# CURTIS'S <br> <br> Botanical Magazine; <br> <br> Botanical Magazine; <br> <br> OR, <br> <br> OR, FLOWER-GARDEN DISPLAYED: 

 FLOWER-GARDEN DISPLAYED:}

IN WHICE

The most Ornamental Foreign Plants, cultivated in the Open Ground, the Green-House, and the Stove, are accurately represented in their natural Colours.

TO WHICH ARE ADDED,
Their Names, Class, Order, Generic and Specific Characters, according to the celebrated Linnews; their Places of Growth, and Times of Flowering;
Together with the most approved Methods of Courver.

## A WORK

Intended for the Use of such Ladies, Gextlemen, and Gardeners, as wish to become scientifically acquainted with the Plants they cultivate.

Bx, JOHN SIMS, M. D.
Fellow of the Royal and Linnean Societies.
VOL XLIII.
Being the First of the New Series.

The Flowers, which grace their native beds, Awhile put forth their blushing heads, But, exer the close of parting day, They wither, shrink, and die away : But these, which mimic skill hath made, Nor scorched by suns, nor killed by shade, Shall blush with less inconstant hue, Which art at pleasure can renew. Lloyd.

## Hondon:

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# ( 1771 ) <br> Crassula lactea. White Crassula. 

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Class and Order.
Pentandria Pentagynia.

## Generic Character.

Cal. 5-phyllus. Petala 5. Squame 5, nectarifere ad basin germinis. Caps. 5.

## Specific Character and Synonyms.

Crassula lactea; caule fruticoso, foliis ovatis basi attenuatis connatis integerrimis intra marginem punctatis, cymis paniculæformibus. Hort. Kew. ed. $1^{\mathrm{mac}}$ 1. p. 396. ed. alt. 2. p. 193. Smith Exot. Bot. 1. p. 63. t. 33. Willd. Sp. Pl. 1. p. 1554. Mart. Mill. Dict. n. 62. Plant. Grass. 37.
Crassula lactea; foliis obovatis subciliatis albo-punctatis, panicula trifida. Thunb. Prodr. 56.

A native of the Cape of Good-Hope, and directed to be kept in the dry stove, as it requires to be protected from a damp atmosphere, as well as from frost. As with all other succulent plants, great care should be taken to water it very sparingly during the winter. A light rich loam with old lime rubbish is recommended as the best soil.
Propagated by cuttings, which should be laid in a dry place for a fortnight before they are planted, that part of their juice may be evaporated, then put into pots of light sand, and plunged into a hot-bed, watering them very sparingly, otherwise they will rot. When they have taken root, which will be in about six weeks, they should be gradually inured to the open air.
Introduced by Mr. Francis Masson, in 1774, from the Cape. Flowers in September and October. Communicated by Mr. George Graves, of Walworth, who possesses a very extensive collection of succulent plants.


## ( 1772 )

## Echium fruticosum (3.) minor. Lesser

 shrubby Viper’s-Bugloss.> *****************

Class and Order.
Pentandria Monogynia.
Generic Character.
Cor. irregularis fauce nuda.

## Specific Character and Synonyms.

Echium fruticosum; caule fruticoso, foliis lanceolatis basi attenuatis villoso-strigosis aveniis, foliolis calycinis lanceolatis acutis. Hort. Kew. 1ma. 1. p. 186. ed. alt. 1. p. 298. Willd. Sp. Pl. 1. p. 781. Mart. Mill. Dict.

Echium fruticosum; caule fruticoso, foliis lanceolatis punctis piliferis scabris, floribus corymbosis. Berg. Cap. 39.
Echium fruticosum; caule folisque oblongis obtusis sericeis, spicis alternis pedunculatis. Thunb. Prodr. 33?
Echium africanum fruticans, foliis pilosis. Commel. Hort. 2. p. 107. t. 54.
(a.) major; foliis sursum latioribus, obtusioribus omnibus scaberrimis.
Echium fruticosum. Jacq. Hort. Schoenbr. 1. p. 15. t. 34.
(ß.) minor ; foliis angustioribus acutis ; superioribus molliter hirsutis.
Echivm fruticosum. Bot. Regist. 39.

There is a considerable difference between our plant and that figured by Jacquis in his Hortus Schoenbrunnensis, the leaves of which are broader, more spathular shaped, and much harsher ; the plant is altogether more robust, with smaller flowers; but we cannot find any characters by which we can determine them to be specifically distinct; we have, therefore considered them as varieties only. The young leaves
leaves in our plant were clothed with rather a soft pubescence, but the older ones were very rough, being covered with elevated points, each terminated with a stiff hair. The colour and size of the flowers vary so much in different specimens that no inference can be drawn from them. As there is nothing like silkiness in the foliage, we must think the synonym quoted from Thunberg to be dubious; and Plukenet's figure, usually quoted as a synonym, ought undoubtedly to be excluded.

Our drawing was made from a plant communicated by Messrs. Colville and Son, in the King's-Road; together with another variety with flowers of nearly a peach-blossom colour, without any admixture of blue. Native of the Cape of Good-Hope. Flowers in May and June. Propagated by cuttings or seeds. Requires protection from frost. The soil best suited to it appears to be a sandy loam with a slight admixture of peat. Cultivated by Philip Miler, in 1759, in the Chelsea Garden, from whence there is a specimen preserved in the Banksian Herbarium, evidently the same variety as the one here figured.


## Elichrysum splendens. Shiving

## Elichrysum.

Class and Order.
Syngenesia Polygamia Superflua,

## Generic Clagracter.

Recept, nudum, Pappus pilosus vel plumosus, Cal, imbricatus, radiatus: radio colorato.

## Specific Character and Synonym.

Elichrysum splendens; caule fruticoso prolifero: ramulis unifloris, foliis lanceolatis margine reyolutis, squamis calycinis splendentibus.
Xeranthemum herbaceum. Bot. Repos. 487 ?

The annual Xeranthemums, natives of Europe and the Levant, differing essentially from the Cape shrubby species, in having a chaffy, not naked, receptacle, and a different pappus, the latter have been separated by Willdenow, under the name of Elichrysum, by which they had been known to botanists, till superseded by the system of Linneus. This arrangement has been adopted in the Hortus Kewensis, and consequently all that we have figured under the name of Xeranthemum, are to be found there, under that of Elichrysum.

A specimen of the same species as our present plant is preserved in the Banksian Herbarium, under the name which we have adopted.

From the figure and description of Xeranthemum herbaceum in the Botanist's Repository, we can hardly think that our plant can belong to the same, although the flowers seem very similar; as the stem of Euchrysum splendens, though slender, is shrubby, erect, and branched. The
flowers are very beautiful, the outside of the calyx having a metallic lustre, as if bronzed, and the internal rays being straw-coloured, shining like satin. If our plant should be found to be the same as herbaceum of the Botanist's Repository, the latter name is inadmissible for a species that is truly shrubby.

Native of the Cape of Good-Hope. Introduced by George Hibbert, Esq. about the year 1802, at whose collection at Clapham-Common, our drawing was taken several years ago. Communicated also in August last, by Messrs. Loddiges and Sons; and is still in flower at this time, the middle of October. Propagated by cuttings. Likes a light soil with peat mould.


## Salvia bicolor. Two-coloured Sage.

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Class and Order.
Diandria Monogynia.

## Generic Character.

Cor. inæqualis. Filamenta transverse pedicello affixa.

## Specific Character and Synonyms.

Salvia bicolor; foliis ovatis eroso-dentatis, floribus nutantibus lacinia media labii inferioris corolle concava. Willd. Sp. Pl. 1. p. 136. Hort. Kezv. ed. alt. 1. p. 57. Jacq. Hort. Schoenbr. 1. p. 4, t. 7.
Salvia bicolor; foliis radicalibus cordatis subincisis, caulinis oblongis subsagittatis inæqualiter dentatis, bracteis reflexis calyce brevioribus, pilis calycis glanduliferis. Willd. Hort. Berol. 1. p. 36.
Salvia bicolor; foliis cordato-oblongis; ramis virgatis; bracteis reflexis ; calycibus nutantibus; corollæ labio inferiore intermedio saccato. Desfont. All. p. 22. t. 2.
Salvia bicolor; foliis cordato-hastatis, inæqualiter dentatis ; spicis nudis prelongis; corollarum barba candida saccata, Lamarck Ill. n. 300.
Salvia bicolor; foliorum laminis cordato-oblongis, repandodentatis, hirsutis, rugosis: spicis prelongis, verticillis 6 -floris: calycis labio superiore 3 -dentato: corollæ fauce striata, labii inferioris lobo medio saccato, emarginato, oris mox emarcidis: filamentis brevissime stipitatis. Salisbury Parad. Lond. 113.

Salvia bicolor is a native of Barbary, where it was first discovered by Desfontaines. It is a very handsome species, and would be much more so, were it not for the speedy change that takes place in the lower lip of the corolla, which at its first expansion is snow-white, but almost immediately begins to fade to a rusty-brown.

The structure of the stamens in Salvia is very remarkable, and makes the essential character of the genus. But the want of uniformity of language among botanists, in speaking of these parts, is apt to render their meaning not always easily intelligible to students. The filament consists of two parts, connected together by a joint: the lower portion is upright, and generally very short; the upper portion is much longer, and united to the lower, not at either extremity, but at some determined point between the two, more or less distant from the middle, in different species. This transverse portion is generally curved, and the longer arm ascends and bears the anther at the extremity, while the shorter arm descends and is terminated by a gland.

Some authors, when they speak of the filament, mean the lower upright portion only, whilst others consider the transverse portion as the filament, and call the upright a stipes or pedicle." Etlinger, who wroté a monograph on Salvia, coonsidered the transverse portion as a part of the anther elongated, separating its two cells and bearing one at each extremity; that on the longer ascending arm being always fertile, whilst that on the descending arm is sterile. This opinion is rendered the more probable from the circumstance, that the fertile anther consists of only one cell; and further, that the sterile portion, though more usually only a callous gland, yet, in other cases, shews its affinity to an anther, by bearing a small quantity of pollen.

The proportion in the length of the two arms of the transverse portion of the filament, though constant in the same, varies in different species, and would, in many cases, afford excellent distinguishing characters. In the present species, the upper arm is very long, extending nearly the whole length of the upper lip of the corolla: whilst the lower arm is very short, and attached nearly its whole length to the tube of the corolla.

A hardy biennial. Propagated by seeds. Introduced in 1793, by the Right Hon. Sir Joseph Banks. Flowers in May, June, and July. Our drawing was made from a living specimen, sent by Mr. Lambert from his garden at Boyton. Communicated also by Mr. Walier from Arno's-Grove, Southgate.
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## （ 1775 ）

Dianthus atrorubens．Cluster－headed Pink．

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## Class and Order．

Decandria Digynia．

## Generic Character．

Cal．cylindricus，1－phyllus：basi squamis 4s Petala 5， unguiculata．Caps．cylindrica 1－locularis．

## Specific Character and Synomyms．

Dinfthes atrorubens；floribus aggregatis capitatis，squamis $^{\text {a }}$ calycinis ovatis aristatis，involucro ovato aristato longi－ tudine capituli，foliis lineari－lanceolatis enerviis．Willd． Sp．Pl．2．p．679．Hort．Kew．edit．alt．3．p． 78.
Dinnthus atrorubens；floribus aggregatis，squamis calycinis ovatis aristatis tubo brevioribus，foliis connatis striatis． Allion．Ped．n．1545．Jacq．Ic．Rar．3．t． 467.
Caryophýlles sylvestris，flore rubro plurimo de summo caule prodeunte．Segu．Veron．434．t．8．f． 9.
Dianthus atrorubens et capitatus．Donn Cant，a Pursh p． 144.

The name of capitatus，by which this Pink has been known in our gardens，is appropriate enough；but as it differs in nothing but a less intensity of colour from Alnion＇s atrorubens，as figured by Jacquin，and this name being already established，we are under the necessity of retaining it， though less applicable ：another example of the inconvenience arising from giving names derived from colour or other qua－ lities so inconstant．

Several species of Diantius are occasionally，some of them constantly，diœcious．So in our present plant the stamens were found to be defective，the styles very long and
spreading; while, in the one figured by Jacquiv, the anthera appear at the mouth of the tube, but no style or stigma is seen. His was a male, ours a female plant.

A hardy perennial, from two to three feet high. Native of Italy and Tauria, growing in dry, open situations. Propagated by parting the roots, or by seeds. Communicated by Mr. Kent, of Clapton. Introduced in 1802, by Mr. Johm Hunnemann.


## ( 1776 )

## Viola altaica, Tartarian Heart's-ease.

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## Class and Order,

 Pentandila Moxogynia. Sxngenesia Monogamia. Linn, Generic Character.Cat. 5-phyllus. Cor. 5-petala, irregularis, postice cornuta. Anth. cohærentes. Caps. supera, 8 -valvis, 1-locularis. Flos in Europais semper inversus.

## Specific Character and Synonyms,

Viola altaica; caulescens, stipulis dentato-pinnatifidis sublyratis, foliis ovalibus crenatis in petiolum decurrentibus, petalis undulatis.
Viola altaica; caulescens glabra; foliis crassiusculis, ovatis ovalibusve crenatis; floribus inversis undulatis: petalis rotundatis, transverse latioribus, subreniformibus. Ker in Bot. Regist. 54.
Viola altaica. Pallas Herb: apud Lambert.

Descr. Stems very short. Leaves alternate, roundish oval, crenate, on long channelled petioles. Stipules opposite, deeply toothed on the sides, with a broad very obtuse termination. Peduncle axillary, solitary, scape-like, square, much longer than the stem, stout, upright, incurved at the apex, a little below which is a small pair of scale-like bractes cared at the base. Segments of the calyx obtuse at both ends, obsoletely denticulate. Corolla large, pale yellow ; petals nearly round, undulated, overlapping one another; the three superior ones (lowermost in position by the inversion of the flower) have a deeper yellow spot near the base, from which proceed several unequal blue rays: the two inferior petals are without spot or ray. The spur or nectarium proceeding
from the back part of the superior petal is a little curved and tinged with blue at the point. Anthers five, compressed, cohering, membranaceous at the apex. Style short. Stigma green, globular, with an opening at the top, bea ded at the lower part. The whole plant is quite smooth. The shortness of the stem and the strong peduncles, springing up so near to the root, upon a superficial view, give the appearance of its belonging to the first division, the acaules; but it really belongs to the third, or such as have pinnatifid stipules and a hollow stigma.

There are several specimens of this plant in Pallas's Herbarium, now in the possession of Mr. Lambert, which have the name of altaica attached to them in the Professor's own writing.

It has usually been called uniflora, a species with which it scarcely agrees in any one character; but the circumstance of the flowers coming out so near the root, and more usually only one at a time, has probably occasioned it to be so called by persons, who, little conversant with botanical characters, are satisfied with any name that seems at all applicable.

Native of Siberia, on the Altaic mountains. A hardy perennial. Propagated by seeds, which it produces freely, or by parting the roots. Communicated by Mr. Knight, of the Exotic Nursery, King's-Road.

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# Verbascum bipinnatifidum. Cut-leated Mullein. 


Class and Order.
Pentandria Monogynia.

## Generic Character.

Cor. rotata, subinæqualis. Caps. 2-locularis, bivalvis.
Specific Character and Synonyms.
Verbascum bipinnatifidum; foliis radicalibus interrupte bipinnatifidis: caulinis serrato-dentatis, ramis divaricatis, floribus axillaribus sessilibus subsolitariis.
Verbascum pinnatifidum; foliis oblongis: radicalibus bipinnatifidis : caulinis pinnatifidis dentatis, caule ramosissimo virgato, floribus axillaribus sessilibus. Bieb. Fl. Taurico-Cauc. 1. p. 162.
Verbascum pinnatifidum. Vahl Symb. 2. p. 39? Willd. Sp. Pl. 1. p. 1006? Hort. Kew ed. alt. 1. p. 386? vix eadem species ac nostra videtur.

Our plant, which is undoubtedly the same species as described by Marschal v. Bieberstein, as growing in Tauria, on the sandy shores of the Black-Sea, does not appear to us to be the pinnatifidum of Vahl, taken up by Willdenow, a native of the islands of the Grecian Archipelago ; and certainly has nothing to do with Tournefort's Verbascum gracum, fruticosum, folio sinuato candidissimo, quoted as a dubious synonym of that plant; as we have ascertained by an imperfect specimen, gathered by Tournefort himself, preserved in the Banksian Herbarium.

In our plant the radical leaves are finely divided, lie flat upon the ground, and perish as soon as the stem rises up to flower. The stem is very much branched; branches rigid,
very divaricate; caulint leaves sessile, half stem-clasping, lower ones more, the upper less deeply toothed. Flowers sessile and, for the most part, solitary.

Communicated by Messrs. Lodpiges and Sons, who raised it from seeds received from Cancasus. It is a hardy biennial. Propagated by parting its roots, or by seeds; but it seems doubtful whether these will be perfected in this country. Flowers in July and August.


## Nicotiana quadrivalis. Missouri Tobacco.

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Class and Order.
Pentandri Monogynia.

## Generic Character.

Cor. infundibuliformis, limbo plicato. Stam. inclinata. Caps. 2-4-valvis, 2-4-locularis.

Specific Character and Synonyms.
Nicotiana quadrivalvis; pedunculis solitariis unifloris, capsulis quadrilocularibus.
Nicotiana quadrivalvis; foliis oblongo-ovatis petiolatis, floribus in summitate ramulorum sparsis solitariis, corollis infundibuliformibus, laciniis oblongis acntiusculis, capsulis subglobosis 4 -valvibus. Pursh Flor. Amer. Sept. 1. p. 141.

Descr. Root annual. The whole plant is clammy, being covered with glandular hairs, except the upper surface of the leaves, which is nearly free from them. Leaves lanceolate, undulate. Flowers solitary pedunculated, sometimes axillary, more frequently extra-axillary. Calyx divided half-way. Segments lanceolate, unequal, one being constantly longer than the rest. Coroila funnel-shaped, undulated, white with purplish veins. Capsule round-oval, with four deep grooves, four-valved and four-celled. Seeds kidney-shaped, attached to a central receptacle.

This plant is at once distinguished, by its four-celled fruit, from every other known species of Nicotiana. Mr. Pursh informs us, that it grows both spontaneously and cultivated on the borders of the Missouri, principally among the Mandan and Ricara nations, and that the tobacco prepared from
from it is excellent, especially a very delicate kind, prepared by the Indians from the dried flowers.

Communicated by our friend A. B. Lambert, Esq. from his collection at Boyton. Flowers in July and August, and ripens its seeds very rapidly. Introduced by Mr Nuttal.


Psidium cordatum. Spice Guiva.

#  

## Class and Order.

Icosandria Monogynia.
Generic Character.
Cal. 5-fidus, superus. Petala 5. Bacca 1-multi-locularis, polysperma.

## Specific Character.

Psidium cordatum; foliis sessilibus cordato-rotundatis utrinque glabris, pedunculis subunifloris aggregatis.

Descr. A tree with straight rigid branches covered with reddish brown bark. Leaves opposite, sessile, heart-shaped, approaching to round, some quite rounded at the point, others shortly acuminate, smooth on both sides, fleshy, and rigid. Peduncles axillary, sometimes branched near the base, more generally single, one-flowered, terminated with a minute tooth-like bracte at its junction with the germen. Calyx fiveleaved : leaflets nearly orbicular, concave, green, rigid, bursting very irregularly, in part deciduous. Petals five, closely adapted to and as it were lining the calycine leaflets, and, by the irregular bursting of these, frequently torn off; so that few of the flowers appear perfect. We have found even four of the petals enclosed within one leaflet of the calyx. A similar irregular bursting of the calyx may be observed in other species of this genus. Stamens many : filaments short, attached to the persistent base of the calyx : anthers white, roundish. Germen inferior, fleshy, six-celled, many-seeded; taste aromatic and acid: style longer than filaments: stigma simple.

Communicated by A. B. Lambert, Esq. from his collection at Boyton, who raised it from seeds received from the late

James Tobin, Esq. the produce of a tree, growing in the Island of St. Nevis, in the West-Indies. Mr. Tobin remarks, that there was only one tree of the kind on the islaitd, and that it was known by the name of the Spice Guava; but is totally different from Psidium aromaticum.

Flowers in May, June, and July. Requires to be kept in the stove.


# Polygala speciosa. Shewy Milk-wort. 



## Class and Order.

Diadelpiia Octindiria.

## Generic Character.

Cal. 5-phyllus : foliolis $\mathbf{2}$ alæformibus, coloratis. Legumen obcordatum, biloculare.

## Specific Character.

Polygala speciosa; cristata fruticosa, appendice duplici, racemis ebracteatis subterminalibus multifloris, foliis alternis oblongo-cuneatis glabris.

Descr. Stem shrubby, upright, very little divided, green, tinged with purple, roughened by the vestiges of fallen leaves. Leaves either scattered or alternate, oblong, narrowed towards the base, emarginate frequently with a mucro; some of the smaller ones are obcordate. Flowers large, bright purple, growing in a long nearly terminal raceme (in some native specimens in several racemes), alternate and rather distant. The three external calycine leaflets green, concave: upper one rather larger than the rest: two internal petallike leaflets (ale) many times larger than the external, roundish obtuse, beautifully veined, patent, or even reflected like the wings of a butterfly ; these wings form the principal part of the flower. Corolla has no vexillum, the place of which is supplied by the upper external leaflet of the calyx; the ale of the corolla are small, pendent, and connivent; carina large, compressed, canoe-shaped, terminated by two large brush-like, bright crimson appendices. Stamens eight, enclosed within the carina : filaments all connate at the lower part. Anthers oblong, affixed by their base. Germen obcordate: style incurved: stigma bifid, one lacinia erect, emarginate,
emarginate, the other dependant, green, glutinous on the underside, where it is stained yellow by the adhering pollen.

Fine specimens of this plant from the Cape of Good-Hope are preserved in the Banksian Herbarium, under the name which we have adopted. These have several terminal racemes; but a specimen in Mr. Lambert's Herbarium, brought from the Cape by Dr. Roxburgh, has only one.

The plant, from which our drawing was taken, was communicated by Messrs. Charles and James Young, Nurserymen at Epsom, in July last, who raised it from seeds given them by Sir John Jackson, M. P. Requires the protection of the greenhouse.


## Rivina humilis. Downy Rivina.

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## Class and Order.

Tetrandria Monogynia.

## Generic Character.

Cor. 4-petala, persistens. Cal. 0. Bacca 1-sperma : semine léntiformi.

