |  |

## Five females.

| 30 Hugonia | t | 1 | India |
| :--- | :---: | :---: | :--- |
| 31 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 |  |  |
| :--- | :--- | :--- | :--- |
| 34 | Assonia | h | 1 |
| 35 | Pentapedes, 1 fem. | h | 3 | India

* 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 Hovtus 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 crodium, 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 latrachia of Linnæus, But, in the 8th. edit. of the Gen. Plan. this distinction is not adopted.


## ORDER IX. POLYANDRIA.

## (MANY STAMINA OR MALES.)

| No | Genera, | Growth. $\begin{gathered}\mathrm{N}^{\mathrm{N}} \text { of } \\ \text { species. }\end{gathered}$ | Native of | $\begin{gathered} \text { Species } \\ \text { Britai } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
| One female. |  |  |  |  |
| 36 | Achania | s\&h 3 | Jamaica, Americ |  |
| 37 | Adansonia* | 1. | Senegal |  |
| 38 | Aleurites | $\mathrm{h}-1$ |  |  |
| 39 | Barringtonia | 1 | China, Taheite |  |
| 40 | Bombax $\dagger$ | 4 | E. \& W. Indies |  |
| 41 | Camellia | 2 J | Japan |  |
| 42 | Carolinea $\ddagger$ | I | Mexico, Guinea |  |
| 43 | Cienfuegosia | h |  |  |
| 44 | Couroupita | h |  |  |
| 45 | Crossostylis | h |  |  |
| 46 | Franklinia§ | s i | Georgia |  |
| 47 | Gordonia | s 1 | Carolina |  |
| 48 | Gossypium | s \& h 6 | Levant, Barbadoe |  |
| 49 | Gustavia | t. 1 | Surinam |  |
| 50 | Hibiscus | s \& h 36 | Africa, Âmerica, | ylore |

* Adansonia digitata receives its name from Mt. Adanson, who says the diameter of the trunk frequently exceeds twenty-five feet, and is supposed to be the largess tree in the world. The horizontal branches are from forty-five to fifty-five feet long, and so large a's to equal the largest tree in Europe, and yet these stupendous trees do not exceed seventy feet in hight.
$\dagger$ 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.
$\ddagger$ Carolinea omitted in the 8th. edit. of Gen. Plan.
\&̧ Franklinia alatamaha is said to be a new genus, (though nearly allied to gow: donia) 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 Gem. 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 shirub.

| No | Genera | Growth. $\begin{gathered}\mathrm{N}^{\mathrm{N}} \text { of } \\ \text { species. }\end{gathered}$ | . Native of | Species in Britain. |
| :---: | :---: | :---: | :---: | :---: |
| 51 | Laguna |  |  |  |
| 52 | Malvaviscus | $h \quad 1$ |  |  |
| 53 | Mesua | 1 I | India |  |
| 54 | Morisonia | 1 A | America |  |
| 55 | Myrodia | $\mathrm{h} \quad 1$ |  |  |
| 56 | Pachira | h |  |  |
| 57 | Palava | h |  |  |
| 58 | Pavonia | h |  |  |
| 59 | Ruizia. | 1 |  |  |
| 60 | Sida | t \& h 27 E | E. \& W. Indies |  |
| 61 | Solandra | 1 C | Cape |  |
| 62 | Urena | 6 | China, America |  |
| Five females. |  |  |  |  |
|  | Malochodendron | h |  |  |
|  | Stewartia |  | Virginia |  |
|  |  | Many females. |  |  |
| 65 | Alcea* | h 2 I | E. Indies |  |
| 66 | Althæa | h 4 I | Italy, Spain | Brit. 1 |
| 67 | Lavatera | s \& h 9 A | America, Crete | Brit. 1 |
| 68 | Malachra | $\mathrm{s} \quad 2 \mathrm{C}$ | Caribees |  |
| 69 | Malope | h 1 H | Hetrurea |  |
| 70 | Malva | s.\& h 26 | Amer. Peru, Cape | Brit. 5 |

## 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 corolla, (resembling a butterfly) with stamina united at the base, $\dagger$ 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 characte. $\ddagger$

[^80]$\ddagger$ The character is not exactly agreeable through the whole class, but as there are few plants but of the order decandriu, 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 deened 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 lieel (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 fitament is incumbent upon it. The united filaments are membranaceous below the middle, being united into a cylinder, 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 anthere 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.

Pistifum. 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, \&e. it is elevated by a slender footstalk issuing from the centre of the calyx.

[^81]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, arechis.

[^82]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.)


ORDER III. OCTANDRIA.
(EIGHT STAMINA OR MALES.)

4 Coumaroura
5 Dalbergia
1
6 Polygala $\dagger$
7 Securidaca
s. 2 Surinam
h 38 Brasils, Senegal, \&c. Brit. 1
s 2 Jamaica, Europe

ORDER IV. DECANDRIA.
(TEN STAMINA OR MALES.)

No Genera, Growth. species. Native of $\quad$| No of |
| :---: |
| Species in |
| Britain. |

## 1 st. Stamens all connected.

8 Abrus
9 Amorpha
10 Anthillis
11 Arachis**
12 Aspalathus
13 Borbonia
14 Bossiæa
15 Crotalaria
16 Cylista
17 Ebenus
18 Erythrina $\ddagger$
19 Genista
20 Ivira
21 Lupinus§
22 Moutouchia
s 1 India
s 1 Carolina
s \& h 15 Italy, \&c.
h 1 South America
6 Cape
h 1

1 Botany Bay
h . 23 China, Carolina
s 1
s 1 Crete, Cape
s\& h 5 Carolina
s 14
h 1
h 7 Virginia, France
14 Spain, \&c. Brit. 3

Species in Britain.


#### Abstract

* Arachis hypograa (ground nut) receives its trivial name from hiding its seeti 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 hypogon is cultivated in Spain and France for its oil: it is said that the seeds of it yield 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 sumn hemp; is managed in the same manner, and used for the same purposes as the common hemp.

[^83]| No | Genera, | Growth. | $\mathrm{N}^{\circ}$ of species. | . Native of | Species i Britain. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 23 | Mullera | t | 1 S | Surinam |  |
| 24 | Nissolia | t | 2 A | America |  |
| 25 | Ononis | s \& h | 31 C | Cape, \&te. | Brit. 3 |
| 26 | Piscidia* | s | ${ }_{2}$ W | W. Indies |  |
| 27 | Platylobium | s | 4 | New Holland |  |
| 28 | Pteracarpus | $t$ | 5 W | W. Indies |  |
|  | Spartium $\dagger$ | s | 16 | Cape, \&c. | Brit. 1 |
| 30 | Taralea |  | 1 |  |  |
| 31 | Teramnus |  | 1 |  |  |
|  | Tetrapteris | h | 1 |  |  |
| 33 | Ulex | s | 2 C | Cape, Europe | Brit. 1 |

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


* 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.
$\dagger$ Spartium scoparium (common English broom) is the sort used in medicine; chiefly in dropsical complaints.
$\ddagger$ 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 stizololium, 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 ${ }_{3}$

Bath Society.

| No Genera. | $\mathrm{N}^{\circ}$ of Growth. Species. | Native of | Species in Britain. |
| :---: | :---: | :---: | :---: |
| 3d. Legumen somewhat two-celled, (not of the former). |  |  |  |
| 41 Amerimnon | h |  |  |
| 42 Astragalus* | \& \& h 47 Alps, Syr.Canada,\&c. Brit. |  |  |
| 43 Biserrula | h 1 |  |  |
| 44 Phaca | h 10 | Siberia |  |

4th. Legumen mostly one-seeded, (not of the former).
45 Acouroa h 1
46 Deguelia $\quad h \quad 1$

47 Glyeyrrhizà h 4 Apulia, Spain
48 Parivoa h 1
49 Psoralia s 23 Africa, America
50 Trifolium
h 46 Italy, \&c.
Brit. 17
5th. Legumen rather jointed.

51 Æschynomene, s 8 America, India
52 Coronilla
53 Hedysarum $\dagger$
54. Hippocrepis

55 Medicago $\ddagger$
s \& h 11 Crete, America
s \& h 67 Amer. Persia, E.Ind. Brit. I
h 4 Italy Brit. 1
s \& h 10 America

[^84]| No | Genera, | Growth. | No of species | Native of | Species in Britain. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 56 | Ornithopus | h |  | France | Brit. 1 |
| 57 | Scorpiurus | h | 4 | Europe |  |
| 58 | Smithia | h | 1 | E. Indies |  |
|  | Stylosanthes | h | 1 |  |  |

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

60 Cicer
61 Clitoria
62 Cytisus
63 Diphysa
64 Ervum
65 Galega
66 Geoffroya*
67 Glycine
68 Indigofera $\dagger$
69 Liparia
70 Lotus
71 Robinia
72 Trigonella
h 1 Spain
h 5 Virginia, Brasil
t \& s 17 Alps, \&c.
h 1
$h 6$ France Brit. \&
h 12 Spain, America
t 2 Brasil, Jamaica
s \& h 15 America
s \& h 23 E. \& W. Indies
s 5 Cape
h 19 Arabia, Crete
s 9 N. America
h 11 France, India

[^85]
## 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 MAIES IN EACII SET.)

| No | Genera. | Growth.No of <br> species. | Native of | Species in <br> Britain, |
| :--- | :---: | :---: | :---: | :---: |
| 1 | Ambroma | h | 1 |  |
| 2 | Theobromat $\dagger$ | $t$ | 2 | W. Indies |

## ORDER II. DODECANDRIA.

(FROM TWELVE TO TWENTY MALESIN SEVERAL SETS.)
3 Monsonia s 3 Cape

## ORDER III. ICOSANDRIA.

(TWENTY MALES IN SEVERAL SETS.)
4 Citrus $\ddagger$ t 4 Asia, Japan, \&c.

* See note to aizoon, where the stamina are inserted by sets into the calyx.
$\dagger$ Theobroma 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.
$\ddagger$ Bergamot is a fragrant essence obtained from a cyon of the limon (citrus me dica) grafted on the stock of a dergamot; whence the name. Citrus medica (tha citron) contains also several varieties, as lime, limon, \&c.


## ORDER IV. POLYANDRIA.

## (MANY MALES iN SEveral SETS.)

$\mathrm{N}^{0}$ of

No Genera. Growth. species. Native of | Species in |
| :---: |
| Britain. |

Calyx one leaf.
5 Ocotea h 1
Calyx two-leaved, beneath,
6 Ascyrum s\&h 3 Virginia
Calyx five-cleft, above.

| 7 | Hopea | s | 1 |
| :--- | :--- | :--- | :--- |
| Carolina |  |  |  |
| 8 Melaleuca | s | 8 | New Zealand, New Holland |

Calyx five-cleft, beneath.

9 Durio
10 Glabraria
11 Hypericum*
12 Symplocos $\dagger$
Calyx six-cleft, beneath.

13 Munchhausia s 1 China

* Hypexicum 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 ciponima, to be in reality but one, to which he gives the name of symplocos, and đescribes 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 anthere 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 anthere 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.

Linmeus 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

[^86]distinction), and also of a floret or floscule; he also calls the compound Hower 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 caly x 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 fructification, receiving many florets sitting on its dise; which is either concave, convex, flat, pyramidal, or globular; and the surface of the dise is either naked, withont 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, sepa* rating the florets, as in authemis, achillea, \&c.

## Character of a floret.*

Calys. When present, a small perianthiam 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,

[^87]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 :

[^88]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 foret, 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 fosculi, and the whole flower is called flos fosculus. 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.

This class contains six orders.

## ORDER I. POLYGAMIA EQUALIS.

## (EQUAL polygamy.)

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

|  | Genera. | $\text { Growth. } \begin{gathered} \mathrm{N} \circ \\ \text { Species. } \end{gathered}$ | . Native of | Species in Britain. |
| :---: | :---: | :---: | :---: | :---: |
| 1st. Semiflosculous* flowers of Tournefort with all the corols ligulated. |  |  |  |  |
| Receptacle chaffy. |  |  |  |  |
| 1 | Catananche | h ${ }^{\text {g }}$ | Crete, Greece |  |
| 2 | Cichorium | $h \quad 3$ | Europe | Brit. 1 |
|  | Geropogon | h 3 | Italy |  |
|  | Hypochæris | h 4 | Europe | Brit. 3 |
|  | Scolymus | h 2, | Spain, Italy |  |
|  | Seriola | h 4 | Crete, Italy, Etna |  |
| Receptacle villous or hairy. |  |  |  |  |
|  | Andryola | h 3 | France |  |
| Receptacle naked. |  |  |  |  |
| 8 | Chondrilla | h 3 | Germany |  |
|  | Crepis | $\mathrm{h} \quad 16$ | Alps, Siberia | Brit. 8 |
|  | Hieracium | h - 35 | Alps, Cape | Brit. 9 |
|  | Hyoseris | h-9 | Virginia | Brit. 1 |
|  | Kleinia | h 1 |  |  |
|  | Lactuca $\dagger$ | h 10 | India, Canada | Brit. 3 |

[^89]| No Genera. | Growth. | No of species. | Native of | Species in Britain. |
| :---: | :---: | :---: | :---: | :---: |
| 14 Lapsana | h | 5 | Portugal | Brit. 1 |
| 15 Leontodon* | h | 10 | Europe | Brit. 4 |
| 16 Picris | h | 4 | Italy, France | Brit. 2 |
| 17 Prenanthes | h | 19 | Japan, \&c. | Brit. 1 |
| 18 Scorzonera | h | 14 | Spain, \&c. |  |
| 19 Sonchus $\dagger$ | s \& h | 13 | Alps, Siberia | Brit. 4 |
| 20 Tragopogon | h | 14 | Virginia, E. Indies | Brit. ${ }^{2}$ |

## 2d. Headed flowers,

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

| 21 | Arctium $\ddagger$ | h | 3 | Europe |
| :--- | :--- | ---: | :--- | ---: |
| 22 Atractylis | h | 8 | Italy, Mexico | Brit. 1 |
| 23 Barnadesia | s | 1 | America |  |
| 24 Carduus | h | 38 | Syria, Virginia | Brit. 11 |
| 25 Carlina | h | 8 | Pyrenean | Brit. 1 |
| 26 Carthamus | s \& h 10 | Crete, Egypt |  |  |
| 27 Cnicus§' | h | 9 | Europe, Spain |  |
| 28 Cynarail | 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 com. plaints 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 sonchus tenerrimus.
$\ddagger$ 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 lenedictus, or blessed thistle, and Mir. 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 scolypus (common artichoke) is the receptacle, snd the fleshy part of the leaves of the calyx; as in onopordon acanthium the receptacle and young stems are eat as artichokes.

$N^{0} \quad$ Genera. Growth. | $\mathrm{N}^{\mathrm{N}}$ of |
| :---: |
| species. |$\quad$ Native of $\quad$| 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.


Receptacle hairy or bristly.

| 43 | Pteronia | s | 17 |
| :--- | :--- | ---: | :--- |
| IEthiopia |  |  |  |
| 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 Artemisiat s\& h 29 Ethiopia, China Brit. 5

[^90]| ${ }^{\text {No}}$ | Genera. | Growth. | $\mathrm{N}^{\circ} \text { of }$ species. | Native of | Species in Britain. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 46 | Baccharis |  | 8 | America, Africa |  |
| 47 | Carpesium | h | 2 | Italy, China |  |
| 48 | Conyza | s \& h | 25 | China, \&c. | Brit. |
| 49 | Gotula | h | 13 | Spain, \&c. |  |
| 50 | Gnaphalium | s \& h | 59 | Alps, India | Brit. 6 |
| 51 | Tanacetum | s \& h | 7 | Siberia, Africa | Bri |

Receptacle chaffy.

| 52 | Anacyclus | h | 4 |
| :--- | ---: | ---: | :--- |
| Crete |  |  |  |
| 53 | Xeranthemum | s \& h | 16 | Austria, \&c.

2d. Semiflosculous flowers, rather two-lipped.
Receptacle naked.
54 Perdicium $\quad$ h 5 Alps, Magellan

3d. Radiate flowers.*
Receptacle naked.

| 55 | Arnica | h | 11 | Africa, Japan |  |
| :--- | :--- | ---: | ---: | :--- | :--- |
| 56 | Astert | s \& h | 38 | Sriberia, 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.

[^91]| $\mathrm{N}^{\mathrm{o}}$ Genera, | $\begin{aligned} & \mathrm{N}^{\circ} \text { of } \\ & \text { Growth. specis. } \end{aligned}$ | Native of | Speciés in Britain. |
| :---: | :---: | :---: | :---: |
| 64.1 Inula* | h 29 | Arabia, Germany | Brit. 4 |
| 65 Matricaria | h 6 | Europe | Brit. 4 |
| 66 Mutisia | $h 1$ | New Granada |  |
| 67 Pectis | h | America |  |
| 68 Senecio | s \& h 59 | Egypt, Siberia | Brit. 8 |
| 69 Solidago | h 14 | Canada, Mexico | Brit. 2 |
| 70 Tagetes | h | Mexico |  |
| 71 Tussilago | 12 | Alps, Japan | Brit. 3 |
| 72 Unxia | h | Surinam |  |
| Receptacle chaffy. |  |  |  |
| 73 Achilleat | 21 | Egypt, Alps, Crete | Brit. 2 |
| 74 Amellus | s \& h 2 | Cape |  |
| 75 Anthemis | s \& h 18 | Alps, America | Brit. 5 |
| 76 Buphthalnum | s \& h 11 | America, \&c. |  |
| 77 Eelipta | h | Virginia |  |
| 78 Leycera |  | Ethiopia |  |
| 79 Sigesbeckia | h 2 | China, W. Indies |  |
| 80 Tridax | h | Vera-Crux |  |
| 81 Verbesina | s \& h 11 | China, Virginia |  |
| 82 Zinnia | h | Peru |  |

## ORDER III. POLYGAMIA FRUSTRANEA.

(FRUSTRANEOUS pOLYGAMy.)
Having the florets of the disc monoclinian, and those of the radius neuter $\ddagger$; hence called frustraneous. All radiate.

$$
83 \text { Gaillardia§ i s } 1 \text { Louisiana }
$$

* In inula the two bristles fixed to the lower part of each lip, is the essential character.
+ Achillea ageratum (sweet maudlin) is a culinary berb, 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 moudlin, but hath a different flavpur, and probably different qualities, and the flower is white.

Miller's Dictionary.
$\ddagger$ The florets in the radius are described as female in the Gen. Plunt.; 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 $\mathbf{1 7 8 6}$, it flowers from the middle of July to the end of October, and if it can be made dounle by cultivation, will supersede the China-aster; it appears by the plate to be a beautiful shrubby plant, with numerous flowers.

No Genera. Growth. species. Native of \begin{tabular}{c}
No of

 

Species in <br>
Britain.
\end{tabular}

## Receptacle rather naked.

84 Gorteria
85 Sclerocarpus
s\&h 12 Africa
1 Africa

Receptacle bristly.

| 86 Centaurea* | h $\quad 67$ | Alps, Asia |
| :--- | ---: | :--- |
| 87 Zægæa | 2 | Cape |

Receptacle chaffy.

88 Coreopsis
89 Helianthus
90 Osmites
91 Rudbeckia
h 12 Virginia, \&c.
h 13 India, America
s 4 Cape
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 naktd.

92 Baltimora
93 Calendula
94 Filago
95 Hippia
96 Micropus
97 Milleria
98 Osteospermum
99 Othonna
h 1 Maryland
s \& h 9 France, \&c.
h 7 France, Germany Brit. 3
s\&h 3 America
h 2 Spain
h 2 Panama
h 15 Africa, America
s \& h 26 Africa, France

[^92]No Genera. Growth. species. Native of | No of |
| :---: |
| Aritain. |

## Receptacle hairy.

100 Arctotis
101 Eriocephalus
1 \& h 12

2 | Ethiopia; \&c |
| :--- |
| Africa |

Receptacle chaffy.

| 102 Chrysogonum | h | 1 | Virginia |
| :--- | ---: | ---: | :--- |
| 103 Melampodium* | h | 2 | America, Vera-Crux |
| 104 Polymnia | h | 7 | Canada, Abyssinia |
| 105 Silphium | h | 8 | America |

## ORDER V. POLYGAMIA SEGREGATA.

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

## One floret.

106 Echinops
107 Stæbe
Three florets.
108 Jungia
1 America

Four florets.
109 Elephantopus h 2 E. \& W. İndies
Five florets.
110 Gundelia $\quad \mathrm{h} \quad 1$ America
Eight florets.

[^93]No Genera, Growth. \begin{tabular}{c}
No of <br>
species. Native of

 

Species in <br>
Britain.
\end{tabular}

## Many florets.

112 OEderá
s 2 Cape
113 Craspedia
h 1

## ORDER VI. MONOGAMIA.

## (MONOGAMY.)

Containing simple flowers with the antheræ united.

| 114 Corymbium | h | 4 | Æthiopia |  |
| :--- | ---: | ---: | :--- | ---: |
| 115 Jasione | h | I | Europe | Brit. 1 |
| 116 Impatiens* | h | 7 | China | Brit. 1 |
| 117 Lobelia | h | 42 | Ceylon, \&c. | Brit. 2 |
| 118 Seriphium | s | 4 | Ethiopia |  |
| 119 Shawia |  | 1 |  |  |
| 120 Strumpfia | s | 1 | America |  |
| 121 Violat | s \& h 29 | America, \&c. | Brit. 6 |  |

* 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.
$\uparrow$ 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.

Panorama for Sept. 1803.

## 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 staminag 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.

[^94]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 nectaritim, 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.

| No Genera. | Growth. | $\begin{aligned} & \mathrm{N}^{\mathrm{N}} \text { of } \\ & \text { species. } \end{aligned}$ | . Native of | Species in Britain. |
| :---: | :---: | :---: | :---: | :---: |
| 1 Arethusa | h | 7 | Virginia, Cape |  |
| 2 Cypripedium | h | 3 | Lapland, Japan | Brit. 1 |
| 3 Disa | h | 4 | Cape |  |
| 4 Epidendrum $\dagger$ | s | 32 | 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 |

[^95]| No | Genera. | Growth. | $\mathrm{N}^{0}$ of species. | Native of | Species in Britain. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Orchis* | h | 50 | Italy, Asia | Brit. 11 |
|  | Satyrium | h | 15 | Cape | Brit. 4 |
|  | Serapias | h | 10 | Cape | Brit. 3 |

## ORDER II. TRIANDRIA. (three males.)

## One-female.

| 12 | Ferrariat | h | 2 | Cape |
| :--- | :--- | :---: | :--- | :--- |
| 13 | Salacia | s | 1 | China |
| 14 | Sisyrinchium | h | 2 | Bermuda |
| 15 | Stilago | s | 1 | India |

$$
\begin{aligned}
& \text { ORDER III. TETRANDRIA。 } \\
& \text { (FOUR MALES.) } \\
& \text { One-female. } \\
& 16 \text { Nepenthes } \quad \text { h } 1 \text { Ceylon }
\end{aligned}
$$

## ORDER IV. PENTANDRIA.

17 Ayenia

Species in
Brit. 11
Brit. 4
Brit. 3

> (five males.)<br>> One-female.<br>> h 3 Jamaica<br>> s 1 Java

18 Gluta


#### Abstract

* 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. $\uparrow$ Ferraria only vegetates every second or third year, though the root remains firm in the ground.


Na Genera. Growth. \begin{tabular}{c}
No of <br>
species.

$\quad$ Native of $\quad$

Species in <br>
Britain.
\end{tabular}

## Three-female.

19 Passiflora*
s 28 Brasils, \&c.

ORDER V, HEXANDRIA.
(SIX MALES.)
Six-female.
q0 Aristolochia $\$ \& / 21$ 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.
$\begin{array}{lccl}23 \text { Helicteres } \dagger & \text { s } & 6 & \text { Jamaica, Carthagena } \\ 24 \text { Kleinhovia } & \text { t } & 1 & \text { E. Indies }\end{array}$

[^96]
## ORDER VIII. DODECANDRIA.

## (TWELVE MALES.)

No Genera. Growth. species. Native of | No of |
| :---: |
| Britain. |

One-female.
25 Cytinus 1 Spain

## ORDER IX. POLYANDRIA.

(MANY MALES.)
One-female.

26 Grewia
27 Xylopia

28 Ambrosinia
29 Arum*
30 Calla
31 Dracontium
32 Pothos

33 Zostera $\dagger$
s 6 Asia, Cape
s 2 America
Spathe.
\& 1 Palermo in Turkey
h 26 Virginia, \&c.
Brit. 1
h 2 Ethiopia
s 5 W. Indies
s 7 America
Leaf.
h 2 Holland
Brit. 1

[^97]
## CLASS XXI. MONEECIA.

## (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 contaned 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 coms pound flowers, which are sometimes androgynous, but have united antheræ. There are also a few other plan'ts 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.)

| N० Genera. | Growth. | No of species. | Native of | Species in Britaia. |
| :---: | :---: | :---: | :---: | :---: |
| 1 Balanophora |  | 1 |  |  |
| 2 Ceratocarpus | h | 1 | Tartary |  |
| 3 Chara | h | 4. | Europe | Brit. 4 |
| 4 Elaterium | h | 2 | Carthagena |  |

[^98]

## ORDER II DİANDRIA.

(two males.)

| 13 | Anguria | h | 3 | America |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 14 | Lemna§ | h | 5 | Europe | Brit. 4 |
| 15 | Sapium | h | 1 |  |  |

## ORDER III. TRIANDRIA.

(THREE MALES.)

16 Axyris<br>s \& h 4 Tartary, Siberia<br>17 Glochidion<br>h 1

[^99]| So Genera. | Growth. | No of Species | Native of | Species in Britain. |
| :---: | :---: | :---: | :---: | :---: |
| 18 Hernandia | s | 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 | 0 | Europe | Brit. 2 |

$\left.\begin{array}{llll}24 & \text { Coix } \dagger & \text { h } & 1 \\ \text { India } \\ 25 & \text { Olyra } & \text { h } & 1 \\ \text { Jamaica } \\ 26 & \text { Scleria } \ddagger & \text { h } & 1\end{array}\right)$ America

## Amentum.

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 |  |  |
| 33 Buxus 9 | s | 1 | Europe | Brit. 1 |
| 34 Cicca | t | 1 | India |  |
| 35 Empleurum | s | 1 | Cape |  |

[^100]$\ddagger$ 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.
I. Buxus sempervirens (box tree) is said by some to have the same virtues as the guajacum officinale.

| No | Genera. |  |  |  |
| :--- | ---: | ---: | :--- | :---: |
| No of | Growth. species. | Native of | Species iñ <br> Britain. |  |
| 36 | Littorella | h | 1 | Dantzic |

## ORDER V. PENTANDRIA.

## (FIVE MALES.)

| 40. Amaranthus | h | 24 | Ganges, \&c. | Brit. 1 |
| :--- | :---: | ---: | :--- | :---: |
| 41 Ambrosia | h | 4 | Virginia |  |
| 42 Chayote | h | 1 |  |  |
| 43 Clibadium |  | 1 | Surinam |  |
| 44 Iva | $\mathrm{s} \& \mathrm{~h}$ | 2 | America |  |
| 45 Leea | s | 2 | Cape, India |  |
| 46 Melicytus | s | 1 |  |  |
| 47 Nephelium | s | 1 | India |  |
| 48 Parthenium | h | 2 | Jamaica |  |
| 49 Xanthium | $\mathrm{s} \& \mathrm{~h}$ | 5 | E. Indies | Brit. 1 |

## ORDER VI. HEXANDRIA.

(SIX MALES.)

## Calyx glume, none.

| 50 Bactris |  |
| :--- | :--- | :--- |
| 51 Pometia | $\mathbf{1}$ |
| $\mathbf{1}$ |  |

* Mr. Evelyn, in his Sylva, says that the timber of the mullerry tree (morus) will last in water as long as the most solid oak; and that it suffers no kind of ver min to breed on it, whether standing or felled, nor does it harbour any caterpillar, 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: shrut he woody part is employed: but the best and most esteemed paper is made from cotton.
+ The three British species of urtica are the urtica pilalifera (the Roman stinging nettle), urtica urens (the annual stinging nettle), and urtica dioica (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. No of \begin{tabular}{l}
Nocies. Native of

 

Species in <br>
Britain.
\end{tabular}

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 2 | Europe | Brit. 2 |
| 57 Fagus $\dagger$ | $t 3$ | Italy | Brit. 2 |
| 58 Liquidambar | 2 | Virginia |  |
| 59 Myriophyllum | h $\quad 2$ | Europe | Brit. 2 |
| 60 Poterium | h 3 | Europe | Brit. 1 |
| 61 Quercus $\ddagger$ | 19 | Molucca, \&c. | Brit. 1 |

[^101]$\dagger$ Evelyn, in his Sylva, says that the leaves of the leech (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, culilia frondes."
$\ddagger$ 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. Miller says requires stripping of its external bark (out of which they cut corks) exery eight or ten years, for 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 cailed 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. | $\mathrm{N}^{0}$ of Species. | Native of | Species in Britain. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2 Sagittaria | h | 5 | America, China | Brit. 1 |
|  | 3 Theligonum | h |  | Italy |  |
|  | 4 Xylosma |  | 1 |  |  |

## Amentum imbricated.

| 65 | Carpinus | s | 2 | America |
| :--- | :--- | :--- | :--- | :--- |
| 66 Corylus | s | 3 | Europe | Brit. 1 |
| 67 Juglans* | t | 5 | America | Brit. 1 |

68 Platanus

## Amentum globular.

$t 2$ E. \& W. Indies

## ORDER IX. MONADELPHIA.

## (ONE BROTHERHOOD.)

Stamina united at the base.

69 Acalypha<br>70 Croton $\dagger$<br>71 Cupania<br>72 Dalechampia<br>73 Heritiera

from whence they ascended perfectly straight, with a gradual taper, forty or fifty feet to the limbs; the bark (called the quercitron vark) 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.

[^102]

* 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.
$\dagger$ The root of the manihot or manioc (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.
$\ddagger$ An oil, called castor oil, in the West Indies, is expressed from the seed of the vicinus 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, Thucydides 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 4 th, and gates of brass substituted in their place. Milne's Bot. Dict.
\| Venice turpentine is from the larch tree (pinus larix); Burgundy pitch is from the fir (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 ltaly.

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.