## Specific Character and Synonyms.

Rivina humilis; racemis simplicibus, floribus tetrandris foliis pubescentibus. Willd. Sp. Pl. 1. p. 694. Hort. Kew. ed. alt. 1. p. 273 . Mart. Mill. Dict. n. 1.
Rivina humilis racemósa, baccis puniceis. Plum. Gen. 48. Rivinia. Hort. Cliff. 35. Jussieu Gen. 84.
Rivina humilis. Brown Jam. p. 148. Gartn. Fruct. p. 375. t. 77. f. 5.

Piercea tomentosa; foliis cordatis pubescentibus. Mill. Dict. ed. 7.
Solanum barbadense racemosum minus tinctorium. Pluk. Alm. 35̄3. t. 112. f. 9. Moris. Hist. 3. p. 522. n. 23.
Solanoides americana circææ foliis canescentibus. Tournef. Act. 1706.
Amaranthus baccifer circere foliis. Commel. Hort. 1. p. 127. t. 66.

Phytolacea americana fructu minori. Boerh. Lugd. 2. p. 70.

This plant was named by Peumier in honour of the celebrated Leipsic Botanist, Avg. Quirinus Rivinus, who flourished in the time of Tournefort and Ray. It is an old inhabitant of our stoves, where, when kept free from insects and in a high temperature, it makes a pretty appearance; for although the flowers are not very conspicuous, yet being of a good white, when first expanded, they contrast
contrast well with its scarlet fruit ; and both are produced plentifully at the same time, almost throughout the year.

It probably varies in the number of stamens from four to eight, as Miller, who surely describes our species, attributes to it eight. It varies also greatly in the degree of pubescence, being, as is remarked by Linneus, when very vigorous, of a brightish green, and, when impoverished by cold, of a hoary appearance.

The berries stain paper or linen of a fine red, but fugitive, colour. Milier mentions a fact, which shews an extraordinary penetrating quality in the juice of these berries, and as this might perhaps be turned to use, in inquiries into the course of the fluids in some plants, we think it worth recording here, especially as the observation has been omitted by Professor Martyn, in his edition of Miller's Dictionary. His words are, "I have made many experiments with the juice of these berries to colour flowers, which have succeeded extremely well. These were made in the following manner: I pressed out the juice of the berries and mixed it with common water, putting it into a phial, and shaking well together, for some time, till the water was thoroughly tinged; then I cut off the flowers, which were just fully blown, and placed their stalks into the phial, and, in one night, the flowers have been finely variegated with red. The flowers which I made the experiments on, were the Tuberose and double white Narcissus." We remember too to have read in some periodical work, that if the juice of these berries be added to the water in which white Hyacinths are blowing, the colour will rise into the flower in red streaks.

Native of the West-Indies. Commelin says, he received the seeds from which he raised his plants from the EastIndies.

Caltivated according to Morison, as quoted above from the Hortus Kewensis, before 1699. Communicated by John Walker, Esq. of Arno's-Grove.


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## Class and Order.

Polyandria Monogynia.

## Generic Character.

Cor, 5-petala. Cal. 5-phyllus: foliolis 2 minoribus. Capsula.
Specific Character and Synonym.
Cistus lavipes; suffruticosus adscendens exstipulatus, foliis alternis fasciculatis filiformibus glabris, .pedunculis racemosis. Sp. Pl. 739. ed. Willd. 2. p. 1190. Hort. Kew. ed. alt.3. p. 308. Jacq. Vindob. 2. p. 74. t. 158. Cavan. Ic. 2. p. 56. t. 173. Mart. Mill. Dict.n. 15.
Cistus suffiruticosus, procumbens, foliis alternatim confertis inæqualibus setaceis. Ger. Prov. 394. t. 14.
Cistus humilis massiliotica, camphorate tenuissimis foliis glabris. Pluk. Alm. 107. t. 84. f. 6.
Helianthemum levipes. Lam. et Dec. Fl. Frang. 4. p. 816.

Cistus lavipes, calycina, and Fumana, have a very near affinity to each other : lavipes is a low under-shrub, which when cultivated in pots, as it usually is with us, always rises with straight stems, but so slender as to require support when exposed to the weather. Native specimens have generally an ascending stem.

From its abundant, lively, yellow flowers, and uncommon foliage, it makes an agreeable variety; and it takes up very little room.

Native of the South of France, and too tender to endure our winters, without the protection of a greenhouse. Flowers from June to August. Cultivated, according to Mr. Arron, in 1690, in the royal garden at Hampton-Court. Communicated by N. Hodson, Esq. of the War-Office.



# Rubus roseffolius (B.) coronarius. Double 

## rose-tetied Beambit.


Class and Orter.
Icosandia Pouygyile.

## Genèric Chäracter.

Cal. 5-fidus. Petala 5. Batea composita aciniis mono spermis.

## Specific Character and Synomyms.

Rubus roscefolius; fratescens, folís quinato-pinnatis ternatisque utrinque viridibus, caule petiolisque aculeatis, floribus solitariis. Smith 1cont. 3. t. 60. Willd. Sj. Pl. 2. p. 1080.
(阝.) coronarius; flore magno multiplici.
Rubus sinensis. Mortulanorum.

Descr. Stem shrubby, branched, and, together with the petioles, covered with sharp, mostly straight, prickles. Leaves pinnate, for the most part quinate, with the lower pair more distant ; the upper leaf next the flower always ternate: leaflets ovate-acuminate, doubly serrate, and now and then irregularly incised, rugose, green on both sides; when dry, their rugosity nearly disappears, and they feel soft from an invisible villosity; when viewed through a lens, in this state, they appear covered with minute, shining glands. Stipules subulate. Peduncle solitary, terminal, opposite a ternate leaf. Calyx 5 -cleft: segments ovate-acuminate with the point lengthened out into a sort of awn. Petals many, roundish, emarginate. Stamens many : anthers oblong, lunated. Receptacle globular : styles many : stigmas simple.

This elegant Bramble, almost rivaling a Rose, was introduced, some years since, from the Prince of Wales's-1sland,
in the East-Indies, by the late Mr. Evans, of Steprrey, who devoted almost his whole income to the acquirement of new and rare plants, which he generously distributed among other collectors.

Nurserymen usually call it Rubus sinensis, but from what authority it is considered as coming from China we know not. To us it appears to be clearly a variety of Rubus rosafolius, described and figured by Sir James E. Smith; from which species, a native of the Isle of Mauritius, it appears to differ in nothing but in the size of the flower and multiplicity of its petals. Rubus pinnatus in its foliage very much resembles our plant, except that it has prickles along the midrib of the leaflet; but its inflorescence is a terminal raceme.

Notwithstanding the corolla is so very double, the parts of fructification seem to remain so perfect, that fruit may very well be expected, though we do not find that any has as yet been perfected.

Is best treated as a greenhouse plant, being impatient of excessive cold or heat. Thrives in any soil ; and propagates itself rapidly by suckers, which it puts forth abundantly.

Our drawing was taken at Messrs. Whitley, Brame, and Milne's Nursery, at Fulham, in April 1813; our description chiefly from a fine living specimen, communicated by Mr. William Kent, of Clapton, last October. So that its season of flowering, under its present management, seems very uncertain, or to have a very long range.

## 

Class and Order.
Polyandria Digynia.

## Generic Character.

Cal. 5-phyllus. Petala 5. Styli 0. Capsula polysperma.

## Specific Character and Synonyms.

Penia officinalis; foliis decompositis nudis: foliolis lobatis: lobis lato-lanceolatis, capsulis rectiusculis tomentosis. Retz. Obs. 3. p. 35. Willd. Sp. Pl. 2. p. 1221. Hort. Kew. ed. alt. 3. p. 315.
Peonia foliolis oblongis. Hort. Cliff. 212. Scop. Carn. n. 650. Regnault Bot.

Peonia radice glandulosa, foliis duplicato-pinnatis, pinnis ellipticis et trilobis. Hall. Hist. n. 1187.
Peonia femina. Fuchs. Hist. 202. Lob. Ic. 689. 6. Bauh. Pin. 323. Park. Parad. 341. Kniph. Cent. 6. n. 69. Knorr. Del. 1. t. R. 3. Blackw. Herb. t. 65. Moris. Hist. 3.
Peovia rubra flore simplici. Besl. Hort. Eyst. Vern. Ord. 6. f. ult.

The Common Peony of the gardens now rarely occurs with single flowers. In Parkinson's time it must have been much more common, as he observes, that the double sort sometimes produces ripe seeds; which, being sown, bring forth some single and some double flowers. The extremely double varieties which, in our days, have been almost exclusively cultivated, rarely, if ever, produce any seed; and are so easily propagated by the tuberous roots, that little or no attention has been paid to procuring it, till quite of late,
when a sort of rage for Pebnies has become prevalent, and seminal varieties are sought after with great avidity.

The roots of this species of Prost were fermerly in considerable repute, as a medicine, and were supposed to cure epilepsy, convulsions of infants, and many other disorders; but are at present almost wholly out of use.

The Common Peony is very hardy, and will thrive in almost any soil or situation, even under the shade of trees, where few other plants will live.

Blossoms in May and June. Was cultivated in our gardens as long since as the year 1548, according to Mr. Airon, upon the authority of Tunser's Names of Herbs.

Communicated by Messrs. Chandler and Buckingham, Nurserymen, at Vanshall, who have one of the most extensive collections of this genus.


# Jasminem Sambac ( $\gamma$. trifollatem). The Tescan Jasmine, or Kudda-Muela. 

## ******************

## Class and Order.

Dasdrata Monogymfa.
Generic. Character.
Corolta Iypocrateriformis, 5-8-fida. Bacca dicocca, Semina solitaria, arillata.

## Specific Character and Synonyms.

Jasmevem Sambac: foliis oppositis simplicibus ellipticis ovatis subeordatisque membranaceis opacis, ramulis petiolisque pubescentibus, laciniis calycinis subulatis. Fort. Kew. ed. $1^{\text {mase }}$ o. 1. p. 8.-ed. alt. 1. p. 15. Willd. Sp. Pt. 1. p. $3 \mathbf{2}$ Mart. Mill. Dict. n. 1.
Nuctanthes Sumbac. Linn. Sp. Pt. 8.
Mogoriem Sambac. Lam. Encycl. 4. 210.-Illustr. 1. 23: $t: 6 . f 1$.
(a.) floxe simplici.

Jasminem Sambac. Bot. Regist. 1.
(阝.) floribus multiplicatis, laciniis ablongis acutis' tubo brevioribus.
Jasminum Sambac; var. flore pleno. Bot. Repos. 497 :
( $\gamma$.) trifoliatum-; floribus plenis, lacinius subrotundis tubo longioribus, foliis plerumque ternatis.
Jasminum Sambac. $\beta$ : trifoliatum. Vahl. Enum. I. p. 26, Kudda-Muleai Hort. Malab. 6. p. 89. t. 51 .
$\mathrm{J}_{\text {asminum }}$ indicum mali aurantii folis, flore albo pleno amplissimo. Tilli Hort. Pisan: p. 87. t. 30.
Nyetanthes grandiftora. Lour. Fl. Cachin. I. p. 21.

We have not thought it necessary to give a complete synonymy for more than the particular variety, which we
now offer now offer.

The Kunda-Mulla of the East-Indies differs from the other varieties of the Arabian Jasmine in so many points, that we might have hesitated whether we should regard it as belonging to that species, unless it had been so decided by those Botanists who have had the opportunity of seeing them together in the East, where they are so universally cultivated.

The flowers are almost constantly solitary; the calyx is divided into a greater number of segments; and the leaves, instead of being regularly opposite, almost constantly grow three together at the extremities of the flowering branches, and in other parts indifferently, singly, opposite, or ternate.

The flowers of all the varieties are much admired for their exquisite scent, which, though powerful, is said to refresh instead of oppressing the head, as most strong perfumes do.

The first account we have of the Kudda Mulla, was from Vin Rhede, in the Hortus Malabaricus. It is said by Miller to have been in the royal garden at Hampton-Court at the end of the seventeenth century ; but it was little known in Europe till it was imported from the East-Indies to the garden belonging to the academy' at Pisa, about the year 1691; being, with the common double variety; the only plant that survived the voyage, out of sixteen chests sent from Goa. These, as soon as they were sufficiently recruited, were removed to the garden of the Grand-Duke, where our plant was so highly prized, that, though it might have been easily propagated by suckers which it produced plentifully, these were not permitted to be given to any one, nor were the ordinary visitors of the garden allowed even to see this rarity. Tilli, from whom we borrow this account, thought himself highly honoured by permission to have a representation taken of both plants thirty-four years after their importation.

The above narrative accounts for the name of Tuscan Jasmine generally applied to this variety.: Mhler, in 1730, received a plant of it from the Malabar Ceast; where he supposes it to grow spontaneously. It is, however, very doubtful whether the Jasminum Sambac be a native of any part of the East-Indies. It seems most probable that it came originally from Arabia.

Thrives best in the bark stove, but should be placed in a situation where it may have both light and air, as well as a trellis to support it. Propagated by layers, or cuttings; but the latter are said not to strike readily. Communicated by Messrs. Loddiges and Sons, in July 1814.


## Cineraria aurita. Purple-flowered

## Cineraria

## ******************

## Class and Order.

## Syngenesia Polygamia Superflua.

## Generic Character.

Recept. nudum. Pappus simplex. Cal. simplex, polyphyllus *qualis.

## Specific Character and Synonyms.

Cineraria aurita; (suffruticosa) floribus corymbosis, foliis cordatis subangulatis subtus tomentosis, petiolis basi biauritis. L'Herit. Sert. Angl. p. 26 ; icone nondum edita. Hort. Kew. ed. $1^{\text {max }}$ 3. p. 2920.-ed. alt. 5. p. 72. Willd. Sp. Pl. 3. p. 2077. Martyn Mill. Dict. n. 33.

The Cineraria aurita is a greenhouse under-shrub, with a woolly stem, disposed to climb. The leaves are tomentose on the under side. The flowers grow in large corymbs, and are of a brightish purple colour, but much paler than those of Cineraria cruenta, smaller, and less shewy : they have also a very disgusting smell.
It has a nearer affinity with populifolia than cruenta, from the latter of which it is readily distinguished by the smaller leaves, white underneath, with long petioles not winged at the sides, and having a single pair of roundish stipules at the base ; besides that, the stem of cruenta is herbaceous. From populifolia it is distinguished by the want of several toothlike appendices on the footstalk.

Native of the Island of Madeira, where it was found by Mr. Francis Masson, and was introduced into the Kew Garden in 1790. Flowers in June and July. Communicated by John Walker, Esq. of Atno's-Grove.


## ( 1787 )

## Symphytum tauricum. Taurian Comfrey.

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## Class and Order.

Peńtandria Monoginia.

## Generic Character.

Corollce limbus tubulato-ventricosus: fance clausa radiis subulatis.

## Specific Character and Synonyms.

Symphytum tauricum ; foliis cordato-ovatis rugosis hirtis, limbo corolle cyathiformi, caule ramoso hispido maculato.
Symphytum tauricum ; foliis cordato ovatis hirtis petiolatis, floralibus oppositis sessilibus, laciniis limbi corolla obtusis, caule ramoso. Willd. Enum. Hort. Berol. 1. p. 183.

Symphytum foliis cordatis crenulatis basi inæqualibus petiolatis. Willd. in N. Act. Soc. Nat. Scrut. Berol. 3. p. 120. t. 6.f. 1 .

Symphytum orientale; caule foliisque cordato-ovatis petiolatis hirsutis, summis oppositis sessilibus, corollæ limbo campanulato. M. V. Bieberst. Fl. Taurico-Caucas. 1. p. 129.

Symphytum Constantinopolitanum, Borraginis folio et facie, flore albo. Tournef. Corol. 7.-Voyage du Levant, v. 1. p. 524. cum tabula.

Descr. Stem herbaceous, scarcely a foot high, hispid and spotted with small reddish dots. Branches very divaricate. Leaves on very short winged footstalks, ovate, acute, with a broad base frequently cordate, rugose, margin finely undulated, so as to give the appearance of being crenulate, villous and hairy along the veins: foral leaves sessile, opposite, spreading. Racemes terminal, always two together, nodding. Calyx five-cleft: segments subulate. Corolla funnel-shaped,
funnel-shaped, white : tube shorter than calyx: limb cupshaped: lacinic very obtuse. Nectaries five barren filaments, lance-shaped between the stamens, and a little longer than them. Style oblique, the length of the corolla.

This species differs in many respects from Symphytum orientale, in which the leaves are more approaching to lanceshaped, not rugose, nor undulate at the margin ; limb of the corolla spreading gradually from the tube to the mouth, not suddenly in form of a cup; style considerably exserted, which in this only equals the corolla.

A hardy perennial. Flowers in April and May. Native of Southern Tauria. Communicated by Mr. Knight, of the Exotic Nursery, King's-Road; who raised it from seeds sent from Russia, under the name of Symphytum bullatum. It appears to have been described by Willdenow, in his Enumeration of the Plants cultivated in the Berlin Garden, under the appellation which we have adopted.


## Stobea pinnata. Carthamus-like Stobea.

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Class and Order.
Syngenesia Polygamia Equalib.

## Generic Character.

Receptaculum hispidum, favosum. Pappus paleaceus. Cor. flosculosa. Cal. imbricatus, squamis dentato-spinosis.

## Specific Character and Synonyms.

Stobea pinnata; foliis sessilibus subtus tomentosis pinnatifidis: pinnis lanceolatis dentatis sursum deorsumque divaricatis spina terminatis.
Stobea pinnata; foliis tomentosis pinnatifidis: pinnis linearibus spina terminatis. Thunb. Prod. 141. Willd. Sp. Pl. 3. p. 1705.

This plant rises up with a straight woolly stem about a foot high, dividing into several alternate branches towards the top, bearing each one flower at the extremity. In a native specimen, we have observed that, after these flowers decay, the stem has again shot out and born fresh flowers on short branches, as at first, the prickly heads of the old flowers remaining as a fence below. Leaves oblong, tomentose on the under side, deeply cut into lance-shaped segments, directed alternately one up and another downwards, furnished with small teeth at the sides and a strong spine at the extremity. Calycine leaflets imbricate squarrose, longer than the florets, armed with a strong spine at the point and spinous teeth at the base. Receptacle bristly. Head of flowers small discoid: floseules tubular with a five-cleft border. Stigmas exserted, revolute.
Stobea is a genus of plants, natives of the Cape of GoodHope, established by Professor Thunberg, and named, we suppose, in honour of Dr. Kilian Stobsus, an eminent
professor in the Swediph Ueiversity of Lund, in the early part of the last century.

The qpecias here described, has been seyeral years in some of the more curious collections about town, and was well known to Mr. Brown, though by accident omitted in the new edition of the Hertus Kewensis; which is the more to be regretted, as not one of the genus occurs there, or, as we believe, in the catalogue of any other European garden.

From the short character given by Thunberg in his Prodromus, we cannot be certain that our plant is the same with his, though it accords with his definition, as far as it goes, and cannot belong to any other of the species that he has recorded.
Qur draxing yxas made in Angust 1913, at the very fine collection belonging to the Comtesse De Yannes, at Bayeswater. But at that time we had no opportunity of seeing the plant: our description was therefore taken from a plant communicated by John Walier, Esq. early in November of the present year.

Flowera from July to Navember. Requires to be protected from frost.


## Cerastium amplexicalee. Glaucous

## Chick weed.



Class and Order.
Decandria Monggynia.

## Generic Character.

Cal. 5-phyllus. Petala bifida. Caps. 1-locularis, apice dehiscens.

## Specific Character.

Cerastium amplexicaule; glabrum, caule dichotomo, foliis cordato-ovatis amplexicaulibus, petalis semibifidis, pedunculis fructiferis reflexis, capsulæ ore decemdentato.

Descr. Stems diffuse, dichotomous, rounded, striate, smooth, brittle. Leaves cordate-ovate, acute, stem-embracing, glaucous, smooth. Peduncles solitary from the divisions of the stem, reflected after the flower falls. Calycine leaftets erect, acute, white-margined. Petals semibitid, streaked, white. Stamens always ten, shorter than petals: anthers yellow. Germen oval. Styles five. Capsule oblong-oval, one-celled, ten-valved; valves reflected at the point. Seeds kidney-shaped, tubercular, chesnut-coloured, attached to a central receptacle.

The Cerastium amplexicaule is very nearly related to Cerastium aquaticum, from which however it differs in several material respects, more especially in being perfectly smooth, in having its petals divided only half-way, and the mouth of the capsule splitting into ten teeth instead of five. It is moreover altogether of much larger growth. Alsine Cerastium foliis connatis of Gmelin's Fora Sibirica, vol. 4. tab. 62. f. 1. represents a plant with stem-embracing, but
not connate, leaves; and might have been taken for our species, had not the peduncle of the fruit been upright.

Our plant was raised at Boyton from seeds received by Mr. Lambert from Dr. Fischer, who presides over the garden at Gorenki, with so much credit to himself and advantage to the science of Botany. It is a hardy perennial, and flowers most part of the summer.

# Ipomea insignis. Magnificent Ipomga. 

## 

## Class and Order.

Pentandria Monogynia.

## Generic Character.

Cor. infundibuliformis. Stigma capitato-globosum. Caps. 3-locularis.

Specific Character and Synonyms.
Ipomea insignis; (volubilis, glabra) foliis cordatis lobatis integrisque subtus coloratis, pedunculis axillaribus multifloris, corollis hypocrateriformibus : fauce cylindrica.
Ipomea insignis; (glabra, volubilis) foliis cordatis integris vel lobatis, acuminatis; cymis dichotomis; calyce brevi, obtuso, convexo : corolla hypocrateriformi. Bot. Regist. 75.

Ipomea insignis. Bot. Repos. 636. Hort. Kew. Epit. add.

The Ipomea insignis is a very fine climber, and in a spacious and lofty hot-house, where it can be allowed an extensive trellis and plenty of room for its roots, makes a very splendid appearance, producing abundance of shewy flowers. The purple colour of the under surface of the leaves, which is not however constant, has also a pleasing effect.

This plant first came into flower at Mr. Bexyon's, of Englefield-House, Berkshire; but no account could be obtained from what country it was received. It is, however, most probably a native of the East-Indies; and, if not a mere variety of Convolvulus paniculatus of Linneus, the Pal-Medecta of the Hortus Malabaricus, certainly approaches very near to that species.

The stems die down every year and shoot up again in the spring. Flowers from July to October. Propagated by cuttings.

Our drawing was taken at Mr. Vere's, of KensingtonGore, in August 1812.


# Delphinium urceolatum. Hollow-leaved 

## Bee-Larkspur.

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## Class and Order.

Polimandria Thigyna.

## Generic Character.

Cal. 0. Petala 5. Nectarium 9 -fidum, postice cornutum.

## Specific Character and Synomyms.

Delphinium urceolatum; (tricapsulare) calcare rugoso pedicellum æquante, labellis apice barbatis emarginatis, foliis 3-5-fidis : lobis acutis tridentatis.
Delphiniom urceolatum; nectariis diphyllis, labellis bifidis apice barbatis, foliis palmatis urceolatis. Jacq. Collect. 1. p. 153. Icon. Rar. 1. t. 101.

Delphinium urceolatum; nectariis diphyllis, labellis oblongis bifidis, laciniis lanceolatis $\begin{aligned} \\ \text { qualibus, foliis peltato- }\end{aligned}$ concavis tripartitis pubescentibus, laciniis trifidis. Willd. Sp. Pl. 2. 1230. Ejusd. Enum. 1. p. 574.

Descr. Stem upright, two or three feet high, striated, smooth at the lower part and hairy upwards, a little branched at top. Leaves 7-5- and 3 -lobed, pale underneath, and a little hairy at the edges only: lobes acute, somewhat connivent at the points, so as to give a hollowness to the leaf: near the flower the leaves are generally simply trifid, with here and there a little tooth, Flowers in a long raceme, pale blue mixed with pink. Pedicels sigmoid, club-shaped, generally with one long linear bracte at the base and two near the flower. Petals in front nearly equal, ovate, acute, with the points inflected: spur thick, rugose, incurved, as long as, or somewhat longer, than the pedicel. Nectary (Petals of Jussiev) two inverted canoe-shaped bodies, pro-
tended into the spur of the upper petal, bifid at the point: labella two small; oval, emarginate petals, bearded at the point, supported on long twisted claws. These nectaries are three times smaller than the petals. Capsules three.

We have no doubt but our species is the urceolatum of Jacquin, and sufficiently distinct from exaltatum, of which it has been supposed to be a variety. It seems to us to be more nearly allied to Staphisagria; and may be the longspurred variety of that species mentioned by Willdenow.

Is perfectly hardy. Its native country uncertain. Communicated by John Walker, Esq. of Arno's-Grove.


## Sagittaria lancifolia. Lance-leavid

## Arrow-head.

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Class and Order.
Monoecia Polyandria.

## Generic Character.

Masc. Cal. 3-phyllus. Cor. 3-petala. Filam. fere 94.
Fem. Cal. 3-phyllus. Cor. 3-petala. Pistilla multa. Sem. multa nuda.

## Specific Character and Synonyms.

Sagittaria lancifolia; foliis ovatis utrinque attenuatis, scapo inferne ramoso. Willd. Sp. Pl. 4. p. 410. excluso forsan synonymo Michauxii. Hort. Kew. ed. alt. 5. p. 283.
Sagittaria lancifolia. Amœen. Acad.5.p.409. Syst. Vegetab. ed. 14. p. 856. Bot. Repos. 333. Mart. Mill. Dict. n. 3.
Sagittaria foliis lanceolato-ovatis Jacq. Amer. 248.-pict. 121.

Sagittaria foliis maximis simplicibus oblongis utrinque productis, ramulis verticillatis, caule glabro. Brown Jam. p. 345.

Ranunculus aquaticus plantaginis folio, flore albo, calyce $^{\text {a }}$ purpureo. Plum. Cat. pl. amer. p. 7.-ic. 116. f. 1.

Sagittaria lancifolia is a native of Jamaica and Cuba, and perhaps of the continent of South-America; but probably not of Carolina, as the plant inserted under the above name by Michaux, in his Flora of North-America, is, according to Pursh, a distinct species, distinguished by its beaked, sickleshaped seeds, and named by him falcata. In Dons's Cata-
logue our plant is said to be a native of the East-Indies, but this we apprehend to be a mistake, though continued in the last edition by Pursh.

If planted in a loamy soil and plunged below the water in the cistern of the hot-house, it flowers freely and makes a very handsome appearance; but it will not blossom without the aid of artificial heat.

Our drawing was made several years ago from a fine plant growing in the stove of E. I. A. Woodford, Esq, at that time at Vauxhall.


## Erica Blandfordiana. Lord Blandford’s

 Нeath.$* * * * * * * * * * * * * * * * * * * * ~$

## Class and Order.

Octandria Monogynia.
Generic Character.
Cal. 4-phyllus. Cor. persistens; limbo 4-fido. Anthere ante anthesin per foramina 2 lateralia connexe. Caps. 4-8locularis, 4-8-valvis.

Specific Character and Synonyms.
Sect. 5. Breviflore. A. Corollae tubus subglobosus.
Erica Blandfordiana; foliis quaternis, bracteis calyci proximis, floribus terminalibus subsolitariis, antheris aristatis.
Erica Blandfordiana foliis quaternis. Hort. Kew. ed. alt. 2. p. 392.

Erica Blandfordia. Andrews's Heaths, vol. 3.

The Erica Blandfordiana is placed by Mr. Dryander in the second section of his Breviflore, containing such as have the tube of the corolla ewer-formed, bractes close to the calyx, and axillary flowers. To us it appears rather to belong to the first section, or such as have the tube nearly globular. It will, however, if placed there, make a second exception with respect to the form of the anthers, which are said to be crested in all except in odorata; as in our plant they are awned. The flowers for the most part grow singly at the extremities of short branches; and in the plants which we have examined are never properly axillary: for although towards the ends of the principal branches, they are nearly sessile, yet they are even here surrounded by leaves at the base, proving them to
stand in fact upon branches not elongated. The calycine leaflets are ovate, acuminate, marginated, with three minute bractes close applied to their base. Tube of the corolla nearly globular, smooth : laciniæ of the limb erect, connivent at first, but finally spreading. Anthers included. Stigma exserted.

Native of the Cape of Good-Hope, where it was discovered by Mr. James Niven. Introduced in 1803 by Messrs. Lee and Kennedy, at whose nursery our drawing was made in February 1813.


# Rosa gallica ( $\beta$. versicolor). Striped Red Rose, or Rosa Mundi. 



## Class and Order.

Icosandria Polygynia.

## Generic Character.

Petala 5. Cal. urceolatus, 5-fidus, carnosus, collo coarctatus. Sem. plurima, hispida, calycis interiori lateri affixa.

## Specific Character and Synonyms.

* fructibus ovatis.

Rosa gallica; fructibus ovatis pedunculisque hispidis, caule petiolisque hispido-aculeatis. Hort. Kew. ed. alt. 3. p. 262.
(ß.) versicolor. Rosa Mundi. Miss Lawer. Roses, t. 13. Martyn Mill. Dict. n. 16.
Rosa rubro et albo variegata, Rosa Mundi, vulgo dicta (Mundy Rose). Raj. Hist. 1475. n. 35.
Rosa versicolor, Passe D'Angleterre. Weinm. Phyt. vol. 5. p.231. b. ic. 869.a.

Rosa Mundi, or, as it was formerly corruptly called, the Mundy Rose, is a variety of the Common Red Rose; the dried petals of which have for so many years maintained a place in the Materia Medica of every civilized country, though, perhaps, in modern practice, more for the sake of the colour, and as forming an agreeable menstruum for more active remedies, than from any dependance upon its own virtues.

This variety, though mentioned by Ray, and supposed to have been more common in England than elsewhere, does not occur in either Gerard or Parinison. When in perfect health, with its foliage undefaced by insects or mildew, it is perhaps not exceeded in beauty by any rose cultivated in our gardens.

Communicated by ——Owen, Esq. of Clapham.

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# Viola cucullata. Hollow-leaved Violet. 

## ******************

## Class and Order.

Pentandria Monogynia. (Syngenesia Monogamia. Linn.)

## Generic Character.

Cal. 5-phyllus. Cor. 5-petala, irregularis, postice cornuta. Anth. cohærentes. Caps. supera, 3 -valvis, 1 -locularis.

## Specific Character and Synonyms.

Viola cucullata; acaulis, glabra, foliis cordatis acutis basi cucullatis serratis, petalis lateralibus basi barbatis.
Viola cucullata; acaulis, foliis cordatis acutiusculis glabris basi cucullatis, floribus inversis, petalis oblique flexis. Hort. Kew. ed. $1^{\text {mace }}$ 3. p. 288.-ed. alt. 2. p. 44. Willd. Sp. Pl. 1. p. 1162. Persoon Syn. 1. p. 254. Mart. Mill. Dict. n. 7.
Viola cucullata, glabra; foliis cordatis glabris serratis basi cucullatis, pedunculis longitudine petiolorum, petalis oblique flexis: lateralibus barbatis. Pursh Fl. Amer. Sept. l. p. 173.

Viola cucullata is a native of North-America, and wan first described by Dr. Solander in Arton's Hortus Kewensis; where we are informed, that it was introduced in the year 1772, by Dr. Samuel Martin.

It was an early inhabitant of Mr. Curtis's first Botanic Garden, at Lambeth-Marsh, where we well remember this accurate observer pointed out to us, that the flowers which appeared in the spring were uniformly barren ; but that later in the summer apetalous flowers were produced upon very short scapes, which were as constantly fertile. The production of apetalous fertile flowers was first observed in the

Viola mirabilis, in which complete flowers appear early in the spring upon scapes; after these are fallen, the plant becomes caulescent, and fertile flowers, which are for the most part apetalous, are produced upon the stems in the axils of the leaves. We are informed, however, by Mr. George Graves, editor of the new edition and continuation of the Flora Londinensis, now publishing, that this circumstance, of the seed being produced from apetalous flowers coming later in the season, and growing on very short scapes, concealed among the leaves, is by no means peculiar to Viola cucullata; but that the same economy takes place in several other, perhaps in all the stemless, species.

A hardy perennial; propagated by seeds or parting its roots; likes a loamy soil and a damp situation. We do not know that any figure of this species has been before given in any botanical work.


## Diervilla.

## ******************

## Class and Order.

Pentandria Monogynia.

## Generic Character.

Cal. oblongus, 5 -fidus. Cor. calice duplo Iongior, infundibuliformis, 5 -fida, patens. Caps. oblonga, 4 -locularis, polysperma.

## Specific Name and Synonyms.

Diervilla humilis. Persoon Syn. 1. p. 214.
Diervilla Tourneforti; Michaux Fl. Am. Bor. 1. p. 1. p. 107.

Diervilla. Hort. Cliff. 63. t. 7.
Lonicera Diervilla; racemis terminalibus, foliis serratis. Spec. Pl. 249. Willd. 1. p. 989. Hort. Kew. ed. alt. v. 1. p. 850. Mart. Mill. Dict. Kniph. Cent. 9. n. 6.

Diervilla acadieńsis fruticosa flore luteo. Tournef. in Act. Paris. 1706. t. 7.f. 1. Miller Ic. t. 124. (errore 125.) Duham. arb. 1. p. 209. t.87. Schmidt arb. t. 116. Boerh. Lugd. Bat. 1. p. 277.
Diervilla canadensis. Willd. Emum. 1. 229.
Diervilla lutea; pedunculis axillaribus et terminalibus dichotomis trifloris, foliis ovatis serratis acuminatis. Pursh Fl. Amer. Sept. 1. p. 162.

This plant was first brought to Europe from Acadie, as the French at that time called Nova-Scotia, by Mons. Diervile, surgeon, in commemoration of whom Tournefort named it. The genus was taken up by Linveus in his Hortus Cliffortianus; but afterwards united by him to Lonicera, a union soon after objected to by Mileer, from
its fruit being a four-celled dry capsule; and the original name has been since restored by Jussiev, and is now adopted by the first Botanists.

It is remarkable that the specific name has been changed by every systematic writer that has recorded the plant under the appellation of Diervilla. At first Michaux applied that of Tourneforti, but Persoon, in his Synopsis, probably from the impropriety of joining the names of two Botanists in the same plant, applied that of humilis, which Willdenow, in his Enumeration of the Plants of the Berlin Garden, has thought fit to change to canadensis. Had he called it acadiensis, as Tournefort had done, we should certainly have followed him. Lastly comes Mr. Pursh, who, in his Flora of North-America, has called it lutea. Persoon's Synopsis being a general system, in every one's hands, we have thought it right to reject all the names since applied, and retain that of humilis.

Native of North-America, from Canada to the lofty mountains of Carolina. A hardy shrub; loves a moist soil and shady situation. Propagated by cuttings or suckers, which it throws up abundantly. Flowers from May to August; but rarely matures its fruit in this country, and we have never seen it. That it is a four-celled capsule, not a berry, we take upon the authority of others. Communicated by John Walker, Esq. of Arno's-Grove, Southgate.


## Phyteuma Scheuchzeri. Scheuchzer's

 Rampion.$* * * * * * * * * * * * * * * * *$

## Class and Order.

Pentandria Monogynia.

## Generic Character.

Cor. rotata, 5-partita : laciniis linearibus. Stigma 2-s. 3 -fidum. Caps. 2- s. 3-locularis, infera.

Specific Character and Synonyms.
Phyteuma Scheuchzeri; foliis lineari-lanceolatis serratodentatis, bracteis linearibus capitulo longioribus, corollæ laciniis medio fenestratis, stigmate trifido.
Phyteuma Scheuchzeri; capitulo subfolioso, bracteis linearibus capitulo longioribus, foliis lanceolatis dentatis. Willd. Sp. Pl. 1. p. 919.-Enum. 214.
Phyteuma Scheuchzeri. Allioni Pedem. n. 428. t. 39. f. 2. $\mathbf{R a p u n c u l u s}^{\text {alpinus petræus cæruleus, foliis flori substratis }}$ longis angustioribus. Scheuchz. it. 6. p. 460.
$\mathbf{R a p u n c u l u s}^{\text {foliis imis longe petiolatis, caulinis linearibus, }}$ integris, bracteis linearibus, duabus imis longissimis. Hall. Hist. n. 682.

Descr. Stems erect, somewhat angular, smooth, a foot or foot and half high. Radical leaves linear-lanceolate, narrowed at both extremities, toothed: petioles very long. Cauline leaves linear, somewhat toothed, Bractes linear, quite entire : one of them generally much longer than in the individual from which our drawing was taken. Head of flowers hemispherical. Calyx five-cleft, segments subulate. Lacinia of the corolla cohering at the base in a globular inflated tube, distinct and expanded in the middle, admitting
the air to the anthers, cohering again toward the extremities, and contracted into a curved horn. Stigma exserted, trifid.

Has much affinity with Phytedma cordata (No. 1466.); but differs from it essentially in the form of the leaves and bractes.

Allioniss figure does not represent the horned corollas. Haller's description is excellent; but his specific character, as quoted by Willdenow, is made nonsense of, by a false punctuation.

Communicated by Mr. Knight, from the Exotic Nursery, in the King's-Road, Little-Chelsea.

Native of Swisseriand and Piemont. A hardy perennial. Flowers in May and June, and when exposed only to the morning sun, will keep long in bloom.


# Bopego laxiflora, Bell-flowered 

## Borage.



> Class and Order.

Pentandria Monogynia.
Generic Character.
Cor. rotata : fauce radiis clausa.
Specific Character and Synonyms.
Borago laxifora; foliis omnibus alternis ovatis acuminatis ciliatis, pedunculis axillaribus solitariis unifloris folio longioribus.
Borrago laxiflora. Decand. Flore Franc. v. 5. p. 422. Desfont. Cat. Hort. Par. Fischer Cat. Hort. Gorenk. p. 27.

Anchusa laxiflora. Fl. Franc. ed. 3. n. 2728. Lois. Fl. Gall. 1. p. 106.

This plant differs from every other species of Borago with which we are acquainted, by its bell-shaped corolla, not very unlike that of Campanula rotundifolia. Its stem is weak, assurgent, very hispid, with stiff shining deflexed hairs; leaves ovate-acuminate, sessile, hispid: margin undulatecrenate, ciliate; peduncles axillary, solitary, one-flowered, longer than the leaf, recurved when in fruit.

The first notice we have of this species is from M. Decandolle, who described it from dried specimens collected by M. Labillardiere, in the Island of Corsica. This anthor was at first induced to refer it to Anchusa, because it appeared to correspond better with the character given of that genus by Gertner than with that of Borago. But Borago indica, the species described by Gertner, Decandolle observes, belongs properly to the genus Trichodesma of Brown.

We first saw this plant in flower, at the Royal Garden at Kew, in July 1814, and have since received specimens of it from Mr. Lambert's collection at Boyton. A hardy biennial?


## ( 1799 )

## Nerium odorum ( $\beta$.) Double sweet-scented Rosebay, or Oleander. <br> ********************

## Class and Order.

Pentandria Monogynia,

## Generic Character.

Contorta. Folliculi 2, erecti. Sem. extremitate superioro comosa. Cor. hypocrateriformis: faux coronath squamis 5, divisis. Sem. extremitate superiore comosa. Bnown.

## Specific Character and Synonyms,

Nerrum odorum; foliis lineari-lanceolatis ternis foliolis calycinis erectis, nectariis multipartitis: laciniis filiformibus, Hort. Kew. ed. 1. v. 1. p. 297.
Nerium odorum. Willd. Sp. Pl. 1. 1235. Hort. Kew. ed. alt. 2. p. 67.
(a.) foribus simplicibus, foliis angustioribus.

Nerrow indicum angustifolium, floribus odoratis simplicibus, Herm. Lugd. B. 447 t. 438.
Belutta-Arel. Hort. Malab.v. 9.p. 3. t. 2.
Nerium indicum. Mill.Dict. ed. 8. n. 2 .
(8.) foribus plenis, foliis latioribus.

Nerion indicum latifolium, floribus plenis odoratis, Herm, Lugd. B. 447. t. 449.
Triovanva-Arbi. Hort. Malab, v. 9.p. 1.t.1.
Nerium indicum, latifolium flore roseo pleno, Weinm. Phyl. Ic. 755, , .
Nerium Zeylanicum, floribus roseis amplis plenis. Burm. zeyl. 167.
Nerium latifolium indicum, flore variegato, odorato, pleno, Commel. Hort. 1. p. 45. t. 23.
Neriun odorum. $\beta$. Bot. Regist. 74.
South-Sea Rose. Broun Jam. 181. Hughes Barbad. 218.
Nzrium odorum, a native of the East-Indies, was taken up by Linnaus, in his Hortus Cliffortianus, as a variety of
the common Oleander, a native of the South of Europe and the Levant. Afterwards, in the Species Plantarum, it was not even considered as a variety, but both plants were united as one and the same. Then, in the thirteenth edition of the Systema Vegetabilium, it is recorded as a permanent variety, and spoken of as the finest ornament of the Flower Garden*.

It was first distinguished as a species by Dr. Solander, in the Hortus Kewensis; and as such has since been generally considered.

Introduced into the Dutch Gardens about the year 1680, by Beverningius, and very soon after cultivated in the Chelsea Garden, as appears by a letter from Sir Hans Sloane to Mr. Ray. It was well known also to Milier, but has been so long lost to our gardens, that when it was again introduced lately from France, it was considered as entirely new. The plants of the present importation do not appear, however, to be in any respect superior to those originally introduced into Europe from the East-Indies, as is proved both by specimens still preserved, and by the figures of Commelin and Weinmann ; the latter of which is both faithfully drawn and well coloured:

Both species of Oleander are allowed on all hands to be poisonous to men and cattle; fortunately the taste and smell of the bruised leaves is sufficient to prevent any injury to the former, but the latter are said to have been sometimes killed by browsing upon it. Externally they may be advantageously applied to the cure of some cutaneous diseases.

Flowers from June to August. Propagated by cuttings or layers. May be preserved alive in a good greenhouse, but to have it flower well, should be kept in an airy part of the stove.

Our drawing was taken at the nursery of Messrs. Coltille and Son, in the King's-Road, so many years celebrated for the cultivation of rare and beautiful flowering shrubs, in the greatest perfection.

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## Cyrtopodium Andersonit. Anderson's

## Cyrtópodium.

Class and Order.<br>Gynandria Monandria.

## Generic Character.

Labellum ungue geniculato: lamina tripartita. Petala 5, distincta. Massæ pollinis 2, postice bilobæ. Brown.

Specific Name and Synonyms.
Cyrtopodium Andersonii. Hort. Kew. ed.alt. 5. p. 216. Cymbidium Andersonii. Lambert in Bot. Repos. 651.

Crrtopodium is distinguished from Cymbidium, chiefly by its three-lobed nectarium, terminating in an articulated claw. Only one species is at present known, which is a native of the West-Indies and was introduced into this country by the late Thomas Evans, Esq. to whom it was sent from the Botanic Garden in the Island of St. Vincent's, by the late Mr. Alexander Anderson.

The flowering scape rises up before the leaves, then divides into several alternate branches, each being furnished with an ovate, acute bracte at its base, and bearing a number of greenish yellow flowers, supported each by a similar bracte at the base of the germen. As these decay, the leaves shoot forth from the roots on one side of the scape, are lanceolate, with petioles embracing and sheathing one another, so as to form a kind of upright stem several inches long, from the top of which the leaves spread out in every direction; these are furnished with three strong nerves and numerous strise between.

Communicated by Messis. Loddiges and Sons; flowering in May.


## ( 1801 )

## Nycterium amazonium. Lambert's Night-shade.

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## Class and Order.

Pentandila Monogynia.

## Generic Character.

Cal. 4-5-fidus. Cor. irregularis, 4-5-fida. Stam. 4-5, filamentis brevissimis; antheris inæqualibus: infima productiore [infimis 1, 2, vel. 3, productioribus,] declinata. Stylus declinatus. Bacca subrotunda. Caulis herbaceus aut fruticosus. Folia simplicia aut composita. Pedunculi solitarii multiflori extraaxillares. Ventenat in Hort. Malm.

## Specific Character and Synonym.

Nycteaum amazonium (fruticosum, polygamum) foliis petiolatis semicordato-ovatis repandis cauleque tomentosis inermibus, calycibus fertilibus aculeatis: sterilibus nudis. Solanem amazonium; fruticosum, polygamum, tridynamum, tomentosum, subaculeatum : foliis oblongo ovatis, repandis, v. sinuato-lobatis, calycibus hermaphroditis solis aculeatis: flore irregulari subinæquali. Bot. Reg. 71.