## $\mathrm{N}^{\mathrm{o}}$ of

Genera. Growth. species. Native of
Calyx five-cleft, or five-toothed.

| 85 Bryonia* | h | 11 | Africa, Crete | Brit. 1 |
| :--- | :--- | ---: | :--- | ---: |
| 86 Cucumis $\dagger$ | h | 13 | Africa, Jamaica |  |
| 87 Cucurbita | h | 9 | America |  |
| 88 Momordica $\ddagger$ | h | 8 | India, America |  |
| 89 Sicyos | h | 3 | Canada |  |
| 90 Tricosanthes | 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 $\quad 2$ Italy |
| :--- | :---: |
|  | Calyx six-leaved. |
| 92 Agyneia | s 2 China |

[^103]
## CLASS XXII. DICECIA.

(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, cucubalis, lychnis, phytolacca, gypsophyla, (decandria); spircea, rubus, (icosandria); clematis, thalictrum, (polyandria); napaa, (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 pertandria, monogynia, or in the classes didynania, tetradynamia, and diadelphiu; 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.)

| 10 Genera. | Growth | $\mathrm{N}^{\circ}$ of species. | Native of | Species ind Britain. |
| :---: | :---: | :---: | :---: | :---: |
| 1 Ascarina | h | 1 |  |  |
| - Najas | h | 1 |  |  |
| S Keura | t | 1 |  |  |


| No Genera. | Growth. species. $\begin{gathered}\text { No of }\end{gathered}$ | Native of | Species if Britain. |
| :---: | :---: | :---: | :---: |
| 4 Pandanus* | $\mathrm{t} \& \mathrm{~s} \text { \& }\left\{\begin{array}{l} \text { Ceylon, Nicobar (most } \\ \text { odorious) } \end{array}\right.$ |  |  |
| ${ }_{5}$ Phelypæe | 1 |  |  |
| ORDER II. DIANDRIA. (TWO MALES.) |  |  |  |
| Spatha. |  |  |  |
| 6 Cec:opia | s 1 J | Jamaica |  |
| 7 Vallisneria $\dagger$ | h 1 l | Italy |  |
| Amentum. |  |  |  |
| 8 Brosimum | $\mathrm{t} \quad 1$ | Jamaica |  |
| 9 Salix $\ddagger$ | t \& s 45 | Egypt, Lapland | Brit. 40 |
| ORDER III. TRIANDRIA. <br> (THREE MALES.) |  |  |  |
| 10 Caturus | S 2 | E. \& W. Indies | Brit. 1 |
| 11 Empetrum | s 2 | Europe |  |
| 12 Maba. | s 1 | Tonga Tabu |  |
| 13 Osyris | s 1 | Italy, Japan |  |
| Amenturi. |  |  |  |
| 14 Exccecaria | ¢ 1 | Amboyna |  |
| 15 Restio§ | s \& h 9 | 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.

[^104]
## ORDER IV. TETRANDRIA.

 (FOUR MALES.)
(five males.)

| 23 Acnida | h | 1 | Virginia |
| :--- | :---: | :--- | :--- |
| 24 Antidesma | t | 1 | India |
| 25 Astronium | s | 1 | Jamaica |
| 26 Canarium | s | 1 | India |
| 27 Cannabis $\ddagger$ | h | 1 | India |

[^105]| No Genera. | Growth. | $\mathrm{N}^{\circ}$ of Species | Native of | Species in Britain. |
| :---: | :---: | :---: | :---: | :---: |
| 28 Flevillea | h | 2 | W. Indies |  |
| 29 Humulus* | h | 1 E | Europe | Brit. 1 |
| 30 Iresine | h | 1 V | Virginia, Jamaica |  |
| 31 Pistacia $\dagger$ | t | 5 | Chios |  |
| 32 Spinacia | h | 2 | Siberia |  |
| 33 Zanonia | h | 1 | India, Malabria |  |
| 34. Zanthoxylon | s | 2 | Virginia, Jamaica |  |

## ORDER VI. HEXANDRIA.

| (six males.) |  |  |  |
| :---: | :---: | :---: | :---: |
| Calyx six-leaved. |  |  |  |
| 35 Dioscorea | h 12 | India |  |
| 36 Rajania | h 5 | America |  |
| 37 Smilax $\ddagger$ | s \& h 14 | Spain, Ceylon | N. Amer. |
| 38 Tamus | h | Crete, Cape | Brit. 1 |

ORDER VII. OCTANDRIA.
(EIGHT MALES.)
Calyx four-parted, or four-toothed.

39 Margaritaria
40 Rhodiola
s 1 Surinam
h 1 Europe
Amentum.

41 Populus§
$t 11$ Italy, \&c.
Brit. 3

* Hop-linds 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.

$$
+ \text { Mastich (a resin) is from the pistacia lentiscus. }
$$

$\ddagger$ The large tuberous roots of the smilax China, properly prepared, afford 2 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 Aprilo.

## ORDER VIII. ENNEANDRIA.

(NiNe MALES.)

| No | Genera. | No of Growth. species. | Native of | Species in Britain. |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Calyx three-leaved. |  |  |
|  | drocharis | h 1 | Europe | Brit. 1 |
| 43 | ercurialis | s \& h 4 | Africa, Spain | Brit. ${ }^{\text {2 }}$ |

ORDER IX. DECANDRIA.
(TEN MALES.)
Calyx five-leaved, or five-cleft.

44 Carica
45 Coriaria
46 Kiggelaria
47 Schinus
s 2 India
s 2 France
t 1 Ethiopia
s 2 Peru

## ORDER X. DODECANDRIA.

(twelve males.)

| 48 | Datisca | h | 2 |
| :--- | :--- | ---: | :--- |
| Crete |  |  |  |
| 49 | Euclea | t | 1 |
| Cape |  |  |  |
| 50 Menispermum | s | 11 | America, Japan |

## ORDER XI. ICOSANDRIA. <br> (twenty males.)

51 Flacourtia s i
ORDER XII. POLYANDRIA.
(MANY MALES.)
52 Cliffortia
53 Hedycarya
s 18 Cape, \&cc.
s 1 New Zealand

## ORDER XIII. MONADELPHIA.

 (ONE BROTHERHOOD.)Stamina united at the base.

54 Adelia
55 Cissampelos
s. 3 America
s\&h 5 America

| No | Genera. | Growth. | $\begin{aligned} & \text { No of } \\ & \text { species. } \end{aligned}$ | Native of | Species fin Bfitain. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 56 | Napæa | h | 2 | Virginia |  |
| 57 | Taxus* | t | 4 | America | Brit. 1 |
| Male amentum. |  |  |  |  |  |
| 58 | Ephedra | s | 2 | Spain |  |
| 59 | Juniperus $\dagger$ | s | 10 | Barbadoes, | Brit. 1 |

## ORDER XIV. SYNGENESIA.

(CONFEDERATE MALES.)
Stamina united at the top.
Calyx six-leaved.
60 Ruscus $\ddagger$
s 5 Italy, Spain
Brit. 1

## ORDER XV. GYNANDRIA.

## (FEMININE MALES.)

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

## 61 Clutia

> Calyx five-leaved.
> s 9 Africa

*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.
$\dagger$ Olibanum (a gum resin) is from a species of juniperus, called juniperus lycia ; and the saudarack 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.
$\ddagger$ 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; it 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 rusa cus hypoglossum. Linnæus enumerates five species, viz.:

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.

## 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 monacia and diccia. 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 (pentan. digyn.), 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. MONCECIA.

(ONE HOUSE.)
Having the polygamy on the same plant.

No Genera. Growth. Species. Native of | No of |
| :---: |
| Species in |
| Britain. |

> 1st. Male monoclinians, and female monoclinians.*

## Spatha.

$$
1 \text { Musat } \quad \text { h } 3 \text { India }
$$

[^106]+ 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

| No | Genera. | No of <br> Growth. specieso |  |  | Native of |
| :--- | :--- | :--- | :--- | :--- | :--- | | Species in |
| :---: |
| Britain, |

near three broad; but when it hath once flowered; the stem soon dies to the ground. The fruit of hoth 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 lanana 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 gummy and partly resinous, from the mimosa catechu, and other plants. Gumaralic is also from the mimosa nilotica. The gum-aralic 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.
$\pm$ Benzoinum (Benjamin) is a resin from terminalia lenzoin, and is sometimes called assa-dulsis, in opposition to assa-foetida.-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 $1787^{\circ}$

| No | Genera. | Growth. | $\mathrm{N}^{\circ}$ of Species. | Native of | Species in Britain. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Gluma. |  |  |  |  |  |
|  | Egilops | h | 4 | Spain, Italy | Brit. 1 |
|  | Andropagon | h |  | India, America |  |
|  | Apluda | h |  | E. \& W. Indie |  |
|  | Cenchrus | s \& h | 9 | Italy | Brit. 2 |
|  | Holchus* |  |  | India |  |
|  | Ischœmum | s | 2 | China |  |
|  | Manisuris | h | 1 | India |  |
| 19 | Spinifex | h | 1 | E. Indies |  |
| Umbelled. |  |  |  |  |  |
|  | Hermas | h | 5 | Cape |  |
| Amentum. |  |  |  |  |  |
| 21 | Brabeium | s | 1 | Cape |  |
| 3d. Monoclinians and females. |  |  |  |  |  |
|  | Atriplex $\dagger$ | s \& h | 12 | Siberia | Brit. 8 |
|  | Clusia |  | 4 | America |  |
|  | Virgilia |  | 1 |  |  |
| 25 | Wedelia |  | 1 |  |  |
| 26 | Parietaria | h | 8 | Portugal, Crete | Brit. 1 |
| 4th. Monoclinians and males and females. |  |  |  |  |  |
|  | Breynia | $\mathrm{h}^{\circ}$ | 1 |  |  |

## ORDER II. DICECIA.

(TWO HOUSES.)
Having the polygamy on two plants.
1st. Monoclinians and males.

| 28 | Chrysitrix (glume) h | 1 | Cape |
| :--- | :--- | :--- | :--- |
| 29 | Diospyros | t | 5 |
| Italy, Virginia, E. Indies |  |  |  |
| 30 Nyssa | t | 1 | Virginia |

[^107]No Genera. Growth. \begin{tabular}{c}
No of <br>
species.

$\quad$ Native of $\quad$

Species in <br>
Britain.
\end{tabular}

| 31 Panax* (umbel'd) s\&h | 5 | China, America |
| :--- | :--- | :--- |
| 32 Stilbe | 3 | Cape |

2d. Monoclinians and females.

# 33 Fraxinus $\dagger$ t 4 America <br> Brit. 1 <br> 34 Gleditsia $\ddagger$ <br> t 2 America 

Species in Britain.
31 Panax* (umbel'd) s\&h 5 China, America
32 Stilbe
3

# 35 Anthospermum§s \& h 3 Ethiopia 

Umbelled.
36 Arctopus

37 Pisonia
h 1 Africa
No calyx.

## 3d. Androgynous and males.

s \& W. Indies

## ORDER III. TRICECIA.

(three houstes.)
Having the polygamy on three plants.
Androgynous, male, and female, on three plants.
38 Ceratonia\| t 1 Spain

[^108]| No Genera. | $\mathrm{N}^{\circ}$ of <br> Growth. Species. |  | Native of |
| :---: | :---: | :---: | :---: | | Species in |
| :---: |
| Britain. |

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 caprificus 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 tricecious 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 Linnreus, 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, teriding 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 Greek, meaning fig-mulberry, and Linnæus, 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 cupressuse

# 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.-lt admits of the follow. ing character: The calyx, a scale growing out of the leaf, opening on one side ${ }_{\text {s }}$ 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 thera according to the form and situation thereof, under the leaves or fronds $\dagger$.

No Genera. Growth. \begin{tabular}{c}
No of <br>
species.

$\quad$ Native of $\quad$

Species in <br>
Britain.
\end{tabular}

## 1st. Fructification spiked.

| 1 Equisetum $\ddagger$ | h | 7 | Europe | Brit. 6 |
| :--- | :--- | ---: | :--- | :--- |
| a Onoclea | h | 2 | Virginia |  |
| 3 Ophioglossum§ | h | 9 | America, Japan | Brit. 1 |
| 4 Osmunda | h | 21 | Cape, Virg. Ceylon | Brit. 4 |

* The plants of this class are often of a dangerous quality.
$\uparrow$ Fronds.-See note to palma.
$\ddagger$ 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 $n o$ 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.


> Species in Britain.

5 Acrostichum
6 Adianthum*
7 Asplenium
8 Blechnum
9 Hemionitis
10 Lonchitis
11 Polypodium $\dagger$
12 Pteris $\ddagger$
13 Trichomanes
h 35 N. \& S. America
Brit. 2
Brit. 2
Brit. 8
h 28 America, \&c.
h 6 Virginia, Japan
h 4 Jamaica, Japan
h 4 Jamaica
h 78 America, \&c.
h 23 W . Indies
h 15 Canary, China
Brit. 15
Brit. 1
Brit. 2

## 3d. Fructifications radical.

| 14 Isoetes | h | 2 | Europe | Brit. 1 |
| :--- | :--- | :--- | :--- | :--- |
| 15 Marsilea | h | 3 | Italy | Brit. 1 |
| 16 Pilularia | h | 1 | Europe | Bren |

## ORDER II. MUSCI.

(mosses.)
These are distinguished according as the anthere (generally without filaments) ate or are not under a calyptra (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.
$\dagger$ 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 hemorrhages, and is called golden moss.

[^109]After the falling of the outer vail or covering, the anthere 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 recepiacle, supporting the flower and fruit ; for within the same little hood in buxbaumia, Linnæus saith he hath observed real antheræ 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. Species. Native of \begin{tabular}{c}
No of <br>

| Species in |
| :---: |
| Britain. |

\end{tabular}

## 1st. Without calyptra, (a vail).

| 17 Lycopodium* | h | 29 | Alps, Japan, \&c. | Brit. 6 |
| :--- | ---: | ---: | :--- | :---: |
| 18 Porella | h | 1 | Pensilvania |  |
| 19 Sphagnum | h | 3 | Alps | Brit. 3 |

## 2d. With calyptra, two bed.

| 20 | Barbula | h | 1 |
| :--- | :--- | ---: | :--- |
|  |  |  |  |
| 21 Dicranium | h | 1 |  |
| 22 Grimmia | h | 1 |  |
| 23 Koelreutera | h | 1 |  |
| 24 Meesia | h | 1 |  |
| 25 Mnium | h | 20 | Europe |
| 26 Neckera | h | 1 |  |
| 27 Pohlia | h | 1 |  |

[^110]Count Rumford's Essays, vol. ii. p. 448 .

| No | Nenera. |  |  | Growth. |
| :--- | :---: | :---: | :---: | :---: |
| Npecies. | Native of | Species in <br> Britain. |  |  |
| 28 Polytrichum | h | 5 | Alps, Magellan | Brit. 3 |
| 29 Splachnum | h | 6 | Sweden | Brit. 2 |
| 30 Timmia | h | 1 |  |  |
| 31 Tortula | h | 1 |  |  |
| 32 Weissia | h | 1 |  |  |

3d. With calyptra, one bed.

| 33 Bryum | h 37 | Alps, \&c. | Brit. 35 |
| :---: | :---: | :---: | :---: |
| 34 Buxbaumia | h \% | 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 |  |  |
| 39 Phascum | h | Europe | Brit. 4 |
| 40 Tetraphis | h |  |  |
| 41 Trichostomum | h |  |  |
| 42 Webera | h |  |  |