Descr. Stem shrubby, covered with a white tomentum. Leaves scattered, petiolated, ovate, with a creeping undulate margin, generally extending a little down the footstalk on one side only, tomentose on both sides, on the upper very soft, on the under harsher. Peduncles lateral, not axillary, bearing several flowers in a compound corymb. The upper flowers in the corymb are generally male, and consequently sterile, the lowermost hermaphrodite and fertile; of the latter only the calyx is covered with straight sharp prickles, that of the male is altogether unarmed. Corolla irregular, 5 -cleft : two of the lacinice widely divaricate. Stamens 5 , on very short filaments. Anthers unequal, declined: in the male flowers generally three long and two short, in the hermaphrodite two
long and three short, or frequently all nearly equal. Style longer than the corolla, declined. Stigma capitate, violet coloured. In the male flowers style and stigma defective.

The genus Nycterium has been established by M. Ventenat in his Jardin de Malmaison: It is very desirable that other genera, as well defined, should be taken out of Solanum, a family consisting at present, of upwards of two hundred species. These have been lately arranged and described by M. Dunal, a pupil of the celebrated Decandolle; and had his division of the genus been founded upon such principles of classification as genera can alone be founded upon, his different sections might have served the purpose, whether designated by generic names or not; but, if this has been his intention, which however it hardly was, the making a primary division of the species into aculeate and unarmed, was stumbling at the very threshold; separating to a great distance some that are the most nearly allied. Nor are his subdivisions, taken from the form of the leaves, less exposed to the same failing.

Native of the Brazils, and with us an inhabitant of the bark-stove, where, if it be kept free from vermin, and allowed plenty of air, it will grow to a fine shrub, producing its beautiful violet coloured flowers, throughout the greater part of the year. Introduced by Aylmer Burke Lambert, Esq. by whom it was communicated to us.


## ( 1802 )

## Gnaphalium fruticans. Shrubby

## Everlasting.

> *********************

## Class and Order.

Syngenesia Polygamia Superflua.

## Generic Character.

Recept. nudum. Pappus pilosus s. plumosus. Cal. imbricatus, squamis marginalibus rotundatis, scariosis, coloratis.

## Specific Character and Synonyms.

Gnaphalium fruticans; (fruticosum argyricomum) foliis amplexicaulibus ovatis trinerviis mucronulatis subtus lanu-ginoso-tomentosis, cyma laxiuscula, bracteis oblongis undulatis.
Graphalium fruticans; fruticosum, foliis ovatis amplexicaulibus, caule rigente, cyma sessili. Mant. alt. 282.
Gnaphalium grandiflorum. Bot. Repos. 489. Willd. Sp. Pl. 3. p. 1851. exclusis synonymis.

There seems to us to be the greatest confusion imaginable respecting Gnaphalium grandiflorum and fruticans. Willdenow evidently considered our plant as grandiforum, though he has continued the synonym of Burmann, which we take to be the true grandiflorum of Linneus; but which is certainly not our plant. Mr. Andrews has, in the Botanist's Repository, given a figure of fruticans under the name of grandiflorum, for which it is quoted in Hortus Kewensis.

The description of fruticans in the Mantissa, we must allow, does not correspond altogether with our plant, and it is from the authority of the specimen in the Banksian Herbarium, marked as having been compared with that in the Linnean, that we have ventured to consider this as the fruticans of Linneus.

The stem, in both plants, is shrubby and covered with a white wool, and is very similar in growth. But in grandiflorum the leqves are obtuse and covered with a thick white tomentum on both sides, not unlike white woollen cloth; in fruticans the tomentum on the upper surface of the leaves is green, and frequently disappears when they are old, they are also terminated with a small callous mucro, which is wanting in the other. The branches in both terminate in a long peduncle, bearing small leaves or bractes, more numerous, narrower, and even at the margin, in grandiflora; wider, more distant, and more patent, with the margin undulated, in fruticans. In the former, the flowers are smaller and crowded into a close capitulum, which in the latter is more lax, being rather a cyme than capitulum ; and the peduncle being more rigid, it is probable that Linneus considered it as stem, not as a peduncle, and therefore called the cyme sessile. Without understanding it in this way, it is difficult to conceive how a plant answering to his description of fruticans, can be nearly related to grandiflorum, which he expressly states that it is*.

The young leaves being covered with a thick tomentum, the nerves are scarcely visible, but in the older leaves become very apparent.

A greenhouse shrub. Native of the Cape of Good-Hope. Flowers from June to August.

* Since the above was in the press, we have been kindly informed by our friend, Sir James Edward Smith, that upon comparing our figure with the specimen of Gnaphalium fruticans, in the Linnean Herbarium, he finds it to be certainly the same species,
N. 1803.



# Cistus sampsucifolius. Rough Dwarf-Cistus. 

*米料***********

## Class and Order.

Polyandila Monogymia.

## Generic Character.

Cor. 5 -petala. Cal. 5-phyllus: foliolis duobus minoribus. Capsula.

## Specific Character and Synonyms.

Cistus sampsucifolius ; (suffruticosus atipulatus) caule assurgente hispido, feliis oblongo-ovalibus integerrimis planis superne scabris subtus tomentosis.
Helinthemum sampsuchifolium. Mill. Dict. ed. 8 .
Cistus pilosus. r. Martyn Mill. Dict. Allioni Pedem. t.45.
f. 1.? nee fig. 2. quæ differt foliis margine revolutis.

Cistus foliis villosis lanceolatis stipulis subulatis. Sauv. Monsp. 148.

Hellanthemum, sive Cistus humilis folio sampsuchi, capitulis valde hirsutis. Bauh. Hist. 2. p. 20. f. 2.
Cistus mutabilis. Jacq. ic. rar. t. 99? an varietas glabra?

That our plant is the Hellanthemum sampsuchifolium of Miller, we have satisfied ourselves from comparison with Miller's own specimens, now preserved in the Banksian Herbarium. There is likewise one of the same species from Montpelier. Different specimens vary very much with respect to the hairiness of the calyx, this part being in some nearly smooth, in others clothed with long hairs.

Allioni considers our plant, pilosus, polifolius, apenninus, and probably mutabilis, as mere varieties of the same species; but we would at least distinguish those in which the margins of the leaves are revolute from the plain-leaved, and consequently the first figure of his pilosus from the second.

Most Botanists of the present day, and even Wiledenow, in his Enumeration, have again separated the genus Helianthemum from Cistus : and indeed they appear at first sight to be sufficiently distinct; but as the fruit of not nearly all the species has as yet been examined, and we have already given some that belong to Helianthemum, under the name of Cistus, we think it right, for the present, to follow the example of the Hortus Kewensis, and keep them under the same genus.

We have not dared to consider the fringed petals as a specific character, suspecting that it is not constant, as the same variation takes place in a degree in some other species.

Oup plant has great affinity with Cistus surrejanus; the roughness of the upper surface of the leaves being occasioned by short hairs collected in fascicles, gives them likewise something of a dotted appearance; and should the extreme narrowness of the petals in the latter be found to be not constant, they might be considered as the same.

It is quite hardy, and well-suited for ornamenting rockwork. Communicated by N. Hodson, Esq. of the WarOffice, who informs us, that he received it from the Botanic Garden at Cambridge. Native of the South of France.


# Lagasca mollis. Soft-leaved Lagasca. 

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## Class and Order.

Syngenesia Polygamia Segregata.

## Generic Character.

Involucrum 5-phyllum, foliaceum simplici serie. Calyculus 1-florus, 5 -dentatus. Corollule tubulose hermaphrodite. Recept, alveolatum, villosissimum. Pappus 0.

## Specific Name and Synonyms.

- Lagasca mollis. Henckel a Donnersm.adumb. p. 30. Cavan. in Anales de ciencias naturales v. 6. p. 331.
Lagascea mollis. Willd. Enum. p. 942.

Descr. An annual plant, covered in every part with a soft velvet-like pubescence. Leaves opposite, at the divisions into branches alternate, petioled, ovate-acuminate, subserrate ; sometimes quite entire. Flowers terminal, capitate. Involucre, in our specimens, always five-leaved in a simple series, with two or three small accessory leaflets within them : leaflets ovate, unequal in size, sessile. Receptacle alveolar, with a fine long down in the interstices. Calycle tubular at the base, five-toothed. Florets tubular, with five-cleft spreading border. Anthers easily separating, terminated with a spathula-shaped appendix. Germen without pappus. Stigma revolute.

The name of Lagasca was given to this plant by M. Cavanilles, in honour of his pupil, and since his successor, Don Mariano Lagasca.

A tender annual, propagated by seeds only, and requires to be kept in the stove or hot-bed. Flowers in August and September. Native of the Island of Cuba. Communicated by Mr. Anderson, curator of the Apothecaries Garden, at Chelsea. Mr. Lambert raised it also at Boyton last summer, from seeds brought from Havannah, by Mr. Cowas.


# Clbrodendrum viscosum. Clamay Clerodenbrum. 

## ****************

## Class and Order.

Didynamia Angiospermia.
Generic Character.
Cal. 5 -fidus (nunc 5 -dentatus). Cor tubo cylindrico: limbo 5-partito patenti: laciniis subæqualibus. Stamina juxta faucem inserta, exserta, adscendentia : antherarum loculis parallelis. Bacca pyrenis 4, 1-spermis. Brown.

## Specific Character and Synomyms.

Clerodendrum viscosum ; tomentosum, foliis cordatis dentatis, corymbo terminali paniculato, calycibus viscosis laxis dimidio tubo corollæ longioribus. Brown in Hort. Kew. ed. alt. 4. p. 63.
Clerodendrum viscosum. Venten. Malm. 25.
Peragu. Hort. Malab. 2. p. 41. t. 25.

Desc. A shrub, tomentose in every part except the corolla. Branches square. Leaves opposite, cordate-ovate, acuminate, crenate-dentate, roughish on the upper and softtomentose on the under surface with elevated veins, petiolated. Bractes ovate-acuminate, petiolated, deciduous, one at each division of the panicle. Inflorescence a terminal trichotomous panicle. Calyx five-cleft, segments ovate, acute, overlapping one another. Corolla irregular, tube but little longer than the calyx : limb 5-cleft : lacinie nearly equal, the uppermost a little the largest, irregularly disposed, looking all upwards, leaving a wide space between two of them. Stamens 4, declined nearly twice the length of the flower. Anthers versatile, subsagittate, purple. Style equal to the stamens. Stigma bifid. The flowers are white with flesh-coloured centre, sweet-scented, but oppressive.

Ventenat considers the Paragu of the Hortus Malabaricus, which, by the bye, is a very bad figure, to be distinct from the Ceylon plant, figured by Burmann, both of which are quoted by Linnses as synonyms of his infortunatum, and characterizes the latter by the tube of the corolla being three times the length of the calyx and the leaves quite entire (see Annals of Botany, v. 1. p. 388). Native of the East-Indies. Requires to be kept in the stove. Introduced in 1796, by Mr. Peter Good. Flowers most part of the summer. Communicated by John Walker, Esq. of Arno's-Grove.


# Rhus Toxicodendron ( $\alpha$.) vulgare. Rooting Poison-OAk. 

## ********************

## Class and Order.

Pentandria Trigynia.

## Generic Character.

Cal. 5-partitus. Petala 5. Bacca 1-sperma.

## Specific Character and Synonyms.

Raus Toxicodendron; radicans, foliis ternatis: foliolis ven-tricoso-ovalibus integris aut sinuato-crenatis, racemis rameis et axillaribus sessilibus dioicis. Pursh Fl. Am. Sept. 205.
Rhus Toxicodendron; radicans, trifoliatum, leucocarpum: foliolis ventricoso-ovalibus, integris aut sinuato-crenatis : racemis rameis et axillaribus, sessilibus dioicis. Michaux Fl. Bor, Am. 1. p. 183.
(a.) vulgare; radicante-scandens; foliolis amplis integris seu rariter dentatis. Michaux l. c. Pursh l.c.
Rhus radicans; foliis ternatis: foliolis petiolatis ovatis nudis integerrimis caule radicante. Willd. Sp. Pl. 1. p. 1481. cum synonymis. Hort. Kew. ed. alt. 2. p. 163.
Edera trifolia canadensis. Corn. Canad. 96. t. 97.
Vitis canadensis. Munting Phyt. p. 239. f. 60.
(ß.) quercifolium ; erectum, humile: foliolis varie sinuatolobatis, subfloratione tomentosis. Michaux l.c. Pursh l. .

Rhus Toxicodendron. Willd. Sp. Pl. 1. p. 1481. Hort. Kew. ed. alt. 2. p. 82.
( $\gamma$.) microcarpon; foliolis oblongo-ovalibus longe acuminatis subrhomboideis, fructu multo minore. Michaux l.c. Pursh l.c.

That Rhus radicans and Toxicodendron are really varieties of the same species, can hardly be doubted by any one
who will take the pains to consult the authors quoted, as synonyms to each. It varies with smooth and pubescent, with entire or sinuated leaves; with a stem, that now grow erect and supports itself without aid, now trails along the ground or ascends a wall or tree, attaching itself by means of fibres, called roots, but which, as in ivy, serve the purpose of support, not of drawing nourishment.

The male and female flowers are bome on distinct shrubs; our figure represents a branch of the male plant. Cornuti's and Munting's figures evidently belong to our plant, though quoted as synonyms of Rhus Toxicodendron.

This is a very common plant in North-America, from Canada to Georgia, growing in woods and hedges; and, with some other species of this genus, is possessed of a poisonous quality ; even its effluvia being peculiarly injurious to certain constitutions, while others are little affected by it.

When wounded or bruised, an almost colourless fluid exudes, which turns black when exposed to the air, and will make an indelible stain upon linen or other substances. This has been successfully used to change the hair to a dark brown.

Quite hardy. Flowers in June and July. Communicated by John Walker, Esq. of Arno's-Grove.


## Sedum oppositifolium. Opposite-leaved

Sedum.

## ****************

Class and Order.
Decandria Pentagynia,

## Generic Character.

Cal. 5-fidus. Cor. 5-petala. Squama nectariferæ 5, ad basin germinis. Caps. 5 .

## Specific Character and Synonym.

Sedum oppositifolium ; (planifolium) foliis oppositis spathulatis dentatis.
Sedum denticulatum. Donn Cat. ed. 8. Pursh p. 149.?

Desc. Stem herbaccous, prostrate: flowering branches erect. Leaves opposite, fleshy, wedge-shaped, very obtuse, toothed towards the end, when viewed through a lens finely ciliated with glandular hairs, Flowers white, in a terminal dichotomous cyme, sessile on the upper side of the branches, which are somewhat recurved; the solitary flowers in the axils larger than the rest and peduncled. Calyx of five erect leaflets, one of which is often smaller than the rest, Corolla five-petaled : petals lanceolate, acute. Stamens ten, filaments white, shorter than the petals, five of them inserted into the claw of the petal, and the other five into the receptacle opposite the segments of the calyx. Anthers yellow, ovate, erect, affixed by the base. Germens five, white: styles erect: stigmas simple.
Among the alpine plants in the collection of the Comtesse de Vandes, at Bayes-Water, we met with this, without being able to learn from whence it came. Our friend, Mr. Robert Brown, soon after met with the same in the little garden of a weaver at Manchester, who had the specific name of den-
tatum to it. He had picked it up, as he thought, from some garden near London, but knew nothing of its native country. It may be the denticulantum of the last edition of the Hortus Cantabrigiensis; and if so, it seems that it is a native of Mount Caucasus.

It has the characters of Sedum, but is the only instance we recollect of distinct opposite leaves in this genus; for in the species with imbricated leaves it is not easy to determine whether they are opposite or not. In this circumstance it approaches to a Crassula or a Beptas, with the latter of which it has a very near affinity. Flowers the latter part of the summer, and cointinues long in blossom.


Acantiuts spinosus ( $\beta$ ). Paickiy Acanthus.

## *****************

Class and Order.
Didynamia Angiospermia.

## Generic Character.

Cal. bifolius, bifidus. Cor. unilabiata, deflexa, trifida. Caps. 2-locularis.

Specific Character and Synonyms.
Acanthus spinosus; foliis pinnatifidis spinosis. Hort. Cliff. 326. Sp. Pl. 891. Reich. 3. p. 202. Willd. 3. p. 398. Hort. Kew. ed. alt. 3. p. 69. Sabbat. Hort. Rom. 3. t. 14.

Acanthus sylvestris. Park. Parad. t.331.f. 2. Ger. Emac. 1147. f. 2. Dod. Pempt. 719.f. 2.

Acanthus aculeatus. Bauh. Pin. 383. Raj. Hist. 1326.
Acanthus spinosus. Hort. Eyst. Astio Ord. 11. t. 1.
Chameleonta Monspelliensium. Lob. Ie. 2. t. 2. f. 2.
Carduds Acanthus sive Branca ursina aculeata. Bauh. Hist. 3. p. 75.
( $\beta$.) Acanthus rarioribus et brevioribus aculeis munitus. Tourn. Inst. 176. Mill. Icon. 7.
Acanthus medius rarioribus et brevioribus aculeis donatus. Fagon Sch. Bot. 219. ex Millero. Morris. Hist. s. 15 t. 2. f. 2.

Acanthus sylvestris mitioribus spinis. Pluk. Almag. 6.
Acanthus mollis ( $\boldsymbol{\gamma}$ ) Martyn Mill. Dict. n. 1.

When Linnaeus first characterized this plant in the Hortus Cliffortianus, he used the term foliis pinnatifidis, and this was continued to the third edition of the Species Plantarum. After this, by some means, the term got changed to pinnatis, which has been continued ever since; though it probably originated in an error of the press; for the leaves are really
pinnatifid, never pinnate. We have therefore restored the original character.

Linneeus, in his Hortus Cliffortianus, says he could hardly persuade himself that mollis and spinosus were distinct species; Miller, on the other hand, maintains that not only they, but likewise this and the shining variety of mollis, always retain their characters when reproduced from seed. How Martyn came to consider our plant as a variety of mollis, the leaves of which are sinuate not pinnatifid, rather than spinosus, we are at a loss to guess.

It should be remarked that the spines, though short and not very close together, are by no means innocuous, but sharp and rigid enough to render handling extremely unpleasant.

Its spikes frequently rise, from the middle of the leaves, three feet in height, and are covered with flowers from the base to the suminit, and continue long in bloom; so that, where it is allowed sufficient room, this plant makes a very ornamental appearance.

Native of Italy, of Greece, and the islands of the Archipelago, and is supposed by Miller to have been the prototype of the Corinthian capital rather than mollis, which Dr. Sibthonpe did not find in Grecce.
Is a hardy perennial, propagated by seeds or by parting its roots. Flowers from July to September. Communicated by Mr. Knight, of the Exotic Nursery, in the King's-Road.



Class and Order.
Dodecandria Dodecagrnia.

## Generic Character.

Cal. 8-12-partitus. Petala 8-12. Caps. 8-12, polyspermæ.

## Specific Character and Synonym.

Sempervivum villosum; foliis spathulato-cuneiformibus obtusis villosis, nectariis palmatis : lacinulis subulatis. Ait Hort. Kew. ed. 1. v. 2. p. 148. edit. alt. 3. p. 171. Willd. Sp. Pl. 2. p. 933.
Sempervivum stellatum; caule herbaceo pubescente, foliis spathulatis sparsis. Trans. Linn. Soc. 1. p.20๊1. excluso synonimo Seguieri?

We have no doubt but that the plant here figured is the Sempervivum villosum of the first edition of Aiton's Hortus Kewensis; having compared it both with specimens from the Kew Garden and a native one from Madeira. At the same time we suspect that it is also the same plant which Sir $\mathbf{J}_{\text {Ames }}$ E. Smith described in the first volume of the Transactions of the Linnean Society, under the name of stellatum. Our plant was some years since very common in the Chelsea Garden, and in that of the late Dr. Pitcairn, at Islington; and, being an annual producing seeds readily, might be cultivated as hardy. Certainly the plant figured by Seguier as a native of Monte Baldo, appears to be very different, both from our plant and from Sir James Smith's description.

An annual plant. Native of the Island of Madeira. Flowers in the middle of summer, and ripens its seeds in August. Communicated by Mr. Pringle, of the Sydenham Nursery.


# Leptospermum grandifolium. Largeleaved South-Sea Myrtle. 

## *******************

Class and Order.

Icosandria Monogynia.

## Generic Character.

Cal. 5-fidus, semi-superus. Petala 5 unguiculata, staminibus longiora. Stigma capitatum. Caps. 4-vel 5-locularis, Semina angulosa.

## Specific Character and Synonym.

Leptospermum grandifolium ; foliis lanceolatis utrinque angustatis mucronatis, calycibus villosis : dentibus coloratis, bracteis gemmaceis persistentibus.
Leptospermum grandifolium ; foliis lanceolatis mucronatis subquinquenervibus subtus pubescentibus, calycibus villosis: dentibus membranaceis coloratis. Smith in Trans. Linn. Soc. v. 6. p. 299.

Many of the leaves on the lower parts of the shrub and on the sterile branches exceed an inch and a half in length and a third of an inch in breadth. The size of the flowers too exceeds that of any other species of Leptospermum. Our friend Sir James E. Smith has remarked the great similarity that exists between this plant and Fabricia levigata; a resemblance which struck us so forcibly, that, before we discovered that it had been already described, we intended giving it the name of fabricioides. The leaves differ so much with respect to pubescence, that little use can be made of this character, the older ones being quite naked, whilst the young ones are villous on both sides, as are the branches that bear them; nor are the number of nerves more to be depended
upon, as these vary from three to seven, according to the breadth of the leaf.
-The flowers grow singly at the extremities of very short leafy branches; and, before they expand, are enclosed within the same scales, as the bud intended for the future elongation of the branch. These scales are permanent, and may be considered as bractes, forming an involucre at the base of the flower. In consequence of this arrangement, although the flower is really terminal, the fruit, by the elongation of the branch, must afterwards necessarily become lateral.

A hardy greenhouse shrub. Native of New-Holland. Flowers in June and July. Propagated readily by cuttings. Communicated by Mr. Sweet, late of the Stockwell Nursery.


## Calicoma serratifolia. Saw-leaved

Сallicoma.
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Class and Order: Dodecandria Digynia.

Generic Character.
Flores aggregati. Receptaculum globosum, villosum. Invol. 4-phyllum. Cal. 4-phyllus. Stam. 8-12. Cor. 0. Germ. superum, villosum, 4-spermum. Styli 2, divaricati. Stigmata acuta.

## Specific Name and Synonyms.

Callicoma serratifolia. Bot. Repos. 566. Epit. Hort. Kew. add. Donn. Cant. a Pursh, p. 154.
Codin. Forst. Gen. n. 30.
Calycomes. Brown in Flinders's Voyage, app. p. 540.