## ORDER III. ALGE。

```
(FLAGS.)
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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 int terrestrial, and aquatic.

## Linnæus hath taken his method from Michelius.

## 1st. Terrestrial.

| 43 | Anthoceros | $\therefore$ | h | 3 | Italy |
| :--- | :--- | ---: | ---: | :--- | :--- |
| 44 Blasia | h | 1 | Europe | Brit. 1 |  |
| 45 Byssus | h | 14 | Italy | Brit. |  |
| 46 Claydonia | h | 1 |  |  |  |
| 47 Jungermannia | h | 33 | Alps, \&c. | Brit. 30 |  |


| No Genera. | No of <br> Growth. spetics. |  | Native of |
| :--- | :---: | :---: | :---: |

* In the Systema Vegetalilium 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) 2 d . leprosi scutellati, such as have the appearance of little shields; 3d. imbricati, 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; 7 th. scyphifera, cup-bearing; 8th. fruticulosi, shrubbyish; 9th. filamentosi, thready, these mostly hang from the boughs of trees, hence the name of tree moss. The lichen rangiferinus, 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 nothern 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 watt perforated, of the 3 st. division ; and the lichen tartarius, of the 2 d . 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 of milk; boiled with milk alone, it affords a wholesome ând palatable nodrishment to the Icelanders. It is here chiefly used, from its demulcent quality, by invalids and convalescents.
$\dagger \mathrm{Mr}$. Corrêa de Serra hath shewn that the submersed alga, instead of pollext. or farina, are furnished with a mucus; and with vesicles instead of anthera.

Phil. Trans. for 1796, part 2.


#### Abstract

$\ddagger$ The conferva bulvosa was preserved dry for eighteen months, and which then resembled nothing but a small heap of greyish dast; 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 agagropila is found loose in many lakes, in a globular form, from the size of a walnut to that of a melon,


| No Genera. | Growth. $\begin{gathered}\mathrm{N}^{\mathrm{No}} \text { of } \\ \text { species. }\end{gathered}$ | Native of | Species in Britain. |
| :---: | :---: | :---: | :---: |
| 55 Fucus | h 58 | Europe, Italy | Brit. 58 |
| 56 Tremella** | h 11 | Europe ${ }^{\text {c }}$ | Brit. 8 |
| 57 Ulva | h $\quad 15$ | Europe | Brit. 15 |
|  | RDER IV. <br> frungus | FUNGI. $\uparrow$ <br> sses.) |  |

Linnzeus tells us he rather chose to make his divisions in this order according to Dellenius, than from Michelius; hecause the first is plain to every one, hut 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 therefare only taken from their external forms. They are generally erect.

## 1st, Hatted.

53 Agaricus $\ddagger \quad$ 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

- vagabunda 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.-(Botanic Garden, 4 to. edit. p. 170). M. Vaucker, of Geneva, hath lately published an history of the fresh-water conferver, 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 Linnæus makes star jelly (tremelia 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.

[^111][^112]|  | Genera, | Growth. | $\mathrm{N}^{0}$ of Species. | . Native of | Species in Britain. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Boletus | h | 21 | China | Brit. is |
|  | Hydnum | , |  | Italy | Brit. 3 |
|  | Phallus | h | 3 | Europe | Brit. 3 |
| 2d. Having no hat. |  |  |  |  |  |
|  | Carpobolus | h | 1 |  |  |
| 63 | Clathrus | h | 4 | Sweden | Brit. 4 |
|  | Clavaria* | h | 13 | Europe | Brit. 8 |
|  | Cyathus | , | 1 |  |  |
| 66 | Heluella | h | 2 | Europe | Brit. 2. |
|  | Lycoperdon $\dagger$ | h | 19 | Bohemia | Brit. 15 |
|  | Mucor | h | 15 | Upsal | Brit. 11 |
|  | Næmaspora | h | 1 |  |  |
| 70 | Peziza | h | 11 | France | Brit. 9 |
| 71 | Poronia | h | 1 |  |  |
|  | Puccinia | h | 1 |  |  |
|  | Sphæria | h | 1 |  |  |
|  | Stemonitis | h | 1 |  |  |
|  | Thælæphora | h | 1 |  |  |

* 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 fungus, which Sir John calls clavaria sololifera, but by Linnæus clavaria militaris, 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.
+ Truffe (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 trufles are sometimes found about Selborne, in Hampshire, and are sold at $2 s .6 d$. 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 PALME, containing suich 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.

## PALME.*

(PALMS SPATHED, THREE-PETALED.)
Wo Genera. Growth. species. Native of Britain,

## 1st. Fan-leaved, (troo houses.)

## Drupa.

| 1 Borassus $\dagger$ | s | 1 | Malabar |
| :--- | :--- | :--- | :--- |
| 2 Chamærops $\ddagger$ | s | 2 | Spain |

[^113]| No | Genera. | Growth.No of <br> species. | Native of | Species in <br> Britain. |
| :---: | :---: | :---: | :---: | :---: |
| 3 | Corypha* | (monoclin.)s s | 2 | India, Barbadoes |

## 2d. Feather-leaved, (Troo houses.)

Drupa.

6 Elæis
s

## 1 Guinea

7 Phœenix $\dagger$
t 2 India, Arabia, \&uc.
Feather-leaved, (one house.) Drupa.

| 8 | Areca $\ddagger$ | t | I |
| :--- | :---: | :--- | :--- |
| 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 Plantain 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 att can prevent its perishing at the approach of winter.-See note to agave.
+ Phoenix dactylifera (date or dactyl tree) is a very durable tree; but if it hap. pens to be injured 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 phonix, it is probable that the fabulous history of the Arabian bird of that name reviving from its ashes, is founded on this circumstance.-(Travels ly the Able 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.
$\ddagger$ 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.

[^114]$\mathrm{N}^{\circ} \quad$ Geneta.
12 Nipa
$\mathrm{N}^{\circ}$ of
Species in
Growth. species. Native of
t 1 Amboyna
t 5 Kafferland in Africa

3d. Twice feather-leaved, (one house.)
Drupa.
14 Caryota ${ }_{15}$ Licuala" (monoclin.) ${ }^{9} \quad 1 \quad 1$ Andia, 1 Amboyna, Ceylon

## From the Supplement.

16 Mauritia s 1 Surinam

17 Ginkgo
18 Arenga $\dagger$
t 1 Japan
t 1 Moluccas

* Licuala spinosa (the tallipot tree).-See note to lorassus.
+ 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 durabie 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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## INDEX

OF SUCH

## TRIVIAL NAMES

## AS WERE

## THE GENERA OF OLD AUTHORS.

| Abelmóschus | Musk-seed | Hibiscus |
| :--- | :--- | :--- |
| A'bies | Fir | Pinus |
| Abrótanum | Southern-rwood | Artemisia |
| Absínthium | Wormwood | Atemisia |
| A'bsus | Four-leaved cassia | Cassia |
| Abútilon | Indian mallow | Sida |
| Acánga | Bromelia |  |
| Acánthium | Cotton thistle | Onopordon |
| Acána | Blessed thistle | Cnicus |
| Acetábulum | Joint cupmoss | Peziza |
| Acetósa | Sorrel | Rumex |
| Acetosélla | Wood sorrel | Rumex |
| Achile'a | Milfoil, yarrow | Oxalis |
| Achyrántha |  | Chrysanthemum |
| Acídoton | Box-leaved adelia | Illecebrum |
| Acinodéndron | American gooseberry | Melia |
| Anciastoma |  |  |
| Acicanthéra | Wild, or stone basil | Thymus |
| Acmélla |  | Rhexia |
| Adhadóta | Malabar nut | Spilanthus |
| Adíantum | Black maiden hair | Justicia |
| Asplenium |  |  |

浉gilops
Æginétia
※thíopis
Agallocha
Agástachys
Agératum
Agéria
Agnus Castus Chaste tree
Agrimonoídes Base agriniony
Ahóvai
Ajácis
Aizoon
Alatérnus
A'lcea
Alhági
Alicástrum
Alkekéngi
Alliária
Ally'sson
A'lnus
Aloídes
Alopecírum
Alsinástrum
Altáica
Aly'pum Blue daisy
Amalágo Rough-leaved pepper
Amaránthoides
Amarélla
Amelánchier
Amellóides
Améllus
A'mmi
Ammódytes
Amómum
Ampelóprasum
Amsónia
Anacámpseros $\left\{\begin{array}{l}\text { Evergreen orpine } \\ \text { Round-leaved purslain }\end{array}\right.$
Anagállis Pimpernel, water
Anánas
Prickly-cupped oak
Broom rape
Athiop
Wood aloes
Sweet maudlin

Yellow stone crop
False phyllirea
Mallow hollyhock
French honeysuckle
Bread-nut tree of Jamaica Brosimum
Winter cherry
Madwort of Galen
Alder
Water aloe, or water soldier Stratiotes
Fox-tail grass

Amaranth
Autumnal gentian

Pine apple

Sauce alone Erysimum

Quercus
Orobanche
Salvia
Excoecaria
Carex
Achillea
Pæderota
Vitex
Agrimonia
Cerbera
Delphinium
Sedum
Rhamnus
Malva
Hedysarum
Physalis
Marrubium
Betula
Hypnum
Elatine
Sibbaldia
Globularia
Piper
Axyris
Gentiana
$\left\{\begin{array}{l}\text { Mespilus } \\ \text { Pyrus }\end{array}\right.$
LPyrus
Cineraria
$\left\{\begin{array}{l}\text { Calea } \\ \text { Aster }\end{array}\right.$
Sison
Astragalus
Sison
Allium
Tabernæmontana
Sedum
Portulaca
Veronica
Bromelia

| Anándria | Colt's-foot | Tussilago |
| :---: | :---: | :---: |
| Anblátum |  | Lathræa |
| Andráchne | Oriental strawberry tree | Arbutus |
| Andrógynus |  | Ruscus |
| Androsæ'mum | Tutsan, or park-leaves | Hypericum |
| Androsáceus |  | Agaricus |
| Angúina | Serpent cucumber | Trichosanthes |
| Anguria | Water melon | Cucumis |
| Ánil | Indigo | Indigofera |
| Anísum | Anise | Pimpinella |
| Anserína | Goose-grass | $\left\{\begin{array}{l}\text { Potentilla } \\ \text { Antirrbinum }\end{array}\right.$ |
| Anteuphórbium |  | Cacalia |
| Anthélmia | Worm grass | Spigelia |
| A'nthora |  | Aconitum |
| Anthríscus | Purple hedge parsley | $\left\{\begin{array}{l}\text { Tordylium } \\ \text { Scandix }\end{array}\right.$ |
| Aparíne $\{$ | Clivers, or hairiff Cross-wort | Galium Valantia |
| A'phaca | Yellow vetching | Lathyrus |
| Aphtosus |  | Lichen |
| A'pios | Knobbed-rooted liquorice $\{$ vetch | Euphorbia Glycine |
| A'pula |  | Myosotis |
| Aquifólium, or Acuifólium* | HHolly | Ilex |
| A'rbor trístis | Sorrowful tree | Nyctanthes |
| Archangélica | Archangel | Angelica |
| Arctostáphylos |  | Vaccinium |
| Aréira |  | Schinus |
| Arenária | Sandwort | Stellaria |
| Argemóne | Prickly poppy | Papaver . |
| Argúsia |  | Messerschimidia |
| A'ria | Aria theophrasti | Crategus |
| Arísarum | Friar's cowl | Arum |
| Aristélla |  | Slipa |
| Armeníaca | Apricot | Prunus |
|  | Thrift, or sea pinlo | Statice |
| Arméria | Deptford pink | Dianthus |
|  | Lobel's caich-fly | Silene |

[^117]| Armorácia | Horse radish | Cochlearia |
| :---: | :---: | :---: |
| Arúncus |  | Spiræa |
| Asclépium |  | Thapsia |
| Ascolónicum | Eschalots | Allium |
| A'scyron | St. Peter's or John's wort | Hypericum |
| Assafoe'tida | Assafotida | Ferula |
| Asteríscus | Base chrysanthemum | Silphium |
| Atamásco | Atamasco lily | Amaryllis |
| Athanásiæ |  | Othonna |
| Atríplicis |  | Chenopodium |
| Aublétia | Cut-leaved rose vervain | Verbena |
| Aurántium | Orange | Citrus |
| Aurícula | Auricula | $\left\{\begin{array}{l} \text { Primula } \\ \text { Peziza } \end{array}\right.$ |
| Auriculária | . | Hedyotis |
| Avellána | Hazel nut | Corylus |
| Azadiráchta | Bead tree | Melia |
| Azárolus | Azarole | Cratægus |
| Azédarach | Bead tree | Melia |
| B |  |  |
| Badúcca |  | Capparis |
| Bæómyces |  | Lichen |
| Bæóthryon |  | Scirpus |
| Balánghas |  | Sterculia |
| Balsámea | Balsam of Canada | Pinus |
| Balsámina | Balsam | $\left\{\begin{array}{l}\text { Impatiens } \\ \text { Momordica }\end{array}\right.$ |
| Balsamíta | Costmary | $\left\{\begin{array}{l} \text { Tanacetum } \\ \text { Chrysanthemum } \end{array}\right.$ |
| Bálsamum |  | 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 |
| Beccabúnga | Brooklime | Veronica |
| Béhen | White behen | $\left\{\begin{array}{l}\text { Cucubalus } \\ \text { Silene }\end{array}\right.$ |
|  |  | Centaurea |


| Belladónna | Deadly nightshade. | $\left\{\begin{array}{l} \text { Atropa } \\ \text { Amaryllis } \end{array}\right.$ |
| :---: | :---: | :---: |
| Bellidiástrum | Middle daisy | $\left\{\begin{array}{l} \text { Doronicum } \\ \text { Osmites } \end{array}\right.$ |
| Bénghas |  | Gluta |
| Benjamína |  | Ficus |
| Bénzoe | Benjamin tree | Croton |
| Bénzoin | Benjamin tree | $\left\{\begin{array}{l} \text { Laurus } \\ \text { Terminalia } \end{array}\right.$ |
| Bergána |  | Erica |
| Bermudíanum |  | Sisyrinchium |
| Bernárdia | Base ricinus | Adelia |
| Bétle | Betle | Piper |
| Betónica |  | Justitia |
| Bétulinum |  | Egopricon |
| Bétulus | Hornbeam | Carpinus |
| Bídens | Tickseed sunflower | Coreopsis |
| Bíhai | Banana | Heliconia |
| Bilímbi |  | Averrhoa |
| Bistórta | Bistort, or snakc-weed | Polygonum |
| Blattária | Moth mullein | Verbascum |
| Blattarioídes |  | Hieracium |
| Bléchnum |  | Ruellia |
| Blítum | Blite | Amaranthus |
| Bóna Nox |  | $\left\{\begin{array}{l} \text { Ipomoea } \\ \text { Smilax } \end{array}\right.$ |
| Bonaróta | Rock germander | Pæderota |
| Bónduc | Nicker tree | Guilandina |
| Bonduccélla |  | Guilandina |
| Bonus Henrícus | Garden mercury | Chenopodium |
| Borbónia | Bay tree of Carolina | Laurus. |
| Bosvallêa |  | Verbesina |
| Botryápium |  | Pyrus |
| Bótrys | Oak of Jerusalem | $\left\{\begin{array}{l} \text { Chenopodium } \\ \text { Teucrium } \end{array}\right.$ |
| Bovísta | Fuz, or puff ball | Lycoperdon |
| Bourréria |  | Ehretia |
| Bréynia |  | Capparis |
| Británnica |  | Rumex |
| Brizoídes |  | Poa |
| Bruníades |  | Protea |
| Bryántha |  | Andromeda |


| Bryópteris |  | Lycopodium |
| :---: | :---: | :---: |
| Búceras |  | Bucida |
| Bulbocástanum | Pig, or earth nut | Bunium |
| Bulbocódium |  | $\{$ Ixia |
|  |  | \{ Narcissus |
| Bánius |  | \{ Ethusa |
|  |  | \{Stilago |
| Bursa Pastóris | Shepherd's purse | Thlaspi |
| c |  |  |
| Caapéba |  | Cissampelos |
| Cacáo | Chocolate nut | Theobroma |
| Cájan | Pigeon pea | Cytisus |
| Caínito | Star apple | Chrysophyllum |
| Cákile |  | Bunias |
| Cálaba | Calaba plum | Calophyllum |
| Calabura |  | Muntingia |
| Calamagnóstis |  | \{ Agrostis |
|  |  | \{ Arundo |
| Calamíntha | Calamint | Melissa |
| Cálamus | Srweet rus/o | Acorus |
| Calceolária | Slipper | Viola |
| Calcéolus, | Ladies' slipper | Cypripedium |
| Calcitrápa | Star thistle | Centaurea |
| Caléndula | Marigold | Arctotis |
| Callicórnia |  | Leysera |
| Callocócca |  | Cordia |
| Caly'cina |  | Festugo |
| Cámara | American viburnum | Lantana |
| Cámeu-clits-se | Quamoclits |  |
| Cámmarum | Variegated monk's hood | Aconitum |
| Campánula | Bell-flower | Canarina |
| Campechiánum | Logwood | Hæmatoxylum |
| Campechiénse |  | Solanum |
| Cámphora | Camphor tree | Laurus |
| Cándel | Candel of the Indians | Rhizophora |
| Candelábrum |  | Ceropegia |
| Cannábina | Base hemp | [ Althæa |
|  |  | Tragia |
|  |  | Urtica |
|  |  | Datisca |
| Cantábrica |  | Convolvulus |




[^118]Chloróxylon
Chordorrhíza
Chrysánthum
Chrysógonum
Chytracúlia
Cícer
Cícera
Cichorácea
Cícla
Cinerária
Cinnamómum
Cistóides
Citrúllus
Clandestína
Cláva Hérculis
Clavénnæ
Claytónia
Clématis
Cly'menum
Cneórum
Cóbbe
Coccífera
Cóculus
Coéli Rósa
Co'cius
Colocásia
Colocy'nthis

## Cólpoon

Colubrína
Colúrna
Comaáurea
Comínia
Conóides
Consólida
Contrajérva
Convólvulus
Conyzóides
Copállinum
Coracánus

Byzantine nut
Goldy locks

Wound-wort
Contrayerva
Base hemp agrimony
Gum copal

Laurus
Carex
Rhododendron
Leontice
Myrtus
Astragalus
Lathyrus
Centaurea
Beta
Centaurea
Laurus'
Tribulus
Cucurbita
Lathræa
Zanthoxylum
Achillea
Osmunda
Mutisia
Lathyrus
$\left\{\begin{array}{l}\text { Convolvulus , }\end{array}\right.$
Daphne
Rhus
Scarlet-grain, or kermes oak Quercus
India-berry Menispermum
Dewberry, bramble Rubus
Great Egyptian arum Arum
$\left\{\begin{array}{c}\text { Cologuintida, or bitter } \\ \text { gourd }\end{array}\right\}$ Cucumis
Euonymus
\{Thesium
Stychnos
Corylus
Chrysocoma
Rhus
Silene
Delphinium
Dorslenia
Polygonum
Ageratum
Rhus
Cynosurus

| Corálinus | Liver-wort | Lichen |
| :---: | :---: | :---: |
| Corallodéndrum | Coral tree | Erythrina |
| Coralloídes | Liver-wort | Clavaria |
| Corallorhíza |  | Ophrys |
| Cordifólia |  | Cissus |
| Coriária |  | Rhus |
| Coríndum | Heart-seed . | Cardiospermuna |
| Córis |  | Hypericum |
| Corónaria | Wild lichnis, or rose campion Agrostemma |  |
| Corónopus | $\left\{\begin{array}{c} \text { Buck's-horn plantain, } \\ \text { swine's cress } \end{array}\right.$ | $\}$ Cochlearia |
| Cóta |  | Anthemis |
| Cótinus | Venice sumach | Rhus |
| Cotoneáster | Dwarf medlar May zeeed | Mespilus |
| Cótula |  | Anthemis |
| Cotylédon |  | Saxifraga |
| Coúrbaril | Locust tree | Hymenæa |
| Crácca |  | Vicia |
| Crísta |  | Casalpina |
| Crísta Castrénsis | Camp crest Cock's comb | Hypnum |
| Crísta Galli |  | $\left\{\begin{array}{l} \text { Rhimanthus } \\ \text { Erithrina } \\ \text { Hedysarum } \end{array}\right.$ |
| Crocáta | Drop-wort hemlock | Oenanthus |
| Crocátus |  | Lichen |
| Crocody'lium | Centaury without stems | Centaurea |
| Crossopétalum |  | Rhacoma |
| Cruciáta | Cross-wort | Valantia |
| Crupína |  | Centaurea |
| Crux Andreæ' |  | Ascyrum |
| Crus Córvi |  | Panicum |
| Crus Gálli |  | $\{$ Panicum |
|  | Cubebs | \{ Cratagus |
| Cúbeba |  | Piper |
| Cuculária |  | Valantia |
| Cucullária | Fumuterre with nakedstalk Fumaria |  |
| Cujéta | Calabash tree | Crescentia |
| Culílaban |  | Laurus |
| Cunónia | Persian corn flag | Antholyza |
| Cuphéa |  | Lythrum |
| Cúrcas | Physic nut | Jatropha |
| Cururu |  | Paullinia |



| Dryméa |  | Carex |
| :---: | :---: | :---: |
| Dryópteris |  | Polypodium |
| Dudáim |  | Cucumis |
| Dulcamára | $\left\{\begin{array}{c}\text { Bitter, sweet, or woady } \\ \text { nightshade }\end{array}\right.$ | \}Solanum |
| E |  |  |
| E'benum | Ehony | Diospyros |
| E'benus |  | Aspalathus |
| E'bulus | Dwarf alder | Sambucus |
| Ecastaphy'llum |  | Pterocarpus |
| Ecbólium |  | Justitia |
| Echínus |  | Statice |
| Echioídes | Ox-tongue | Picris |
| Eglantéria | Eglantine | Rosa |
| Elatérium | Spurting cucumber | Momordica |
| Elatíne | Female speedwell | $\left\{\begin{array}{l}\text { Antirrhinum } \\ \text { Campanula }\end{array}\right.$ |
| Elégia |  | Restio |
| Elemífera | Gum elemi | Amyris |
| Eléngi |  | Mimusops |
| E'lephas | Elephant's head | Rhinanthus |
| Ellísia |  | 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 |  | Lycoperdon |
| Epiglóttis |  | Astragalus |
| Epipáctis |  | Astrantia |
| Epipogíum |  | Satyrium |
| Epithymum | Dodder of thyme | Cuscuta |
| Eragróstis |  | $\left\{\begin{array}{l}\text { Poa } \\ \text { Bra }\end{array}\right.$ |
| Erinácea | Spanish hedge-hog thorn | Ariza |
| Erínus |  | ¢ Campanula |
|  |  | LLobelia |
| Erisithales |  | Cnicus |


| Erúcà | Rocket | Brassica |
| :---: | :---: | :---: |
| Erucágo | $\{$ Square-podded rocket of | Bunias |
| Erucástrum |  | Brassica |
| Eruláceum |  | Laserpitium |
| Ervília | Bitter vetch | Ervum |
| Ery'siphe |  | Mucor |
| Erythrína | Fish-bane | Piscidia |
| E'sculus |  | Quercus |
| Esúla | Great spurge | Euphorbia |
| Euódía |  | Fagara |
| Eupatória | Hemp agrimony | Agrimonia |
| Eupatorioídes |  | Kuhnia |
| Exacoídes |  | Gentiana |

Fába
Fabágo
Fabárius
Fagíneus
Fagopy'rum
Falcáría
Falcáta
Falx
Fárfara Common colt's-foot
Farsétia
Fávus
Ferulágo
Ficária
Ficoídes
Fícus I'ndica
Filipéndula
Filix Mas
Fílix, Foémina
Fílum
Fístula
Flámmula
Flávium
Flos A'eris
Flos A'quæ
Bean
Bean caper

Buck or beech wheat; brank Polygonum
Sium
\{ Adenanthera
Medicago
Melica
Tussilago
Cheiranthus
Boletus
Ferula
Ranunculus
Cacalia
Cactus
Spiræa
Polypodium
Polypodium
Fucus
Cassia
Clematis
Ranunculus
Allium
Epidendrum
Byssus


| Galáctia Galánga | Galangal | Mariana |
| :---: | :---: | :---: |
|  |  | Maranta |
|  |  | Kaempferia |
| Galáxia |  | Ixia |
| Gálbanum | Galbanum | Bubon |
| Gále | Gale, or sweet willow | Myrica |
| Gaieóbdolon | Yellow archángel | Galeopsis |
| Genistoídes |  | Sophora |
| Gentianóldes | Base gentian | Sarothra |
| Gerascánthus |  | Cordia |
| Gerbéra |  | Arnica |
| Géum | Kidney-wort | Saxifraga |
| Gingídium |  | Daucus |
| Githágo | Cockle, or popple | Agrostemma |
| Gláucium | Yellow-horned poppy | Chelidonium |
| Glaux |  | Astragalus |
| Gloriósa | Adam's needle | Yucca |
| Gmelíne |  | $\{$ Cortusa |
|  |  | \{ Hieracium |
| Gnémon |  | Gnetum |
| Gnídıa |  | Passerina |
| Gnídium | Flax-leaved laured | Daphne |
| Granátum | Pomegranate | Punica |
| Grandarúca |  | Justicia |
| Gránum Paradí | Grains of Paradise | Amomum: |
| Grossulária | Gooseberry | Ribes |
| Grossularioídes |  | Melastoma |
| Gry'lus |  | Andropogon |
| Guazúma | Base cedar of Jamaica | Theobroma |
| Gútta | Gamboge, or camboge | Cambogia |

HI

Halicácaba
Halicácabum
Halimóides
Hálimus Shrubby sea orach
Halléri
Halodéndron
Hármala
Háspan
Hedy'pnois
Heistéria
Helénium
Heleonástes
Heliánthem
Hélix
Hemionítis
Hepática
Hérba Vénti
Hieracioídes Base hawkroeed
Híppo-castanum Horse chestnut
Híppo-márathum Horse fennel
Hírculus Urine-wort
Holoschóenus
Holóstea Stitch-wort
Hormínum
Hóspita
Hyacinthoídes
Hybánthus
Hydnóra
Hydrópiper
Hypericoídes St. Peter's wort
Hypnoídes Lady's cushion
Hypocístis Rape of Cistus
Hypoglóssum Tongue laurel
Hypophyllocarpodéndrum
Hypophy'lum
Hypópithys

Erica
Cardiospermum
Portulaca
Atriplex
Arabis
Robinia
Peganum
Cyperus
Hyoseris
Polygala
Inula
Carex
Cistus
Hedera
Salix
Asplenium
Anemone
Phlomis
Picris
Esculus
Seseli
Saxifraga
Scirpus
Stelleria

Kleinhovia,
Aletris
Viola
Aphyteia
$\left\{\begin{array}{l}\text { Water pepper, or arse-smart Polygonum } \\ \text { Water }\end{array}\right.$
Elatine
Ascyrum
Saxifraga
Cytinus
Ruscus
Protea
Ruscus
Monotropa

| Hypóxilon |  | Clavaria |
| :---: | :---: | :---: |
| Hyssópifólia |  | Lythrum |
| Hysteróphorus | Base feverfuge | Parthenium |
| Hy'strix |  | Aristida |
|  |  | - Elymus |
|  |  | S Barleria |
|  |  | Aspalathus |
| 1 |  |  |
| Jabotápita |  | Ochua |
| Jácea | Knap, or knob-weed | Centaurea |
| Jacobæ'a | Rag-wort | Senecio |
| Jalápa | $\{$ True jalep | Convolvulus |
| Jánipha |  | Jatropha |
| Jámbos | Jamboo apple | Eugenia |
| I'beris |  | Lepidium |
| Icáco | Cocoa plum | Chrysobalanus |
| I'lex | Evergreen oak | Quercus |
| I'nga |  | Mimosa |
| Inophy'lum |  | Calophyllum |
| Insectórius |  | Rhamnus |
| I'ntsia |  | Mimosa |
| I'ntybus | Wild cichory | Cichorium |
| Jolithus |  | Byssus |
| Jonquílla | Jonquil | Narcissus |
| Jonthláspi | Treacle mustard | Clypeola |
| Ipecacuánhæ | Base ipecacuana | $\left\{\begin{array}{l}\text { Euphorbia } \\ \text { Viola }\end{array}\right.$ |
| I'ria |  | Cyperus |
| I'rio |  | Sisymbrium |
| Ischáemum | Cock's-foot grass | Andropogon |
| I'sora | Screro tree | Helicteres |
| Jujúba |  | Rhamnus |
| Julácéa |  | Jungermannia |
| Juláceum |  | Hypnum |
| Juliána |  | Satureja |
| Jungermánnia |  | Mnium |
| Junipérinus | 1 | Lichen |
| I'va | I | Teucrium |
| I'xina | 4r | Crameria |

皆

| Káki |  | Diospyros |
| :---: | :---: | :---: |
| Káli | glass-wort | Salfola |
| Kálmanum |  | Hypericum |
| Kálmii |  | \{ Hieracium |
|  |  | \{Lobelia |
| Kánki |  | Minusops |
| Káratas | Stemless wild pine | Bromelia |
| Kléinia | Eoreign colt's-foot | Cacalia |
| Kolpínia |  | Lapsana |
| L |  |  |
| Láblab |  | Dolichos |
| Labrúsca |  | Vitis |
| Labírnum | Trefoil tree | Cytisus |
| Laccíferum |  | Croton |
| Lácryma Jóbi | Job's tears | Coix |
| Ládanum |  | Galeopsis |
| Lagópus |  | Plantago |
| Lántana | Pliant mealy tree | Viburnum |
| Lapathifólium |  | Polygonum |
| Láppa | Burdock | Arctium |
| Lappáceum |  | Nephelium |
| Láppula |  | $\{$ Myosotis |
|  |  | TTriumfetta |
| Lárix | Larch tree | Pinus |
| Láthyris |  | Euphorbia |
| Lathyroídes |  | $\left\{\begin{array}{l}\text { Orobus }\end{array}\right.$ |
| Lauréntia |  | LVicia |
| Lauréola | Spurge laurel | Daphne |
| Láuro-Cérasus | Cherry laurel | Prunus |
| Lavénia |  | Verbesina |
| Lebbék |  | Mimosa |
| Léns | Lentils | Ervam |
| Lentágo |  | Rhus |
| Lentíscus | Mastick, or lentisk | Pistachia |
| Leonítis |  | Phlomis |
| Leontopetaloíde |  | Leontice |
| Leontopétalum | Lion's leaf | Leontice |
| Leontopódium |  | Filago |



| Lôtus | Wild jujube tree Lotus of Egypt Lotus, supposed of Homer or Indian date plum | Rhamnus <br> Nymphæa <br> Diospyros |
| :---: | :---: | :---: |
| Lucídor |  | Antholyza |
| Lúffa |  | Momordica |
| Luuária |  | $\left\{\begin{array}{l} \text { Rumex } \\ \text { Osmunda } \end{array}\right.$ |
| Lupináster |  | Trifolium |
| Lúpulus | Hop | Humulus |
| Lutéola | Wild wood | Reseda |
| Lychnídea | Base lychnis | Erinus |
| Lychnítis |  | $\left\{\begin{array}{l}\text { Verbascum } \\ \text { Phlomis }\end{array}\right.$ |
| Ly'cia | Olibanum | Juniperus |
| Lycóctonum |  | Aconitum |
| Lycopérsicum | Wolf's peach | Solanum |
| Lygístum |  | Petesia |
| M |  |  |
| Mahágoni | Mahogany | Swietenia |
| Maháleb |  | Prunus |
| Majorána | Marjoram | Origanum |
| Malabáthrica | Indian leaf | Melastoma |
| Malacodéndron |  | Stewartia |
| Malácoides | Base mallow | Malope |
| Malamíris |  | Piper |
| Malocócca |  | Grewia |
| Málus | Apple | Pyrus |
| Malvavíscus | Berry-bearing hibiscus | Hibiscus |
| Mancinélla | Manchineel | Hippomane |
| Mandrágora | Mandrake | Atropa |
| Mánghas |  | Cerbera |
| Mángle | Mangrove, or mangle | Rhizophora |
| Mangostána | Mangostan | Garcinia |
| Mangostánus |  | Amaranthus |
| Mánihot |  | $\{$ Hibiscus |
|  | Cassava | \{Jatropha |
| Máppa |  | Ricinus |
| Marántæ |  | Acrostichum |
| Marántina |  | Globba |
| Mariána |  | Clitoria |


| Mariánus | Spotted milk thistle | Carduas |
| :---: | :---: | :---: |
| Maríscus |  | Schoenus |
| Miárinelos |  | Cratæva |
| Máriagon | Martagon lily | Lilium |
| Máru |  | Origanum |
| Marrubiástrum |  | Leonurus |
| Mírum | Common marum | Teucrium |
| Mastichina | Mastich thyme | Thymus |
| Matrélla |  | Agrostis |
| Matthóoli | Bear's-ear sanicle | Cortusa |
| Máura |  | Antholiza |
| Maurocénia | Hottentot cherry | Cassine |
| Máx |  | Phaseolus |
| Máys | Indian, or Turkey wheat | Zea |
| Meadia | American cowslip | Dodecatheon |
| Média | Mock privet | Phillyria |
| Médium |  | Convolvalus |
|  | Canterbury bell | Campanula |
| Meleágris | Weeping widow | Fritillaria |
| Melánium |  | Lythrum |
| Melanóphleum |  | Sideroxylon |
| Méliot | Melilot | Trifolium |
| Melítifólia |  | Besleria |
| Mélo | Melon | Cucumis |
| Melocáctus | Melon thistle | Cactus |
| Melóngena | Egg plant | Solanum |
| Melópepo | Buckiler gourd | Cucurbita |
| Mercuriális |  | Tragia |
| Meriána |  | Antholyza |
| Mérianélla | Cape corn flag | Antholyza |
| Metel |  | Datura |
| Metópium |  | Rhus |
| Méum | Spignel | Æthusa |
| Mezéreum | Mezereon | Daphne |
| Micránthus |  | Rhamnus |
| Microcos |  | Grewia |
| Micheliánus |  | Scirpus |
| Miliáceus | Millet, or panic grass | $\left\{\begin{array}{l}\text { Scirpus } \\ \text { Panicum }\end{array}\right.$ |
| Milleflórum |  | Gnaphalium |
| Millefólium | Milfoil, or yarrow- | Achillea |
| Mítra |  | Helvella |

Mitréola
Mnematéia
Mokusín
Monócera
Moldávica
Mólle
Mollúgo
Móly
Mómbin
Monniéria
Monórchis
Morgsána
Morínga
Mório
Móschata
Mórsus Ránæ
Moschatéllina
Moschéutos
Mucéda
Mullúgo
Múngo
Mángos
Múrex
Murucúja
Muscári
Muscípula
Mussénda
Mutellína

Ophiorrhiza
Ehrharta
Phallus
Visnea
Dracocephalum
Schinus
Galium
Allium
Spondias
Gratiola
Ophrys
Zygophyllum
Guilandina
Orchis
Myristica
Hydrocharis
Adoxa
Hibiscus
Mucor
Pharnaceum
Phaseolus
Ophiorrhiza
Pedalium
Passiflora
Hyacinthus
Dionæa
Silene
Gardenia
Phellandrium

Myrsinítes
My'stax
Mýurus
My'sa
N
Nápeca
Napéllus
Nápus

Myrobálanus $\left\{\begin{array}{c}\text { Myrobalans, or Jamaica } \\ \text { hog plum }\end{array}\right\}$ Spondias
Myrtillus Bilberry
Passion flower
Musk hyacinth
$\{$ Fly-trap
\{Catch-fly

Euphorbia
Vaccinium
Hugonia
Manisuris
Cordia

Rhamnus
Aconitum
Brassica

| Nárdus | Nard, or spikenard | Andropogon |
| :---: | :---: | :---: |
| Nastúrtium | Cress | Sysymbrium |
| Nátrix |  | Ononis |
| Negúndo |  | $\{$ Vitex |
|  |  | Acer |
| Nelúmbo | Indian water lily | Nymphæa |
| Nemolápathum |  | Rumex |
| Népeta | Wild cat mint | Melissa |
| Nepetélla |  | Nepeta |
| Nídus A'vis | Bird's nest. | Ophrys |
| Nigellástum | Fennel flower of Crete | Garidella |
| Nigrína |  | 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 | Phyllis |
| Noli tángere | Touch not, or yellow balsamine | Impatiens |
| Nóstoc |  | Tremella |
| Nuga |  | Guilandina |
| Nummulária | Money-wort | Lysimachia |
| Nummulárius |  | Evolutus |
| Nux Vómica |  | Strychnos |
| Nycteléa |  | Ellisia |
| Nymphoídes | Lesser water lily, with fringed flowers | Menyanthes |
| - |  |  |
| O'chrus | Winged pea | Pisum |
| $\mathrm{O}^{\prime}$ culus Cati | Cat's eye | Gnaphalium |
| O'culus Christi | Christ's eye | Inula |
| Ocymoídes |  | Saponaria |
| Odontítes | Red meadow eye-bright | Euphrasia |
| Oenóplia |  | Rhamnus |
| Oenothére |  | Geranium |
| Oleánder | Rose bay | Nerium |
| Oleoídes |  | \{ Rhamnus |
|  | Spurge olive | \{ Daphne |
| Ollária |  | Lecythis |


| Olusastrum | Alexander | Smyrnium |
| :---: | :---: | :---: |
| Oly'mpicum |  | Hypericum |
| O'mphalodes | Spring navel-wort | Cynoglossum |
| Onobry'chis | $\left\{\begin{array}{l} \text { Saintfoin } \\ \text { Vetching } \end{array}\right.$ | Hedysarum Astragalus |
| Onítes |  | Origanum |
| Ophioglossoídes |  | Clavaria |
| Opobálsamum |  | Amyris |
| Opóponax |  | Pastinaca |