Descr. Stem shrubby, four feet high, with opposite branches, which, when young, are covered with a rustycoloured pubescence. Leaves opposite, ovate-lanceolate, narrowed towards both extremities, equally serrate, ribbed with simple parallel veins, with a fine net-work in the interstices, smooth and shining on the upper, white tomentose on the under surface. Petioles pubescent, brown. Stipules two, opposite, elliptical, situate between the petioles. Flowers axillary, on peduncles longer than the petioles, collected into globular heads, having an involucre of four elliptical, unequal leaves. Common receptacle globular, hairy. Proper calyx of four or six leaflets, oval, erect, three-nerved, petal-like, white, pubescent on the outside. Corolla none. Bractes between the flowers lanceolate, pubescent, nearly the size of the leaflets of the calyx. Stamens in the flowers we examined 8-12, corresponding with the segments of the calyx: fila-
ments thrice the length of the calyx : anthers yellow, round. Germen small, superior, villous, with four ovula. Styles two, divaricate: stigmas acute,

Upon comparing the above description with Forster's Codis, not only a striking resemblance will appear, but strong reasons for suspecting that both plants belong to the same genus. Forster indeed describes his Codia as having a corolla, of which our plant is destitute, unless what we have called bractes may have been taken for a calyx, and our calyx for a corolla.. Cobra is deseribed as octandrous, and many of the flowers which we examined had only eight, some twelve, and more bave been observed by others. The germen appeared to us to have only four ovula, which agrees with Codia. The involucre or common calyx and the receptacle are the same in both.

As the above observations lead only to probability, not certainty, we have thought right to retain the name of Casncoma, by which our plant is now pretif generally known.

Mr. Browns in the Appendix to Flinders's Voyage to Terra Australis, refers this genus, together with Codia, Weinmannia, Cunonia, and Ceratopetalum, to a new natural order, which he calls Cunoniaces. As one character of this order is a bilocular germen of ovarium, we have no doubt. but this is the case with our plant, though in so small an organ we missed observing the septum. Indeed it is not, very likely to be otherwise in a fower with two distinct styles.

Our drawing was made at Mr Kxighr's Exotic Nursery, King's-Road, in the month of March. The description taken from a plant communicated in. June 1809, by Mr. Barr, of the Northampton-Nursery, Balls-Pond. Native of New South-Wales. Requires the protection of a green? house. Propagated by cuttings.


## (1812)

## Lithrem alatum. Hexandious Lythrum.

## *******米**********

Class änd Order.
Dodecandria Monggynia.
Generic Character.
Cal. 12-dentatus: basi equali. Petala 6. calyci inserta. Caps. 2-locularis, polysperma.

## Specific Character and Synonyms.

Lythrum alatum; caule erecto tetragono, foliis oppositis glabris sessilibus, floribus solitariis axillaribus hexandris. Lythrum alatum; foliis oppositis ovato-oblongis acutis basi subcordatis arcte sessilibus, ramis virgatis tetragonoalatis, floribus axillaribus solitariis sessilibus hexandris. Pursh Fl. Amer. Sept. p. 334.
Lythrum alatum. Epit. Hort. Kew. addend.
Lythrem Vulneraria. Hortulanis.

Descr. Stems erect, four-angled: the angles are acute from two opposite sides of the stem being deeply grooved, but are hardly to be called winged, red, smooth, branched from about the middle. Leaves generally opposite, sometimes alternate, quite entire, elliptical, smooth, sessile. Flozers large, shewy, solitary, axillary, on very short peduncles. Calyx nearly cylindrical, a little dilated upwards, twelve-toothed; six of the teeth subulate and longer, alternating with other six minute and inflected. Petals six, equal, inserted into the margin of the calyx. Stamens six only, inserted into the tube of the calyx near the bottom; but the smaller teeth of the calyx are powdery, as if nature attempted to convert them into other six anthers. Germen superior oblong: style shorter than the tube of the calyx : stigma globular, green.

We have no doubt but that this is the Lythrum alatum of Pursh, though he describes the flowers as being very small and the leaves acute; the first circumstance may be accounted for from the author's having seen the dried plant only, in which state the flowers shrink almost to nothing, and as to the second, although we have generally found the leaves obtuse, sometimes even a round-oval, yet we have seen one specimen in which they were narrow and acute.

Native of Georgia and South-Carolina. Flowers in June, July, and August. A herbaceous perennial, requiring protection from severe frost. Propagated by parting its roots, or by seeds. Introduced by Mr. Lions, in 1812. Communicated by Mr. Knight, of the Exotic Nursery.


# Commersonia platypiylla. Broad-leaved 

## Commersonia.



Class and Order.
Pentandrla Pentagyita.

Generic Character.
Cal. 1-phyllus, corollifer. Petala 5. Nect. ${ }^{\text {5 }}$-partitum. Caps. 5-locularis, echinata.

## Specific Character and Synonyms.

Commersonia platyphylla; foliis cordato-ovatis acuminatis inæqualiter dentato-terratis, supra scabriusculis infra tomentosis.
Commersonia platyphylla. Bot. Repos.603. Icon.519. Donn Cant. a Pursh 92.
Commersonis echinata. Bot. Repos. 519. quoad iconem, nomine postea in platyphylla mutato: a planta Forsteri diversa.

Descr. A low shrub, with tomentose, irregularly-twisted branches. Leaves cordate, ovate, acuminate, unequally dentate-serrate, veined, rough on the upper surface, tomentose underneath. Flowers small, white, in lateral panicles, coming out opposite the leaves. Bractes subulate, one at each division of the panicle. Calyx five-cleft : segments ovate, tomentose on the outside. Corolla five-petaled: petals linear, dilated at the base into two lobes, which conniving enclose the stamen. Filaments short, attached to the base of the petals : anthers round, two-lobed. Nectary five-cleft : lacinia erect, connivent at the margins, patent at their points, forming a cylindrical cup with a spreading lip. Germen fiveknobbed : styles erect, approximate: stigmas capitate.

The specimen from which our drawing was taken, was communicated from his garden at Boyton, by A. B. Lambert, Esq. by whom we are informed, that the flowers are very fragrant, perfuming the whole stove in warm weather.

Native of the Molucca Islands. Cultivated in the stove at Boyton. Flowers in June and July. Propagated by cuttings.


## Cyrtopodium Woodfordil. Woodferd's Cyrtopodium.

## *******************

## Class and Order.

Gynandria Monandria.
Generic Character.
Petala 5, distincta, secunda. Labellum trilobum, cum processu unguiformi baseos columnæ apteræ subarticulatim connexum. Masse Pollinis 2, postice bilobæ. Brown Mss.

Specific Character.
Cyrtopodium Woodfordii ; labello ventricoso: lobis laminæ lateralibus intermedio verrucoso callis cristato brevioribus*。

It is not without hesitation that we refer this plant to Cyrtopodium, more especially on account of the striking difference in the form of the labellum; yet, when more particularly examined, there are some points of resemblance in this organ, the lateral lobes of the lamina being in both erect and ear-like : in Andersonii long and spreading, in Woodfordii shorter and rounder. The connexion with a claw-like process of the column, though not exactly the same, is not altogether dissimilar. In Andersonii the union is by means of an articulation, which in this is less evident. The connexion allows, however, of some motion, and the parts separate easily, always at the same point.
Cyrtopodiem Woodfordii is a native of St. Paul, in the Brazils, and was sent by E. J. A. Woodrord, Esq. to

[^1]Mr. Anderson, the curator of the Apothecaries Garden at Chelsea, by whom it was kindly communicated to us.

Requires to be kept in the bark stove, where it produces its fine spike of flowers in October, being some time preceded by the leaves. In Cyrtopodiom Andersonii, the leayes do not appear till after the flowering is over.

N. 1815 .

# Erica flava ( $\beta$ ) imbricata. Imbricated Yellow Heath. 

## Class and Order.

Octandria Monogynia.

## Generic Character.

Cal. 4-phyllus. Cor. persistens: limbo 4 -fido. Anthere ante anthesin per foramina duo lateralia connexæ. Capq. 4-8-locularis, 4-8-valvis.

## Specific Character and Synonyms.

Sect. 5. Breviflore. Div. B. Corolle tubus urceolaris. Flores axillares. Bractece calyci proximæ.
Erica flava; pedunculis prope apicem aggregatis flore longioribus, corollis subtetragonis.
( $\alpha$.) ternata; foliis ternis patentibus distinctis. Erica flava; foliis senis. Hort. Kezo. ed. alt. 2. p. 392. Erica flava; antheris muticis subinclusis, marginibus foliorum ternatorum asperiusculis, corolla ovata costata subquadrilineari. Andrews's Heaths, v. 2.
( $\beta$.$) imbricata; foliis senis imbricatis ramo adpressis.$

Descr. A shrub two feet high, with long, simple, somewhat crooked branches. Leaves subulate, six in a whorl, imbricate, more crowded together upwards, and closely adpressed to the stem, giving a truncated appearance to the tips of the branches. Flowers axillary, aggregated towards the extremities of the branches. Peduncles longer than the flower, nodding. Bractes subulate : two near to the calyx and one remote. Calycine leaflets subulate, nearly the length of the corolla, a little spreading. Tube of the Corolla oblong-ovate, but slightly bellied, four lines long, four-ribbed, spreading
spreading towards the mouth, lacinia obtuse, rather erect. Anthers naked, dirty-purple, nearly enclosed. Germen topshaped, smooth: slyle longer than stamens: stigma exserted, capitate, green.

This plant, which was raised from Cape seeds, by Messrs. Loddiges and Sons, and communicated by them in September 1815, differs so little from the flava of Andrews, except in the leaves being much more crowded together, and growing six instead of three in a whorl, that we can only consider it as a variety of that species. The tube of the corolla is so little contracted upwards, that we hesitated whether to seek for our plant in division B. or $D$. of the fifth section in the late Mr. Dryander's excellent arrangement of the species. In the latter division, it would stand next to filamentosa, a change in the character of which would be necessary, to distinguish it from flava.

Propagated by cuttings. Flowers in September. Requires the protection of a greenhouse.


# Clematis cordata. Heart-leaved Virgin's-Bower. 

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Class and Order.
Polyandria Polygynia.

## Generic Character.

Cal. 0. Petala 4, rarius 5. Sem. caudata.

## Specific Character and Synonyms.

Clematis cordata; foliolis cordatis integerrimis, petalis coriaceis conniventibus apice revolutis crispatis, aristis seminum plumosis.
Clematis cordata; scandens; foliis pinnatis quadrijugis, foliolis ovatis utrinque obtusis omnibus integris petiolatisque membranaceis utrinque reticulato-venosis, floribus solitariis, petalis subcoriaceis, aristis seminum plumosis. Pursh Fl. Amer. Sept. p. 385? excluso synonymo Abbot. Clematis cordata. Walt. Fl. Carol. 156? Michaux Fl. Bor. Am. 1. p. 318?

The Clematis cordata has often been mistaken for crispa, which, as represented by Dillenius's figure, is a very different plant, with lanceolate and three-lobed leaflets; and, which is a character of more consequence, having the beard of the seed naked. Whether our plant may not be the same with the reticulata of Pursh, we are uncertain ; but it cannot be the rosea of Sir James E. Smith in Abbot's Insects, quoted as a synonym of reticulata; because that has naked aristas. The leaflets of our plant are always quite entire, cordiate, and acute. The flowers are not nearly so thick as those of Clematis Viorna. From the reticulata of Walter, it seems to differ in having no tendril at the termination of the leaf.

We received the same species more than seven years ago from Mr. Whitley, then of Old-Brompton, now of the Fulham Nursery. Our drawing was taken from a plant communicated by Mr. Knight, of the Exotic Nursery, King's-Road.

Native of South-Carolina and Georgia. Requires to be protected from severe frosts. Is with difficulty propagated in any other way than by seeds. Flowers in June and July.

# Polianthes tuberosa. Common Tuberose. 



Class and Order.
Hexandria Monogynia.
Generic Character.
Cor. infundibuliformis, incurva, æqualis. Filamenta corollæ fauci inserta. Germ. in fundo corolle.

## Specific Name and Synonyms.

Polianthes* tuberosa. Sp. Pl. 453. Reich. 2.p. 76. Willd. 2. p. 164. Hort. Cliff. 127. Kniph. Cent. 11. n. 76. Knorr Delic. 1. t. T. 12. Lour. Cochinch. 1. p. 204. Flora Peruv. 3. 66. Salisbury in Trans. Hort. Soc. 1. p. 41. t. 2. Hort. Kew. ed. alt. 2. p. 281. Mart. Mill. Dict. Redouté Liliac. 147. Bot. Regist. 63.
Hyacinthus indicus tuberosus, flore Narcissi. Bauh. Pin. 47. Rudb. Elys. 2. 39.f. 4.

Hyacinthus major indicus tuberosa radice. Swert. Florileg. t. 14. f. 1. optima. Vallet Jard. d'Henr. IV. Park. Parad. 111. Raj. Hist. 1164. Theatr. Flore t. 23.
Hyacinthus indicus serotinus flore amplo odoratissimo. Moris. Hist. 2. p. 376. §4. t. 12. fig. ult.
Amica nocturna. Rumph. Amboyn. 5. p. 285. t. 98.
Ozimochitl seu flore osseo. Herrandez Mexic. 277.
( $\beta$.) Hyacinthus indicus tuberoza radice. Clus. Hise. 1. p. 176.-minor. Park. Parad. 111. Raj. Hist. 1164. Ger. Emac. 115. f. 16.

[^2]Hyacinthus indicus tuberosus flore Hyacinthi orientalis. Bauh. Pin. 47.
Hyacinthus minor indicus tuberosa radice albus. Swert. Florileg. t. 14. f. 2. Moris. Hist. 2. § 4. t. 12. f. 22.

The first account we have of the Tuberose is from Clusius, who received a miserable specimen of it in December 1594; of which he has given a figure. All the synonyms we have quoted after that of Cussius, are derived from this source, and the figures quoted are mere copies of that. There is no other authority for variety $\beta$; it is probable, therefore, that the only real varieties are the tuberose with a double flower, and the one with variegated leaves.

It seems evidently to have been first brought into Europe from the East-Indies, and hence it has commonly been said to be a native of that country; yet Mr. Salisbury, in his elaborate account of this plant, in the first volume of the Transactions of the Horticultural Society, has shewn that there is no proof whatever of its ever having been found wild in any part of the East ; but that it is a native of Mexico, as appears from Hernandez, in his History of the Plants and Animals of that Country. From thence it was probably conveyed to the East-Indies, where the cultivation of it was speedily and widely spread, for the sake of the fragrance of its flowers, a quality held there in such high esteem.

The English name, which seems absurd enough, is evidently a corruption of the French Tubereuse; the name by which it was most probably imported into this country, as it is said to have been first cultivated in the neighbourhood of Toulon.

The root of this plant is a solid tuber of an irregular shape, sending forth lateral processes, upon which the buds of the future plant are formed: these are real bulbs consisting of concentric layers, as was long ago observed by Monison. The flowers grow almost constantly by pairs, having a common bracte to both, and a proper one to each.

The roots are annually imported from Italy, and sold so reasonably, that few persons are at the trouble of propagating them here. Though Mr. Salisbury, from his own experience, says that they might be propagated, especially in the warmer parts of the island, with great advantage. The soil he recommends as best suited to them, consists of light sandy earth, mixed with one-third part of rotten cow-dung.

Flowers the latter part of the summer. Communicated by Messis. Colvllle and Sos, of the King's-Road.


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## Class and Order.

Polyandria Polygynia.

## Generic Character.

Cal. 0. Petala 4, seu 5. Sem. ecaudata.
Specific Character and Synonyms.
Thalictrem aquilegifolium; fructibus triangularibus pendulis, stipulis amplexicaulibus, staminibus petalis reflexis caducis longioribus.
Thalictrem aquilegifolium; fructibus pendulis triangularibus rectis, caule tereti. Sp. Pl. 770. Reich. 2. p. 649. Willd. 2. p. 1301. Hort. Kew. ed. alt. 3. p. 349. Jacq. Austr. 4. p. 10. t. 318. Mart. Mill. Dict. n. 18. Scop. Carniol. n. 672. Krock. Siles. v. 9. p. 244.
Thalictrem foliis triplicato-pinnatis, patulis, obtuse trilobis, stipulis ovatis, paniculis umbellatis. Hall. Hist. n. 1141. Allioni Pedem. n. 1077. Villars Dauph. 2. p. 713.
Thalictrum majus florum staminibus purpurascentibus. Bauh. Pin. 337. Morvis Hist. 2. p. 395. §9. t. 20. f. 16. Tourn. Inst. 270.

Thalictrum 4, vel. montanum 3. Clus. Pan. 380.
Thalictrem majus folliculis angulosis caule levi. Bauh. Hist. 3. p. 487. Raj. Hist. 403.
Ruta pratensis. Gesn. İc. An. tab. 9. f. 79.. optima.

Thalictrem aquilegifolium is a hardy perennial. Varies with purple and with white stamens; the former variety is much the handsomest. The number of stamens, pistils, and petals, is likewise subject to vary. Our plant had for the most
most part five, sometimes only four petals. By the character of straight fruit, Linneus did not mean that it was not somewhat curved, but that it was not twisted; (a character intended to distinguish it from contortum) : but, as Willdenow has observed, that the fruit in the latter species, when perfect, is exactly similar to that of aquilegifolium, and that it is only twisted when imperfect : of course this character is of no use.

The Columbine-leaved Meadow-Rue, or, as it is sometimes called, the Feathery Columbine, is a native of mountainous pastures and woods in Switzerland, Austria, Carniola, Piemont, Dauphiny, Ingria, and Silesia.

Cultivated by Miller in 1731. Flowers from May to July. Communicated by John Walker, Esq. Arno's Grove.


# Podophyllum peltatum. Duck's-Foot, or 

 May-Apple.*******************

## Class and Order.

Polyandria Monogynia.
Generic Character.
Cor. 9-petala. Cal. 3-phyllus. Bacca 1-locularis, coronata stigmate.

## Specific Name and Synonyms.

Podophyllum peltatum. Trew Ehret. t. 29. Herbier Artific. Cent. 5. Dec. 5. tab. 2.
Podophyllum peltatum; foliis peltatis lobatis. Sp. Pl. 723. Reich. 2. p. 568. Willd. 2. p. 1141. Hort. Kew. ed. alt. 3. p. 287.
Podophyllum peltatum ; caule unifolio unifloro, folio peltatopalmato lobis cuneatis incisis. Pursh Fl. Am. Sept. .p. 366. Michaux Fl. Boreal. Am. 1. p. 309.

Anapodophyllum. Tournef. Inst. t. 122.
Anapodophyllum canadense. Catesb. Car. 1. p. 24. t. 24. Aconitifolia humilis, flore albo unico campanulato, fructu cynosbati. Mentz. pug. t. 14.

As we have referred Podophyllum diphyllum to another genus, the peltatum is the only known species of this genus.

A native of North-America, growing in large patches, generally in moist shady places, from New England to Carolina.

The fruit, which we have never seen perfected in this country, is said by Mr. Pubsh, to be of the size of a common plum, green, eatable, and known by the name of May-Apple.
Jussieu has placed Podophyllum at the end of his order of Ranunculacees, and derives from it a connecting link
between this order and his Papaveracese, the Rheadee of Linneus, in which order the last named botanist places it.

A hardy perennial, propagated by dividing its creeping roots. Flowers in May. Cultivated according to Hortus Kewensis in 1664. Communicated by Mr, Kent, of Clapton.


## Bryonia quinquelobi. Five-fingered

## Cape Bryony.

## ****************

## Class and Order.

Moneecia Monadelphia.

## Generic Character.

Masc. Cal. 5-dentatus. Cor. 5-partita. Filamenta 3.
Fem. Cal. 5-dentatus. Cor. 5-partita. Stylus 3 -fidus. Bacca subglobosa, polysperma.

## Specific Character and Synonym.

Bryonia quinqueloba; (dioica ?) foliis quinquelobatis: lobis obtusissimis dentato-mucronulatis posticis auriculatis, pedunculis unifloris geminatis, corollis campanulatis semiquinquefidis.
Bryonia quinqueloba; foliis quinquelobis denticulatis supra scabris, pedunculis unifloris. Thunb. Prodr. 13.
Bryonia quinqueloba, dioica; foliis cordatis sinu baseos profundo, superioribus palmato-quinquelobatis, lobis oblongis obtusissimis distantibus superne repando-dentatis, dentibus mucronatis. Bot. Reg. 89.

This very rare plant has been supposed to be the Bryonia grandis of Linnexs, a native of the East-Indies, and, under this notion, has been treated as a stove plant, in which situation we have observed it for some years at Bayswater, in the collection of the Comtesse de Vandes., From this plant our drawing was made in September 1815.

It is however a native of the Cape of Good Hope, and would probably do better if treated as a greenhouse plant. We are indeed informed by the author of the Botanical Register,
that it will grow more luxuriantly, extending its branches from thirty to forty feet, and producing larger and higher coloured bloom, if planted at the foot of a wall with a southern aspect. The stems are herbaceous and perish every year. The large, fleshy root only requires to be protected from frost, and might perhaps be safely taken up after the stems are decayed, and preserved in dry mould or sand until the spring, when they might be again planted out.

As no female flowers have been observed, this species is supposed to be diæcious.


# Netrosideros salignt. Witlow-leaved 

## Metrosideros.

> ******************

Class and Order.
Icosandria Monogynia.

## Generic Character.

Cal. trifidus semisuperus. Petala 5. Stamina longissima, exserta. Stigma simplex. Caps. 3- vel 4-locularis.

## Specific Character and Synonyms.

Metrosideros saligna; foliis alternis lanceolatis utrinque attenuatis mucronatis, floribus lateralibus confertis sessilibus glabris. Smith in Trans. Lin. Soc. 3. p. 272. Willd. Sp. Pl. 2. p. 9556. Hort. Kew. ed. alt. 3. p. 18̃. Persoon Syn. 2. p. 26.

Descr. A tall shrub with flexile branches. Leaves alternate or scattered, lanceolate, narrowed towards the base, quite entire, smooth, when viewed towards the light with a lens seen to be dotted with pellucid glands, apex terminated with a glandular mucro. The younger leaves are clothed with a silky pubescence, adult ones quite naked. Flovers greenish white ${ }_{3}$ in oblong spikes, surrounding the branches near their extremity. Calyx superior, smooth, cupshaped with a five-cleft border: segments roundish-oval, marcescent, while the entire part of the calyx forming a rim above the germen is persistent. Petals 5, larger than the segments of the calyx, pale green. Stamens very many: filaments distinct, twice longer than petals: Anthers versatile. Germen 3-celled: Style longer than stamens. Stigma simple.
Large specimens of this fine shrub were communicated last June by John Walker, Esq. from his extensive and curious collection
collection at Arno's Grove; Southgate, where the shrub has flourished for some years nailed to a wall with a southern aspect, without being injured by the severity of the climate.

Native of New South-Wales. Introduced about the year 1788, by the Right Hon: Sir Joseph Banks, K. B. Flowers in May and June. Propagated by cuttings.


## Anchusa capensis. Cape Bugloss.

> ********************

## Class and Order.

Pentandia Monogynia.

## Generic Character.

Cor. infundibuliformis fause clausa fornicibus. Sem. basi insculpta.

## Specific Character and Synonyms.

Anchusa capensis; foliis lanceolatis acutis hispidis, floribus racemoso-paniculatis, calycibus obtusis demum inflatis.
Anchusa capensis; foliis lanceolatis, villosis callosis ; floribus racemoso-paniculatis, cœruleis. Bot. Rep. 336.
Anchusa capensis; foliis lanceolatis callosis villosis, racemis trichotomis. Thunb. Prodr. 34. Hort. Kew. ed. alt. 1. p. 289. Willd. Sp. Pl. 1. p. 756?

Our drawing of this rare plant was made at George Hibbert's, Esq. Clapham-Common, several years ago; into whose collection it was brought from the Cape of Good-Hope by Mr. Niven, his collector, about the year 1800. Being biennial, and propagated by seeds only, it is very doubtful if it still exist in the country.

As we have no other knowledge of Thunberg's Plant, than the very short specific character in his Prodromus, and our specimens did not correspond altogether with that, inasmuch as the racemes were not trichotomous, it is very uncertain whether our plant be the same species as his; it is certainly however the same as the one meant by Mr. Artos in the Hortus Kewensis, and as that figured by Mr. Andrews in the Botanist's Repository.

As in Anchusa angustifolia the calyx is divided only half way down, but the lacinix are more obtuse and shorter than in that ; and the whole plant is much less spreading.

Flowers in June and July. Propagated by seeds.


## Pomaderris lanigera. Woolly Pomaderris.

## *****************

> Class and Order.

Pentandria Monogynia.

## Generic Character.

Cal. turbinatus, quinquefidus. Petala 5, fornicata, staminibus opposita. Caps. cocculis tribus, membrana operculatis.

## Specific Character and Synonyms.

Pomaderris lanigera; cymis paniculatis terminalibus, foliis ovato-lanceolatis integerrimis coriaceis subtus ferrugineolanatis.
Cennothus laniger ; foliis oblongo-lanceolatis, integerrimis, subtus lanuginosis ; ramulis, pedunculis, petiolis, calycibusque hirsutis. Bot. Repos. 569.

Descr. A shrub two or three feet high, alternate-leaved and branched. The young branches, petioles, peduncles, and calyxes, are covered with a rough woolliness, more or less tinged with a rust-colour. Leaves ovate-lanceolate, quite entire, leathery, covered with a soft pubescence on the upperside, on the under with white wool more or less tinged with rust-colour, ribbed with parallel veins. Flowers terminal, in a panicled, subumbellated cyme. Bractes small oval, concave. Pedicles thickened towards the upper end, somewhat mealy. Calyx five-cleft: segments acute, revolute. Petals five, concave, crisped at the margin, on long claws. Filaments five, the length of the petals, inserted into the receptacle at the base of the claw of the petal. Anthers yellow, oval, becoming sagittate. Germen, from the union of the lower part of the calyx, half inferior: style erect, divided upwards
into three branches, and divisible nearly or quite to the base, Sligmas capitate.

Not having seen the fruit, we cannot assert that it accords with Labillardiere's character of Pomaderris; but from its very near affinity to Pomaberris elliptica (No. 1510) we cannot doubt but that it should be arranged under the same genus.

Our drawing was made several years ago, from a plant received from Messrs. Loddiges and Sons, by Mr. Edwards, who observed that the stamens removed, one at a time, from the petals to which they had previously been closely applied, towards the pistil, so as to bring the anther to one of the stigmas, and receded again after shedding the pollen.

Flowers in May. Native of New-Holland. Requires the shelter of the greenhouse. Propagated by cuttings. Communicated by Messig. Loddiges and Sons.


Mesembryanthemum albidum. White-

$$
\begin{aligned}
& \text { leaved Fig-Marigold. } \\
& \text { ****米************}
\end{aligned}
$$

# Class and Order. <br> Icosandria Pentaginia. 

## Generic Character.

Cal. 5 -fidus. Petala numerosa, linearia, basi cohærentia. Caps carnosa, infera, polysperma.

## Specific Character and Synonyms.

Mesembryanthemum albidum; foliis subulatis triquetris peralbis: basi semiteretibus; apice obtusis cum mucrone. Hazoorth Mesembr. p. 156. n. 32.-Misc. Nat. 97. Pl. Succul. 218. Hort. Kew. ed. alt. 3. p. 216.
Mesembryanthemum albidum ; acaule, foliis triquetris integerrimis. Sp. Pl. 699. Willd. 2. p. 1029.
Mesembryanthemum foliis robustis albicantibus. Hort. Elth. 243. $t$. 189. $f$.232. cum fructu sed sine flore.

Ficoipes africana, folio triangulari ensiformi glauco crasso, flore amplo aureo. Bradl. Succ. 5. p. 10. t. 43.
Ficoides africanum triangulari robustissimo folio. Herm. Parad. 172.

The white-leaved Fig-Marigold is one of those species which are more shy of flowering than many of the genus.

Mr. Haworth ranks it among the afternoon flowering ones. Mr. George Graves, in whose collection this species blossomed last summer, informs us, that, with him, the flowers opened regularly at eight in the morning, and continued open for two hours only; at eight in the evening they again expanded, and closed at ten. They diffuse an agreeable scent while open, especially in the evening. Flowers in June, July, and August. Propagated by cuttings. Requires the same treatment as the rest of the genus. Our drawing was taken several years ago at the late Mr. Grimwood's nursery.


# Valeriana montana ( $\beta$.) rotundifolia. Round-leaved Mountain Valerian. 

## *********-*********

Class and Order.
Triandria Monogynia.

## Generic Character.

Cal. 0. Cor. 1-petala, basi hinc gibba, supera. Sem. 1.

## Specific Character and Synonyms.

Valeriana montana; floribus triandris, foliis ovato-oblongis subdentatis, caule simplici. Spec. Pl. 45. Willd. 1. p. 178. Hort. Kew. ed. alt. 1. p. 74. Jacq. Austr. v. 3. p. 269. Scop. Carn. n. 42. Villars Dauph. 2. p. 283. n. 6. Gmel. Sib. 3. p. 121. Allioni Pedem. n. 7. Krock. Siles. n. 51. Mart. Mill. Dict. n. 9.
Valeriana montana; foliis inferioribus ovato-oblongis acutis subdentatis, superioribus oblongis acuminatis, caule simplici pubescente. Willd. Enum. p. 51.
Valeriana foliis ovato-lanceolatis obiter dentatis. Hall. Hist. n. 212.

Valeriana foliis omnibus integris ex ovato acuminatis, levissime dentatis. Hall. Opusc. 188.
Valeriana alpina scrophulariæfolio. Bauh. Pin. 164. Prodr. 87. Raj. Hist. 390. Tournef. Inst. 131.

Valeriana sylvestris alpina prima. Clus. Hist. 2. p. 55.?
( $\beta$.) Valeriana rotundifolia cespitosa foliis cordatis repandodentatis, caulinis sessilibus. Villars. Dauph. 2. p. 283. n. 7.

Valeriana montana subrotundo folio. Bauh. Pin. 115. Bauh. Phytop. 293.
$V_{\text {aleriana montana. Hist. Lugd. 1127. ed. Gallic. 2. p. } 29 .}$
Valeriana alpina foliis integris, radice repente inodora. Raj. Hist. 389. ?

Valerifa tripteris, montana, and rotundifolia of Villars are very nearly allied. The cauline leaves of the first being, according to the just-named author, sometimes quite entire, it is not easily distinguished from montana, except by the more glaucous colour of the leaves.

Our present plant, which we take to be the rotundifolia of Viliars, is the smallest of the three, scarcely exceeding the height of eight or ten inches. It seems to vary with leaves, sometimes quite entire and sometimes slightly toothed.

Hallen, in his Opuscula, above quoted, has sought out the synonymy with great labour, and reduces what had been considered by Caspar Bauhin and the Botanists of his time, as several species, to one and the same;-Villars, from his' own observations, thinks it right to separate our plant from the scrophularicefolia of Baurin's Prodromus, in which he does not seem to have been followed by any more modern author. On this account we have considered the two as varieties only ; which Viluars himself acknowledges they may be, though he at the same time asserts that he had frequently found it difficult to distinguish the varieties of tripteris and montana from one another, but that he was never in danger of confounding the rotundifolia with any of the varieties of the other two.

A hardy perennial. Native of the mountainous regions of the South of Europe. Flowers in May and June. Communicated by Mr. Pringie, of the Sydenham Nursery.

$N .7826$.

# Echium rubrum. Red Viper's Bugloss. 

## 

Class and Order.
Pentandria Monogynia.

## Generic Character.

Corolla irregularis, fauce nuda

## Specific Character and Synonyms.

Echium rubrum; caule érecto hispido, foliis lineari-lanceolatis, spica composita [vel subsimplici] terminali, corollis subæqualibus. Willd. Sp. Pl. 1. p. 787. Hort. Kew. ed. alt. 1. p. 301.
Echum rubrum; caule ex racemulis brevibus longe spicato, corollis subæqualibus, foliis hispidis. Host Syn. 9. Jacq. Austr. 5. p. 27. t. 3.
Echum sylvestre hirsutum maculatum-Bauh: Pin. 354.
Echium 2, rubro flore. Clus. Pan. 689, f.681. Clus. Hist. 163.

Descr. Stems erect, firm, from one to two feet high, hispid, spotted with purple. Leaves scattered, linear-lanceolate, acute, covered with soft hairs.- Flowers grow in the axils of the leaves, according to Jacquin and Clusius, in very short curled racemes, but in our plant consisting of two flowers only, so that the spike was rather simple than compound. Caly. 5 -cleft; segments subulate, hairy, equal to the tube, but only half the length of the corolla : faux campanulate ; border five-cleft ; lacinia subbilabiately arranged, the upper one being somewhat longer than the rest and emarginate. Stamens longer than corolla, unequal, declined: anthers oval, incumbent, with blue pollen.- Style nearly equal to the stamens, somewhat hairy : stigma acute.

The flowers of this species are sometimes pale red, but never blue or violet-coloured. The synonym of Cuusius evidently belongs to our plant, and is so quoted by Jacquin ; yet Wildenow has continued to apply it to Echium violaceum.

A hardy perennial. Flowers in May and June. Native of Hungary. Propagated by parting its roots or by seeds. Communicated by Messrs. Colville and Son, of the King'sRoad, Chelsea.


# Acacia longifolia. Long-leated Acacia. 

 Class and Order. Polygaina Mongecia.

Generic Character.
Hermaphrod. Cal. 5-dentatus. Cor. 5-fida vel 5 -petala. Stam. 4-100. Pist. 1. Legumen bivalve.
Masc. Cal. 5-dentatus. Cor. 5-fida, s. 5 -petala. Stam. 4-100.

## Specific Character and Synonyms.

Acacia longifolia; inermis, foliis lineari-lanceolatis utrinque angustatis trinerviis striatis, spicis axillaribus geminatis cylindraceis. Willd. Sp. Pl. 4. p. 1052. Hort. Kew. ed. alt. 5. p. 461.
Mimosa longifolia. Bot. Repos. 207. Venten. Malmais. 62.

The long-leaved Acacia is a very ornamental greenhouse shrub, growing to the height of eighteen feet and upwards, and producing abundance of flowers very early in the spring, at a time when few other plants are in blossom.
Native of New South-Wales. May be increased by cuttings, which are said, however, not to strike very readily. Introduced by John Ord, Esq. in 1792. Communicated by John Walker, Esq. of Arno's-Grove.

# Digitalis ferruginea. Iron-coloured 

Fox Glove.
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Class and Order.
Didynamia Angiospermia.

Generic Character.
Cal. 5-partitus. Cor. campanulata, 4-5-loba, ventricosa, Caps. ovata, bilocularis.

## Specific Character and Synonyms.

Digitalus ferruginea; calycibus obtusissimis marginatis glabris, corollæ laciniis superioribus obsoletis: lateralibus acutis: inferiore elongata retusa barbata.
Digitalis ferruginea; foliolis calycinis ovali-oblongis obtusissimis glabris, corolle labio superiore semibilobo: inferioris lobo medio oblongo concavo barbato: lateralibus acutis nanis, Hort. Kew. ed. alt. 3. p. 30.
Digitalis ferruginea; calycinis foliolis oblongis obtusissimis glabris cocolla lobis lateralibus labii inferioris acutis, intermedio nblongo hirsitto concavo, floribus distantibus, bracteis lanceolatis glabris calycis longitüdine. Willd. Sp. Pl. 3. p. 286.
Digitalis ferruginea; calycinis foliolis ovatis obtusis patentibus, corollæ labio inferiore barbato. Syst. Veg. p. 470. Martyn Mill. Dict. n. 6. Sabbati Hort. 2. t. 86. Allioni Pedem. n. 260.
Digitalis angustifolia flore ferrugineo. Bauh. Pin. 244 . Rivin. Monopet. 105.
Digitalis ferruginea; folio angustiore. Bauh. Hist. 2. p. 813. f. 2.

Digitalis gilvo flore, alias ferrugineo. Lob. Obs. 308. sine icone.
Digitalis maxima ferruginea. Park. Parad. 380. p. 381. fig. 6. Raj. Hist. 768. Lob. Icon. 1. p.573. a.

Descr. Root perennial. Stem upright, rigid, from three to six feet high, clothed with lanceolate leaves quite entire or slightly toothed. Spike, or rather spike-like raceme, terminal, two or even three feet long, gradually tapering to the top ; simple, or having a few short branches towards the base. Flowers crowded together, but solitary, on short peduncles, supported each by a single, lanceolate, marginated, reflexed bracte, of which the lower ones are much longer than the calyx, the upper ones shorter. Calyx five-cleft; the three upper segments erect, the two lower applied close to the corolla, all of them oval, very obtuse, and edged with a white membranaceous margin. Corolla drooping, dull yellow on the outside, within streaked with rusty purple lines: tube short, contracted : faux suddenly swelling, bellied : limb fivecleft : two upper lacinia very short, nearly obsolete, rolled back; two lateral somewhat longer, acute ; lowermost long, blunt, hollowed, thinly bearded. Stamens shorter than corolla; filaments inserted into the tube of the corolla, equal, thickened at the base, sigmoid: anthers parallel: lobes divaricate. Germen superior, conical, bilocular; style the length of the stamens; stigma simple.

Of all the figures above quoted, the only one that represents even the habit of our plant, is that of Rivinus.

A hardy perennial, generally perishing after flowering; very shewy, from its stature and long tapering spike of flowers. Native of Italy. An old inhabitant of our gardens, being cultivated by Gerard above two hundred years ago. Our drawing was taken from a specimen, communicated by John Walker, Esq. of Arno's-Grove ; our description from one communicated many years ago, by Thomas Furlex Forster, Esq.


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## Cassia-ligustrina. Privet-leaved Cassia.

## *********************

## Class and Order.

## Decandria Monogynia.

## Generic Character.

Cal. 5-phyllus. Petala 5. Anthera 3 supreme steriles; 3 infimæ rostratæ. Legumen.

## Specific Character and Synonyms.

Cassis ligustrina; foliis septemjugis lanceolatis : extimis minoribus, glandula baseos petiolorum. $\mathrm{Sp} . \mathrm{Pl}$. 541 et 1681. Ed. Willd. 2. p. 523. Hort. Cliff. 159. Hort. Upsal. 100. Hort. Kew. ed. alt. 3. p. 28. Mart. Mill. Dict. n. 24. Gronov. Fl. Virg. 47. ed. 4to. 65, Bot. Reg. 109.
Cassia ligustrina ; tenuissime pubescens, foliis septemjugis lanceolatis, extimis minoribus, glandula basilari, pedunculis terminalibus subpaniculatis, leguminibus oblongis subfalcatis. Pursh Fl. Am. Sept. 1. p. 306.
Cassis bahamensis, pinnis foliorum mucronatis angustis, calyce floris non reflexo. Mart. Cent. 21. t. 21.
Senva ligustri folio. Dill. Elth. 350. t. 259.

The privet-leaved Cassia being a native of the warmer parts of the Continent of North-America, from Virginia to Georgia, and the West-India Isles, requires to be kept in the bark stove, where, when in vigour, it makes a handsome appearance.

Our drawing was taken at Mr. Salisbury's Botanic Garden early in June, some years ago, and was supposed to be Cassia Sophera, a species very nearly allied indeed, but a native of the East-Indies. Our plant differs somewhat from the figure published last month in the Botanical Register, but corresponds better with the character given by Linnizus.

From comparing the specimens in the Banksian Herbarium, we cannot discover any essential difference between ligustrina and Sophera.
We are informed by Clayron, that the leaves have the same effects as the Alexandrine senna.

Introduced from the Bahama Isles, by Mr. Mark Catesby, in 1726. Propagated by seeds, which are not produced in our climate, and will, if raised carly in the year in a hotbed, sometimes produce flowers in the autumn of the same year. In the bark stove it will remain as an evergreen shrub, and attain the height of five or six feet.


# (1830) <br> Myoporum debile. Procumbent Myoporum. 

## $* * * * * * * * * * * * * * * * * * *$

## Class and Order.

Didynamia Angiospermia.

Generic Character.
Cal. 5-partitus. Cor tubo brevi ; limbo 5 -fido, subæquali. Stigma obtusum. Drupa baccata, 2-4-locularis. Semina 1-2, pendula. Brown.

## Specific Character and Synonyms.

Myoporum debile; foliis lanceolatis apice dentatis, drupis compressiusculis calyce brevioribus, pedunculis solitariis, caule prostrato. Brown Prodr. 516. Hort. Kew. ed. alt. 4. p. 60 ,
Pogonia debilis, Bot. Repos. 212.

Myoporum debile is a small greenhouse shrub with procumbent branches. It is not a plant of much show, but it flowers most part of the summer, and its lively blossoms, and purple stems studded with glandular tubercles, make a pleasing variety; and it takes up but little room. In a cultivated state the leaves are frequently quite entire, but in native specimens are generally more or less toothed towards the point.

Native of New South-Wales. Propagated by cuttings. Communicated by Messrs. Loddiges and Sons.


## ( 1831 )

## Calla palustris, Marsh Caila.

******************
Class ànd Order.
Heptandria Monogynia. Wield.
Gynandria Polyandria. Linn.
Mongela Monandria. Schiebs.

## Generic Character.

Spatha plana. Spadix tectus flosculis. Cal. 0. Cor. 0. Bacca polysperma.

## Specific Character and Synonyms.

Calla palustris; foliis cordatis, spatha plana, spadice undique hermaphrodito. Sp. Pl. 1373. Willd. 2. p. 290. Reich. 4. p. 75. Hort. Cliff. 436. Pollich Pal. n. 865. Gmel. Sib. 1. p. 1. Fl. Dan. t. 422. Svensk Bot. 39. Martyn Mill. Dict. n. 2. Hort. Kew. ed. alt. 2. p. 337.
Calla foliis cordatis. Fl. Lap. 320.
Prouvenzalia palustris. Petit Lettres 3. p. 45 . cum tab.
Dracunculue palustris s. radice arundinacea Plinii. Bauh. Pin. 195. Moris. Hist. 3. p. 545. §13. t. 5. f. 23. Weinm. Phyt. t. 472. 6. in fructu.
Dracunculus aquatilis. Dod. Pempt. 331. Raj. Hist. 1210. Ger. Emac. 832. f. 3. Park. Herb. 1244. Hort. Eyst. Ord. Vern. 2. t. 17. Cam. Epit. 362.
Dracunculus palustris Polonicus Corvini. Barrel. Ic. 574. Anguina aquatica sive Dracunculus. Lob. Ic. 600. f. 2. Hydropiper rubeum. Fuchs Hist. folio Ic. 844. in fructu, ed 12 mo . p .924 . sine figura.

The genus Calla is readily recognised, in the natural arrangement, to belong to the aroidea of Jussiev; piperita of Linnevs : but, in the sexual system of the latter, there
is a peculiar difficulty in assigning to it its proper place. Linneus himself placed it in the class Gynandria, order Polyandria ; but a more careful examination of the parts of fructification soon led Botanists to the conclusion, that none of the aroidece were really gynandrous. Haenke, in his edition of the Genera Plantarum, removed it to Polyandria Polygynia; Schreber inserted it under Monocia Monandria; and lastly, in Willdenow's Species Plantarum, it occurs in Heptandria Monogynia; where certainly no one, from an examination of the species now under consideration, would think of looking for it. The stamens are inserted, as appears to us, without order or definite number in the interstices between the germens, and being surrounded by neither calyx nor corolla, may be considered as solitary.

The older Botanists considered our plant as a species of Dracunculus. M. Petit, Physician to the Royal Hospitals at Paris, made a new genus of it in the beginning of the last century, under the name of Prouvenzalia, in honour of his friend, M. Prouvenza, Inspector-General of the Royal Hospitals, which Linneeus, however, did not think fit to adopt, but applied that of Calla, a name borrowed from Pliny.

It is a native of Germany and all the northern parts of Europe, but has not been found in Great-Britain, though Parkinson distinguishes it by the name of "Our Water"Dragons."

Was cultivated by Philip Miller, in 1738. Requires to be kept in a water-trough. Propagated by its creeping roots. Flowers in July and August. Communicated by Mr. William Kent, from his very fine collection of rare plants, which he cultivates, with the happiest success, at Clapton.



## Tree.


Class and Order.
Icosandria Monogynia.

## Generic Character.

Cal. 5-fidus, superus. Petala 5. Pomum multiloculare, polyspermum.