| O'pulus | Marsh elder | Viburnum |
| Opúntia | Indian fig | Cactus |
| Orchioídes |  | Hyacinthus |
| Orellána | Anotta, or arnotta | Bixa |
| Oreoselínum | Mountain parsley | Athamantha |
| Orientále |  | Sicymbrium |
| O'rnus | Ash | Fraxinus |
| Oróntium |  | Antirrhinum |
| O'rvala |  | Lamium |
| Osbéckii |  | Verbascum |
| Ostrúthium | Master-wort | Imperatoria |
| O'strya | Hop horn-beam | Carpinus |
| Otítes |  | Cucubalus |
|  |  | Polypodium |
| Oxycédrus | Greater Spanish juniper | Juniperus |
| Oxycóccos | Cranberry | Vaccinium |
| P |  |  |
| Padalíanches |  | 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 |
| Passerína | Tragus's sparrow-wort | Stellera |


| Passeríno |  | Erica |
| :---: | :---: | :---: |
| Patiéntia | Monli's rhubarb | Rumex |
| Pávia | Scarlet horse chestn | Æsculus |
| Pécten | $\left\{V_{\text {cnus's comb, or }}\right.$ | Scandix |
| Pedy'pnois |  | Hyoseris |
| Pelecínus | $\left\{\begin{array}{c}\text { Clusius's foreign } \\ \text { vetch }\end{array}\right.$ | Biserula |
| Pémphis |  | Lythrum |
| Penæ'a | Tree milk-wort | Polygala |
| Pentacárpos |  | Hibiscus |
| Pentagónia |  | Campanula |
| Pentstémon |  | Chelone |
| Péplis |  | Euphorbia |
| Péplus |  | Euphorbia |
| Pépo | Pumpion | Cucurbita |
| Péragua |  | Cassine |
| Peréskia | Blad apple | Cactus |
| Pericly'menum | Trumpet honeysuckle | Lonicera |
| Pérsea | Avocado pear | Laurus |
| Pérsica | Peach | Amygdalus |
| Persicária | Persicaria | Polygonum |
| Persónata | ( | Arctium |
| Pes Cápre |  | S Convolvulus <br> Oxalis |
| Pes Tígridis | Tiger's-foot | Ipomoea |
| Petasítes | Pestilent wort | Tussilago |
| Petroselínum | Parsley | Apium |
| Phænopy'rum |  | Mespilus |
| Phæ'um |  | Geranium |
| Phegópteris |  | Polypodium |
| Phéllos |  | Quercus |
| Phelypæ'a |  | Lathræa |
| Phlegmária |  | Lycopodium |
| Phlómidis |  | Clerodendrum |
| Phu | Garden valerian | Valeriana |
| Phyllánthus |  | Cactus |
| Physódes |  | Erica |
| Phytéuma |  | \{ Reseda |
|  | Crested rampions | Lobelia |
| Pícæ |  | Polypodium |
| Pícea |  | Pinus |


| Picroídes |  | Scorzonera |
| :---: | :---: | :---: |
| Pilosélla | Creeping mouse-ear | Hieracium |
| Piménta | All-spice | Myrtus |
| Pimpinelloídes |  | Seseli |
| Pínea |  | $\left\{\begin{array}{l} \text { Euphorbia } \\ \text { Pinus } \end{array}\right.$ |
| Pinéti |  | Helvella |
| Pínguin | Wild ananas | Bromelia |
| Piperélla |  | Thymus |
| Piperíta |  | \{ Fagara |
|  | Pepper-mint | \{Mentha |
| Pistolóchia | Spanish birthroort | Aristolochia |
| Pitajáya | Pitajaya of California | Cactus |
| Pithyusa |  | Euphorbia |
| Plantagíneum |  | Doronicum |
| Plantáginis |  | Manulea |
| Plantágo |  | Alisma |
| Platonoídes |  | Acer |
| Polygonóides |  | Calligonum |
| Pneumonánthe. |  | Gentiana |
| Podagrária |  | Egopodium |
| Pólium | Mountain poley | Teucrium |
| Polifólia | Marsh cistus ; or wider | Andromeda |
| Polluéria |  |  |
| Polygónatum | Solomon's seal | Convallaria |
| Polytrichoídes |  | Mnium |
| Porophy'llum |  | Cacalia |
| Pompónium |  | Lilium |
| Pontána |  | Hypochæris |
| Pórrum | Leek | Allium |
| Pórtula | Water purslain | Peplis |
| Portulacária |  | Claytonia |
| Portulacástrum | Horse purslain | Sesuvium |
| Portulacoídes |  | Atriplex |
| Posopósa |  | Carica |
| Potatórum |  | Strychnos |
| Prínus |  | Quercus |
| Prionítis |  | Barleria |
| Prótium |  | Amyris |
| Pséudo-Acásia | False acacia | Robinia |
| Pséudo-Acmélla |  | Spilanthus |


| Pséudo-Acórus | Yellow zater flag | Inis |
| :---: | :---: | :---: |
| Pséudo-Cápsicum | m Amomam plinii | Solanum |
| Pséudo-Chína | False China root | S Senecio |
|  |  | Smilax |
| Pséudo-Cypérus |  | Carex |
| Pséudo-Cy'tisus |  | Vella |
| Pséudo-Dictámn | nus Base dittany | Marrubium |
| Pséudo-Narcíssu | us Daffodil | Narcissus |
| Pséudo-Pithys |  | Teucrium |
| Pséudo-Plátanus | ( Greater map | Acer |
| Pséudo-Psídium |  | Eugenia |
| Psycódes |  | Orchis |
| Psy'llium | Flea-wort | Plantago |
| Psyllóphora |  | Carex |
| Ptármica | Sneeze-wort | Achillea |
| Pteránthus |  | Camphorosmas |
| Pterocéphala | Scabious | Scabiosa |
| Pteróta |  | Fagara |
| Pulégium | Pennyroyal | Mentha |
| Pulicária | Marsh flea-bane | Inula |
| Pulsatílla | Pasque flower. | Anemone |
| Pumílea |  | Turnera. |
| Pyracántha | Pyracantha | Mespilus |
| Py'rethrum | Pellitory of Spain | Anthemis |

Q

| Quámoclit | Indian Pink | Ipomoea |
| :--- | :--- | :--- |
| Quércinus | Oak agaric | Agaricus |


| R |  |  |
| :--- | :--- | :--- |
| Rádiola | $\left\{\begin{array}{c}\text { All seed, or least rup- } \\ \text { ture wort }\end{array}\right.$ | Linum |
| Rangiferínus | Reindeer liver-wort | Lichen |
| Rápa | Turnep | Brassica |
| Raphanístrum | $\left\{\begin{array}{c}\text { Whiteflowered charlock, } \\ \text { roith jointed pods }\end{array}\right.$ | Raphanus |
| Rapuncoloídes |  | Campanula |
| Rapúnculus | Rampions | Campanula |
| Rhabárbarum | Rhubarb | Rheum |
| Rhagadioloídes |  | Hyoseris |
| Rhagadíolus |  | Lapsana |


| Rhamnoídes | Sea buckthorn | Hippophæ |
| :---: | :---: | :---: |
| Rhapóntica | Centaury | Centaurea |
| Rhapónticum | Rapontic | Rheum |
| Rhóeás | Red field poppy | Papaver |
| Ríbes |  | Rheum |
| Ricinélla |  | Adelia |
| Rícino-carpos | Base ricinus | Croton |
| Riindéra |  | Cynoglossum |
| Rinocerótis |  | Stoebe |
| Rítro |  | Echinops |
| Róbur | Oak | Quercus |
| Roccélla | Orchal | Lichen |
| Rosa Sinénsis | China rose | Hibiscus |
| Rósea | Rose root | Rhodiola |
| Rótang |  | Calamus |
| Rothmánnia |  | Gardenia |
| Royéni |  | $\left\{\begin{array}{l}\text { Codon }\end{array}\right.$ |
|  |  | Cactus |
| Royoc |  | Morinda |
| Ruta Murária Ruyschiána | Wall rue | Asplenium Dracocephalum |
| S |  |  |
| Sabdaríffa |  | Hibiscus |
| Sabína | Sabine | Juniperus |
| Salicária | $\{$ Willow-herb, or | Lythrum |
| Salsílla |  | Alstroemeria |
| Sálsula |  | Phaca |
| Sámbac | Arabian jasmine | Nyctanthes |
| Sambúcina |  | Aquilicia |
| Sanguisórba |  | Poterium |
| Santólinus |  | Pterocarpos |
| Santólina |  | Achillea |
| Santónica | French wormmeood | Artemisia |
| Saponária |  | $\{$ Gentiana |
|  | Soap apple | \{Sapindus |
| Sápota | Sapota | Achras |
| Sappán |  | Cæsalpina |
| Sarcocólla |  | Penæa |
| Sarcocómphalus |  | Rhamnus |
| Sarsaparílla © 1 | Sarsaparilla | Smilax |


| Sássafras Saxifraga | Sassafras tree | Laurus |
| :---: | :---: | :---: |
|  |  | Pimpinella |
|  |  | Gypsophyla |
|  |  | Silene |
| Saxífragus |  | Cucubalus |
| Scabiósa | Scabious | Centaurea |
| Scammónia | Scammony | Convolvulus |
| Scaríola |  | Lactuca |
| Scéptrum Scéptrum Caroliánu |  | Digitalis |
|  |  | Pedicularis |
| Scéptrum Gustaviánum |  | Protea |
| Scherardiána |  | Malva |
| Schinoídes |  | Schrebera |
| Schobéri |  | Nitraria |
| Schoenánthus | Camel's hay, or sweet rush | Andropogon |
| Schoenoídes |  | Phleum |
| Schoenóprasum | Cives, or chives | Allium |
| Scilláris Sciuroídes |  | Ixia |
|  |  |  | Hypnum |
| Sclaréa | Clary | Salvia |
| Scolopéndrium | Hart's tongue | Asplenium |
| Scólymus | Artichoke | Cynara |
| Scopária | $\left\{\begin{array}{c} \text { Summer cypress, or bel- } \\ \text { videre } \end{array}\right.$ | Chenopodium |
|  |  | Melaleuca |
| Scopólia |  | Hyoscyamus |
| Scordioídes |  | Sideritis |
| Scordíum | Scordium | Teucrium |
| Scordótis |  | Nepeta |
| Scorodónia | Wood sage | \{ Teucrium |
|  |  | Scrophularias |
| Scorodóprasum | $\left\{\begin{array}{c} \text { Great round-headed } \\ \text { Turkey garlic, or } \\ \text { rocambole } \end{array}\right.$ | Allium |
| Scórpius |  | Spartium |
| Scúrrula |  | Loranthus |
| Sebesténa | Assyrian plum | Cordia |
| Secálinus |  | Bromus |
| Secamóne Securidáca Hatchet wetch |  | Pepiploca |
|  |  | Coronilla |
| Sedoídes |  | S Saxifraga |
|  |  | Penthorum |


| Selágo | Upright fir moss | Lycopodium |
| :---: | :---: | :---: |
| Sénega |  | Polygala |
| Sénegal |  | Mimosa |
| Sénna | Senna of the shops | Cassia |
| Seriána | Sent | Paulinia |
| Séridis |  | Centaurea |
| Serpentária | Virginia snake root | Aristolochia |
| Serpy'llum | Mother of thyme | Thymus |
| Serrária |  | Protea |
| Sesamoídes |  | Reseda |
| Sésban |  | Æschynomene |
| Sicyoídes | Single-seeded cucumber | Cissus |
| Siláus |  | Peucedanum |
| Síler | Mountain laser-wort | Laserpitium. |
| Síliqua | $\left\{\begin{array}{c}\text { Carob tree, or St.John's } \\ \text { bread }\end{array}\right\}$ | Ceratonia |
| Siliquástrum | Judas tree . innal | Cersis |
| Simarúba |  | Quassia |
| Siríboa |  | Piper |
| Sísarum | Skirret | Sium |
| Sisyrínchium | Double-bulbed iris | Iris |
| Smilácina |  | Cissampelos |
| Sóda | Soda | Salsola |
| Sója | $\{$ Soy, or kidney-bean | Dolichos |
| Solanácea |  | Atropa |
| Solándra |  | Hydrocotyle |
| Soldanélla | Sea cole-wort ; soldanella | Convolvulus |
| Sophéra |  | Cassia |
| Sóphia | Flix-weed | Si-ymbrium |
| Sórghum | Greater, or Indian millet | Hoicus |
| Spadícea |  | Festuca |
| Sparganóphora |  | Ethulia |
| Spéculum | $V e n u s ' s$ looking-glass | Campanula |
| Spélta |  | Triticum |
| Sphondylium | Cow parsnep | Heracleum |
| Spíca | Spike, or lavender | Lavandula |
| Spicant |  | Osmunda |
| Spina Chrísti | Christ's thorn | Rhamnus |
| Squamária |  | Lathroa |
| Stáchydis |  | Psoralea |
| Stw'chas | French lavender | Gnaphalium |

Stæhelína
Staphiságria Stavesacre
Stélis
Stoébe
Stoéchas
Stramónium
Stratiótes
Stróbus
Struthiópteris
Strúthium
Styracíflua
Styracifólium
Súber
Succísa
Supranálium
Sycomórus Egyptian sycomore
Symphoricárpus Shrubby St. Pèter's wort
T

| Tabácum | Tobacco | Nicotiana |
| :--- | :--- | :--- |
| Tabuláre |  | Satyrium |
| Tæ'da | Pinus |  |
| Tágera |  | Cassia |
| Tagétes |  | Othonna |
| Tamarísci |  | Jungermannia |
| Tanárius |  | Ricinus |
| Tápia | Garlic pear | Cratæva |
| Taráxací |  | Hieracium |
| Taráxacum | Dandelion | Leontodon |
| Tartonráira | Tarton raire | Daphne |
| Tátula | Dolianthus narcissus | Datura |
| Tazétta | Narcissus |  |
| Telephió́des | Base orpine | Andrachne |
| Teléphium | Orpine | Sedum |
| Tenagéia |  | Juncus |
| Téndo |  | Fucus |
| Terebínthus | Turpentine tree | Pistacia |
| Ternatéa |  | Clitoria |
| Tetragonothéca |  | Posymnia |
| Tétrahit | Base hemp | Galeopsis |
| Tétralix |  | Erica |

TROM OLD GENERA.
Téucrium . Veronica
Thalictroídes
Anemone
Thápsi
Thapsoídes
Thápsus White Mullein
Digitalis
Verbascum
Théezans
Thely'pteris
Thevétia
Thoma'a
Thóra
Thumbérgia
Kidney-leaved crowefoot
Verbascum
Rhamnus
Polypodium
Cerbera
Nardus.
Ranunculus
Gardenia
Thy'mbra
Thymeláea
Thymifólia
Thyoídes
Tiglium
Thinus Laurestinus
Tirucálli
Tithymaloídes Base spurge
Tóra
$\left\{\begin{array}{c}\text { Savory, with verticil- } \\ \text { late flowers }\end{array}\right\}$ Satureja
Spurge flax Daphne
Lythrum
Cupressus
Croton
Viburnum
Euphorbia
Euphorbia
Tótta
Tournefórtii Amber tree
Toxicodéndron Poison tree
Trachélium Throat-wort
Tragacántha Goat's thorn
Tragódes
Tragoriganum
Tragus
Trichómanes ramosum Maiden hair
Trichomanoídes
Triónum
Tripólium
Tripteris
Tríxago
Troglodytárum
Tsiámpaca
Tíber Truffles
Tuberária
Tuberósa
Tína
Túpa
Kelmia, or Venice mallow Hibiscus
Aster
Valeriana
Rhinanthus
Musa
Michelia
Lycoperdon
Cistus
Polianthes
Indian fig, or prickly pear Cactus
Lobelia

| Túrbith |  | Sesseli |
| :--- | :--- | :--- |
| Turpéthum | Turbith | Convolvulus |
| Turríta |  | Arabis |
| Typhalæ'a | Urena |  |
| Ty'phinum |  | Rhus |


| Ulmária | Meadow sweet | Spiræa |
| :--- | :--- | :--- |
| Una Críspa |  | Ribes |
| U'nedo | Spanish red-worts | Arbutus |
| U'nguis Cati | Cat's cllaw | Mimosa |
| Uragóga |  | Myginda |
| UTinária |  | Phylanthus |
| Urtícæ |  | Begonia |
| U'snea | Tree moss | Lichen |


| Uva U'rsi | Spanish red-worts, or <br> bear berries | Arbutus <br> Uvaria |
| :--- | :--- | :--- |
| Iris wuaria | Aletris <br> Uvedália | Polymnia <br> Uvífera |
|  |  | Coccoloba |


\left.| v |
| :--- | :---: | :---: |
| Vaccária |
| Valentina |\(\right\left.) $$
\begin{array}{c}\text { Saponaria }\end{array}
$$ \left\lvert\, \begin{array}{l}Coronilla <br>

Anthemis <br>
Anacyclus\end{array}\right.\right\}\)

| Virgínicum |  | Lépedium <br> Viscária |
| :--- | :--- | :--- |
| Visnága | Visnaga, or tooth pick | Lychnis <br> Vitálba |
| Vaucus |  |  |
| Vitaliána | Traveller's joy | Clematis |
| Viticélla | Virgin's bower | Aretia |
| Vitis Idáea | Whortle berry | Clematis |
| Vulnerária | $\left\{\begin{array}{c}\text { Kidney vetch, or lady's } \\ \text { finger, }\end{array}\right\}$ Vaccinium |  |
| Vulpína | Wildyllis |  |
| Vulvária | Wild stinking orach | Vitis |
| Chenopodium |  |  |

w
Wedélia
x
Xíphium
Xylósteum

Y
Yervamóra
z
Zacíntha
Zanónia
Zeocrithon
Zerúmbet
Zeugítes
Zeylánica
Zibethínus
Zíngiber
Zizy'phus
Zuzy'gium
Zy'gis

Bulbous iris
Fly honeysuckle

Golden rod tree
Bosea
Polymnia

Iris
Lonicera
vil

$x+\frac{1}{2}+\frac{2}{x}$
$\qquad$
 $\qquad$
 $\qquad$
 $\qquad$
$\qquad$

## INDEX

OF THE

## BRITISH NAMES.

Abele (the Dutch name)
Abelmosk; or musk seed
Acacia, true; or Egyptian thorn Mimosia nilotica
Acacia, false; or locust tree Robinia pseud-acacia Ácacia, German Prunus
$\left.\begin{array}{l}\text { Acacia, three-thorned; or ho- } \\ \text { ney locust }\end{array}\right\}$ Gleditsia triacanthos
Acajou; or cashew nut Anacardium occidentale
$\left.\begin{array}{l}\text { Acanthus,Corinthian; orbrank } \\ \text { ursine }\end{array}\right\}$ Acanthus spinosus

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

Agrimony, common
Agrimony, hemp
Agrimony, base hemp
Agrimony, naked-headed hemp
Agrimony, water hemp
Ague tree; or sassafras
Aikraw
Alaternus
Alaternus, base
Alder
Alder, black, or berry-bearing
Alecost; or costmary
Alehoof; gill ; or ground ivy
Alexanders
Alcali, or sal-kali*
Alcali, or sal-kali, jointed
Alcanet
Alhenna, or henna; or alcanna
Alkekengi
Allgood; good Henry; or Eng- \} Chenopodium bonus Henlish garden mercury $\}$ ricus
Allheal, clown's; or woundwort Stachys palustris

[^119]Aliheal, Hercules's
Allseed; or least rupture-wort All-spice; or Jamaica pepper
All-spice, Virginian
Alligator; or Avocado pear Almond
Almond, Ethiopian or African
Almond, dwarf
Aloc,** leaf-pierced
Aloe, cobweb
Aloe, socotrine
Aloe, hepatic
Aloe, common American
Aloc, water; or water soldier
Aloes, wood; or calamba
Althæa frutex; or Syrian mallow
Alysson, rough-leaved; or awlwort Subularia aquatica
Anaranthus; or flower-gentle Amaranthus
Amaranth, globe
Amaranthus tricolor
Amaryllis, superb
Amber tree
Amellus of Virgil
Ammi
Amomum Plinii
Amomum, German
Anacardium
Andrachne; or oriental strawberry tree
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 alöúdes
Excoecaria agállocha
Hibiscus Syriacus

Gomphrena
Amaranthus tricolor
Amaryllis vittata
Anthospermum Ethiopicum
Aster amellus
Sison ammi
Solanum pseudo-capsicum
Sison amomum
Anacurdium orientale
Arbutus andrachne
Anemone hortensis
Anemone silvestris
Bromelia ananas
Angelica archangelica

[^120]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 gooseberry
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
Agopodium padagraria
Pimpinella anisum
Illicium anisatum
Bixa orellana
Sloanea
Pyrus malus
Citrus aurantium
Cucumis colocynthis
Cactus pereskia
Eugenia jambos
Annona reticulata
Solanum lycopersicum
Atropa mandrágora
Solanum insanum
Momordica balsamina
Podophyllum peltatum
Bromelia ananas
Annona asiatica
Sapindus saponaria
Annona muricata
Chrysophyllum cainito
Anuona africata
Annona squamosa
Datura stramonium
Annona palustris
Prunus armeniaca $\dagger$
Thuia occidentalis
Thuia orientalis
Nyctanthes arbor tristis
Arbutus unedo
Arbutus uva ursi
Lichen roccella

[^121]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 spikenard
Ash, common
Ash, mountain; or wicken, or
Ash, poison; or varnish tree
Ash, sweet or ground; or goutwort Egopodium podagraria
Asparagus, common
Asparagus, climbing
Asp, or aspen tree
Asphodel, yellow; or king's-spear
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
Azarole service tree
Azerita

Polygonum hydropiper
Lamium album
Galeopsis galcóbdolon
Cratagus aria
Bixa orellána
Sagittaria
Triglochin palustre
$\{$ Thalia geniculata
Maranta arundinacea

Cynara scolymus
Helianthus tuberosus
Calla Ethiopica
Arum colocasia
Orontium aquaticum
Asarum europaum
Fraxinus excelsior
Sorbus aucuparia
Rhus vernix
Asparagus officinalis
Medeola aspáragoídes
Populus tremula
Asphodelus luteus
Anthericuin asphódelö́des
Anthericum calyculatum
Aster
Aster chinensis
Geum urbanum
Laurus persea
Primula auricula
Verbascum myconi
Asclepias gigantea
Subularia aquatica
Cratagus azárolus
Prunus

B
Bachelor's button
$\left.\begin{array}{l}\text { Bachelor's button; lychnis; or } \\ \text { campion }\end{array}\right\}$ 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 eagle flower
Balsamine, yellow ; or noli me tangere
Bambu cane Arundo bambos
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, American field
Basil, Syrian field
Basil, stone
Basil, wild; or mother of thyme
Batata; or Spanish potatoe
Balm, common
Balm, Moldavian ; or Turkey

Amyris gileadensis
Dracocephalum canariens:
Impatiens balsamina
Copaifera officinalis
Pinus balsamea
Amyris opobalsamum
Melittis melissophyllum
Myroxylon peruiferum
Toluifera bálsamum
Clusia flavia
Pistacia
\} Impatiens balsamina
\} Impatiens noli me tangere
Musa sapientum
Actaa spicata
Ficus religioso
Arctium lappa
Cinchóna officinalis*
Iva frutescens
Croton cascarilla
Brucea antidysentéricot.
-Wintera aromatica
Quercus nigra
Hordeum vulgare
Epimedium alpinum
Ocymum basilicum
Clinopodium vulgare
Monarda clinopodia
Ziziphora tenuior
Thymus áeinos
Thymus serpillum
Convolvulus batatas
Melissa officinalis
Dracocephalum moldúvica

[^122]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
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 Nympháa 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
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
Dapline laureola
Magnolia glauca
Melia azédarach
Cratogesus aria
Vicia faba
Dolichos soja
Phaseolus vulgaris
Phaseolus coccineus
Glycine frutescens
Erythrina carnea
zygophyllum fabágo
Cytisus laburnum
Anagyris fotida
Arbutus uva ursi
Convolvulus sepium
Acanthus
Primula auricula
Corlusa
Arctopus echinatus
Helleborus fatidus
Andropogon
Clemaris vitalba
Polygonum fagopyrum*
Fagus silvatica
Fagus silvatica(purpurea)
Beta vulgaris
Ophrys
Cucubalus behen
Campanuia
Campanula medium
Cripsicum
Hyacinthus non-scriptus

[^123]Bella-donna; or deadly nightshade Atropa belladonna
Belvidere; or Summer cypress Chenopodium scoparia
Belly-ache weed
Jatropa gossypifolia
Ben-see Behen
$\left.\begin{array}{l}\text { Berberry; common*; or pipe- } \\ \text { ridge bush }\end{array}\right\}$ Berberis vulgaris
ridge bush

Bergamot, oil of
Bermudiana
Betle
Betony
Betony, Paul's
Betony, water
Big barley
Bilberry $\ddagger$; or whortle berry, blue Vaccinium myrtillus
Bilberry, red
Bindweed, great
Bindweed, black
Bindweed, rough
Bindweed, small gravel
Birch
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 $\dagger$
Sisyrinchium hermudianum
Piper betle
Betonica officinalis
Veronica officinalis
Scrophularia betonicifolia
Hordeum hexastichon
Vaccinium vitis idaa
Convolvulus sepium
Polygonum convolvulus
Smilax 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

[^124]$\uparrow$ See note to citrus.
$\ddagger$ It is said the lilberry 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 | $V$ Vebascum blattaria |
| Blind man's ball ; or puff ball | Lycoperdon bovista |
| Blinks | Montia fontana |
| Blite ; or strawberry spinach | Blitum capitatum |
| Blite, amaranth | Amaranthus blitum |
| Blood-flower; twy-blade; orAfrican tulip |  |
| Blood-wood; or logwood | Hamatoxylon campechianum |
| Blood-wort | Rumex sanguineus |
| Blue bottle; or blue bonnet; or \}Centaurea cyanu |  |
| Blue bottle, mountain perennial | Centaurea montana |
| Bogbane; or marsh trefoil | Menyanthes trifoliata |
| $\begin{aligned} & \text { Bogberry; or bogwort; or cran- } \\ & \text { berry } \end{aligned}$ |  |
| Bohon upas-see Upas |  |
| Bonny of Carolina; or oily grain | Sesamum orientale |
| Borecole (a variety) \{ | Brassica oleracea (sabellica) |
| Borage, common | Borago officinalis |
| Box | Buxus sempervirens |
| Box, African | Myrsine Africana |
| Box, low | Polygala chamabuxus |
| Boxthorn, willow-leaved | Lycium barbarum |
| Boxthorn, American | Randia aculeata |
| Bracken; or brakes; or common fernPteris aquilina |  |
| Bramble ; or-blackberry | Rubus fruticosus |
| Brank; or beech wheat | Polygonum fagopyrum |
| $\left.\begin{array}{l}\text { Brank ursine; orCorinthian acan- } \\ \text { thus }\end{array}\right\}$ Acanthus spinosus |  |
| Brasil; or fernambuck | Pterocarpus |
| Brasiletto tree | Casalpinia |
| Bread fruit, Otaheite | Artocarpus incisa |
| Bread fruit, Nicobar | Pandanus leram |
| Bread, or plantain tree; or banana | Musa sapientum |
| Bread-nut tree, Jamaica | Brosimum alicastrum |

Break-stone; or saxifrage Saxifraga
Break-stone parsley; or parsley piert Aphanes arvensis
Briar, sweet
Briar, hep; or dog rose
Rosa rubiginosa
Rosa canina
$\left.\begin{array}{c}\text { Briget is her bravery; or scarlet } \\ \text { Iychuis; or knight's cross }\end{array}\right\}$ Lychnis chalcedonica
Brimstone, or sulphur wort; or
hog's feunel
Brocoli (a variety) Brassica oleracea(italica)
Brooklime; or water speedwell Veronica beccabunga*
Broom, common besom $\dagger$ Spartium scopariuin
Broom, white Spanish
Spartium monospermum
Broom, African Aspalathus
Broon, dyer's; or greenwood ; \} Genista tinctoria
or wood waxen
Broom, arrow-shape jointed Genista sagittalis
Boom, rape Orobanche
Brom, rape, with great purple
fowers Lathraa
Bruise-wort; or soap-wort Saponaria officinalis
Biyony, white Bryonia alba
Bryony, black
Tamus communis
Buckbean-see Bogbane
Buck's horn, plantain
Plantago coronopifólia
Buck's hom, warted
Cochlearia
Buckthorn, common
Buckthorn, sea (willow-leaved)
Rhamnus cutharticus
Buck-wheat-see Beech wheat
Buckee, Hottentot
Hippopha rhamnoides
Diosma
Bug-bane
Cimicifuga fatida
Bugle, common
Bugloss
Ajuga reptans
Bugloss, broad-leaved, evergreen
Bugloss, small wild
Anchusa
Anchusa sempervirens
Lycopsis arvensis
$\left.\begin{array}{l}\text { Bugloss, small wild; or great } \\ \text { goose grass; or German } \\ \text { madwort }\end{array}\right\}$ Asperugo procumbens

[^125]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; or crow-foot, corn
Butter-wort; or Yorkshire sanicle Pinguicula vulgaris
Button tree
Button weed
Button wood
Button, bachelor's

Echium vulgare
Chrysophylluin glabrum
Prumus insititia
Arctium lappa
Xanthium strumarizn
Bidens frondosa
Poterium sanguisorba
Sanguisurba officinalis
Pimpinella saxijraga
Euphorbia officinaram
Sparganium erectum
Ruscus aculeatus
Tussilago petasites

Ranuaculus arvensis
Conocarpus erecta
Spermacoce
Cephalanthus occidentalis
Lychnis dioica

Cabbage, common Brassica oleracea
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

Crambe maritima
Brassicaoleracra(sabanda
Brassica oleracta (rutira)
$\left\{\begin{array}{c}\text { Brassica oleracea (napo- } \\ \text { brassica) }\end{array}\right.$
brassica)
Geoffroya spinosa
Geoffroya imermis
$\left.\begin{array}{l}\text { Cabbage tree; or Palinetto roy- } \\ \text { al; or lance-wood }\end{array}\right\}$ Corypha untraculifera
Cabbage tree, W. Indian , Areca olërucera
Cabbage tree; or foreign colt's-foot Cacalin \lemia
Cacao; or cocoa; or chocolate nut Thenbrima cucao

[^126]Calabash; or gourd
Calabash ; or gourd tree
Całamba; or lignum aloes
Calamint, common
Calamint; or balm cat-mint
Calamint, water
Calamus aromaticus; or sweet flag, or rush
Caltrops
Caltrops, water
Calves' snout; or toad flax
Cameoclits-see Quamoclits
Cammock; or petty whin; or rest harrow
Campeachy wood; or logwood
Camphor tree
Campion, rose ; or wild lychnis
Campion
Campion, viscous; or catchfly
Candle of the Indians
Candia lion's foot
Candy-tuft
Candy-tuft, perennial
Candy-tuft tree
Cane, bambu; or walking cane
Cane, or shot, Indian
Cane, or reed
Cane, sugar : Saccharum officinarum
Canella alba tree; or white cinamonCanella alba
Caper bush, common
Carat, or caract tree
Caraway; or carui
Carduus benedictus
Cardoon
Cardinal flower; or water gladiole Lobelia cardinalis
Carica
Carnation; or clove July flower Dianthus caryophyllus
Carnation, Spanish; or flower fence Poinciana pulcherrima
$\left.\begin{array}{l}\text { Carnation tree; or foreign colt's- } \\ \text { foot }\end{array}\right\}$ Cacalia kleinia
Carob tree; or St. John's bread Ceratonia siliqua

Carrot, wild
Carrot, garden
Carrot, candy*
Carrot, deadly; or scorching fennel Thapsia villosa
Carui; or caraway Carum carui
Cascarilla; or bark of Eleutheria Croton cascarilla
Cashew nut; or acajou
Anacardium occidentale
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
Catchtly, or fly-trap
Catchfly
Catchfly, dog's-bane
Catchfly, lobels
Catchlly ; or viscous campion
Catmint; or nep
Catmint, or calamint, wild
Cat's-foot; or ground ivy
Cat's-eye
Cat's-foot
Cats-tail ; or reed mace
Caterpillars; or scorpion grass
Cauliflower, or cole flower (a variety)
Cedar, red Virginian
Cedar of Jamaica, base
Cedar, white
Cedar of Bermudas
Cedar of Busaco in Portugal
Cedar of Libanus
Celandine, common or greater

Cassine paragua
Laurus cassia
Osyris alba
Cassia fistulte
Lavandula stcchas
Viburnum lavigatum
Mimosa catechu
Bignonia catalpa
Dionce muscipula
Silene muscipula
$\left\{\begin{array}{c}\text { Apocymum androsamifo- } \\ \text { lium }\end{array}\right.$
Silene armeria
Lychnis viscaria
Nepeta cataria
Melissa nepeta
Glechoma hederacea
Gnaphalium occulus cati
Gnaphalium dioicum
Typha latifolia
Scorpiurus vermiculata
Brassica oleracea (botrytis)
Juniperus Virginiana
Theobroma guazuma
Cupressus thyoides
Juniperus bermudiana
Cupressus pendula
Pinus cedrus
Chelidonium majus

[^127]Celandine, cut-leaved (a variety)
Celandine, lesser; or pile-wort
Celandine tree
Celery-see Selery
$\left.\begin{array}{c}\text { Cereus, common creeping ten } \\ \text { angled }\end{array}\right\}$ Cactus cereus flageliformis
Centaury
Centaury without stems
Centaury, lesser
Centaury, yellow perfoliate
Ceterach
Chamæmile,* common
Chamæmile, field
Chamæmile, dwarf, or sea

Chelidoníum majus
Ranunculus ficaría Bocconia frutescens
$\left.\begin{array}{c}\text { Champignon; or esculent mush- } \\ \text { room }\end{array}\right\}$
Char; or sedge
Carex divisa
$\left.\begin{array}{l}\text { Charity; Greek valerian; or } \mathrm{Ja}- \\ \text { cob's ladder }\end{array}\right\}$ Polemonium caruleum
Charlock; or ketlock Sinapis arvensis
$\left.\begin{array}{l}\text { Charlock, white-flowered, with } \\ \text { jointed pods }\end{array}\right\}$ Raphanus raphanistrum
Chaste tree; or agnus castus Vitex agnus-castus
Chay root; or E. India madder Oldenlandia umbellate
Cheese rennet; or ladies' bed straw Galium verum

Cherry tree
Cherry, Barbadoes
Cherry, bird
Cherry, blaek
Cherry laurel, or common laurel
Cherry, cornelian
Cherry, dwarf; or uprighthoneysuckle
Cherry, Hottentot; or Cape phillyrea
Cherry, Winter common
Cherry, Alpine
Chervil, garden

Prunus cerasus
Malpighia glabra
Prunus avium
Prumus cerasus nigra
Prunus lauro-cerasus
Cornus mascula
Lonicera carulea
Cassine maurocenia
Physalis alkehengi
Lonicera alpigena
Scandix, charefolium

[^128]$\left.\begin{array}{l}\text { Chervil, or cicely, wild; or cow } \\ \text { parsley }\end{array}\right\}$ Charophyllum sylvestre
Chestnut
Fagus castanea
$\left.\begin{array}{l}\text { Chestnut, dwarf American; or } \\ \text { chinquapin }\end{array}\right\}$ Fugus pumila
Chestnut, horse Asculus hippo-castanum
Chestnut, scarlet horse
Fsculus pavia
Chestnut, Indian rose
Mesua ferrea
$\left.\begin{array}{l}\text { Chiches; or Chich pea; or ga- } \\ \text { ravances }\end{array}\right\}$
Chichling-vetch
Chickweed, common
Cicer arietinum
Lathyrus cicera
Chickweed, African
Alsine media
Chickweed, berry-bearing
Mollugo veriticillata
Cucubalus baccifera
Chickweed, great; or stitchwort Stellera holostea
Chickweed, mountain
Mochringia muscosa
Chickweed, mouse ear
Cerastium dichotomum
Chickweed, sea
Arenaria peplö́des
Chickweed, small water
China root
China root, false
Montia foutana
Smilax china
Senecio pseudo-china
China rose
Hibiscus rosa-sinensis
Chinquapin; or dwarf American chestnut

Fagus pumila
Chirimoya; or sweet sop
Chocolate nut ; or cacao
Annona squamosa
Christmas rose; or black hellebore Helleborus niger
Christopher, common herb
Christ's thorn*
Chrysanthemum, base
Chrysanthemum, hard-seeded
Ciboules; or Welsh onion
Cichory $\dagger$
Actaa spicata.
Rhammus palizrus
Silphium asteriscus
Osteospermum
Allium cepa (cambrica)
Cichorium intybus

[^129]Cichory, yellow; or base bawkweed Picris hieracioides

Cichory, gum
Cichory, wart; or zacintha
Cicuta; or water hemlock
Cicely ; or fool's parsley
Cicely, sweet; myrmis 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 Ledum palustre
Cistus, lesser marsh; or base heath Andromeda polifolia
Cistus, rape of
Cistus, nettle-leaved
Cistus, dwarf; or little sunflower
Citron
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
grass
Cobweb aloe
Cobweb sedum
Cocculus indicus (India berry)
Cochinil fig; or nopal
Cockscomb; rattle; or lousewort
Cockscomb amaranth
Cockscomb; or yellow rattle
Cockshead; or saintfoin

Chondritla juncera
Lapsaria zuciuthe
Cicuta vrrosa
Nithesa cyyapium

Sicandix odorata
Cherophyllum sylzestre
Lauris cimamomum
Canella alba
Laurus cassia
Potintilla
Comarum palustre
Potentilla fruticosa
Cistus ladanifrrus

Cytinus hypocistis
Turnera cistoides
Cistus helianthemum
Citrus medica
Cucurbita citrullus
Allium schenoprasum
Salvia sclarea

## Horminum pyrenaicum

Galium aperine
Rubus chamumorus
Dianthus caryophyllus
Caryophyllus aromaticus
Trifolium pratense
Irifolium alpestre
Trifolium repens
Aloe pumila arachnoides
Sempervivum arachnoideuns
Menispermum cocculus
Cactus cochinillifer
Pedicularis palustris
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, or carnation tree
Columbine, common
Columbine,feathered; or meadow rue
Comfrey,common; or consound* greater
Consound, middle; or bugle Ajuga reptans
Consound, lesser; or self-heal
Consound, least ; or daisy
Consound, red
Consound, Saracen's; or wound-
wort
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
Cacalia kleinia
Aquilegia vulgaris
Thalictrum aquilegifolium
Symphytum officinale
Prunella vulgaris
Bellis perennis
Tormentilla erecta
Solidago virgo aurea
Senecio sarracénicus
Comarum palustre
Delphinium consolida
Cistus ladaniferus
Dorstenia contrayerva
Passiflora
Convolvulus
Ipomoea coccinea
Convalvulus purpureus
Dentaria bulbifera

[^130]Coriander
Cork tree
Corn-bind ; or devil's-gut
Corn, Guinea; or Endian millet
Corn, Iudian ; or maze
Corn lag; or gladiole, common
Com marigold; or guills
Com poppy
Corn salad; or lamb's lettuce
Cornel ; or dog berry
Cornelian cherry
Costmary ; or alecost*
Coronopus ; or swine's cress
Cotton plant, $\uparrow$ common Levant
Cotton tree
Catton, lavender, common
Cotton tree, silk
Cotton grass, common
Cotton weed ; or cudweed
Courbaril; or locust tree
Cow-grass; or English red clover
Cow-quakes; or quake grass
Cow-itch; or cowage
Cowslip (a variety)
Cowslip, American ; or meadia

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 arborcum
Santolina chamх cyparissus
Bombax gossypinum
Eriophorum polystachion
Gnaphalium margaritaceum
Hymenéa courbaril
Trifolium alpestre
Briza
Dolichos pruriens
Primula veris (officinalis)
Dodecatheon meadia
Pulmonaria officinalis
Charophyllum sylvestre
Pyrus malus
Pyrus malus baccata

[^131][^132]Crackling, or sandbox tree* Hura crepitans
$\left.\begin{array}{l}\text { Crake, or crow berries; orblack } \\ \text { berried heath }\end{array}\right\}$ Empetrum nigrum
Cranberry Vaccinium oxycoccos
Crane's bill
Geranium
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
Hedera quinquefolia
Lepidium sativum
Lepidium virginicum
Tropaolum majus
Iberis nudicaulis
Vella annua
Cochlearia coronopus
Turritis
Cochlearia
Sisymbrium nasturtium
Erysimum barbarea
Cross, Jerusalem ; or knight's cross; , or scarlet cross; or Lychnis chalcedonica flower of Constantinople
Crosswort; or mug-weed Valantia cruciata
Crocus; or saffron
Crocus sativus
Crocus, common yellow spring Crocus sativus vernus
Crow, or crake berries ; or blackberried heath

Empetrum nigrum
Crow-foot; , golden cup; or but-
ter cup, corn Ranunculus arvensis
Crow-foot, geranium Geranium pratense
Crow-sike
Crown imperial
Cubebs
Conferva rivularis
Fritillaria imperialis
Cuckow flower; or lady's smock
Cuckow flower; or ragged robin
Cuckow pink; or wake robin
Cucumber
Piper cubeba
Cardamine pratensis
Lychnis flos cuculi
Arum maculatum
Cucumber, asses, spurting, or wild Momordica elatérium

[^133]Cucumber, Egyptian
Cucumber, serpent
Cucumber, single-seeded
Cucumber, small creeping
Cudweed; or cotton weed
Cudweed,common; orherb impious Filago germanica
Cudweed, base
Cullions (round roots)
Cullions, soldier's
Cumin
Cumin, base or wild
Currant ; or Corinth*
$\left.\begin{array}{c}\text { Currant; } \dagger \text { or Corinth, foreign } \\ \text { dried (a variety) }\end{array}\right\}$ Vitis vinifera (corinthiaca
$\left.\begin{array}{l}\text { Currant-leaved Virginian gelder } \\ \text { rose }\end{array}\right\}$ Spirca opulifolia
Curry, Indian
Cussion, lady's
Cussion, sea; sea pink; or thrift
Cypress, common upright
Cypress, summer ; or belvedere
Cyclamen, common; or sow bread Cyclamen europaum
Cyanus; or blue bottle
$\left.\begin{array}{l}\text { Cytisus secundus clutii; or Itali- } \\ \text { an cytisus }\end{array}\right\}$ Cytisus sessilifolius

## D

Daffodil
Daffodil, sea; or lesser white squill
Daisy, common or least
Daisy, blue globe
Daisy, hen and chicken
Daisy, greater; or ox eye

Momordica luffa
Trichosanthes anguina
Sicyos angulata
Melothria pendula
Gnaphalium margaritaceum
Micropus supinus
Orchis
Orchis pyramidalis
Cuminuin cymímum
Lagacia cuminördes Ribes

Mangifera indica
Saxifraga hypnoides
Statice armeria
Cupressus sempervirens
Chenopodium scoparia
Centaurea cyanus

Narcissus pseudo-narcissus
Pancratium maritimum
Bellis perennis
Globularia alypum
Bellis perennis prolifera
$\left\{\begin{array}{c}\text { Chrysanthemum leucanthe- } \\ \text { mum }\end{array}\right.$

[^134]Daisy, middle
Daisy, Michaelmas; or aster
Damson tree (a variety)
Damson tree, W. Indian
Chrysophyllum glabrum
Dandelion,ordent-de-lion,common Leontodon taraxacum
Dane-wort; wall-wort; or dwarf elder
Darnel; or rye grass
Darnel, annual
Date, or dactyl tree;* or greater palm
Devil in a bush; or fennel flower Nigella damascena
Devil's-bit
Devil's-bit, yellow
Devil's-gut; or cornbind
Dewberry bush
Dyer's weed ; or wild woad
Dyer's weed ; or dyer's broom
Dill
Dittander; or pepper-wort
Dittany, white ; or fraxinella
Dittany of Crete $\dagger$
Dittany, base
Dock
$\left.\begin{array}{l}\text { Dr. Tinker's weed; or fever root; } \\ \text { or false ipecacuana }\end{array}\right\}$

* 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 .
$\uparrow$ 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.

$$
\text { Letters on Greece by M. Savary, printed } 1788 .
$$

[^135]| Dodder,* European | Cuscuta europaa |
| :---: | :---: |
| Dodder of thyme | Cuscuta epithymum |
| Dog's-bane | Apocymum |
| Dog's-bane, base | Cynanchum |
| Dog-woo | Cornus sanguinea |
| Dog-stones ; or satyrion | Orchis |
| Dogwood ofJamaica; or cora | Erythrina corallodendrum |
| Dogwood tree; or fish bane | Piscidia erythrina |
| Dog's-tooth violet | Erythronium dens-canis |
| Dorycnium of Montalier | Convolvulus dorycnium |
| Dove's foot; or crow-foot geranium | Geranium pratense |
| Doura; or Indian millet | Holcus sorghum |
| Dragons | Dracontium |
| Dragons, spotted | Arum dracunculus |
| Dragon's head | Dracocephalum |
| Dragon wort; or tarragon | Artemisia dracuncu |
| Drauk ; or corn broom grass | Bromus arvensis |
| Dropwort; or filipendula | Spirea filipendula |
| Dropwort, hemlock | Oenanthe crocata |
| Dropwort, water | Oenanthe fistulosa |
| Duck-meat | Lemna minor |
| Duck-meat, starry ; or star grass | Callitriche |
| Duck's-foot; or May apple | Podophyllum peltatum |
| Dulse | Fucus palmatus |
| Dwale; or common deadly nightshade | Atropa belladonna |
| Durion | Durio zibethinus |

E

| Ebeny | Ebenus cretica |
| :--- | :--- |
| Ebeny wood, true | Diospyros ebenum |
| Ebeny, false | Poinciana pulcherrima |
| Ebeny of the Alps; or laburnum | Cytisus laburnum |
| Ebeny, mountain | Bauhinia acuminata |
| Edders | Arum peregrinum |

[^136]Egg plant
Eglantine rose
Elder tree
Elder, dwarf; or danewort
Elder, marsh
Elecampane; or yellow startwort Inula helenium
Elecampane, base
Elemi tree, gum
Elephant's foot
$\left.\begin{array}{l}\text { Elephant's head; cock's comb; } \\ \text { or yellow rattle-grass }\end{array}\right\}$
Elichrysum, base Æthiopian
Eller; or alder
Elm, common
Elm, witch (a variety with broad- $\}$ - er leaves)

Eleutheria-see Cascarilla
Endive
Eryngo; or sea holly
Eryngo, common
Eschalot; or shalot
Evergreen
Everlasting, or eternal flower
Everlasting ; or globe amaranth
Euonymus,common; orspindle tree Euonymus europaus
Euonymus, base
Euonymus, base ; or staff tree
Eye-bright, common
Elaterium ; or spurting cucumber Momordica elaterium

## F

| Fat hen; or wild orach | Chenopodium viride |
| :--- | :--- |
| Featherfew-see Feverfuge |  |
| Felwort ; or gentian, yellow | Gentiana lutea |
| Fennel |  |
| Fennel, horse | Anethum foniculum |
|  | Seseli hippomarathrum |

[^137]Fennel, hog's; or sulphur wort Peucedanum officinale
Fennel, scorching; or deadly carrot Thapsia villosa
Fennel, sea; or samphire Crithmum maritimum
Fennel hower; or devil in a bush Nigella damascena
Fennel flower of Crete
Fennel, giant
Garidella nigellastrume
Ferula
Fenugreek, common
Fernambuck ; or Brasil
Fern, male; or polypody
Fern, female
Trigonella fonum gracum,
Pterocarpus
Polypodium filix mas
Polypodium filix femina
Fern, flowering ; or Osmund royal Osmunda regalis
Fern, common or true mule's Asplinium hemionitis
Fern, common; or bracken Pteris aquilina
$\left.\begin{array}{l}\text { Fern, mule's or moon ; or mule- } \\ \text { wort }\end{array}\right\}$ Hemionitis
Fern, fork; or acrostic
Acrostichum septentrionale
Fern, sweet
Scandix odorata
Feverfuge, common
Matricaria parthenium
Feverfuge, base; or wild wormwood Parthenium hysterophorus
$\left.\begin{array}{l}\text { Fever root; Dr. Tinker's weed; } \\ \text { or false ipecacuana }\end{array}\right\}$ Triosteum perfoliatum
Fever weed
Eringium fatidum
Fiddle dock
Rumex pulcher.
Fiddle wood
Citharexylon
Ficoides
Cacalia ficoides
Ficoides, diamond ; or ice plant $\{$
Fig marigold
Mesembryanthemum crystallinum
Mesembryanthemum.
Fig, common
Ficus carica
Fig, Indian, common
Cactus opuntia
Fig tree, Indian*
Ficus indica
Fig, Bengal
Ficus benghalensis
Fig, Indian; or prickly pear
Cactus tuna
Fig, infernal; or prickly poppy Argemone mexicana
Fig, Pharaoh's; or true sycomore Ficus sycomorus
Fig, Pharaoh's Musa

[^138]Hig, 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 cori
Flag, yellow water
Flag, corn; or gladiole, common
Flag, Persian corn
Flag, sweet; or calamus aromaticus Acorus calumus
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 ; or $\}$ Lychnis chalcedonica
knight's cross, \&c.
Flower-gentle ; or amaranth
Flower of an hour
Flower de luce
$\left.\begin{array}{c}\text { Flower-fence of Barbadoes; or } \\ \text { Spanish carnation }\end{array}\right\}$ Poinciana pulcherrima
Flower-fence, base Adenanthera pavonina
Fluellin ; or speedwell
Fly, dog's-bane catch
Fly-bane; or catch-fly $\underset{\sim}{9} \mathrm{M}$

Cactus cochinillijer
Scrophularia
$\{$ Corylus avellana (alba, vel rubra
Spiraa filipcudula
Pisonia a culeata
Anethum segitum
Pinus abies
Pinus picea
Pinus balsamea
Lycopodium selago
Piscidia erythrina
Alga
Iris
Antholiza
Iris pseadacorus
Gladiolus communis
Antholiza cunonia
Clematis fiamula
Linum usitalissimum
Polypremum procumbens
Antirrhimum linaria
Phormium tenax
Conyza squarrosa
Erigeron àcre
Inula pulicaria
Inula dysenterica
Tarchonanthus
Plantago psyllium
Sisymbrium sophia

Amaranthus
Hibiscus trionum
Iris germanica

Verunica
Apocynum androsxmif oliunt
Silene muscipula

| Fly-trap ; or catch-fly | Dion®a muscipula |
| :---: | :---: |
| Fly-eater | Arum muscivorum |
| Fly, vegetable | Clavaria militaris |
| Forbidden fruit; or banana | Musa sapientum |
| Four o'clock flower; or white jalap | Mirabilis jalapa |
| Foxglove : | Digitalis purpurea |
| Frankincense ; or incense-wort | Gnaphalium odoratissimum |
| Frankincense tree ; or Virginia three-leaved pine | Pinus ṫœda |
| Fraxinella; or white dittany | Dictamnus albus |
| Fringe tree | Chionanthus virginica |
| Fritillary | Fritillaria |
| Fritillary, cock's comb; African swallow-wort; or fritillaria crassa minor | Stapelia variegata |
| Fritillaria crassa major | Stapelia hirsuta |
| Frog's-bit | Hydrocharis morsus-rana |
| Friar's cowl | Arum arisarum |
| Fumuterræ,* common | Fumaria officinalis |
| Furze ; gorse ; or whin | Ulex europxus |
| Fustic treet | Morus tinctoria |
| Fuz-ball ; or puff-ball | Lycoperdon bovista |
| Fungusses | Fungi |

## G

Gale; sweet gale; or Dutch myrtle Myrica gale
Galangale, larger
Cyperus
Galangale, lesser
Kampfaria galanga
Garavances, Spanish; or chich pea Cicer arietinum
Garlic
Allium sativum
Garlic, crow or wild
Allium vineale
Garlic pear
Cratava tapia
Garlic, great round-headed; or $\}$
Turkey; or rocambole
Gatter tree; or dogwood
Gentian ; or felwort, yellow
Gentian, base
Gentian, marsh; or swertia
Gentianella

Allium scorodoprasum
Cornus
Gentiana lutea
Sarothra gentianüídes
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 umbellutus
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 Eng- \}Chenopodıum bonus Henlish garden mercury
Gooseberry
Gooseberry, American
Gooseberry, W. Indian ; or blad apple
Goose-foot; or wild orach Chenopodium viridé
Goosegrass; clivers; or hairiff Galium aperine

* See note to ranunculus.

Goosegrass ; or wild tansey Potentilla anserina
$\left.\begin{array}{l}\text { Goosegrass, great; small wild bu- } \\ \text { gloss; or German madwort }\end{array}\right\}$ Asperugo procumbens
Goose tongue; or sneeze-wort Achillea pturnica
Go to bed at noon; or goat's beard Tragopogon pratense
Gorse; furze'; or whin
Ulex europaus
Guard ; or calabash
Cucurbita
Gourd; or calabash tree
Crescentia cucurbitina
$\left.\begin{array}{c}\text { Gourd, sour, of Ethiopia; or } \\ \text { monkey's bread }\end{array}\right\}$ Adansonia digitata
Gourd, Jonah's
Gourd, buckler; or squash Cucurbita melopepo
$\left.\begin{array}{l}\text { Goutwort; or herb-gerard; or } \\ \text { wild angelica; or sweet ash }\end{array}\right\}$ Egopodium podagraria
Grace, herb of; or rue Ruta graveolens
Grain*-see wheat, barley, \&c.
Grains of Paradise
Amomum granum Paradisi
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
Sesamum orientale
Quercus coccifera
Cactus cochinillifer
Passiffora maliformis
Titis vinifera
Uvaria
Grape, sea-side; or mangrove
Grass, arrow-headed
Ephedra
Coccoloba uvifera
Triglochin
Grass, brown-bent, or dog's
Agrostis canina
Grass, corn broom; or drauk
Grass, cat's-tail
Grass, cock's-foot
Bromus arvensis
Phleum pratense
Dactylis
$\left.\begin{array}{l}\text { Girass, cow, or marl ; or English } \\ \text { red clover }\end{array}\right\}$ Trifolium pratense
Grass, canary Phalaris canariencis
Grass, striped canary; or ribbon Phalaris arundinaceat
Grass, cotton
Grass, darnel, annual
Eriophorum polystachion
Lolium temulentum

[^139]| Grass, darnel; or rye, or ray gras Grass, dog's; or couch; or quick; | Lolium perenne <br> Triticum repens |
| :---: | :---: |
| Grass, dog's-tail | Cynosurus |
| Grass, feather | Stipa pennata |
| Grass, fescue | Festuca |
| Grass, fox-tail | Alopecurus pratensis |
| Grass, fox-tail, of the Indies | Alopecurus indicus |
| Grass, hard | Egilops |
| Grass, hair | Aira |
| Grass, hare's-tail | Lagurus ovatus |
| Grass, lyme | Elymus |
| Grass, mart*-see Cow grass |  |
| Grass, mat | Nardus stricia |
| Grass, smooth-stalked meadow | Poa pratensis |
| Grass, rough-stalked meadow | Poa trivialis |
| Grass, millet | Milium effisum |
| Grass, oat | Aristida |
| Grass, panic | Panicum miliaceum |
| Grass of Parnassus | Parnassia patustris |
| Grass, pepper | Pilularia globutifera |
| Grass, poley | Lythrum |
| Grass, purple | $\left\{\begin{array}{l}\text { Medicago polymor } \\ \text { rabica }\end{array}\right.$ |
| Grass, quake ; or cow-quakes | Briza |
| Grass, rope, or melic | Melica |
| Grass, rush | Schoenus |
| Grass, sedge ; or Cyperus grass | Carex divisa |
| Grass, silk $\dagger$ | Panicum sericum |
| Grass, star | $\{$ Callitriche verna |
| Grass, sea | Ruppia maritima |
| Grass, scorpion ; or caterpillars | Scorpiurus vermiculata |
| Grass, scurvy | Cochlearia officinalis |
| Grass, Timothy | Phleum pratense |

[^140]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
$\begin{array}{c}\text { Groundsel tree; } \\ \text { spikenard }\end{array}$ or plowman's $\}$
Groundsel tree, with a ficoides leaf Cacalia ficoides
Guava; or guayava; or bay plum Psidium pyriferum
Guills ; or corn marigold
Gum succory
н
Hag-berries; or bird cherry Prumus padus.

- Hairiff; clivers; or goosegrass Galium aparine Halimus; or shrubby sea orach
Hare-bells
Hare's-ear
Hare's-ear, base shrubby; or sim-
pla nobla
Hare's-foot trefoil
Hare's lettace or sowthistle
Hard-head; or knapweed
Hart's-tongue spleen-wort Asplinium scolopendrium $\dagger$
Hart-wort, French; or wild spignel Seseli glaucum
Hart-wort, common Tordylium officinale

[^141]Hart-wort of Syria
Hart-wort, shrubby
Harmel ; or wild Assyrian rue
Hassagay tree
Hawkweed
Hawkweed, base

Tordylium syriacum
Bupleurum fruticosum
Peganum harmala
Curtisia faginea
Hieraceum
Crepis
Hawkweed, base; or yellow cichory Picris hieracioides
Hawkweed, trailing, crookedseeded; or yellow eye

Hyoseris
Andryala lanata sowthistle
Haw-thorn; quick; or white thorn Cratagus oxyacanthd
Haw-thorn, black American Viburmum prunifolium
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
$\left.\begin{array}{l}\text { Heath, black-berried; or crow, } \\ \text { or crake berries }\end{array}\right\}$ Empetrum nigrum
Heath, mountain Saxifraga nivalis
Heath, low pine
Heath peas; or bitter vetch
Heath, sea
Hedge-hog trefoil
Hellcbore
Coris monspeliensis
Orobus
Frankenia lavis
$\left\{\begin{array}{c}\text { Medicago polymorpha (in- } \\ \text { tertexta) }\end{array}\right.$
Helleborus
Hellebore, black; or christmas rose Helleborus niger
$\left.\begin{array}{c}\text { Heilebore, fennel-leaved black ; } \\ \text { or perennial Adonis }\end{array}\right\}$ Adonis vernalis
Hellebore, white Veratrum album
Hellebore, base Limodorum
$\left.\begin{array}{l}\text { Hellebore, black; helleboraster; } \\ \text { bear's foot; or setterwort }\end{array}\right\}$ Helleborus foetidus
Helleborine; or base hellebore Serapias
$\left.\begin{array}{l}\text { Helmet-flower; monk's hood; } \\ \text { or wolf's-bane }\end{array}\right\}$ Aconitum napellus


Heron's bill
Hiccory nut
High-taper; white mullein; or $\}$ cow's lungwort
Hog-bean ; or henbane
Hog-weed, American
Hollow-root; or tuberous moschatel Adoxa moschatellina
Holly common*; or holm Ilex aquifolium $\dagger$
Holly, hedge-hog (a variety) Ilex aquifolium ferox
Holly, Dahoon
Ilex cassine
$\left.\begin{array}{l}\text { Holly, knee; or butcher's broom; } \\ \text { or Alexandrian laurel }\end{array}\right\}$ Ruscus aculeatus
Holly, sea ; or eryngo $\ddagger$
$\left.\begin{array}{l}\text { Hollyhock; hollyoak; or rose } \\ \text { mallow }\end{array}\right\}$ Alcea rosea

- Honesty; moonwort; or satin flower Lunaria annиa

Honewort; or corn parsley Sison segetum
Honey flower
Melianthus, major \& minor
Honey locust; or three-thorned $\}$ acacia Gleditsia triacanthos
$\left.\begin{array}{c}\text { Honeysuckle; or woodbind, com- } \\ \text { mon }\end{array}\right\}$ Lonicera periclymenum
Honeysuckle, upright, with red berries; or dwarf Alpine Lonicera alpigena cherry
Honeysuckle, fly
Honeysuckle, African fly Hulleria lucida
Honeysuckle, American upright Azalea viscosa
Honeysuckle, French Hedysarum alhagi
Honeysuckle, trumpet Lonicera sempervirens
Honeysuckle, grass; or white clover Trifolium repens
Honeysuckle, Jamaica Bauhinia divaricata
Honey-wort
Hop
Cerinthe
Humulus lupulus

[^142]+ See aquifolium, in Index to Trivial Names.

$$
\ddagger \text { See eryngo. }
$$

| Hop hornbeam; or witch hazel | Carpinus ostrya |
| :---: | :---: |
| Horehound, common | Marrubium vulgare |
| Horehound, base | Siachys germanica |
| Horehound, base ; or ironwort | Sideritis |
| Horehound, black | Ballota nigra |
| Horehound, common water | Lycopus europeus |
| Hornbean*; or hard bean | Carpinus betulus |
| Hornwort, common | Ceratophyllum demersuns |
| Horse-foot | Buxbaumia |
| Horse-tail | Equisetum |
| Horse-tail, shrubby ; or sea grape | Ephedra |
| Hound's-tongue, common | Cynoglossum officinale |
| Houseleek, cobweb | Sempervivum arachnoideu |
| Houseleek, common | Sempervivum tectorum |
| Houseleek, lesser ; or orpine | Sedum telephium |
| Houseleek, small annual | Tilloa muscosa |
| Houseleek, water, of Egypt | Pistia stratiotes |
| Hyacinth | Hyacinthus |
| Hyacinth, African blue umbella | Crinum africamum |
| Hyacinth, musk | Hyacinthus muscari |
| Hyacinth, grape | Hyacinthus botryoides |
| Hyacinth, lily | Scilla lilio hyacinthus |
| Hyacinth, Peruvian | Scilla peruviana |
| Hyacinth, starry | Scilla amona |
| Hyacinth, Indian ; or tuberose | Polyanthes tuberosa |
| Hyssop, common. | Hyssopus officinalis |
| Hyssop, hedge | Gratiola hyssopioides |
| Hyssop, hedge ; or grass-poley | Lythrum hyssopifolia |
| Hyssop, mountain | Thymbra |
| Hypericum frutex | Spirca hypericifolis |
| 1 |  |
| Jacinth-see Hyacinth |  |
| Jaca-tree | Artocarpus integrifolia |
| Jack in a box | Hernandia sonora |
| Jack by the hedge; or sauce alone | Erysimum alliaria |
| Jacob's ladder; Greek valerian ; | PPolemonium caruleum |

[^143]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
Jasmine, common yellow Italian Jasminum fruticans
Jasmine, yellow Carolina
Ice plant; or diamond ficoides $\left\{\begin{array}{c}\text { Mesembryanthemum crys- } \\ \text { tallinum }\end{array}\right.$
Jew's ear
Inmortal 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
$\left.\begin{array}{l}\text { Indigo, base; or Jupiter's beard, } \\ \text { of America }\end{array}\right\}$ Amorpha fruticosa

Inga
Job's tears
Johnsonia Jonquil
Ipecacuanha; or Brasilian root
Ipecacuanha, base

Convolvulus jalápa
Mirabilis jalápa
Jasminum officinale
Jasminum odoratissimum
Nyctanthes sambac
Cestrum nocturnum
Gardenia florida
Lantana africana
Ipomoea rubra
Syringa persica
Plumeria rubra

Bignonia semper virens

Peziza auricula
Gomphrena
Impatiens balsamina
Gnaphalium odoratissimum
\{-Maranta arundinacea
Thalia geniculata
Melastoma malabathrica
Canna indica
Menispermum cocculus*
\{ Indigofera anil, and tinctoria $\dagger$

Mimosa inga
Coix lacryma
Callicarpa americana
Narcissus jonquillā
Psychotria emetica
Viola ipecacuanha

* The berries of the menispermum cocculus are used to intoxicate fish. $\uparrow$ Indigofera anil is said to be the wild indigo; the tinctoria is the true indigo.

Ipecacuanha, base Asclepias curassavica
Ipecacuanha, base Euphorbia ipecacuanha
$\left.\begin{array}{l}\text { Ipecacuanha, false; fever root; } \\ \text { or Dr. Tinker's weed }\end{array}\right\}$ Triosteum perfoliatum
Iris, or orris, Florentine
Iris, Calcedonian
Iris, bulbous, or Persian
lris, Persian, or dwarf
Iris, snake's-head; or hermodactyl Iris tuberosa
lris, uvaria Aletris uvaria
Iris, wih a double bulb, called $\}$ Iris sisyrinchium
Iron-wood
Iron-wort ; or base horehound
Sideroxylum
Jucca-see Manihot
Judas tree (see Red-bud tree) Cercis siliquastrum
Jujube tree, blunt-leaved Rhamnus jujuba
Jujube tree, common, with shin-
ing leaves Rhammus zizyphus
July-fiower, clove Dianthus caryophyllus
$\left.\begin{array}{l}\text { July-fiower, queen's; rocket; or } \\ \text { dame's violet }\end{array}\right\}$ Hesperis matronalis
July-flower, stock Cheiranthus
Junctianella-see Gentianella
Junquil-see Jonquil
Juniper, common Juniperus communis
Jupiter's beard; or silver bush Anthyllis barva jovis
$\left.\begin{array}{l}\text { Jupiter's beard, American; or base indigo }\end{array}\right\}$ Amorpha fruticosa
Jupiter's distaff
Ivy, common
Salvia
Ivy, ground; gill; alehoof; $\}$, $\left.\begin{array}{l}\text { gurn-hoof; or cats foot }\end{array}\right\}$ Glechoma hederacea
$\left.\begin{array}{l}\text { Ivy tree; or dwarf laurel of } \\ \text { America }\end{array}\right\}$ Kalmia
Ivy; or creeper of Virginia Hedera quinquefolia

## K

Kale, or cabbage, sea
Kali; or glasswort
Kali, Egyptian

Crambe maritima
Salsola kali
$\{$ Mesembryanthemum nodi $=$ florum
$\left.\begin{array}{c}\text { Kali, sal; alkali; jointed glass- } \\ \text { wort; or kelp }\end{array}\right\}$ Salicornia herbacea
Karatto (a variety) Agava americana
Kex
Kedlock; or charlock
Kermes oak
Kidney-wort
Ketmia; or Venice mallow
Cicuta
Sinapis arvensis
Quercus coccifera
Saxifraga geum
Hibiscus trionum
King's spear ; Aaron's rod; or
yellow asphodel Asphodelus luteus
Kleinia; or foreign colt's-foot Cacalia kleinia
$\left.\begin{array}{l}\text { Knapweed; knobweed; matfel- } \\ \text { lon; or hardhead }\end{array}\right\}$ Centaurea nigra
Knapweed, thorny Centaurea spinosa
Knawel; or German knot-grass Scleranthus annuus
$\left.\begin{array}{l}\text { Knee holm; knee holly; or } \\ \text { butcher's broom }\end{array}\right\}$ Ruscus aculeatus
Knot-berries Rubus
Knot-grass
Polygonum aniculare
Knot-grass, sea
Knot-grass, German; or knawel
Knot-grass, mountain
Knot-grass, verticillate
Polygonum maritimum
Scleranthus annuus
Illecebrum paronychia
Illecebrum verticillatum

## L

Laburnum; ebeny of the Alps; \}Cytisus laburnum
or trefoil tree
Ladder, Jacob's; Greek valerian; \}Polemonium caruleum or charity
Lad's-love; or southern-wood Artemisia abrotanum
Lady's bed-straw; or cheese rennet Galium verum
Lady's bower Clematis
$\left.\begin{array}{l}\text { Lady's comb; Venus's comb; or } \\ \text { shepherd's needle }\end{array}\right\}$ Scandix pecten
shepherd's needle
Lady's cushion
Lady's finger; or kidney vetch
Lady's mantle, common
Lady's mantle, silver-edged
Lady's ruffle
Lady's seal ; or black bryony
Lady's slipper
Lady's smock ; or cuckow flower Cardamine vratensis

Lady's traces, treble
Ophrys spiralis
Lamb's lettuce; or corn salad Valeriana locusta
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
Pinus larix
Delphinium
Delphinium elatum
Delphinium grandifiorum
Laserpitum siler
Lavender; or false spikenard
Lavandula spica
Lavender, sea; or limonium
Lavender cotton, common
Statice limonium
Santolina chama-cyparissus
$\left.\begin{array}{l}\text { Lavender, French; stickadore; } \\ \text { or cassidone }\end{array}\right\}$ Lavandula stochas

Laver
Laurel, China
Laurel, cherry*; or common laurel Prunus lauro-cerasus
$\left.\begin{array}{l}\text { Laurel of the antients; or com- } \\ \text { mon bay }\end{array}\right\}$ Laurus nobilis
Laurel; or bay of Alexandria Ruscus racemosus $\dagger$ Laurel, dwarf; or ivy tree of $\}$ Kalmia latifolia
America
Laurel, Portugal Prunus lusitanica
Laurel, flax-leaved
Laurel, sea-side
Laurel, spurge
Laurel, tongue; or tongue blade
Laurestinus

Daphne gnidium
Phyllanthus emblica
Daphne laureola
Ruscus hypoglossum
Viburnum tinus

[^144][^145]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
$\left.\begin{array}{c}\text { Lignum aloes; calamba; or xylo- } \\ \text { aloes }\end{array}\right\}$
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

Plumbago europaa
Loranthus
Dirca palustris
Allium porrum
Passifora laurifolia
Ervium lens
Pistacia lentiscus
Schimus molle
Doronicum
Arnica montana
Lactuca sativa
Sonchus oleraceus
Valeriana locusta
Prenanthes muralis
Thuja* occidentalis
Thuja orientalis
Excacaria agallochat
Guaiacum officinale
Syringa vulgaris
Syringa persica
Lilium candidum
Amaryllis guttata
Hemerocallis flava, \&fulva
Amaryllis atamasco
Amaryllis belladonna
Agapanthus umbellatus

$$
\begin{aligned}
& \text { Lily, St. Beuno's ; or savoy spi- } \\
& \text { derwort }
\end{aligned}
$$ Lily, conval; or lily of the valley Convallaria majalis Lily, day

Lily, Guernsey
Hemerocallis fiava.
Amaryllis sarniensis
*Thuja is sometimes with a $y$, as thuya.

[^146]Lily, Jacobæa
Lily, Japan and Ceylori
Lily, Mexican
Lily, orange, bulb-bearing
Lily, Persiam
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

Catesbaa spinosa
Liriodendron liliifera
Citrus medica
Veronica beccabunga
Talia europaa
Citrus medica (a variety)
Statice limonium
Erica vulgaris
Catananche lutea
Leontice leontopetalum
Leonurus

Lipplehout; Hottentot cherry; ;
or Cape phyllyrea
Liquorice, true ${ }^{*}$ Glycyrrhiza glabra
Liquorice, wild
Abrus precatorius
Liquorice, wild; or liquorice vetch Astragalus glycyphyllus
Liquorice, wild; or sweet weed Capraria bifiora
$\left.\begin{array}{l}\text { Liquorice, wild; or knobbed- } \\ \text { rooted liquorice vetch }\end{array}\right\}$ Glycine frutescens
Live-long; or common orpine Sedum telephium

[^147]Liver-wort
Liver-wort, ash-coloured, ground Liver-wort, marsh
Liver-wort, noble ; or hepatica
Lizard-flower
Lizard's tail
Lizard, or scorpion's tail; or pepper Piper
Locker goulands; or globe ra-
nunculus
Locust tree; or courbaril LHymenea courbaril
Locust tree; or false acacia Robinia pseud-acacia
$\left.\begin{array}{c}\text { Locust tree, honey; or three- } \\ \text { thorned acacia }\end{array}\right\}$ Gleditsia triacanthos
Logwood; or bloodwood
London pride ; or none so pretty Saxifraga umbrosa Loosestrife
Loosestrife, podded ; or French willow
Loosestrife, purple; or willow herb Lythrum salicaria
Loosestrife, spiked
Loosestrife, willow herb, Spanish
Loosestrife, yellow Virginian
Lote; or nettle tree
Lotus of Egypt
Lotus, supposed of Homer
Lotus, honey; or white clover
Lovage, common
Love in a mist
Love lies a bleeding
Lousewort; or stavesacre Delphinium staphisagria
$\left.\begin{array}{l}\text { Lousewort; cockscomb; or rat- } \\ \text { tle, yellow }\end{array}\right\}$ Rhinanthus cristagalli