## Specific Character and Synonyms.

Punica Granatum; foliis lanceolatis caule arboreo. Sp. Pl. 676. Willd. 2. 981. Hort. Cliff. 184. Hort. Ups. 122. Hort. Kew. ed. alt. 3. p. 194. Woodv. Med. Bot. 158. t.58. Gertn. Fruct. 1. p. 183. Pall Ross v. 1. pars 2. p. 67. Zorn Icon. 270. Trew Ehret. p. 36. t. 71, 72. Lour. Cochinch. 1. p. 313. Desfont. Atl. 1. 392.
Granata Punica mala. Blackio. Herb. 97. et 145.
Punica Cesalp. de Plant. 141. Tournef. Inst. 636. t. 407. Quer. Fl. Espan. 6. p. 149.
Le Grenadier. Regnault Bot.
Punica spinosa, foliis nitentibus, ellipticis, integerrimis, floribus sessilibus. Hall. Hist. 1098.
Punica malus. Trag. Herb. p. 1037. Dalech. Lugd. 303. ed. Gallic. 1. 256. Cord. Hist. 184. a: Ruell. Stirp. Hist. 239. Tournef. Inst. 636. Bauh. Pin. 438.
Males Punica. Bauh. Hist. 1. p. 76. Dod. Pempt. 794. Raj. Hist. 1462. Cam. Epit. 130.
Malum Granatum. Rumph. Amb. 2. p. 94. t. 24.
Malum Punicum. Lob. Hist. 563. Advers. 419. Icon. 2. 130. Ger. Emac. 1450. Park. Parad. t. 429. f.4, 5, 6. Granata seu Punica. Weinm. Phyt. t. 557. a, b, c. (n.) Aloribus simplicibus rubris. Bot. Mag. 1832. Poit, et Turp. arbr. fruit. 22.
(3.) floribus simplicibus albis. Bot. Repos. 96.
(r.) floribus plenis. Trew Ehret. t. 71.f. 2.
balaustia flore pleno majore et minore. Bauh. Pin. 438.

The Pomegranate Tree is ornamental, even in foliage, and sufficiently hardy, not only to bear the cold of our climate, but, if placed against a warm wall, to produce flowers freely; and, in favourable seasons, will even bring its beautiful fruit to a certain degree of maturity. It is probably because such situations are usually in request for fruit for the table, that this tree is not more generally cultivated in this country.

The double-flowered variety produces no fruit; but its blossoms being more shewy, is mostly preferred, as fruit is hardly to be expected, except in very favourable seasons, and is, in no case, fit for eating; it is nevertheless pleasing to the eye. In the countries where the Pomegranate is cultivated for use, three kinds of fruit are particulariy mentioned; the sweet, the acid, and the vinous.

Native of Spain, Italy, Barbary, Persia, Japan, and Cochinchina, and cultivated in the East and West-Indies.

According to Turner, it was to be seen in Sion Garden as long ago as the year 1548.

Should be planted in a warm situation ; and, according to Milerr, in a strong rich soil; but is said in its native countries to affect a poor chalky soil. Propagated by layers, which should be laid down in the spring, and in a year's time will be sufficiently rooted to be removed.

The flowers of the double variety are astringent, and were formerly used in medicine and kept in the shops, under the name of Balaustins. The rind of the fruit is a more powerful astringent, and is said to be used in Persia, in dying leather black. Bacon recommends wine made of the sweet Pomegranates; or, where that cannot be had, the juice, with a little sugar and lemon-peel and three or four cloves, to be taken every morning, from February to the end of April, as good for the liver*.


## Stapelia maculosa. Spotted-flowered

 Stapelia.******************

Class and Order.
Pentandria Digynia.

## Generic Character.

Asclepiadea. Nectar. duplici stellula tegente genitalia.

## Specific Character and Synonyms.

Stapelia maculosa; orbiculo solido, rostris alisque teretibus oblusis, ligulis trifidis, corollis subtus planissimis ad oras ciliatis. Jacq Stap.
Stapelia maculosa; corollis quinquefidis leevibus planis ciliatis, fundo orbiculato convexo, coronæ exterioris laciniis tridentatis, cornubus binis clavatis approximatis. Willd. Enum. 283.
Stapelia maculosa. Donn Cant. ed. 1, 2, \& 3. sed mixta ed. posteriorum.
Orbea maculosa. Haworth Succul. p. 37.

Stapelia variegata (No.26.)-picta (No. 1169.)-Bufonis (No 1676.) and maculosa, are nearly-allied species, and are, with some others, separated into a distinct genus by Mr. Haworth, under the name of Orbea.

The venerable Jacquin's splendid work on the genus Stapelin, though published several years ago, owing to the unsettled state of the Continent, has not till very lately reached this country. In his figure of our present plant, the light parts of the flower are a deeper yellow, and the staiks more slender and brown-coloured, circumstances very liable to vary, but in other respects it does not differ from the one here given.

As Jacquin received his plant from this country, under the name which he has adopted, there can be no doubt that it is the maculosa of the carly edition of Donn's Catalogue.

Native of the Cape of Good-Hope. Communicated by Mr. George Graves.

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## Clerodendrùm fragrans. Fragrant

## Clerodendrum.

## Class and Order.

Didynamia Angiospermia.
Generic Character.
Cal. 5-fidus. Cor. tubo cylindrico: limbo 5-partito, laciniis æqualibus subsecundis. Stam. exserta, adscendentia. Bacca dipyrena: ossiculis bilocularibus.

Specific Character and Synonyms.
Clerodendrum fragrans; foliis subcordatis dentatis basi glandulosis, corymbis terminalibus densis hemisphæricis. Hort. Kew. ed. alt. 4. p. 63. Vent. Malm: 70. floribus simplicibus. Willd. Enum. 659. excluso synonimo Kæmpferi.
Clerodendrum fragrans; foliis ovatis subcordatis dentatis pubescentibus, subtus basi biglandulosis, corymbo conferto terminali. Willd. Enum. 659.
Volkmannia japonica. Jacq. Hort. Schoenbr. 3. p. 48. t. 338. floribus plenis.

Clenodendnum fragrans, is chiefly valuable for the sake of its very fragrant blossoms. It is a native of Japan and China, and, though generally treated as a stove plant, is not very tender. It has creeping roots, and we remember once to have seen an instance where it had been planted in the border of the conservatory, that the roots found their way through or under the brick-work, and the shoots came up in the open ground, in which situation the plants flourislied and
flowered very well during the summer; but perished the following winter.

Willdenow, in his Enumeration of the Plants in the Berlin Garden, has quoted tab. 57, of Kempfer's drawings published by Sir Josepir Banks, as a representation of our plant, but, as we think, without foundation. Communicated by Join Walker, Esq. of Arno's-Grove.


## ********************

Class and Order.
Pentandria Monogynia.
Generic Character.
Cor. rotata. Bacca exsucca.
Specific Character and Synonyms.
Capsicum bicolor; pedunculis solitariis fructibus oblongis subconicis, corollæ laciniis trinerviis bicoloribus, caule fruticoso.
Capsicum bicolor. Jacq. Fragm. t. 99. f. 1.
Capsicum nigrum; pedunculis solitariis, fructibus oblongis erectis mucronatis, petiolis glabris, caule fruticoso. Willd. Enum. 242.

As Jacquin had given a figure of Capsicum bicolor in his Fragmenta, some time prior to Willdenow's publication, we do not see that the latter author had any good reason for changing its name, we have therefore thought it right to restore the original appellation.

In a genus so subject to vary in the form of its fruit, it is not easy to find good specific characters; in this instance the fruit, though sometimes terminated in a sharp point, is at others quite obtuse, without appearance of mucro. The most striking difference between this species and frutescens, consists in the size and colour of the corolla, and the dark purple colour of the unripe fruit; for when mature this changes to red; the leaves and branches, when the plant
is kept in a light and airy situation, partake, on the upper side, of the same dark colour.

We received specimens of this plant from the late Mr. North's Nursery, at Lambeth, in the year 1805.

Native, we believe, of the West-Indies, and requires the protection of the stove in the winter months, but mãy be removed into the greenhouse in the summer.


## Buphthalmum sericeum. Silky Ox-Eye.

> *******************

Class and Order.
Syngenesia Polygamia Superflua.
Generic Character.
Recept. paleaceum. Pappus margo obsoletus. Seminum latera, præsertim radii, marginata.

## Specific Character and Synonyms.

Buphthalmum sericeum; foliis oppositis approximatissimis spathulato-oblongis sericeis, calycinis squamis setaceis hirsutis, caule arboreo. Linn. Suppl. 379. Willd. Sp. Pl.,3. p. 2230. Hort. Kew. ed. alt. 5. p. 123.
Buphthalmum sericeum; foliis sparsis cuneiformibus acutis integerrimis villoso-sericeis. Hort. Kew. ed. $1^{\text {mad. }}$ 3. p. 245. L'Herit. Sert. Angl. tab. 37. nunquam edita.

Buphthalmum sericeum is a handsome dwarf shrub, though the leaves lose something of their beauty in cultivation; the soft silky whiteness of the pubescence becoming greener and coarser than in native specimens.

Table 34 of L'Hertrier's Sertum Anglicum, quoted in the first edition of the Hortus Kewensis, we believe, was never published; we do not therefore know that any other representation of this plant than the one here given, is before the public.

Native of Fuertaventura, one of the Canary Islands, and is called by the Spanish inhabitants Forjada. Discovered by Mr. Francis Masson, and introduced into the Kew Gardens in 1779.
May be propagated by cuttings. Requires the protection of the greenhouse. Flowers most part of the summer. Communicated by John Walker, Esq. of Arno's-Grove.


## ( 1837 )

# Heliotropium indicum. Indian Turnsole, or Heliotrope. 

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Class and Order.
Pentandria Monogynia.

Generic Character.
Cor. hypocrateriformis, 5 -fida, fauce plicata. Stigma incrassatum subconicum.

Specific Character and Synonyms.
Heliotropium indicum ; foliis cordatis acutis scabriusculis, spicis solitariis, fructibus bifidis. Flor. Zeyl. 70. Sp. Pl. 1877. Reich. 1. 380. Willd. 1. 740. Persoon Syn. 1. 155. Swartz Obs. 54. Hort. Kero. ed. alt. 1. p. 284. Loureiro Cochinch. 103. Mart. Mill. Dict. n. 2.

Hellotropium foliis ovatis acutis, spicis solitariis. Hort. Cliff. 45.
Heliotropium americanum cæruleum foliis Hormini. Pluk. Alm. 182. t. 245. f. 4. Dodart Mem. 83. Robert Ic. 158. Sabb. Hort. Rom. 2. t. 34. Sloane Jam. 1. p. 3. Moris. Hist. 3. p. 451. Raj. Hist. 3. p. 270.
Jacua-Acanga. Pis. Braz. p. 229.

Descr. Root annual. Stem rounded, erect, from one to two feet high, branched, hispid. Leaves alternate and opposite, spathulate-ovate, acute, rugose, crenate, naked on the upper and clothed with a rather soft pubescence on the under surface. Branches grow from the axils of the leaves. Flozeers in long, solitary, terminal, generally simple, but
now and then divided, spikes ; at first blue, but soon fading to white.
The figure in the Hortus Romanus, quoted as a variety, and as the same with Miller's horminifolium, is a bad representation, but does not seem to be at all different from our plant. Dodart's figure, copied in Robert's Icones, is very good.

The Indian Turnsole is a native of the West-India Islands and the continent of South-America. Being annual, must be raised in the stove or hot-bed.

Flowers from June to August. Communicated by John Walker, Esq. of Arno's-Grove.


## Zamia media. Intermediate Zamia.

## *****************

## Class and Order.

## Diegia Polyandria.

## Generic Character.

Masc. Amentum strobiliforme. Cal. squama obovata. Cor. 0. Anthere globosæ, rima dehiscentes, in squama sessiles.
Fem. Ament. strobiliforme. Cal. squamæ peltate. Cor. 0. Germina 2. Styli 0. Bacca 2, 1-spermæ.

## Specific Character and Synonyms.

Zania media; foliolis oblonge-linearibus subintegerrimis muticis rectis, stipite tereti inermi. Jacq. Hort. Schoenb. 3. p. 77. t. 397 et 398.

Zamia media; frondibus pinnatis, foliolis lineari-lanceolatis obtusis sub apice obsolete serrulatis planis, stipite triquetro glabro. Willd. Sp. Pl. 4. p. 846.

Zamia media is very distinct both from integrifolia and angustifolia, and has its name from being in some measure, intermediate between the two ; the pinnæ or leaflets being narrower and more numerous than in the former, and broader and fewer than in the latter. The serratures just helow the point of the leaflets are frequently wanting, and seldom visible to the naked eye.

Our drawing was taken from a female plant communicated by Messrs. Loddiges and Sons, by whom it was introduced. Native of the West-Indies. Requires to be kept in the stove. Is not recorded in the Hortus Kewensis, nor in Donn's Catalogue.


# Stapelia Gemmiflora ( $\beta$.) Gem-flowered Stapelia. 

## 

## Class and Order.

## Pentandria Digynia.

## Generic Character.

Asclepiadea, Nectar. duplici stellula tegente genitalia,

## Specific Character and Synonyms.

Stapelia gemmiflora; corollis ciliatis facie tuberculatoscabrosis, ligulis tripartitis erectis: laciniis lateralibus subulatis media sublanceolata. Jacq. Stap.
Stapelia gemmiflora; ramis plüribus erectis tetragonis dentatis : dentibus suberectis acutis, corolla plana scabra quinquefida: laciniis ovato-lanceolatis margine ciliatis. Masson Stap. p. 14. n. 15. t. 15.
Stapelia gemmiflora; corollis quinquefidis scabris: laciniis ovato-lanceolatis margine ciliatis superne quinquenerviis, pedunculis longitudine corollæ, ramis erectis tetragonis inferne floriferis. Willd. Sp. Pl. 1. p. 1280. Hort. Kew. ed. alt. 2. p. 87.
Tridentea gemmiflora corolla crassissima corrugata atra, albo-ciliata. Hazoorth Succul. p. 34.
(a.) ciliis albis.
(ß.) ciliis rubicundis.
Tridentea stygia; corollis rugosis atris, pilis rubicundis, ramis crassis brevibus, luteo-viridibus. Haworth Succul. p. 35.?

The cilice, or glandular hairs on the margin of the corolla, in our plant and in Jacquin's, are of a red colour. In Masson's figure they are represented white. Mr. Haworth considers the tyo varieties to be distinct species, from some
difference
difference in the stems; but, in this respect, our plant does not seem to us to differ materially from Masson's figure. The colour of the flower varies from dark purple to almost black; and also in the number and situation of the goldcoloured specks.

Our plant was far less brightly spotted on the underside than is represented in Masson's figure, and in Jacquin's these spots were entirely wanting. Neither were the nerves, so marked on the upper surface of the lacinix of the corolla in Masson's drawing, at all visible in our plant, nor are they seen in Jacquis's figure. This shows how dangerous it is to frame the specific characters from drawings only, as Willdenow has done throughout this genus.

Our drawing was taken at Messrs. Whitley, Brame, and Milne's Nursery, at Fulham.

Flowers in June. Native of the Cape of Good-Hope, growing among the shrubs in the sandy districts beyond Platte-Kloof. Requires the same treatment as the rest of the genus.


## Allium stellatum (ß.) White Missouri

## Garlick.

## 

Class and Order. Hexandria Monogynia. Generic Character.

Cor. 6-partita, patens. Spatha multiflora Umbella congesta. Caps. supera.

## Specific Character and Synonym.

Allium stellatum; foliis linearibus acute carinatis scapo sub-teretí brevioribus, staminibus inclusis, germine apice sexfido.
(a.) floribus purpureis foliorum odore miti. Supra No. 1576,
(阝.) floribus albis foliorum odore gravi.
Allium angulosum. Pursh Fl. Am. Bor. 1. p. 223.? nequaquam Linnæi.
Allum reticuktum. Fras. Cat.?

Descr. var. B. Bulb conical, oblique, covered with a fibrous bristly coat. Radical leaves linear, acutely keeled at the back, not quite the length of the scape, which is nearly rounded, smooth, erect, generally furnished with two leaves towards the base, only half the length of the scape. Flowers white in a rather lax umbel, frequently proliferous, scent sweetish, and slightly alliaceous. Lacinia of the corolla erect : internal ones longer, narrower, and more spreading than the outer. Filaments equal, all broad at the base and sharp-pointed, shorter than corolla, white, inserted into a fleshy receptacle, and connate with the base of the petal and with one another. Anthers yellow. Germen white, somewhat rugose, sixcleft at the apex: style erect, shorter than the stamens: stigma simple, acute. The plant when bruised has a rank garlick-like smell.

This

This plant was represented to us as a distinct species, and its very near affinity with Allum stellatum, of which it cam be considered only as a variety, was not observed till the whole impression was thrown off. In Fraser's Catalogue two species of Alliom are recorded as natives of Missouri, under the names of stellatum and reticulatum; by the latter was probably, meant our present plant, and perhaps so named from the fibrous coating surrounding the bulb; but whether this difference be constant or not, we have had no opportunity of examining.

Introduced by Mr. Nuttal, who found it on the banks of the Missouri, in North-America. Our drawing was taken at Messrs. J. and J. Fraser's Nursery, Sloane-Square. Flowers in May.

# Gardenia Randia. Round-leavkd 

 Gardenia, or Indigo-Berry.
## 

## Class and Order.

Pentandria Monoginia.

## Generic Character.

Bacca infera, 2-locularis, polysperma. Anthere sessiles in fauce corolle. Stigma bilamellatum.

## Specific Character and Synonyms.

Gardenia Randiu; spinosa; spinis términalibus binis, foliiis obovato-subrotundis, corollis glabris solitariis sessilibus, dentibus calycis subulatis patulis.
Gardenia Randia; spinosa, spinis ramulorum terminalibus binis, foliis ovato-subrotundis, corollis hypocrateriformibus. Willd. Sp. Pl. 1. p. 1230. Hort. Kew. ed. alt. I. p. 370.

Gardenia aculeata; spinis oppositis floribusque foliis brevioribus, ramis glabris. Hort. Kew. ed. 1. v. 1, p. 295.
Randia aculeata; ramis bispinosis. Sp. Pl. 214. Syst. Veg. xiv. p. 197.

Randia foliis subrotundis confertis, summis ramulis bispiniferis, floribus solitariis. Browne Jam. 143. t. 8. f. 1 .
Lyciem forte foliis subrotundis integris, spinis et foliis ex adverso sitis. Sloane Hist. 1. t. \%. 2. f.4.
Lyciem magis americanum Jasmini flore foliis subrotundis lucidis. Pluk: Alm. 234. t. 97.f. 6.
Lxcium Beloxylon binis aculeis in ramulorum fastigis americanum. Plul. Alm. 234. t. 97. f. 5.
Jasminum lucidum americanum folio lucido subrotundo. Parad. Bat. Prodr. 342.

Descr. In our hot-hotises Gardenia Randia is a dwarfish branched shrub, with grey bark. Branches towards their extremities
extremities knotted, and from these knots the leaves grow on the younger branches in pairs, but afterwards in bundles of three or four together. Leaves roundish, generally obovate, shining green on the upper and paler on the under surface. Flowers white, very like those of the Common Jasmine, solitary, sessile, and generally axillary. Calyx small, five-toothed: teeth subulate, spreading, connected half-way by a membrane. Tube of Corolla green, shorter than the limb, which is usually divided into five, sometimes into six, lanceolate segments, and, according to Patrick Browne, in Jamaica, constantly into four only. Stamens equal in number to the laciniæ of the corolla : filaments none: anthers linear, sessile, inserted into the margin of the tube. Germen inferior: style shorter than the tube, club-shaped : stigma bifid, fleshy.

Varies much in the size of the leaves and in the number of spines, which latter, in old plants, are sometimes entirely wanting, and in this state it is supposed by Swartz to be the Randia mitis of the Species Plantarum.

The berries, which are never produced with us, afford a permanent blue colour, hence the common appellation in Jamaica of Indigo-Berry. And if the Lxcium Beloxylon of Plukenet, above quoted, be the same, which we see no reason to doubt, the natives on the Continent make arrows of the wood and ink of the berries, whence it is called by the English settlers, Dartwood and Ink-Berries.

Communicated by Messrs. Loddiges and Sons, flowering in May. It seems to have very rarely come into blossom in this country, as its season of flowering is not marked in the Hortus Kewensis. Propagated by cuttings. Requires to be kept in an airy part of the stove.


## Gardenia radicans. Rooting Gardenia.

> ********************

## Class and Order.

Pentandria Monogynia.

## Generic Character.

Bacca infera, 2-locularis, polysperma. Antherce sessiles in fauce corolle. Stigma bilamellatum.

## Specific Character and Synonyms.

Gardenia radicans; inermis, foliis lanceolatis, corollis hypocrateriformibus obtusis calyce angulato, caule radicante. Willd. Sp. Pl. 1. p. 1295. Hort. Kew. ed. alt. 1. p. 368. Bot. Repos. 491.

Gardenia radicans; inermis, corollis obtusis, calyce angulato, foliis ellipticis, caule radicante. Thunb. Gard. n. 1. t. 1.f. I. Thunb. Jap. 109. t. 20.

Kutsuinas altera, folio minori, flore niveo pleno, cujus gemma nondum explicata speciosam cochleæ oblongæ figuram exprimit. Kampf. Amæn. p. 808.

In the way that Gardenia radicans is treated in our stoves, the stems show no disposition to put forth roots; but probably would, were they suffered to come in contact with the earth. It is doubtful, whether it has ever been seen in this country, or even in China, with a single flower.

There is great affinity between this species and Gardenia florida, from which it differs very little, except in the lesser size of its flowers and leaves, which last are narrowed at both extremities. The flowers have nearly the same fragrant smell, and the plant flowering more freely and being more easily propagated than the true Cape Jasmin, it has of late very much taken the place of this last, and is frequently sold for it.

Flowers in June and July. Communicated by Messrs. Lopdiges and Sors.


# Phlomis fruticosa. Larger Shrubey 

## Phlomis, or Jerusalem Sagr.

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Class and Order.
Didinnamia Gymnospermia.

## Generic Character.

Cal. 5-gońus, 5-dentatus. Cor. galea incumbens, carinatocompressa, barbata, emarginata vel incisa ; labium inferius proportionatum : lo末o medio majore. Stigmatis labium superius brevius. Brown.