Lucern; Burgundy hay; or medick Medicago sativa
Lungwort, common spotted; or $\}$ Jerusalem cowslip $\}$ Pulmaria officinalis Jerusalem cowslip

[^148]Lungwort, cow's; white mullein ;
or high taper
$\underset{\text { mouse-ear }}{\text { Lungwort, golden ; or golden }}\}$ Hieracium murorune
Lupine Lupinus
Lustwort Drosera
Lychnidia; or base lychnis Phlox
Lychnis, scarlet*; or scarlet cross Lychnis chalcedonica
$\left.\begin{array}{l}\text { Lychnis; campion; or bachelor's } \\ \text { batton }\end{array}\right\}$ Lychnis dioica
Lychnis, wild ; or rose campion Agrostemma coronaria

Mace-see Nutmeg
Mace, sweet-see Sweet Maudlin
Mace, reed ; or cat's-tail
Machingboy ; or fish spurge
Typha latifolia
Maddert
Euphorbia hyherna
Rubia tinctorum
Madder, E. India; or chay root Oldenlandia umbellata
Madder, little field Sherardia arvensis
Madder, petty
Madder, petty
Rubia cordifolia
Madder, crosswort; or meadow
Crucianella
Madwort, with bladdery pods
Galium boriale
Alyssum vesicaria
Madwort of Galen Marrubium alysson
$\left.\begin{array}{l}\text { Madwort, German; wild bugloss; } \\ \text { or great goosegrass }\end{array}\right\}$ Asperugo procumbens
Mad-flower; or flag Antholiza
Maho tree
Hibiscus
Mahogany Sroietenia mahagoni
Mahogany, Madeira ; or vigniatico Laurus indica
Maiden-hair, common Adianthum capillus veneris
Maiden-hair, Canada
Maiden-hair, English black
Adianthum pedatum
Maiden-bair, Tunbridge
Maiden-hair, golden
Maiden-hair, white ; or wall rue
Asplinium adiantum nigrum
Trichomanes tunbrigense
Polytrichum commune
Asplinium ruta muraria

* See Cross, Jerusalem.

[^149]Maiden－hair tree
Maize；or Indian corn
Mallow ；or maul，common
Mallow，African，or gooseberry－$\}$
Mallow，base
Mallow，Carolina
Mallow，common Jew＇s
Mallow，Indian yellow
Mallow，Indian
Mallow，marsh
Mallow，musk
Mallow，rose；or hollyhock
Mallow，Syrian；or althea frutex
Mallow tree
Mallow，varied－leaved
Mallow，Portugal
Mallow，vervain ；or hollyhock
Mallow，Venice；or ketmia
Mammee
Mammee，Sapota
Manchineel tree⿻丷木大 ；or poison tree
Mandrake $\dagger$
Mango tree
Mangostan
Mangrove tree $\ddagger$ ；or mangles
Manihot；manihoc；jucca；or cassada
Manna seeds
Maple，common
Ape，
$\left.\begin{array}{l}\text { Maple，greater ；English syco－} \\ \text { more ；or false plane }\end{array}\right\}$ Acer pseudo－platanus

[^150]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 ground-
sel 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 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 Schinus molle
Mastich, or lentisk tree
Matfellon; knapweed; or hard-
head
Mat-weed
Mat-weed, hooded
Maudin, sweet
Mawseed May, or May bush; or white thorn

Acer saccharimum
Passiftora
Hippuris vulgaris
Calendula officinalis
Tagetes erecta
Chrysanthemum segetum
Calendula arvensis
Mesembryanthemum
Cacalia ficoides
Tagetes patula
Caltha palustris
Origanum majorana
Origamum
Urtica dodartii
Origanum vulgare
Origanum heracleoticum
Lilium martagon
Mirabilis jalapa
Teucrium marum
Arundo arenaria
Milissa fruticosa
Origanum creticum
Inperatoria ostruthium
Astrantia

Pistacia lentiscus
Centaurea nigra
Stipa tenacissima
Lygeum spartum
Achillea ageratuim
Pupaver somniferum

May-weed; or mays*
Anthemis cotula

[^151]Meadia; or American cowslip Dodecatheon meadea
$\left.\begin{array}{c}\text { Meadow-sweet; ; or queen of the } \\ \text { meadows }\end{array}\right\}$ Spircea ulmaria
$\left.\begin{array}{l}\text { Mealy tree, pliant; or wayfaring } \\ \text { tree }\end{array}\right\}$ Viburnum lantana
Mechoacanna; or white jalap Mirabilis jalapa
Medick
Medicago
Medick ; lucern; or Burgundy hay Medicago sativa
Medick, sea Medicayo marina
Medlar
Medlar of Louisiana
Medusa's head
Melancholy; or sorrowful tree
Melilot
Mespilus
Diospyros virginiana
Euphorbia caput medusa
Nyctanthes arbor tristis
$\{$ Trifolium melilotus officinalis
Cucumis melo
Cucurbita citrullus
Cactus melocactus
Melon thistle
Mercury, dog's; or dog's cabbage Theitgonum cynocrambe
Mercury
Mercurialis
Mercury, English garden'; all- $\}$ Chenopodium bonus Hengood ; or good Henry
Meum ; or spignel
Mezereon
Mignonette
Milfoil; or yarrow
Milfoil, or violet, water
Milfoil, water
Athusa meum
Daphne mezereum
Reseda odoratu
Achillea millefolium
Hottonia palustris
$\left.\begin{array}{l}\text { Milfoil, water, or hooded; or } \\ \text { bladderwort }\end{array}\right\}$
Milk, or white wood
Milk-wort
Milk-wort; or spurge
Myriophyllum
\} Utricularia vulgaris
Bignonia leucoxylon
Polygala
Milk-wort, sea; or black salt-wort Glaux maritima
Millet; or panic grass Panicum miliaceum
Millet, common
Millet, Indian ; or doura
Milt-waste
Mint, horse
Mint, spear
Mint, pepper
Mint, cat; or nep

Milium effusum
Holcus sorghum
Asplinium
Mentha silvestris
Mentha viridis
Mentha piperita
Nepeta cataria

Mint, balm-cat; or wild calamint Melissa nepeta
Methridate; or treacle mustard Thlaspi campestre
Misletoe,* common Viscum album
Moly, with lily flowers; or yellow $\}$ garlic Allium moly
Mombin; or Brasilian plum Spondias mombin
Money-wort ; or herb two-pence Lysimachia nummularia
Money-wort, base Sibthorpia europáa
Monkey-bread ; or sour gourd
Adansonia digitata
Leontodon
Aconitum napellus
Aconitum cammarum
Menispermum
Medicago arborea
Lunaria annua
Vaccinium oxycoccos
Monk's-head
Monk's-hood ; or helmet flower
Monk's-hood, variegated
Moon-seed
Moon trefoil; or tree medick
$\left.\begin{array}{l}\text { Moon-wort; satin flower; or } \\ \text { honesty } \\ \text { Moor, or moss berries; or cran- } \\ \text { berries }\end{array}\right\}$
Morel Phallus esculentus
Moringa Guilandina moringa
Móschatel,tuberous; orhollow-root Adoxa moschatellina
Mosses
Moss, pill; or pepper grass
Moss tree
Moss, upright fir
Moss, water
Mother-wort
Mould
Mouse-ear
Mouse-ear, creeping
Mouse-ear, golden ; or golden lungwort
Mouse-ear chickweed
Mouse-ear scorpion grass
Mouse-tail
Much-good; or mountain parsley Athamanta oreoselinum
Mud-wort; or least water plantain Limosella aquatica

[^152]Mug-weed ; or cross-wort
Mugwort, common
Mulberry tree
Mulberry; or strawberry blite
Mule, Fairchild's

Valantia cruciata Artemisia vulgaris Morus Blitum capitatum $\{$ Dianthus superbus et dianthus caryophillus

Mule-wort ; or moon or mule's fern Hemionitis
Mullein Verbascum
Mullein, black Verbascum nigrum
Mullein, moth ; or blattaria Verbascum blattaria
$\left.\begin{array}{l}\text { Mullein, white; high taper ; or } \\ \text { cow's lungwort }\end{array}\right\}$ Verbascum thapsus


Mushroom, cup
Mushroom, fairy
Musk, geranium
Musk, mallow
Musk-seed
Mustard
Mustard, field; or charlock
Mustard, base
$\left.\begin{array}{l}\text { Mustard, buckler; or base mi- } \\ \text { thridate }\end{array}\right\}$
Mustard, hedge Erysimum officinale
Mustard, mithridate of Dioscorides Lepidium perfoliatum
Mustard, mithridate ; or treacle Thlapsi campestre
$\left.\begin{array}{l}\text { Mustard, base mithridate; or sci- } \\ \text { atica cress }\end{array}\right\}$ Iberis
Mustard, tower ; or wall cress
Mustard, base tower
Myrrhis; or wild myrrh; or $\}$ Charophyllum sylvestre
sweet Cicely
Myrtle

Peziza
Agaricus
Erodium moschatum
Malva moschata
Hibiscus abelmoschus
Sinapis
Sinapis arvensis

## Cleome

Biscutella

Turritis
Arabis

Myrtus

[^153]Myrtle, candleberry
Myrtle, Dutch; or gale

Myrica cerifera
Myrica gale

N
Naked ladies; or meadow saffron Colchicum autumnale

Narcissus polyanthus
Narcissus
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 $\}$ Venus's
Navel-wort, taller Venus's
Navel-wort, lesser Venus's*
Navel-wort, water; or marsh 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
$\underset{\text { weed }}{\text { Nightshade, American; or pork- }}\}$

Narcissus tazetta
Narcissus
Pancratium maritimum
Nardus stricta
Valeriana celtica
Sloanea
Trapcolum majus
Cotyledon
Crassula coccinea
\}Cynoglossum omphalodes
Cynoglossum lusitanicum
Cynoglossum linifolium
\}Hydrocotyle vulgaris
Brassica napus
$\left\{\begin{array}{c}\text { Amygdalus persica (fruc* } \\ \text { tibus glabris) }\end{array}\right.$
Nepeta cataria
Urtica
Melittis melissophyllum
Lamium album
Galeopsis tetrahit
Galeopsis galeobdolon
Urtica pilulifera
Prasium
Celtis
Eriocaulon decangulare
Guilandina bonduc
Solanum
Phytolacca decandria
t

* Venus's navel-worts receive the name from a hollow in the seeds being a supa posed resemblance of the navel.

Nightshade, base
Nightshade, deadiy; or dwale
Nightshade, common enchanter's
Nightshade, Malabar
Nightshade, three-leaved; or $\mathrm{Ca}-$
nada herb-paris
Nightshade, woody; or bitter-sweetSolanum dulcamara
Nil; or American blue bindweed Convolvulus nil
Nip ; or stinking ragwort
Nipple-wort ; or wart-wort
Nipplewor, Lapsana communis
Nolime ; ore; or yow bli Impations noli
Noli me tangere; or yellow bal-
samine Impatiens noli tangere
None so pretty; or London pride Saxifraga punctata
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, $\}$ Royena
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
Nut, pea-earth
Nut, physic, or purging
Nut, physic, or purging

Rivina paniculata Atropa belladonna Circaa lutetiana Basella
Trillium cernuum

Senecio jacobaa
Lapsana communis
Lapsana zacintha Cactus cochenillifer Achillea

Areca catechu
$\left\{\begin{array}{c}\text { Corylus avellana* (silves- } \\ \text { tris, vel grandis) }\end{array}\right.$
Staphylea pinnata

Ilex
Anacardium occidentale
Theobroma cacao
Corylus colurna
Strychnos potatorum
Cocos nucifera
Bunium bulbocastanum
Areca
Arachis hypogaa
Juglans alba

- Justicia adhadota

Lathyrus pisifulia
Jatropa curcas
Croton

[^154]Nut, pistacia
Nutmeg
Nut, Spanish
Nux-vomica

Pistacia vera
Myristica moschata
Iris sisyrinchium
Strychnos nux-vomica

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

Oats, animated Avena hispida
Oats, common wild
Oats, sea-side, of Carolina
Oats, wild bearded
Occulus Christi
Ocra; or Indian sorrel

Avena fatua
Uniola
Bromus
Inula occulus Christi
Hibiscus esculentus

Christi
Oily grain*, called bonny in Carolina
Old man's beard; or traveller's joy
Old man's head (a variety)
Oleander ; or rose bay
Olibanum
Oleaster ; or wild olive
Oleum rhodii $\dagger$

Sesamum orientale
Clematis vitalba
Dianthus deltoides
Nerium oleander
Juniperus lycina
Elaagnus
Aspalathus

[^155]Olive, common*
Olive, sweet-scented
Olive, spurge
Olive, wild, of Barbadoes

Olea europaa
Olea fragrans
Duphne oleoides
Bontia daphnoides
One-berry; true love; or herb ParisParis quadrifolia
Onion
Onion, many-bulbed $\dagger$
Onion, umbel-bearing
Onion, sea ; or squill
Onion, Welch
Opulus; or marsh elder
Orange tree, Seville
Orange, $\ddagger$ China (a variety)
Orange, mock
Orchilla; or archil
Origany, pot; or winter sweet marjoram
Origany of Crete; or Cretan marum
Ornotta, see Anotta
Orpine; or live long
Orpine, base
Orpine, lesser
Orpine, true, of Imperatus
Orach, garden
Orach, berry-bearing ; or strawberry blite

[^156]Quere. If it would affect the bite of a mad dog.
$\dagger$ The many-bulved 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.

[^157]Orach, creeping shrubby Airaphaxis inermis
Orach, wild; goosefoot; or fat hen Chenopodium viride
Orach, shrubby sea; or halimus Atriplex halimus
Orris, or iris, Horence Iris forentina
Osier Salix viminalis
Osier, yellow
Osier, brown ; or almond-leaved
Salix vitcllina
Osmund, royal; or flowering fern
Oswego tea
Ox-eye, foreign
Ox-eye of old authors
Ox-eye ; or greater daisy
Oxslips (a variety)?
Ox-tongue
Oyster-green

Sulix amygdalina
Osmunda regalis
Monarda didyma
Buphthalmum
Authemis
$\left\{\begin{array}{c}\text { Chrysanthemum leucanthe- } \\ \text { mum }\end{array}\right.$
Primala 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 dac- $\}$

Agaracus
Equisetum
Pconia
Primula veris (officinalis)
Dianthus deltoides
Phowix dactylifera
Chamarops humilis
Palmetto royal; or cabbage tree Corypha umbraculifera
Palm, coco nut
Palm, fausel nut Areca
Palm, Malabar : called ampana and corimpana
Palm, wild Malabar ; called ka-tou-indel
$\left.\begin{array}{l}\text { Palm, mountain, with largest } \\ \text { leaves; called codda panna }\end{array}\right\}$ Corypha umbraculifera
Palm, sugar Arenga saccharifera
$\left.\begin{array}{l}\text { Palm, with ringed stems; called } \\ \text { todda panna }\end{array}\right\} \begin{aligned} & \text { Cycas circinalis }\end{aligned}$
Palm, with bipinnate leaves; $\}$ called schunda panna
Palma Christi; Agnus castus $;\}$ Ricinus communis
or oil tree

Pampehnoe; 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
$\left.\begin{array}{c}\text { Parsley, dog's, or fool's; lesser } \\ \text { hemlock; or Cicely }\end{array}\right\}$ Athusa cynapium
Parsley, knotted
Parsley, Macedonian
Parsley, water; or smallage
Parsley, milk
Parsley, mountain; or much-good Athamanta oreoselinum
Parsley, purple-flowered hedge Tordylium anthriscus
Parsley, stone
Parsley piert; 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.
Moruis papyrifera
Cyperus papyrus
Carica papaya
Annona triloba
Amomum granum paradisi
Hypericum androsamum
Apium petroselinum
Caucalis
Sison segetum

Bubon
Tordylium nodosum
Bubon macedonicum
Apium graveolens
Selinum sylvestre
\}Aphanes arvensis
Pastinaca sativa
Heracleum sphondylium
Echinophora.
Sium latifolium
Sium nodiflorum
Anemone pulsatilla
Passifora
Isatis tinctoriá
Rumex patientia
Pisum sativum
Cicer arietinum

[^158]Pea, or vetch, chichling
Pea, earth nut
Pea, everlasting
Pea, heart
Pea, heath, or wood; or bitter vetchOrobus sylvaticus
Pea, painted lady
Pea, pigeon
Pea, sea-side pigeon
Pea, sweet-scented
Pea, Tangier
Pea, winged
Peach
Peach, wolf's
Pear tree, common
Pear, avocado, or alligator
Pear, bachelor's
Pear, garlic
Pearl-wort
Pellitory, or parietary of the wall
Pellitory of Spain
Pellitory of Spain, false
Peilitory ; or tooth-ach tree
Pennyroyal
$\left.\begin{array}{c}\text { Pennyroyal, stag, or narrow- } \\ \text { leaved upright }\end{array}\right\}$
Pennyroyal, Virginiau
$\left.\begin{array}{l}\text { Penny-wort, marsh; or water } \\ \text { navel-wort }\end{array}\right\}$ Hydrocotyle vulgaris
Penny-wort, or navel-wort, wall
Penguin ; or wild ananas
Penstemon
Pepper
Pepper, black
Pepper, Guinea
Pepper, bell
Pepper, bird

Lathyrus
Lathyrus pisifolia
Lathyrus latifolia
Cardiospermum corindum
Lathyrus
Cytisus cajan
Sophora occidentalis
Lathyrus odoratus
Lathyrus tangitanus
Pisum ochrus
$\{$ Amygdalus persica*
$\{$ Fructibus lanuginosis
Solanum lycopersicum
Pyrus communis
Laurus persea
Solanum mammosum
Cratreva tapia
Sagina procumbens
Parietaria officinalis
Anthemis pyrethrum
Chrysanthemum frutescens
Zanthoxylum
Mentha pulegium
Mentha cervina

## Satureja

Cotyledon serrata
Bromelia pinguin
Chelone penstemon
Piper
Piper nigrum
Capsicum annuum
Capsicum grossum
Capsicum baccatum

* Amygdalus persica, called so from being supposed a native of Persia.
N.B. The peach and neclarine are considered as only varieties of the sams 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-
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; or mock privet
Phillyrea, false

Capsicum
Capsicum frutescens
Capsicum
Capsicum
Myrtus pimenta
Schinus molle
Piper longum
Sedum acre
Polygonum hydropiper
Piluraria globulifera
Capsicum
Vitis arborea
Lepidium latifolium
Aphanes arvensis
Vinca miajor
Vinca minor
Vinca rosea
Polygonum persicaria
Polygonum orientale.
Tussilago petasites
Apium petroselinum
Adonis autumnalis
Dianthus deltoides
Phillyrea media
Rhamnus alaternus
$\left.\begin{array}{l}\text { Phillyrea of the Cape; or Hot- } \\ \text { tentot cherry }\end{array}\right\}$ Cassine muurocenita
Phu, setwall; or garden valerian Valeriana phu
Pile-wort; or lesser selandine Ranunculus ficaria
$\left.\begin{array}{c}\text { Pimento; all-spice; or Jamaica } \\ \text { pepper }\end{array}\right\}$ Myrtus pimenta pepper
Pimpinel, common
Pimpinel, round-leaved water
Pimpinel of the woods, yellow
Pin-pillow; or pin-cushion
Pineaster (a variety)
Anagallis arvensis.
Samolus valerandi
Lysimachia nemorum
Cactus curassavicus
Pinus silvestris

[^159]| Pine, frankincense | Pinus tada |
| :---: | :---: |
| Pine, Cembra | Pinus cembras |
| Pine, Scotch | Pinus silvestris |
| Pine, stone | Pinus pinea |
| Pine, Weymouth, or New England | Pinus strobus |
| Pine, ground, or dwarf | Teucrium chamapithys |
| Pine, stinking ground | Camplorosma |
| Pine, heath low | Coris monspeliensis |
| Pine apple, or ananas | Bromelia unanas |
| Pine apple, wild | Renealmia exaltata |
| Pine apple, wild ; or penguin | Bromelia penguin |
| Pink | Dianthus |
| Pink, wild sand | Dianthus are |
| Pink, China | Dianthus chinensis. |
| Pink, maiden | Dianthus deltoides |
| Pink, Indian ; or quamoclit | Ipomoea quamoclit |
| Pink, matted | Dianthus virgineus |
| Pink, mountain | Dianthus glaucus |
| Pink, Indian | Spigelia marilandia |
| Pink, Deptford | Dianthus armeria |
| Pink, sea ; or thrift | Statice armeria |
| Pink, sea, the greater | Statice pseud-armeriv |
| Pipe-tree*; or common lilac | Syringa vulgaris |
| Pipe-tree, pudding | Cassia fistula |
| Piperidge bush; or berberry | Berberis vulgaris |
| Piquets; or piquettees (a carnation) | Dianthus caryophyllus |
| Pistacia nut | Pistacia vera |
| Pishamin, or persimon plum | Diospyros virginiana. |
| Pistacia, black Virginian hazel- leaved | Hamamelis virginiea |
| Pitch-tree | Pinus picea |
| Pitajaya of California | Cactus, pitajaya |
| Plane tree | Platanus |
| Plane tree, false; greater maple; or sycomore | Acer pseudo-platanus |
| Plant, burning thorny | Euphorbia |
| Plant, egg | Solanum melongeno |
| -Plant, humble sensitive | Mimosa pudica |

[^160]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 Musa paradisiaca
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 Spondias myrobalanus
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
Pond weed, treble-headed
Pontic ; or Roman wormwood
Poplar
Poplar, common; or aspen
Poplar, common; or aspen
Poplar, Lombardy; or Po poplar Populus dilatata 29

Mimosa
Aschinomene
Hedysarum gyrans
Plantago major
Plantago major (a variety
Plantago lanceolata
Alisma plantago.

Prunus domestica
Calophyllum calaba
Chrysobalanus icaco
Cordia sebestena
Psidium pyriferum
Diospyros lotus
Diospyros virginiana
Sanguinaria canadensis
Guaiacum officinale
Hippomone manchinella
Rhus toxicodendron
Cestrum
Euphorbia
Tєucrium polium
Lythrum hyssopifolia
Primula veris (elatior)
Narcissus tazetta
Polypodium
Punica granatum
Cucurbita pepo
Potomogeton natans
eratophyllum demersum
Zannichella palustris
Artemisia pontica
Populus
Populus tremula

Poplar, balsam ; or tacamahaca Populus balsamifera
Popple; or cockle
Poppy
Poppy, common corn
Poppy, red horned*
Poppy, yellow horned
Poppy, prickly; or fig infernal
Agrostemma githago
Papaver
Papaver rhoeas
Chelidonium corniculatum
Chelidonium glaucium
Argemone
Poppy, spatling; or white behen Cucubalus behen
Pork weed; pork physic ; or $\}$ American nightshade
Potatoe, common
Potatoe, Indian ; or yam
Phytolacca decandria
Solanum tuberosum
Dioscorea bulbifera
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 henna $\dagger$
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
Convolvulus batatas
Euonymus
Primula veris (acaulis)
Oenothera biennis
Oenothera fruticosa
Narcissus odorus
Amaranthus caudatus
Ligustrum vulgare
Lawsonia inermis
Rhamnus alaternus
Phillyrea
Ligustrum
Prunus domestica
Sanguinaria canadensis
Anchusa virginica
Cassia fistula
Lycoperdon bovista
Mentha pulegium
Anemone pulsatilla
Cucurbita pepo
Sesamum orientale
Portulaca oleracea

[^161]Purslain, horse
Purslain, sea
Purslain, water
Purslain tree
Purslain tree, sea
Pyracantha

Sesuvium portulacastrum Atriplex portulacoides Peplis portula Crassula cotyledon Atriplex halimus Mespilus pyracantha

9

| Quake grass ; or cow quakes | Briza |
| :---: | :---: |
| Quamoclit; or Indian pink | Ipomoea quamoclit |
| Queen of the meadows; or meadow sweet | Spiroaa ulmaria |

Quick; or white thorn Cratagus oxyacanthe
Quicken; wicken; quick-beam; or mountain ash
Quince tree
Quill-wort
Sorbus aucuparia
Pyrus cydonia
Isoetes lacustris
Quinquina; or Jesuit's bark
Cinchona officinalis

## R

Radish, common esculent Raphanus satious
Radish, horse
Cochlearea armoracia
Radish, or cress, water
Sisymbrium nasturtium
$\begin{array}{l}\text { Ragged Robin; } \\ \text { kow flower }\end{array}$ lychnis cuc- $\}$ Lychnis flos-cuculi
Senecio jacobaa
Othonna
Cineraria maritima
Senecio
Solidago
Campanula rapunculus
Phyteuma orbicularis
Lobelia phyteuma
Rampions with scabious heads ; $\}$ Jasione montana or hairy sheep scabious
Ramsons; or bear's garlic
Allium ursinum

[^162]$\left.\begin{array}{c}\text { Ranunculus; or crow-foot, com- } \\ \text { mon garden }\end{array}\right\}$ Ranunculus asiaticus
$\left.\begin{array}{c}\text { Ranunculus, globe; or locker } \\ \text { goulands }\end{array}\right\}$ Trollius europous
Rape, cole, or navew Brassica napus
Rape, broom Orobanche
Raspberry
Raspberry, flowering
Rubus idaeus
Rattle; cockscomb; or lousewort Pedicularis palustris
$\left.\begin{array}{l}\text { Rattle, yellow ; cockscomb; or } \\ \text { elephant's head }\end{array}\right\}$ Rhinanthus crista-galli
Rattlesnake root, Senega Polygala senega
Rattlesnake root, Dr. Witt's Prenanthes altisima
Rattlesnake weed Eryugium aquaticum
Red-bud tree; or CanadaJudas treeCercis canadensis
$\left.\begin{array}{l}\text { Red-worts, Spanish; or straw- } \\ \text { berry tree }\end{array}\right\}$ Arbutus unedo
Reed, common Arundo phragmitis
Reed, burr
Sparganium
Reed, Indian flowering
Reed mace
Reed, sand*
Canna angustifolia
Typha latifolia
Arundo arenaria
$\left.\begin{array}{c}\text { Rennet, cheese; ; or yellow ladies } \\ \text { bedstraw }\end{array}\right\}$ Galium verum
$\left.\begin{array}{l}\text { Rest-harrow; ; petty whin; or } \\ \text { cammock }\end{array}\right\}$ Ononis
Rhamnus, base; or sea buckthorn Hippophae rhamnoides
Rein deer liverwort
Rhapontic
Lichen rangiferinus
Rheum rhaponticum
Rhubarb
Rheum
Rhubarb, true Turkey
Rheum palmatum
Rhubarb, British
Rumex britanica
$\left.\begin{array}{c}\text { Rhubarb, monk's; or patience } \\ \text { rhubarb }\end{array}\right\}$ Rumex patientia
Ribwort; or ribbed plantain Plantago lanceolata
Rice
Oryza sativa
Rice, wild Zizania aquatica
Ricinus, base
Croton
Roan tree; mountain ash; or wickenSorbus aucuparia

[^163]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

Cactus spinosissimus
Geranium robertianum
Allium scorodoprasum
Veronica teucrium
Cistus
Brassica eruca
Reseda lutea
Bunias orientalis
Sisymbrium silvestre
Bunias orientalis
$\left.\begin{array}{l}\text { Rocket, square-podded of Mont- } \\ \text { pelier }\end{array}\right\}$ Bunias erucago
Rocket, water or wood
Rocket, Winter
Rocket, wall
Rocket; dame's violet; or queen's July-flower
$\left.\begin{array}{l}\text { Rod, Aaron's; king's spear; or } \\ \text { yellow asphodel }\end{array}\right\}$ Asphodelus luteus
Rod, bloody Cornus sanguinea
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
$\left.\begin{array}{l}\text { Ront, hollow; or tuberous mos- } \\ \text { chatel }\end{array}\right\}$ Adoxa moschatellina
Root, rose
Root, snake, of Virginia
Root, snake, black or wild of Virginia
Root, sweet; or liquorice
Rosa-solis
Rose
Rose, China
$\left.\begin{array}{l}\text { Rose, Christmas; or black helle- } \\ \text { bore }\end{array}\right\}$ Helleborus niger
Rose, Gelder; or snowball tree \}Viburnum opulus (fiore (a variety from marsh elder)

Sisymbrium silvestre
Sisymbrium
Sisymbrium murale
Hesperis matronalis

Solidago virga-aurea
Bosea yerva-mora
1)ipsacus fullonum

Rubus sexatilis
Maranta arundinacea
Smilax china
Senecio pseudochina

Rhodiola rosea
Aristolochia serpentaria
\} Actoa racemosa
Glycyrrhiza glabra
Drosera rotundifolia
Rosa
Hibiscus rosa (sinensis) pleno)

Rose, dog; or hep
Rosa canina
$\left.\begin{array}{l}\text { Rose, Virginian Gelder, with a } \\ \text { currant leaf }\end{array}\right\}$ Spirca opulifolia
Rose, Japan Camellia japonica
Rose, Martinico; or mutable $\}$ Hibiscus mutabilis
China rose
Rose, musk Rosa moschata
Rose, rock
Rose of Jericho Anastatica hierochuntica
$\left.\begin{array}{l}\text { Rose of Shapon* (see St. John's } \\ \text { wort) }\end{array}\right\}$ Hypericum calycinum
Rose bay; or oleander Nerium oleander
Rose bay, dwarf or mountain
Rose bay willow herb
Rose mallow; or hollyhock
Rose-root
Rhododendrum hirsutum
Epilobium angustifolium
Alcea rosea
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
$\left.\begin{array}{l}\text { Rue, meadow ; or feathered co- } \\ \text { lumbine }\end{array}\right\}$ Thalictrum aquilegifolium
Rue, common yellow meadow Thalictrum flavum
Rue, wall; or scent-wort
Rue, wild Assyrían
Rufte, lady's -
Rupture-wort
Rupture-wort, leāst; or all-seed
Rush
Asplinium ruta muraria
Peganum harmala

Rush, sea
Lychnis
Herniaria
Linum radiola
Juncus
Juncus acutus $\dagger$

* Canticles, chap. ii. ver. 1.

[^164]| Push, bull | Scirpus lacustris |
| :---: | :---: |
| Rush, soft or candle | Juncus effusus |
| Rush, flowering; or water gladiole | Butomus unibellatus |
| Rush, lesser flowering | Scheuchzeria palustr |
| Rush, round black-headed,marsh, or bog | Schoenus nigricans |
| Rush, sweet; or calamus aromaticus | Acorus calamus |
| Rye, common | Secale cereale |
| Rye or ray grass ; or wild rye | Lolium perenne |

## S

Sabin
Sabin tree, Indian
Juniperus sabina
Saffron
Bauhinia aculeata
Saffron, base ; or safflower
Crocus sativus
Saffron, meadow; or naked ladies Colchicum autumnale
Saffron, mountain spring
Sage, common garden
Bulbocodium vernum
Sage of virtue, narrow-leaved (a variety)
Sage, purple or red-topped
Sage, wild or wood
Salvia officinalis

Sage, Indian wild
Sage, Jerusalem ; or sage tree
Sago
St. John's bread; or carob tree
St. John's wort,* common
\}Salvia officinalis
Salvia horminum
Teucrium scorodonia
Lantana aculeata
Phlomis fruticosa
Cycas circinalis
Ceratonia siliqua
Hypericum perforatum
$\left.\begin{array}{l}\text { St. John's wort of Constantino- } \\ \text { ple, or great-flowered; or } \\ \text { rose of Sharon }\end{array}\right\}$
Hypericum ascyron, or calycinum $\dagger$
St. John's wort, shrubby ; or tutsan Hypericum androsamum
St. John's wort, warted Hypericum balearicum
St. John's wort, Chinese Hypericum monogynum
$\left.\begin{array}{c}\text { St. Peter's, wort; or base St. } \\ \text { John's wort. }\end{array}\right\}$ Ascyrum hypericoides
St. Peter's wort Hypericum quadrangulare

[^165]St. Peter's wort, shrubby Saintfoin ; or cock's head
Salack
Salep
Sallad, corn; or lamb's lettuce
Sal-kali ; or jointed glasswort
Sallow,* common
Salsify; or garden goat's-beard
Salt-wort
$\left.\begin{array}{l}\text { Salt-wort, black; sea chickweed; } \\ \text { or milk-wort }\end{array}\right\}$ Glaux maritima
Sambac ; or Arabian jasmine Nyctanthes sambac
Samphire; or sea fennel Crithmum maritimums
Samphire, golden Inula crithmifolia
$\left.\begin{array}{c}\text { Sandbox,t or crackling tree; or } \\ \text { Jamaica walnut }\end{array}\right\}$ Hura crepitans
Sanicle
Sanicle, American
Sanicle, American base
Sanicle, bear's ear
Sanicle, Yorkshire ; or butterwort Pinguicula vulgaris
Sandwort,
Sappadillo tree
Sappan-wood
Sapota
Sapota mammee

Saracen's woundwort; or consound Solidago virga-aurea
Saracen's woundwort; or con- $\}$ Senecio sarracenicus
sound, true
Sassafy (see Salsafy) Tragopogon porrifolium
Satin flower; moon-wort; or $\}$ Lunaria annua
honesty

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 8 s .6 d . 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.
The above was related by Mr. Graves, Paper-maker, at Mill-Bank near Warrington, in 1788.

> + See crackling tree.

Satyion; or dog-stones Orchis
Sauce alone; or Jack by the hedge Erysimum alliaria
Savin-see Sabin
Sanders, white or yellow
Sanders, red
Savory, conimon
Saw-wort
Saxifrage
Saxifrage, white or granulated
Saxifrage, Bumet
Saxifrage, golden
Saxifrage, meadow
Scabious, common
$\left\{\begin{array}{l}\text { Santalum albume } \\ \text { Sirium myrtifolium }\end{array}\right.$
Pterocarpus santalimus
Satureja hortensis
Serratula
Saxifraga*
Saxifraga granulata
Pimpinella saxifraga
Chrysosplenium
Seseli saxifragum
Scabiosa arvensis
$\left.\begin{array}{c}\text { Scabious, hairy sheep's; or ram- } \\ \text { pions with scabious heads }\end{array}\right\}$ Jasione montana
Scallion; cibouls; or Welsh onion Allium cepa (cambrica)
Scammony of Montpelier Cynanchum acutum
$\left.\begin{array}{l}\text { Sciatiea cress; or base mithri- } \\ \text { date mustard }\end{array}\right\}$ Iberis
Scordium - , Teucrium 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
Scorpiurus vermiculata
Myosotis scorpioides
Ulex europaus
Helicteres isort
Scutellaria
Cochlearia officinalis
Sea beard
Conferva rupestris
Sea-fans (Zoophytest)

[^166]Sea-grass
Sea-weed
Sedge; or char
Sedum, cobweb
Sedum, saxifrage
Seed, heart
Seed, heart
Segs
Selery* (a variety) see Smallage
Seleriac (a variety)
Self-heal, common
Senna of the shops
Senna, bladder
Senna, Ethiopian bladder
$\left.\begin{array}{l}\text { Senna, jointed-podded bladder; ; } \\ \text { or scorpion senna }\end{array}\right\}$
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 maritima
Fucus
Carex divisa
Sempervivum arachnoideunt
Saxifraga sedoides
Brassica vesicaria
Cardiospermum
Iris pseud-acorus
Apium graveolens (dulce)
Apium graveolens
Prunella vulgaris
Cassia senna
Colutea arborescens
Colutea frutescens
Coronilla emerus
Saxifraga nivalis
Onoclea sensibilis
Smithia sensitiva
Oxalis sensitiva
$\left\{\begin{array}{c}\text { Mimosa } \dagger \text { sensitiva and pu- } \\ \text { dica }\end{array}\right.$
Hedysarum girans
Dionea muscipula
Aschynomene
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 as. serted 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 truffe.-See note to lycoperdon.

* Selery is generally spelt celery, but as it is derived from the Greek, it ought to be selery.

Skinner's Etymolo. Ling. Anglicanæ.

+ 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- $\}$ leboraster
Shaddock ; or pampelmoe
Shallot (see Eschalot)
Shave grass
Shepherd's needle; orVenus's combScandix 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
hare's ear
Simpler's joy; or common vervain Verbena officinalis
Skirret
Sky flower
Sloe tree
Sloke
Smallage ; or water parsley
Snail trefoil
Snake's head
Snake weed
Snake-root, Virginian

Ophioglossum
Ophyoxylum serpentinum
Sorbus domestica
Cratogus torminalis
Sesamum orientale
Astragalus sesameus
Valeriana phu

Helliborrus fatidus
Citrus decumana
Allium ascalonicum
Equisetum hyemale
Thlaspi bursa pastoris.
Dipsacus fullonum
Dipsacus pilosus
Canna indica
Coronilla
Sarracena
Bombax gassipinum
Periploca greeca
Anthyllis barba jovis
Protea argentea
Potentilla argentea
Phyllis nobla
Sium sisarum
Cineraria
Prunus spinosa
Ulva
Apium graveolens
$\{$ Medicago polymorpha (scutellata)
Iris tuberosa
Polygonum listorta
Aristolochia serpentaria

Snake-wood
Snap tree
Snap-dragon
Snap-dragon of America

Ophioxylum serpentinum
Justicia hyssopifolia
Antirrhinum
Ruellia tuberosa

Sneeze-wort ; or grose-tongue Sneeze-wort, Austrian
Snow-ball tree ; or Gelder rose
Snowberry bush
Snowdrop
Snowdrop, Sumimer
Snowdrop tree
Snowy mespilus
Soap apple, or berty

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

## Acriillea ptarmica

Xeranthemum anmum $\left\{\begin{array}{l}\text { Viburmum opulus (flore. } \\ \text { pleno) }\end{array}\right.$
Chiococco racemosa
Galanthus nivalis
Leucojum astivum
Halesia tetraptera
Mespilus canadensis
Sapindus saponaria
Saponaria offcinatis
Salsola soda
Soldaneella alpina
Stratiotes aloides
Orchis pyramidalis
Conoallaria polygonatum
Uvularia
Holcus sorghum
Rumex acetosa
Rumex scutatus
Rumex acetosella
Hibiscus esculentus
Oxalis acctosella
Oxalis sensitiva
Andromeda arborea
Nyctunthes arbor tristis,
Annona muricata

[^167]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 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-
Cyclamen
Passerina

Veronica

Laurus

Nardus

Artemisia abrotanum
Dolichas soja
Stellera passerina
Ranunculus linqua
Ranunculus jammula

Veronica officinalis
Antirrhinum elatine
Veronica beccabanga
Myrtus pimenta
Calycanthus floridus
Anthericum
\} Anthericum liliastrum
Tradescantia virginica
尼thusa meum
Alhamanta
Nardus indica
Andropogon nardus
Valeriana celtica
Lavendula spica
Baccharis halimifolia
Spikenard, plowman's; or fleabane Coniza squarrosa
Spikenard, wild; or asarabacea Asarum europuиm
Spinach, common
Spinach, rock
Spinach, strawberry ; or blite
$\left.\begin{array}{c}\text { Spindle tree; or prick or skewer } \\ \text { wood }\end{array}\right\}$
Spindle, or staff tree, climbing
Spindle tree, base
Spiræa frutex*

Spinacia oleracea
Beta maritima
Blitum capitatum
Euonymus
Celastrus scandens
Kiggellaria a fricana
Spircea salicifolia

[^168]Spiræa, African
Spleen-wort, common
Spleen-w ort, rough
Spleen-wort, rough
Spoon-wort; or scurvy grass
Spunge (a Zoophyte)
Spunk
Spurge; or milk-wort
$\left.\begin{array}{l}\text { Spurge, four-parted umbellated } \\ \text { French ; or caper }\end{array}\right\}$ Euphorbia lathyris
Spurge, common sun; or wart-wort Euphorbia helioscopia
Spurge laurel ; or dwarf bay Daphne laureola
Spurge olive Daphne oleoides
Spurry, or sperry,* common corn Spergula arvensis
Squash; or buckler gourd Cucurbita melopepo
Squill; or sea onion
Scilla muritima
Squill, lesser white; or sea daffodil Pancratium maritimum
Squinanch Asperula cynanchica
Staff or spindle tree, climbing
Staff, shepherd's; or teazel
Stag's-horn tree
Stagger or staverwort; or ragwort Senecio jacobaca
Star of Bethlehem
Star-flower, low and small
Star of Arabia and Constantinople Ornithogalum arabicum
Star of Naples Ornithogalum nutans
Star grass; or starry duck meat
Star-wort; or aster
Star-jelly; star-shot; or nostoc Tremella nostoc
Star-wort, base Buphthalmum grandiflorum
Star-wort, trailing American Tradix procumbens
Star-wort, yellow; or elecampane Inula helenium
Stavesacre; or lousewort Delphinium staphisagra
Stickadow; or French lavender Lavendula stochas
Stitch-wort; or star-flower, greater Stellaria holostea

[^169]Stitch-wort, lesser
Stink-horns
Stock July-flower
Stock, annual, or ten-weeks
Stonecrop; or wall pepper
Stork's bill
Stramonium; or thorn apple
$\left.\begin{array}{l}\text { Stramonium, purple-stalked; or } \\ \text { tatula }\end{array}\right\}$
Strawberry $\dagger$
Strawberry, barren
Strawberry, barren
Strawberry blite; or spinach
Strawberry tree, common $\ddagger$
Strawberry tree, oriental
Succory-see Cichory
Sugar cane
Sugar palm
$\left.\begin{array}{l}\text { Sulphur-wort; or hog's fennel, } \\ \text { common }\end{array}\right\}$
Sultan flower ; or sweet sultan
Sumach
Sumach, myrtle-leaved
Sumach, tanner's
Sumach, Venice
Sundew
Sun-flower, common annual
Sun-flower, perennial
Sun-flower, base or willow-leaved

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
Peucedanum officinale
Centaurea moschata
Rhus
Coriaria myrtifolia
Coriaria ruscifolia
Rhus cotinus
Drosera
Helianthus anmus
Helianthus multiflorus
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 disprder 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.

[^170]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

Rudbeckia hirte
$\{$ Polymnia tetragonathecd
\{. Rudbeckia purpurea
Cistus helianthemum
Coreopsis verticillata
Heliocarpus americana
Crotalaria juncea
Paullinia polyphylla
Asclepias vincetoxicum
$\left.\begin{array}{c}\text { Swallow-wort, African; or lesser } \\ \text { cockscomb frituillary }\end{array}\right\}$ Stapelia variegata
Sweet John; and sweet William Dianthus barbatus
Sweet sop; or chirimoya Annona squamosa
Sweet sultan Centarrect moschata
Sweet William; and sweet John Dianthus barbatus
$\left.\begin{array}{l}\text { Sweet William, Indian; or qua- } \\ \text { moclit }\end{array}\right\}$ Ipomoea quamoclit
Swine's cress
Cochlearia coronopus
$\left.\begin{array}{c}\text { Sycomore, true; or Pharaoh's } \\ \text { fis tree }\end{array}\right\}$ Ficus sycomorus

Syringa $; \dagger$ or mock orange Philadelphus coronarius

## $T$

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

Acer pseudo-píaiamus

Populus balsamifera
Licuala spinosa
Croton sebiferum
Tamarindus indica
Tamarix gallica
Tanacetum vulgare
Potentilla anserina Jatropha manihot
Vicia sativa
Artemisia dracunculus
Daphne tartonraira
Polypodium barometz

$$
\text { * See note to ficus, p } 169 .
$$

[^171]Tea tree, bohea
Tea tree, green
Tea, base
Tea, New Jersey
Tea, base China, with a leaf like? Jamaica pepper
Tea, Labrador
Tea, Oswego; or Indian balm
Tea, Paragua, South Sea, or Yapon
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*
Teazel, small
Tent-wort ; or wall rue
Terra japonica-see Catechu
Thistle
Thistle, common corn $\dagger$
$\left.\begin{array}{c}\text { Thistle, blessed; } \text {; or carduus be- } \\ \text { nedictus }\end{array}\right\}$
Thistle, carline, $\ddagger$ common
Thistle, distaff
Thistle, distaff, yellow
Thistle, fish
Thistle, globe, common
Thistle, golden
Thistle, hedge-hog
Thistle, lady's, spotted milk, or holy Carduus naarianus
Thistle, marsh
Carduus palustris

* 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 sau-wort (serratula arvensis) ; but, according to Curtis, and also Smith (who has lately publiched a Flora Britannica, ; 801), 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.
$\ddagger$ 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
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; or basil
Tickseed sun-flower
Tickseed
Tiger's-foot
Tinker's (Dr.) weed; fever-root ; or false ipecacuana
Tithymale

Carduus helenioides
Cactus melocactus
Carduus dissectus
Centaurea solstitialis
Sonchus oleraceus
Andryala lanata
Cactus
Onopordum acanthium
Carduus eriophorus
Fucus loreus
Datura stramonium
Prunus spinusa
Iycium
Rhamnus spina christi
Mimosa nilotica
Mespilus pyracantha
Astragalus tragacantha
Catesbaa spinosa
Rhamnus catharticus
Ulex europæus
Anthyllis erinacea
Cratagus oxyacantha
Euphorbia
Bupleurum rotundifolium
Trifolium
Statice armeria
Campanula latifolia
Campanula glomerata
Trachelium caruleum
Thymus vulgaris
Thymus serpyllum
Cuscuta срithymum
Thymus mastichina
\}Thymus serpyllum
Coreopsis verticillata
Corispermum
Ipomoea pes tigridis
Triosteum perfoliatum
Euphorbia tithymaloides

| Toad, or paddock-stool | Agaricus |
| :---: | :---: |
| Toad-flax; or calve's snout | Antirrhinum linaria |
| Toad grass | Bufonia tenuifolia |
| Tobacco | Nicotiana tabacum |
| Tolu tree, balsam of | Toluifera balsamum |
| Tomatoes | Solanum peruvianum |
| Tongue-blade ; or tongue laurel | Ruscus hypoglossum |
| Tooth-ache, or pellitory tree | Zanthoxylum clava herculis |
| Tooth-pick ; or visnaga | Daucus visnaga |
| Tooth-wort ; or coral-wort | Dentaria bulbifera |
| Tooth-wort ; or lead-wort | Plumbago europaa |
| Tormentil ; or septfoil, common | Tormentilla erecta* |
| Touch me not; or yellow jasmine | Impatiens noli tangere |
| $\left.\begin{array}{l}\text { Touch me not; or spurting cu- } \\ \text { cumber }\end{array}\right\}$ | Momordica elaterium |
| Traveller's joy ; or old man's beard | dClematis vitalba |
| Tree everlasting | Gnaphalium arboreum |
| Tree moss | Lichen usnea |
| Trefoil | Trifolium |
| Trefoil, bean tree | Cytisus laburnum |
| Trefoil, common hare's foot | Trifolium arvense |
| Trefoil, stinking bean | Anagyris fatida |
| Trefoil, hedge-hog | $\left\{\begin{array}{c}\text { Medicago polymorpha } \\ \text { tertexta }\end{array}\right.$ |
| Trefoil, bird's-foot ; or lamb toes | Lotus ornithopodioides |
| Trefoil, bird's-foo | Trifolium ornithopodioides |
| Trefoil, winged birds-foot | Lotus tetragonolobus. |
| Trefoil, marsh ; or bog-bean | Menyanthes trifoliata |
| Trefoil, moon | Medicago arborea |
| Trefoil, shrub | Ptelia trifoliata |
| Trefoil of Montpelier, shrub | Lotus dorycrium |
| Trefoil, snail | Medicago prostrata |
| Trefoil, thorny, of Candia | Fagonia cretica |
| Trefoil tree; or laburnum | Cytisus laburnum |
| Trichomanes | Asplenium trichomanes |
| True love; or hèrb paris | Paris quadrifolia |

[^172]| r herb paris of | m cernuam |
| :---: | :---: |
| Truffles | Lycoperdon tuber |
| Trumpet flower ; or scarlet jasmiae | Biguonia radicans |
| Tube rose ; or Indian hyacinth | Polianthes tuberosa |
| Tulip, common garden | Tulipa gesneriana |
| Tulip, wild yellow | Tulipa sylvestris |
| Tulip, African ; or blood-flower | Hamanthus coccineus |
| Tulip, checquered | Fritillaria meleagris |
| Tulip tree | Liriodendrum tulipijera |
| Tulip tree, laurel-leaved | Magnolia grandifiora |
| Tupelo tree | Nyssa aquatica |
| Turkey feather | Ulva favonia |
| Turk's cap ; or martagon | Lilium martagon |
| Turk's head | Cactus |
| Turk's turban | Ramunculus |
| 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 peruvian |
| Turpentine tree' | Pistacia terebimithus |
| Turpeth garganic | Thapsia garganica |
| Tussubakki | Camellia japonica |
| Tutsan; or park leaves | Hypericum andros๕num |
| Twopence, herb; or money-wort | Lysimachia nummularia |
| Twa, or twy blade | Ophrys ovata |
| Twy blade; or blood-flower | Homanthus coccineus |
| Twining plants-see Class Diadelp | hia |

$$
\mathrm{V}
$$

| Valerian, or setwall, garden | Valeriana phu |
| :---: | :---: |
| Valerian, Greek; Jacob's ladder; or charity | Polemonium corruleum. |
| Vanilla, or venelloe | Epidendrum vanilla |
| Yarnish tree; or poison ash or oak | Rhus vernix |
| Venus's comb; or shepherd's needle | Scandix pecten |
| Venus's looking glass | Campanula speculum |
| Venus's navel-wort (see navel-wort) | Cynoglossum lusitanicum |
| Verus's hair | Adianthum capillus veneris |
| Vernal grass, sweet-scented | Anthoxanthum odoratum |

Vervain Verbena
Vervain, common; or simpler's joy Verbena officinalis
Vervain, mallow Malva alcea
Vetch; or tare
Vicia sativa
Vetch, axe, or hatchet
Coronilla securidaca
Vetch, bitter
Eroum ervilia
Vetch, bitter; or heath peas
Vetch, jointed-podded bitter
Orobus sylvaticus
Erounc lens
Vetch, chichling
Vetch, crimson grass
Vetch, Clusius's foreign hatchet
Vetch, horse-shoe
$\left.\begin{array}{l}\text { Vetch, kidney ; lady's finger; or } \\ \text { wound-wort }\end{array}\right\}$
Vetch, liquorice Astragalus glycyphyllos
Vetch, knobbed-rooted liquorice
Vetch, milk
Vetch, base milk
Glycine apios
Astragalus
Vetch, Venetian bitter
Vetch, medic
Phaca
Orobus
Hedysarum
Vetchling
Vetchling, yellow
Viburnum
Astragalus onobrychis
Lathyrus aphaca
Viburnum
Viburnum, American
Vine tree, common
Lantana
Vitis vinifera
Vine, Canadian
Gaultheria procumbens
Vine, black; or black bryony Tamus communis
Vine, climbing five-leaved, of Ca nada; or Virgimian ivy, or Hedera quinquefolia creeper
Vine, Spanish arbour
Ipomoea tuberosa
Vine, white ; or white bryony Bryonia alba
Violet, common
Violet, bulbous; or snowdrop
Viola odorata
$T$ iolet, bulbous; or snowdrop Galanthus nivalis
Violet, Calathian
$\left.\begin{array}{l}\text { Violet, dame's; rocket; or queen's } \\ \text { July flower }\end{array}\right\}$ Hesperis matronalis
Violet, dog's-tooth Erythronium dens canis
Violet, or milfoil, water
Hottonia palustris
Viper's grass
Virgin's bower, purple

Scorzonera
Clematis viticella

| $\left.\begin{array}{c}\text { Viorna, leathery-flowered virgin's } \\ \text { bower }\end{array}\right\}$ | Clematis viorna |
| :---: | :---: |
| $V$ isnaga; or tooth-pick | Daucus visnaga |
| Umbrella tree | Magnolia tripetala |
| Upas, bohon* | Cestrum |
| Uva ursi ; or bear berries | Arbutus uva ursi |
| Urine-wort | Saxifraga hirculus |
| Uraick-see Wrack |  |
|  |  |
| Wagebroom | Protea argentea |
| Wake robin; or cuckow pink | Arum maculatum $\dagger$ |
| Wall-flower | Cheiranthus cheiri |
| Walnut tree | Juglans regia |
| Walnut, Jamaica; sandbox tree; or crackling tree | H Hura crepitans |
| -Walnut, Virginian ; or hiccory | Juglans alba |
| Wall-wort; dane-wort; or dwarf elder | \}Sambucus ebulus |
| Wanhom | Kampferia |
| Ware, sea | Fucus vesiculosus |
| Wart-wort | Psoralia |
| W art-wort; or common sun spurge | e Euphorbia helioscopia |
| W art-wort; or turnsol | Heliotropium |
| W art-wort; or nipple-wort | Lapsana communis |
| Water-leaf | Hydrophyllum |
| Water-wort | Elatine hydropiper |
| Wayfaring, or pliant mealy tree | Viburnum lantana |
| Weed, sweet ; or wild liquorice | Capraria biflora |
| Weld; wold ; or base rocket | Reseda lutea |
| Wheat, common lammas $\ddagger$ | 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 cos: metic, 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.

[^173]$\left.\begin{array}{l}\text { Wheat, buck or beech;* brank ; } \\ \text { or helxine }\end{array}\right\}$ Polygonum fagopyrum
Wheat, meadow cow Melampyrum pratense
Wheat, Egyptian Triticum compositum
Wheat, Trukey; or Indian maize
Whin; furze; or gorse
Zea mays
$\left.\begin{array}{l}\text { Whin, petty; cammock; or rest- } \\ \text { harrow }\end{array}\right\}$ Ononis antiquorum
Whin, petty ; or small broom Gerista anglica
Whip-thong tree Crassula imbricata
Whistles, sea Fucus nodosus
$\left.\begin{array}{l}\text { White beam; white leaf tree; } \\ \text { or aria theophrasti }\end{array}\right\}$ Cratagus aria
White, or milk wood Bignonia leucoxylon
Whitlow grass
Draba
Whitlow grass, common Draba verna
Whitlow grass, rue-leaved Saxifraga tridactylites
$\left.\begin{array}{l}\text { Whortle-berry; red-worts; or } \\ \text { bilberry }\end{array}\right\}$ Vaccinium myritlus
Whortle-berry; or bladder nut, African
Whortle-berry, with flowers single Vaccinium vitis iduea
$\left.\begin{array}{l}\text { Whorts, bog or moor; ; or cran- } \\ \text { berry }\end{array}\right\}$ Vaccinium oxycoccos
$\left.\begin{array}{c}\text { Whorts, Spanish red ; or straw- } \\ \text { berry tree }\end{array}\right\}$ Arbutus unedo
$\left.\begin{array}{l}\text { Wicken; quickbeam; mountain } \\ \text { ash; or roan tree }\end{array}\right\}$ Sorbus aucuparia
Widow-wail Cneorum tricoccon
Widow, weeping Fritillaria meleagris
Willow Salix
Willow, French; or willow herb Epilobium angustifolium
Willow, golden, or yellow Salix vitellina
Willow, spiked, of Theophrastus Spiroa saliciciolia
Willow, or gale, sweet Myrica gale
Willow herb; or purple loosestrife Lythrum salicaria
Willow herb; or yellow loosestrife Lysimachia vulgare

[^174]Willow herb, rosebay
Willow, weeping
Wind-fower; or anemone
Wind-seed
Winter-berry
Winter-bloom
Winter-green, common
Winter-yreen, ivy-flowering
Winter-green, with chickweed flowers
Woad; or pastel, common
Woad, wild ; or dyer's or yellow weed
Wolf's bane; or aconite
Wolf's claw
Woodbind; or honeysuckle
$\left.\begin{array}{l}\text { Woodbind, Spanish; or arbour } \\ \text { vine }\end{array}\right\}$ Ipomoea tuberosâ
Wood of life; or lignum vitæ Guaiacum officinale
Woodroof
Wood-waxen ; or dyer's broom
Wooginoos
W orm-grass
W orm-seed, officinal
Wormwood
Wormwood, Roman or Pontic
Wormwood, sea
Wormwood, wild; or base feverfuge
Woundwort of Achilles
Woundwort ; or kidney vetch
Woundwort, clown's; or altheal
Woundwort; consound, Saracen'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 europaa
Isatis tinctoria
Reseda lutcola
Aconitum
Lycopodium
Lonicera periclymemum

Asperula odorata
Genista tinctoria
Brucea antidysenterica
Spigelia anthelmia
Artemisia santonica
Artemisia absinthium
Artemisia pontica
Artemisia maritima
Parthenium hysterophorus
Achillea
Anthyllis vulneraria
Stachis palustris
\}Solidago virga aurea
Senecio sarracenicus
Fucus
Zostera marina

Y
$\left.\begin{array}{l}\text { Yam, or yaum; or Indian po- } \\ \text { tatoe }\end{array}\right\}$ Dioscorea sativa

Arm, 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 centaury Achillea millifolium Hydrastis canadensis Reseda luteola Bosea yerva mora Taxus baccata \}Chlora perfoliata

## Z

$\left.\begin{array}{l}\text { Zacintha; warted nipple-wort; } \\ \text { or cichory }\end{array}\right\}$ Lapsana zacintha Zedoary, round Zedoary, long; or galangal Zerumbet; or wild ginger Kampferia rotunda Kampferia galanga Amomum zerumbet
Zoophytes-see page 305.

2 T

# A TABLE 

## OF

# VEGETABLE DRUGS, 

NOT IN THE INDEXES。

ANISEED
Assafortida (a resin)
Balaustines; or pomegranate
Bdellium (a gum resin)

Benzoin, or Benjamin (a resin)
Burgundy pitch (a resin)

## Pimpinella anisum

Ferula assafotida
Panica granatum Malachra capitata
$\{$ Laurus benzoin
Terminalia benzoin
Pinus abies
Camboge, or gamboge (a gum
resin) Cambogia gutta
Canella alba
Caranna (a resin)
Cardamom seed
Cassia fistularis
Cassia lignea
Castor oil
Canella alba
Amomum cardamomum
Cassia fistula
Laurus cassia
Ricinus communis
$\begin{array}{c}\text { Caoutchonc ; } \\ \text { resin) }\end{array}$ or gum elastic (a $\}$ 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 Madagascat, 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 cuoutchouc resin in all its principal properties (except that the cohesion of its parts is weaker) ; it is chiefly found amongst spars and Fead-ores; a small quanity of which hath also been lately found in Derbyshire,

Cochinil (see Kermes)
Colombo*
Cursuta $\dagger$
Dragon's blood (a gum resin)
Elaterium
Euphorbium (a gum resin)
(axporbia axtiquoram
Frankincence ; or olibanum (a
resin) Juniperus lycia
Galbanum (a gum resin) Bubon galbanum
Gum ammoniac $\ddagger$ (a gum resin) Ferula
Gum anime (a resin) Hymenaa courbaril
Gum arabic (a gum) Minosa nilotica
Gum baubaul
Gum copal (a resin) - Rhus copallinum
Gum elemi§ (a resin) Amyris elimifera
Gum guajacum (a resin) , Guajacim officinale
Gum ladanum (a resin) Cistus ladaniferus
Gum lac|| (a resin) 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 vege-tables.-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.
$\dagger$ 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 as corruption of skar-s⿱̈tte (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.
$\ddagger$ The gum-ammoniac beetle, called in Morrocco diblen 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 fy.
§ Bursera gummifera affords a resin no way different from the gum elemi of the. shops.
|| 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.
$\left.\begin{array}{l}\text { Gum sandarach, called pounce (a } \\ \text { resin) }\end{array}\right\}$ Juniperus communis

Gum senega (a güm)
Gum tragacanth (a gum)

## Hermodactyls

Jew's ear
Mimosa senegal
Astragalus tragacantha*
$\{$ Colchicum variegatum $\{$ Iris tuberosa

Peziza auricula

Kino (a gum)
Liquidamber; liquidstorax; or $\}$ Liquidamber styracifua gum sweet (a resin)
Mace
Manna (a gum)
Mastich (a resin)
Myrobalans
Myristica officinalis Fraxinus rotundifolia

Myrrh (a gum resin)
Oleum rhodii
Opobalsamum $\dagger$
Opium (a gum resin)
Opoponax (a gum resin)
Origanum, oil of
Pareira brava
Pistacia lentiscus
Spondias myrobalanus

Pyrethrum
Sago (the pith of the palm tree)" Cycas circinalis $\ddagger$
Sagapenum (a gum resin) Firula orientalis
Salep
Sarcocolla (a gum resin)
Sarsaparilla
Sassafras
Scammony (a gum resin)
Sebesten; or Assyrian plam
Soldanel; or sea bindweed
Orchis morio
Penaa sarcocolla
Smilax sarsaparilla
Laurus sassufras
Convolvulus scammonias
Cordia sebestena
Convolvuhus soldanella
Spike, oil of Lavandula spica
$\left.\begin{array}{c}\text { Styrax; } ; \text {, storax calamita; or } \\ \text { Jew's frankincense (a resin) }\end{array}\right\}$ Styrax officinulis Jew's frankincense (a resin) \}styrax nffinutis

Aspalathus
Amyris opobalsamum
Papaver somniferum
Pastinaca opoponax
Origanum vulgare
Cissampelos pareira
Anthemis pyrethrum
Ferula orientalis

-     - 

Terebinth; or chio turpentine
Terra japonica
Turpeth-root
Venice turpentine (a resin)

Pistacia terebinthis
\{ Mimosa catechu
\{ Area catechu
Convolvulus turpethamb
Pinus larix.
$\qquad$
FINIS.


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## 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.

N. B. In the Table of Classes and Orders, at page 38, the 7 th order to $P_{0-}$ lyandria should be Decagynia, and an 8th order to be added called Polygy. - mia; it will then agree with the class Polyandria.


## QK92.D3 $1810{ }^{\text {New York Botanical Garden Library }}$

## Darwin Rober Wari/Prin

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[^0]:    * 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 Plilosophia Botanica of Linnæus; and very proper to be perused, after a general idea of the system is obtained.

[^1]:    * 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

[^2]:    * 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 reseryed for Linnæus.

[^3]:    * This variation renders the system incomplete (though perhaps it is the best hitherto formed) from the difficulty arizing in adapting a plant to its proper class and order, as in one of the species of the horse-chesnut (Fseulus pavia) though it is of the class heptandria, hath eight stamina ; and so of several others; as lychnis dioica, hypericum, cleome, \&c.
    $\dagger$ 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 Vegetalilium, where the genera and species are discriminated according to their essential and specific differences; under several generic and specific distinctions.

[^4]:    $\ddagger$ 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.

[^5]:    * See umbellate flowers under distinction of flowering.

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

[^6]:    * Volva, though mentioned as a calyx to fungusses, yet in the Genera Plantar rum, 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 sluma; 3 a calyptra; 25 have both a perianthium and involucrum; and a few have both perianthium and spatha. In eriophorum ryris, cyperus, and scirpus, the spike is the calyx; in morinda and eringium, the common receptacle is the caly $\mathbf{x}$; and about 110 have no calyx, or very imperfect.

[^7]:    * 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 nectatium was imbibed by the seeds, to make them keep and preserve their vegetative quality the lonser, and as long as this baisam remained in the seeds, so long they would generate.
    $\dagger$ 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.

[^8]:    * 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

[^9]:    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 unthera, along with the little cells in which it is enclosed.

[^10]:    * 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 syngenesia; 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 hibis. cus, and some others.

[^11]:    * 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, lu= naria, \&c.; and sometimes transversly, as in jointed pods.

[^12]:    * All drupes have not a stone or nut (properly so called) for the seed, as in schreberu, \&c. neither have all seeds that are called nuts a drupe for the pericarpium, as in fagus it is called a capsule, 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 cannabis the seed is also called a nut lodged in the calyx. See note to bacca.

[^13]:    * 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 bath 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 fiagellaria, \&c. are not properly nuts, yet they are large and single, and are generally called nuclei.-Linnæus 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 dry: pess, but without valves.

[^14]:    * 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.

[^15]:    * The down with which many seeds are furnished, as in goat's-leard, 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 cen-taurea-crupini; or in the capsule, as in justicia, geranium, fraxinella, spurting cucumber, lura, \&c. Other plants of the burr kind, as lurdock, 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.

[^16]:    * The two leaves of the calyx fall off when the flower opens;

[^17]:    * 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.)

[^18]:    + A flower is said to be radiate, when the florets in the radius or circumferencediffer 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 daucus, \&c. which gives rise to several of the orders in the class syngenesia, which contains the compound flowers; and where they are further explained.

[^19]:    $\ddagger$ The involucrum in umbellate flowers, greatly differs as to the number of leaves; and generally each floret hath a proper perianthium, besides the two invoducres.

[^20]:    * Cymous flowers have no common calyx, yet each floret hath a perianthium (generally very small) either above or below the germen. In sambucus, and vilournum it is placed above.

[^21]:    * A remarkable instance of plenitude is in the gelder rose (viburnum opulus torepleno) where all the flowers are barren.

[^22]:    * As in luxuriant flowers many parts of the natural character are deficient it 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.

[^23]:    * 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 trom the parent plant, that they may not incommode each other.

    Phytologia.

[^24]:    * The outer bark either runs longitudinally, as in oak, ash, \&c. and in most other trees; or transversely, as in cherry, lirch, \&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 $a s h, \& c$. ; the inner bark, though less indurated, is supposed to answer the same purpose, as it contains much mucilaginous of sutritious matter.

    Phytulogia, p. 492-187.

[^25]:    * Plants that support themselves by claspers, catch 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.

[^26]:    * 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.

[^27]:    * Conduplicate, (doubled together) as in oak, hazel, walnut, \&c.

    Convolute,.... (rolled together) as in lean, saxifrage, \&c.
    Involute, .... (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 leech, vine, currant, \&c.
    Spiral, ...... (coiled like a. watch spring, one end in the centre) as in fern:

[^28]:    * See the note at the end of luxuriant flowers. The name that constitutes the wariety is to be placed immediately after the specific name, as flore pleno, corolla rulra, \&c.
    $\dagger$ 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.
    $\ddagger$ 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.

[^29]:    * Other bulbs, besides those here mentioned, were formerly enumerated, (viz.) the jointed bulb, as in moschatel; and the double bulb, as in orchis.

[^30]:    * 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 siviricus (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.

[^31]:    * 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 anthere; the others are called larren, as being imperfect.

[^32]:    * Scitamineous, (from scitamentum) because some of the plants afford delicious fruit. Scitaminea 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.
    $\ddagger$ 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 7 s .6 d . 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.

[^33]:    * Several plants of this class diandria, are so similar to many of the class didy namia, 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.

[^34]:    $\ddagger$ 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 antheræ.-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.

[^35]:    * 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 sativus 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 inte cakes for use; it is said to be very narcotic or anodyne.

[^36]:    * 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, \&e.-These plants may be generally known (when not in flower) by the roots being scented, and two leaves at each juint opposite.
    $\dagger$ Tamarindus (the tamarine tree) renders the air under its shade very unwholesome.
    $\ddagger$ Cyperus papyrus (the Egyptian papyrus, or paper of the antient Egyptians) is a triangular rush, growing 8 or 9 feet high, and an inch thick, bearing a woolly tuft.

[^37]:    * All the plants of this 2 d . 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, gahnia.-MONGECIA, zea, tripsacum, coix, olyra, zizania, pharus.-DIECIA, restio.-POLYGAMIA, agilops, cenchrus, ischamum, apluda, holcus, andropogon, munisuris, 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.
    $\ddagger$ 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 arwndo colorata.

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

[^38]:    * The stamina in this class being of equal length, is the distinction from the class didynamia, where they are two long and two short.
    $\dagger$ Onc-fruited means a single seed-ressel undivided, containing several seeds.

[^39]:    * These are the plantac stellatce 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 stellate, of the Fragments of a Natural Method; viz. Phyllis, Richardia,valentia, anthospermum, hedyotis,lippa, ophiorhiza, spigelia, houstonia, oldenlandia, coffea, psychotrix, cornus, ixora, pavetta.

[^40]:    * 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.

[^41]:    * 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 asperifolive of Ray, having four naked seeds.

[^42]:    * Pulmonaria officiannlis (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.

[^43]:    * 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.
    $\dagger$ 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 molby.
    $\ddagger$ 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 constntly carried about by the soldiers in time of war; they are easier to be had than alum, and probably less hurtful.

[^44]:    * 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.

[^46]:    $\ddagger$ Mangifera indiea (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.

[^47]:    * Rives inerme (unarmed) are currants, of which there are four species; and ribes aculeata (prickly) are gooseberries, of which there are six species.
    N. B. Linnæus makes ribes of the neuter gender, when it refers to currants; and of the feminine gender, when it relates to gooselerries.

[^48]:    * See radiate flowers explained in a note under the head of distinction of flowers.
    $\dagger$ Oenanthe crocata (water drop-wort) is one of the strongest vegetable poisons that is known.-See laurel, cherry, in index.
    $\ddagger$ See flosculous explained in observation to the head of the class syngenesia.

[^49]:    * The samphire used as a pickle is the British species (crithmum maritimuim) and grows in the crevices of rocks by the sea-side; which is said to be a very wholesume and agreeable pickle; but the markets are too often supplied with a spurious sort, called goiden samphire, (inula crithmifolia).
    $\dagger$ The drug of asafotida is a gum resin of ferula asafatida. Ferula communis (giant fennel) grows plentifully in the kingdom of Naples, and is said to rise to the hight of twelve feet.

[^50]:    * 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.
    $\ddagger$ 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 monocia, monadelphia.

    II 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.

[^51]:    * The resin called gum copal, is from rhus copallinim ; and the rhus coridria was formerly much used for tanning leathet, especially in Turkey.
    $\dagger$ Semecarpus-see anacardium.
    $\ddagger$ Staphylea pinnata (bladder nut) is sometimes strung for beads by Roman catholics, and children will sometimes eat them, though the taste is disagreeable.

[^52]:    * 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 refiection 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 edres 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 suow described as such, awled, petal-form, Sys. Veg, 14th edito

[^53]:    *The stamina in this class being of equal length, is the distinction from the class ietradynamia, 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.
    $t$ The calyx in some genera is only a rim or border.
    $\ddagger$ 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

[^54]:    * 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.
    $\dagger$ 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.

[^55]:    * 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.
    $\dagger$ 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 each 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.

[^56]:    *The stamens in aponogeton are uncertain as to number, being from 6 to $i \%$,

[^57]:    * 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, A-locularis, polysperma.

[^58]:    $\dagger$ 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 anr exhalation of its essential oil. (See preface). For all essential olls 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 birning 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 Burl-adoes tar.

[^59]:    * The arbuius 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.
    $\uparrow$ Kalmia-see note to collinsonia.
    $\pm$ Balsam capaili is from copaifera officinatis.
    §The Scleranthus perennis is the plant on which the coccus polonicus (Germars cochineal) is found. See coctus and quercus.

[^60]:    * Formerly only those plants with broader-leaves were called sweet William, (under dianthus barbatus); and those with narrower leaves were called sweet John. $\dagger$ 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.
    $\ddagger$ Saponaria officinalis (common soap-wort) so called as being used in a decocfion 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 catchfies, from a viscous matter surrounding the stalk for about an inch in length below the flower, which will detain small flies and insectṣ.

[^61]:    * Garcinia mangostana (mangostan or mangosteen) is about the size of anf 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 annona.

[^62]:    $\|$ The cratcogus, sorlus, and mespilus, are very near allied, the females in each vary as to number: The leaves of cratogas are angled, of sorlus, are feathered, of mespilus commonly entire.

[^63]:    * The berries of the sorlus' 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.
    $\dagger$ In the year 1794 a whole volume was published on the genas mesembryanthemum, describing upwards of 136 species (though Linnæus only enumerates 50) by Adrian Hardy Haworth, ...... 8vo. 480 p.p. 6s. Linnæus bath 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.
    $\ddagger$ 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 aizoon the essential character consists in the stamina being inserted by gets or phalanxes into the sinuses of the calyx (commonly by threes approximated); not equally distributed on the receptacle.

[^64]:    * Rosa spinosissima (the dwarf Scotch rose) is the least of the rose kind, seldom xising above a foot or two in hight.
    $\dagger$ 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 frequertly used for tanning leather, and is said to be equal to oak bark. See polygonum listorta.

[^65]:    * 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 with small seeds.
    + 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.

[^66]:    T 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.

[^67]:    * In proonia the most natural number of germens are two, but different species have from two to five: The one is called male pcoony, as having stamina; the other female, as having no stamina, from its luxuriance. Poonia moutan (the Chinese tree poony) is a beautiful plant when in flower.
    $\uparrow$ Aquilegia vulgaris (common columbine) of which there are great varieties.
    $\ddagger$ In nigella damascena (fennel flower, or devil in the luish) 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.

[^68]:    * In ranunculus the essence consists in the nectary, all other parts of the fructi* fication 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 ranun* culus bulbosus, and ranunculus sceleratus. The butter-cups or crow-foots in our meadows are of three species, viz. 1st. ranunculüs bulbosus (bulbous) hath the calyx turned hack to the flower-stalk, the peduncles furrowed, and a bulbous root.-2d. ranunculus repens (creeping) hath the calyx open or spreading, the peduncle furzowed, and puts out runners like the strawberry.-3d. ranunculus acris (acrid) hath the calyx open and spreading, the peduncle round, and grows the highest.

[^69]:    * See the reason why they are shorter, in the explan, of the class tetradynamiz.

[^70]:    * 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 recoinmended in bruises; by applying a boiled cataplasm of the leaves, it buth takes off the pain and blackness. It is also good in an asthma, \&c.
    $\ddagger \ln$ 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.

[^71]:    * 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 puse pose as the tea of China and Japaz.

[^72]:    * Digitulis popurea (foxglove) is much recommended in some species of dropsy, but it must be given with caution.

    Botanic Garden.

[^73]:    * This plant (Linnæa borealis) Linnæus 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.

[^74]:    * 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.

[^75]:    * 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

[^76]:    * Anastatica hierochuntica (rose of Jericho) was formerly called by the monks rosa marixe, 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.

[^77]:    * The plants of this class, especially those of the order polyandria, 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 hiliscus, (althæa) \&c.-They are differently situated in different genera; sometimes on the receptacle, as in larringtonia; sometimes on the calyx, as in hydnora; sometimes on the coral, as in ultheea, alcea, malva, \&c.

[^78]:    * 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 disc tinction of genera and species.

[^79]:    * See symplocos, in polyadelphia.

[^80]:    * 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, hymencea, and monospermum, but the stamina are distinct.-Also a species of African pelargonium hath a papilionaceous corolla.

[^81]:    * Monadelphia, diadelphia, polyadelphia, and gynandria, are distinguished by the situation of the stamina; by which they approach nearer towards natural classes.

[^82]:    * There ate many other twining plants dispersed in the several classes (as cotscuta, \&cc.) the spirals of which turn different ways by the twisting of the stalk: 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 nay be called climing plants. See cirrus, under Outlines of a plant.

[^83]:    * Coral tree (erythrina) 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 pro-duction.-Erythrina is also called the American bean tree, from its bearing pods with seeds in them like beans.
    § The seeds of the lupine were used by the Greeks for food; and Mr. Miller says that the urhite lupine is cultivated in some parts of ltaly, as other pusle for food,

[^84]:    * Gum tragacanth is from a species of asiragalus, 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 Marseilles, 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 selfmoving power at certain times is also discovered in the stamina of many plants. See note to collinsonia.
    $\ddagger$ 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.

[^85]:    * 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 anthelmintic.

    See London Magazine for 1778, p. 264.

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

[^86]:    * The name of this class means congeneration, alluding to the circumstance of all the stamina being united by their antherex, and therefore is translated confen derate 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 adelphia classes, in the stamina not being joined at the bottom by the filaments, but at the top by the anthera.

    This class is natural, except the last order monogamia, which upon systematic principles was found pecessay 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)s and carthamus (base safiren or saftlower).

[^87]:    * The character here given is of a monoclinian foret.

[^88]:    1. Tubular monoclinian florets both in the disc and ray.
    2. Tubular monoclinians in the disc ; tubular females in the ray.
    3. Tubular monoclinians in the disc ; tubular neutrals in the ray.
    4. Tubular monoclinians in the disc; ligulated monoclinians in the ray.
    5. Tubular monoclinians in the disc; ligulated females in the ray.
[^89]:    * Semiflosculous flowers of Tournefort, means such florets as are flat above, and qubular or hollow below, as dandelion, goat's-leard, hawkweed, \&c. and correspond with the ligulati of Linnæus; the lingulati of Pontedera; the planipetali of Boerhave and Ray; the cichoracei and acanace of Cæsalpinus; and the lactescentes of Morison.
    + Lactuca sativa (garden lettuce) as observed by Dr. Carradorri, 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 leaflets of the calyx.

[^90]:    * 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.
    $\dagger$ The moxa, 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. Artenisia absinthium (common

[^91]:    * See radiate flowers described in a note under the head of distinction of flowers.
    $\uparrow$ 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.

[^92]:    * 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 dise 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 dif'ferent forms.-The flowers of centaurca cyanus (blue-bottle) make a good blue, which, with the addicion of a little alum, becomes permanent.

[^93]:    * Melampodiam was the name given by Pliny to black helebore, which, accordto the Edinb. Dispens., is now hellelorus niger.

[^94]:    * 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 pros priety, to bear the name of hermaphrodites.

[^95]:    * 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.
    $\dagger$ The venelloes, which is an ingredient in chocolate, is the pod of the epidendrum vanilla. Most of the species are parasitical.

[^96]:    * 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.

[^97]:    * 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 rolin (arum maculatum) in Index of British names.
    $\dagger$ 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.

[^98]:    * See androgynous under Distinction of fowers.

[^99]:    * 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.
    $\ddagger$ 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.

[^100]:    * See note to Xylophylla.
    $\dagger$ Coix lacrima (Job's tears) is frequently cultivated in Spain and Portugal, and the seeds ground for a coarse sort of bread.

[^101]:    * 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.

[^102]:    * 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 tren of the same kind, that they will bear fruit in a very few years.
    $\dagger$ In China are many plantations of the croton seliferum (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 bloss,oms of a pale pur-ple.-Macartney's Embassy, printed in 1795. 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.

[^103]:    * The young tops of white lryony (bryonia alba) may be boiled and eaten as hop tops, or asparagus. See note to arctium.
    $\dagger$ The drug coloquintida, or colocinth, is the pulp of a species of cucumis, called cucumis colocynthes.
    $\ddagger$ 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 manver, 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, "Qiia data porta, ruit." See note to impatiens, and to the semina of plants

[^104]:    $\ddagger$ Salix herbaccea, 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 xeed (restio tectorum).

[^105]:    * The bark of the root of the lrucea antidysenterica (called by the natives woom ginoos) 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 fero ruginea. Bruce's Travels, 1790, vol. v.
    N. E. The new red bark called angustura bark is supposed to be the production of the brucea.-Observations on the angustura bark, by Auzustus 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.-D.D. Simmons's Medical facts, 1791 .
    $\dagger$ The substance which is obtained from the female plant of candlelerry 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.
    $\ddagger$ 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 (cannalis sativa). The effects produced from smoking hemp are said to be fully as narcotic as opium.-Barrow's Travels in Africa, printed 1801.

[^106]:    * 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.

[^107]:    * 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 therr. This genus is omitted in the 8th edit. of Gen. Plant.

[^108]:    * The roots of fennel (anethum foeniculum) is said to be a good succedaneun for ginseng (panax quinquefolia). Dispensatorium Fuldense, 1791.
    + Manna, from Calabria, is a concreted juice chiefly from a species of ash, called fruxinus 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 manna, which granulated like mastick. Manna is also obtained in Spain from the old branches of the cistus ladiniferus.
    $\ddagger$ In gleditsia, the monoclinians and males are on the same plant, and the females on another.
    $\S$ 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.

    II Ceratonia siliqua (the carob tree) called by former botanists siliqua; which, Mr. Bruce says, in Africa is called kuara, 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,

[^109]:    $\ddagger$ 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.

[^110]:    * 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, hut 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.

[^111]:    + Those sircles or curves we often see on the ground, called fairy-rings, seem yery imperfectly understood: they have long been supposed to be caused by light. ning; 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.

[^112]:    $\ddagger$ M. Willemet (a member of the academy of Dijon in France) considers the \&garic on trees as the superaburdance of a vegetable juice that exists in the tree, or as a morbid matter which is in a state of depuration; consequently excludes is us a fungus. See note to mushroom, in the Index.

[^113]:    * 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.
    $\dagger$ The leaves of the Borassus falelliformis (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 zo 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. Travelso
    $\ddagger$ Of the palmetto there are two species; first, the chamarops 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 Linneeus calls chameesops excelsa.

[^114]:    If Cycas circinalis,--see note to sago in Talle of Vegetalle Drugs.

[^115]:    * Bergera, an aromatic plant of Africa, is omitted in 8th edit. of Gen. Planto

[^116]:    * 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.

[^117]:    * See Skinner's Etimo. Ling. Anglicance.

[^118]:    * Chamoe is from the Greek, and means low, humble, or tending to the ground.

[^119]:    * A fixed alkali may be extracted from all vegetables; but fumuterree and wormuood will yield the greatest quantity, and fir the least; one thousand pounds of fumuterra 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. Jrish 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.

[^120]:    * Aloe perfoliata has many varieties; which see in Aiton's Horius Kewensis ;which Donn, in his catalogue of plants, called Hortus Cantalrigiensis, 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 $\mathbf{1 8 0 2}$.

[^121]:    * 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.
    $\uparrow$ Prunus armeniaca, a supposed native of Armenia.

[^122]:    * A root hath lately been discovered in Peru, called radix rhat-anguice, or radix chataniæ, and is said to be superior in all cases to the cinchona; but the generic character seems not yet to be known.

[^123]:    * Phagos is greek for the beech, and puros is greek for wheat; it is called leeeh wheat from the similarity of the seed. See wheat, luck.

[^124]:    * 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 $b l i g h t$, the farina of its fungus may be carried by the wind to the pores of the corn.

    Printed in 1805.

[^125]:    * Beccalunga seems a harsh specific name, but was formerly the name of the plant; it is derived from the Flemish lecc-pungen (mouth smart), from its pun. gent quality.
    + At Ghent, Antwerp, \&c, the flower buds of commonbroom are pickled as experso

[^126]:    * 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 wooly-headed curviock, being a variety from arctium lappa, the common burdock

    Universal Magazine for $A_{\alpha}$ itg 1758.

[^127]:    * The seeds of candy carrot are said, by Dr. Brook, to be used in making Fe. nice treacle and mithridate.

[^128]:    * Chamremile is generally spelt chamomile, but as it is derived from the Greek wrord chamai (humi crescens), it ought to be chamamile. - See note to may-weed.

[^129]:    * Christ's thorn (rhamnus paliurus) is so called from a supposition that his crow 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 cictiony root (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.

[^130]:    * 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 consuund, \&c.

[^131]:    * Costmary, formerly called costus marix, receives its name from its aromatic quality, similar to the costus aralicus; 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.

[^132]:    + 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.

[^133]:    * 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.

[^134]:    * In Brook's History of the Island of St. Helena, printed in 1808, p. 18, it is said that the gooseberry and currant lushes 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 $8,000,000 \mathrm{lbs}$. Cephalonia and the Morea jointly furnish about the same quantity; the greater part of which is said to be consumed in Great Britain.

[^135]:    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, 1. 411.

[^136]:    * 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.

[^137]:    * The flowers of eryngium grow in a head on a common receptacle, somevhat similar to the lurdock; and as they ripen, the stalks and head change to different colours, some to blue, others to purple, \&c, which make a beautiful appearance.

[^138]:    * 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.

[^139]:    * 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 cort is deposited.

[^140]:    * 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.

[^141]:    * A very remarkable case is recorded in the Monthly Magazine for July, 1809, p. 573 , of the cure of a cancer; by takiag 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.
    $\uparrow$ Asplinium scolopendrium hath many varieties.-Aiton's Hort. Kew.

[^142]:    * 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 lirch bree 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 carching birds.

[^143]:    * Hornlean receives its name from the hardness of the seed or nut; it is in many places, wrongly, called hornbeam.

[^144]:    * 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 Jarge 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 fiavour, may have similar qualities.-Botanic Garden. See note to oenanthe crocata.

[^145]:    + 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.

[^146]:    + Saint Beuno resided at Clynog, a little village ten miles south of Carnarvon is North Wales; he lived in the 7 th 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 tamous well in Flintshire, who also lies interred in the church at Clynog.

    Hutton's Tour in North Wrales, printed in 180..

[^147]:    * It is said the leaves of liquorice make a good tea.

[^148]:    * 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 rhamnuis lotus'; for a description of which, see the memoirs of M. des Fiontains, delivered to the Academy of Sciences at Paris, 1787.

[^149]:    $\dagger$ Mr. Spencer Smith hath lately introduced that valuable plant Smyrna madder, which it is hoped will soon become naturalized in our soil.

[^150]:    ＊The Spaniards call this tree manzanillo，deriving it from the Spanish wore 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 igno－ rant and credulous，who have sometimes been imposed upon with fictitious images shaped from the fresh rocts of bryony，angelica，and other plants，pretending to be from the mandrake．
    $\ddagger$ The bark of the mangrove tree is said to answer the same purposes in tanning as the oak bark．

[^151]:    * 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.

[^152]:    * 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.

[^153]:    * 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, where. ever 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.

[^154]:    * 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 $£ 11,250$ ts the town of Avellina.

[^155]:    * 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.
    $\uparrow$ 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 cons volvulus, either scoparius or floridus.

[^156]:    * 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.

[^157]:    $\ddagger$ 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.

[^158]:    * 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, larley, 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.

[^159]:    * 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.

[^160]:    * Pipe-tree, called so from the branches of this tree, when the pith is taken out, serving for pipes in syringes.

[^161]:    * 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; whence the name.
    $\dagger$ A powder is prepared from the leaves of Egyptian privet called alcanna, alken$n a$, 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.

[^162]:    * 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.

[^163]:    * See note to Sea rush.

[^164]:    $\dagger$ Juncus acutus, and juncus 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 late-ral.-The sand reed (arundo arenaria) is also used for the above purposes ; and in Iceland, the seed is dried and ground for bread.

[^165]:    * It is called St. John's wort, as being formerly usual or 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.
    $\dagger$ Mr. Miller says it is the ascyron, and Mr. Aiton says it is the calycinum.

[^166]:    * Saxifraga (from samum 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 coralines, 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 acetalulum; 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.
    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-

[^167]:    * Soda is an alkali extracted in the same manner as pot-ash alkali, but hat some very different properties; soda, as obtained from marine plants, is usually entirely saturated with carbonic acid, doth not attract the humidity of the atmo sphere 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 varilla. 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 and 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.

[^168]:    * The young shoots of the spircea frutex being very tough and pliable, are oftea nsed for the tops of fishing rods.

[^169]:    * 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 spe fig 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.

[^170]:    $\ddagger$ 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.

[^171]:    + Syringa was a name formerly given to the mock-orange; but as Linnews has made that name the genus to lilac, it must now be exploded.

[^172]:    * 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.

[^173]:    $\ddagger$ See Ververry.

[^174]:    * Buck wheat is probably a corruption for leech 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. 233.