## Specific Character and Synonyms.

Phlomis fruticosa; [foliis subrotundis [ovato-oblongis] tomentosis crenatis, involucris lanceolatis, caule fruticoso. Hort. Kezv. ed. alt. 3. p. 407. Sp. Pl. 818. Willd. 3. p. 117. Pers. Syn. 2. 126. Mart. Mill. Dict. n. 1. Kniph. Cent. 1 et 3. Sabb. Hort. Rom. 3. t. 15.
Phlomis involucri radiis lanceolatis. Hort. Cliff. 315.
Phlomis cretica, fruticosa, folio subrotundo, flore luteo. Tournef. Cor. 10.
Phlomis capitata lutea grandiflora. Dill. Elth. p. 316. t. 237. f. 306.

Verbascum latis salviz foliis. Bauh. Pin. 240.
Verbascum sylvestre. Cam. Epit. 881. Matthioli Compend. 794.

Verbascum sylvestre alterum. Dod. Pempt. 146.
Verbascum 4 Matthioli. Lob. Icon. 560. § 1. Ger. Emac. 767. $f$. 1.

Salvia fruticosa lutea latifolia. Park. Theatr. 52.
Salvia fatua flore luteo. Weinm. Phyt. 4. t. 880. c.
Pseudo-Salvia major lutea latifolia. Moris. Hist. 2. p. 397 § 11.

Phlomis fruticosa varies very much in the form and size of its leaves, which are sometimes cordate-oval, somtimes oblong-oval,
oblong-oval, and not at all cordate ; at other times again. they are auriculated. We have observed only two varieties, which differ in nothing but in size, and not in the relative width of the leaves. The older authors, by their latifolia and angustifolia, denoted two distinct species, our present one and Phlomis Lychnitis. Mileer made three species of the fruticosa, but they appear to us to run so much into one another, that they cannot properly be considered even as distinct varieties; except the larger and smaller, which seem to be permanent.

The Phlomis fruticosa is a native of Spain, Portugal, and Sicily. It is tolerably hardy, and will grow in almost any soil or situation, though it lives longest in a dry soil; its hoary leaves are not deciduous, and make a pleasing variety in the winter. But severe frost will cut them down to the ground, and sometimes destroy them altogether. Propagated by cuttings. Flowers in June and July. Cultivated by Gerard in 1596.


## ( 1844 )

Berckheya grandiflora. Large-flowered Berckieya.
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## Class and Order.

Sysgenesia Polygamia Frustranea.

## Generic Character.

Receptaculum favosum. Semina villosa. Pappus paleaceus (nunc setoso-paleaceus ciliatus). Cal. imbricatus.

## Specific Character and Synonyms.

Berckheya grandiflora; foliis oppositis lanceolatis trinerviis spinoso-dentatis subtus tomentosis, calycinis foliolis spinoso-dentatis. Willd. Sp. Pl. 3. p. 2271.
Berckheya fruticosa. Wendl. Obs. 33. t. 4.f. 31.
Rohria grandiflora; foliis calycibusque oblongis dentatospinosis subtus tomentosis capitulo solitario. Thunb. Prodr. 140. Act. Soc. Nat. Scrut. Hafn. 3. p. 107.
Rohria ilicifolia; foliis oppositis oblongis dentatis spinosis supra lineatis, caule fruticoso. Vahl Act. Soc. Nat. Scrut. Hafn. 2. p. 40. t. 7.
Gorteria fruticosa. Berg. Cap. p. 302. quoad descriptionem, exclusis synonymis omnibus, excepto forte Plukenetii.
Atractylis oppositifolia; foliis oppositis. L. Mant. 477. Reich. Sp. Pl. 3. p. 697. exclusis synon. Sp. Plant. et Plukenetii.
Carthamus africanus, frutescens, folio ilicis spinoso, flore aureo. Walth. Hort. 13. t. 7.

Descr. Stem shrubby, about three feet high, divided into a few upright branches. Leaves opposite, ternate, or, sometimes scattered, oblong, smooth on the upper surface and cottony on the under, sinuate-dentate: teeth terminated each
with a rigid, sharp, orange-coloured spine. Peduncle terminal, half a foot long, rounded, cottony, bearing a single, large, radiated, yellow flower. Calyx imbricated: outer teaftets exactly resembling the leaves, but smaller, the inner series gradually diminishing and becoming less spinous, innermost series linear-lanceolate, ciliated: all of them appeared to us to be distinct to the base. Receptacle honeycombed : cells deep with ragged chaffy edges. Seed buried in the cells, hairy from the base, and crowned with a chaffy many-cleft pappus, whose segments are ciliated. Radius barren.

A greenhouse shrub. Native of the Cape of Good-Hope. Flowers in June. Not mentioned in the Hortas Kewensis.

Communicated by Messrs. Jeniins and Gwyther, NewRoad, who are preparing an extensive Botanic Garden for the use of subscribers; which, from its vicinity to the centre of the metropolis and the enjoyment of the pure air of the Regent's Park, promises to be a great acquisition to London Botanists.


Cerbera.

Class and Order.
Pentandria Monogrita.

## Generic Character.

Contorta. Drupa monosperma.

## Specific Character and Synonyms.

Cerbera Manghas; foliis lanceolatis: nervis transversalibus, foliolis calycinis ovato-oblongis patentissimis margine involutis.
Cerbera Manghas; folis lanceolatis : nervis transversalibus. Hort. Kew. ed. alt. 2. p. 65. Fl. Zeyl. n. 106. Sp. Pl. 303. Reich. 591. Willd. 1. p. 122\%. Obs. It. 91. Manghas lactescens, foliis Nerii crassis, venosis, Jasmini flore, fructu Persicæ simili venenato. Burm. Zeyl. 151. t.70. f. 1.?

Manghas fructu venenato. Bauh. Pin. 440. Raj. Hist. 1552. Arbor lactaria. Rumph. Amb.2. p. 243. t. 81.
Odollam. Hort. Malab. 1. p. 71. t. 39.

It is probable that more than one species of Cerbera have been confounded under the name of Manghas. The peculiarity of the corolla-like calyx, which is not much shorter than the tube of the corolla, will perhaps easily distinguish this from every other species. This calyx is well represented in the figure in the Hortus Malabaricus, and is particularly described by Rumphius, as having the appearance of a stellated flower, of a fine green colour, from the centre of which the real flower grows on a long tube; his figure probably represents the plant after the corollas were all fallen off, leaving only the calyx. Burman's figure represents the calyx
calyx as very small, and closely applied to the tube of the corolla; a circumstance which makes it doubtful whether it may not be intended for some other species.

The stories of its very poisonous qualities have arisen, probably, from its being confounded with some other plant; its milky juice is not vehemently caustic, and Rumphius remarks, that the natives eat the leaves, boiled with other pot-herbs, with no other effect than gently relaxing the bowels; and an infusion of the bark of the tree is used as a familiar cathartic in Amboyna, by the Europeans as well as the natives.

With us it is a stove plant. Native of the East-Indies. Flowers from June to September. Propagated by cuttings. We were favoured with the specimen from which our drawing was taken, by our friend Mr. Artos, from the royal garden at Kew, in June 1815.
N.1846.



## Smilax Glauca. Glaucous-leaved Smilax.

## *****************

Class and Order.

## Digecia Hexandria.

Generic Character.
Masc. Cal. 6-phyllus. Cor. 0.
Fem. Cal. 6-phyllus. Cor. 0. Styli 3. Bacca 3-locularis. Sem. 2.

## Specific Character.

Smilax glauca; (caulis teres aculeatus) foliis inermibus rotundato-ovatis mucronulatis subseptemnerviis subtus glaucis, pedunculis brevibus bifloris.

We cannot find that this species of Smilax, a native of North-America, communicated by John Walker, Esq. of Arno's-Grove, has been any where described. It approaches to rotundifolia, but has much smaller leaves, less cordate at the base, and quite glaucous on the under side; they have generally seven longitudinal nerves, but the outer ones are soon lost in the margin, and all of them are much less conspicuous in the dried than in the fresh leaf: the petiole is shorter than the lamina, and is generally furnished with a pair of tendrils. Peduncles not longer than the petioles, and for the most part two-flowered. Our plant was a male. It is hardy, and of easy culture,



## ( 1847 )

Justicia Ecbolium. Long-spiked Justicia,
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Class and Order.
Diandria Monogynia.

## Generic Character.

Cal. simplex vel duplex. Cor irregularis vel subregularis. Caps. 2-valvis, 2-locularis: dissepimentum valvis contrarium: retinaculis seminum uncinulatis.

## Specific Character and Synonyms.

*** Calyce s̀implici, corollis bilabiatis : labiis divisis.
Justicia Ecbolium ; spicis terminalibus tetragonis imbricatis, bracteis ovalibus foliisque oblongo-ovatis acuminatis, galea lineari. Vahl enum. 1. p. 117. Hort. Kew. ed. alt. 1. p. 36.
Justicia Ecbolium; spicis terminalibus tetragonis, bracteis ovatis imbricatis ciliatis mucronatis, corollarum galea lineari reflexa, Vahl symb. 2. p. 14. Willd. Sp. Pl. I. p. 85.

Justicia Ecbolium ; arborea, foliis lanceolato-ovatis, spicis tetragonis, bracteis ovatis ciliatis, corollarum galea reflexa. Sp. Pl. 20, Fl. Zeyl. 17. Fabr. Helmst. 217. Vahl Symb. 1. p. 2. Lour. Cochin. p. 23.
Justicia Ecbolium; fruticosa; corollis bilabiatis: labio superiore lineari, spicarum bracteis ovalibus cuspidatis ciliatis, antheris parallelis. Hort. Kew.ed. $1^{\text {mo. }}$ 1. p. 26. Mart. Mill. Dict. n. 16.
Jubticas viridis; foliis oblongis integris, spicis terminalibus imbricatis, bracteis ovato-acutis, galea lineari reflexa bidentata. Forsk. Descr. p. 5. n. 14.
Adhatoda spica longissima, flore reflexo. Burm. Zeyl. 7. t. 4. f. 1.

Adhatoda floris labio superiore angustissipo et ad posteriora reclinato. Tournef. Inst. p. 175.
Carim-Curini. Hort. Malab. 2. p. 31. t. 20.
Curini (forte) prima species, Pluk. Phyt. t. 171. f. 4.

Stem shrubby: branches erect, simple, appearing as if jointed from the intumescence just above the insertion of the leaves. Leaves opposite, decussate, oval, smooth, pointed at both extremities, quite entire, somewhat rigid and recurved. Flozers in a terminal four-cornered imbricated spike. Bractes oval, ciliated, terminated with a soft mucro, turning purple towards the point. Calyx 4-parted: leaflets subulate, finely pubescent. Tube of corolla long curved: limb bilabiate: upper lip linear, emarginate, bent back : lower lip 3-lobed: middle lobe broader oval then the lateral ones. The corolla is white, but changes to a pale green in fading; scentless. Stamens two: filaments inserted into the superior part of the tube : anthers parallel. Germen conical, supported on a festy receptacle: style the length of the tube: stigma capitate.

Linneus, who has described only twenty species in his Species Plantarium, divided these into two genera, naming one Dianthera from the circumstance of each filament bearing two anthers, one above the other; Jacquin and Vail have united them into one genus; which however is so numerous as to require subdivision; the latter author having enumerated no less than one hundred and forty-seven species, though he separated the stemless species under the name of Elytraria. The first edition of Aiton's Hortus Kewensis contains only nine species, and the last but twenty-eight.
Justicia Ecbolium is a native of the East-Indies. Requires to be kept in the stove. Cultivated by Philip Milier in 1759. Propagated by cuttings. Communicated by Jons Wakker, Esq. of Arno's-Grove, in July 1815. Flowers most part of the summer.


# Stachytarpheta urticifolia. Nettlib 

## leaved Bastard Vervain.

Class and Order.
Diandria Monogynia.

## Generic Character.

Cal. tubulosus, 4 -dentatus. Cor. hypocrateriformis, inaqualis, 5 -fida, curva. Stam. 4: 2 sterilia. Sem. 2.

## Specific Character and Synonym.

Stachytarpheta urticifolia; glabriuscula, foliis ovatis achtis usque basin serratis, bracteis subulatis calyce adpresso brevioribus.
Cymburus urticcefolius; foliorum laminis ovali-lanceolatis, nervo medio subtus rare hirto, cæterum glabris: bracteis totis adpressis, ovato-acuminatis: calycis dorso edentulo: stigmate integro. Parad. Lond. 53. exclusis synonymis.

Although we consider this to be the same species as is figured in the Paradisus Londinensis, under the name of Cymburus urticafolius, yet we believe it to be quite distinct from Stachytarpheta jamaicensis, supposed by Mr. Salisbury to be the same. It is of taller growth, its stalks are far less hairy, the leaves less succulent, sharper pointed and more acutely sawed, with the serratures continued to the base of the leaf. In jamaicensis the leaves are more succulent, broader towards the apex, and quite entire at the lower part; teeth more distant and blunter; it is also less eregt in its growth, and has shorter spikes. In our plant the bractes are rather subulate than ovate, with a membranous border at the base only; they are shorter than the calyx, to which they are closely adpressed their whole length. The calyxes are imbedded
bedded in a deep groove in the peduncle: the outer teeth of the calyx are larger than the inner, which they entirely conceale, It has two fertile stamens; and we could not detect any steril filaments.

Communicated by John Walker, Esq. who sent it under the name of Verbena violacea. Flowers in the stove most part of the year. Propagated by cuttings.

We are not certain of what country it is a native.

# Stevia Eupatoria. Hemp-Agrimony-like 

## Stevia.

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## Class and Order.

## Syngenesia Polygamia Æequalis.

## Generic Character.

Reeept. nudum. Pappus paleaceus. Cal. cylindraceus, ex simplici foliolorum serie.

## Specific Character and Synonyms.

Srevin Eupatoria; herbacea, foliis lanceolatis planis in petiolum attenuatis trinerviis apice obsolete subserratis, corymbis fastigiatis, pappo paleaceo et aristato. Willd. Enum. 854. Idem in Mag. d. Gesells. Naturf. Fr.z. Berl. 1807. p. 138.
Stevia Eupatoria; herbacea foliis lanceolatis trinerviis integerrimis, corymbo fastigiato, pappo paleaceo et aristato. Willd. Sp. Pl. 1775. Hort. Kerv. ed. alt. 4. p. 510.
Mustelin Eupatoria. Sprengel in Linnean Soc. Trans.v.6. p. 152. t. 13.

The late Professor Willdenow, in his Enumeration of the Plants of the Berlin Garden, has a species that he calls purpurea, nearly allied to Eupatoria, but which, he says, differs in having channelled leaves and purple flowers. The corollas in our plant are tinged with purple on the outside and are white within ; but then its leaves are flat; they are three-nerved on the under and dotted on both sides, quite entire at the upper part of the plant, but the lower ones are somewhat sawed at the apex. The leaves in our specimens were rather oblong-ovate than lanceolate; but, as we have seen others with longer leaves, we can hardly consider our plant as different from Eupatoria.

The specimen, from which our drawing was taken, was communicated by the late Mr. Dons, of the Cambridge Garden, who said he found it to be a hardy herbaceous perennial. Native of Mexico. Flowers in August and September.



## Hallia imbricata. Imbricated Hallia.

> ********************

## Class and Order.

## Diadelphia Decandiia.

Generic Character.
Cal. 5 -partitus, regularis. Legumen 1 -spermum, bivalve.


#### Abstract

Specific Charater and Synonyms. Hallia imbricata; foliis cordato-ovatis convolutis imbricatis, floribus axillaribus sessilibus. Thunb, Prodr. p. 131. Willd. Sp. Pl. v. 3. p. 1170. Hedysarum imbricatum. Thunb. in Nov. Act. Upsal. v. 6. p. 42. 1. 1. Suppl. Pl. p. 330.


This very rare plant, not recorded in the last edition of the Hortus Kewensis, was communicated by Messrs. Loddiges and Sons, in August 1813.

Native of the Cape of Good-Hope ; represented by Thunberg as growing among grass, upon very slender stems, but crect at the upper part.

In our specimen, the stem was firmer, and had more the appearance of a low shrub. Leaves imbricated toward the extremities of the branches, ciliated with strong hairs along: the margin and the mid-rib, and terminated with a soft mucro; they were mostly folded together, partly concealing the flower, which was solitary, axillary, and nearly sessile. We know of no figure but the one in the New Upsal Transactions, above quoted. Jicquis, in the second volume of the Hortus Schoenbrunnensis, has given the figure of a very nearly-allied species, under the name of Glycine monophylla; but which is certainly not the plant so called by Linneus. Jacquin's plant, though in many respects similar, we take to be a distinct species from ours, having its stalks entirely prostrate, leaves more distant, and not folded upon the flower. Propagated by seeds.


## Zamia integrifolia. Dware Zamia.

## ********************

Class and Order.

## Digecta Polyandria.

## Generic Character.

Masc. Amentum strobiliforme. Cal. squama obovata. Cor. 0. Anth. globose, rima dehiscentes, in squama sessiles.

Fem. Amentum strobiliforme. Cal. squame peltate. Cor. 0. Germina 2. Styli 0. Baccee 2, 1-spermæ.

## Specific Character and Synonyms.

Zamí integrifolia; frondibus pinnatis: foliolis lanceolatis rotundato-obtusis basi attenuatis latere exteriore ad apicem serrulatis, stipite glabro subtetragono. Willd. Sp. Pl. 4. p. 847 . Hort. Kew. ed. alt. 5. p. 410.
Zamia integrifolia. Jacq. Ic. 3. t. 635. Collect. 3. p. 261.
Za mia pumila; frondibus pinnatis: foliolis linearibus obtusis. Linn. Sup. 443. Sp. Pl. 1659. Exclusis synonymis omnibus.

Zamia integrifolia is distinguished from media published last month, not only by the wider and more obtuse leaflets, serrulate at the apex, but also by the smoother footstalk, and the acuminated spadix or flowering spike, which in media is obtuse without the conical termination. We have not, however, seen a sufficient number of specimens to determine, if this distinction is to be depended upon or not.

Communicated by Messrs. Loddiges and Sons, flowering in August, which appears to be the usual time with us, though Jacquin remarks, that different individuals flowered at Vienna at such very different seasons, that it was impossible to determine its proper period.

Native of the West-Indies and of East-Florida, Requires the heat of the stove.


## Moluccella lavis Smooth Molucca

## Balm.

> ******************
> Class and Order. Didynamita Gymnospermia.

## Generic Character.

Cah campanulatus, ampliatus, corolla latior, mucronatus. Bractea spinose.

## Specific Character and Synonyms.

Moluccella levis; calycibus campanulatis, quinquedentatis : dentibus æequalibus muticis, foliis petiolatis sub-rotundo-ovatis dentatis. Willd. Sp. Pl. 3. p. 129. Enum. 621. Hort. Kew. ed. alt. S. p. 411.

Moluccelsa lavis; calycibus campanulatis subquinquedentatis : denticulis æqualibus. Sp. PL. 821. Hort. Upsal. 172. Kniph. Cent. 11. n. 77. Sabb. Hort. 3. i. 45. Gartn. Fruet. 1. 320. t. 66. f. 10. Regn. Bot.
Monucca levis: Dod. Pempt. 92. Ger. Emac. 691. f. 5. Moris. Hist. 3. p. 380 § 11. t. 14.
Melissa Moluccana odorata. Bauh. Pin. 229.
Melissa Molucca levis sive Syriaca levis. Park. Theatr. 41. t. 42.f. 5.

Molvea. Bauh. Hist. 3. p. 234. Raj. Hist. 568. Rivin, Mon. 64.
Moluca, Italis, Melissa Constantinopolitana. Cam Epit. 675.

Cardiaca Melica, sive Moluca Syriaca minus aspera. Lob. Ic. $t .516$.
Cardiaca Syriaca. Tabern. ed. Germ. 935.

Moluccella levis is an annual plant, and, unless in favourable seasons, does not perfect its seeds with us, which
accounts for its being 50 rarely met with in our gardens. To insure the ripening of its seeds, Miller directs that it should be raised in the autumn, and the young plants preserved through the winter under a frame. In the spring, they may be planted in the open air, in a warm situation, sheltered from the high winds. These plants, which have been preserved through the winter, will flower towards the end of Junè, and may be expected to produce ripe seeds, should the weather be at all favourable.

The calyx in the whole genus is bell-shaped and much larger than the corolla, with teeth more or less mucronated: in this species they are deseribed as being without mucro; but this is not the fact: the mucro is indeed small, and though not pungent when green, becomes so in drying. The whorls are generally five-flowered, and under each calyx is a bracte of from three to five spines united at the base, which, though at first innocuous, become rigid and pungent; these together form an involucre surrounding the stem, beneath each whorl.

Authors differ in their opinion of its scent; Paríinson observes, that the smell thereof is nothing like balm, but rather fulsome : to us the scent is very agreeable; as it was to Joun Bauhiv.

Native of Syria. Cultivated by Lobel in 1570. Flowers in July and August. Communicated by our kind friend, Alexander M'Leay, Esq.
N.1833.


## (1853)

## Rhododendron hirsutum. Hairy <br> Rhododendron.

## *******************

Class and Order.
Decandria Monogynia.

## Generic Character.

Cal. 5-partitus. Cor. subinfundibuliformis. Stam. declinata. Caps. 5-locularis.

## Specific Character and Synomyms.

Rhododendron hirsutum; foliis ellipticis acutiusculis ciliatis subtus punctatis, corollis infundibuliformibus. Willd. Sp. Pl. 2 p. 49. Hort. Kew. ed. alt. 3. p. 49.
Rhododendron hirsutum; foliis ciliatis nudis, corollis infundibuliformibus. Sp. Pl. 562. Mart. Mill. Dict. 4. Jacq. Austr. p. 61. t. 98. Scop. Carn. n. 480. Villars Dauph. 3. p. 592.
Rhododendron foliis ovatis, ciliatis, subtus punctatis. Hall. Hist. n. 1016.
Ledum alpinum hirsutum. Bauh. Pin. 468, Raj. Hist. 1005.
Ledum alpinum. Clus. Pan. 74. fig. bona, p. 82.
Ledum alpinum sive Rosa alpina. Park. Theatr. 77.
Balsamum alpinum Gesneri. Lob. Ic. 367.
Nerium alpinum quibusdam, alis Ledum hirsutum. Bauh. Hist. 2. p. 21 et 22.
Cistus Ledon alpinum Clusii. Ger. Emac.

Rhododendron hirsutum and ferrugineum are very much alike. By the older Botanists they seem to have been considered as varieties only, and are for the most part described together, as the smooth and hairy Mountain Rose. They are, however, permanently distinct species. The flowers of hirsutum are not so large, and rather less intense in colour
than those of ferrugineum; nevertheless, a large shrub of the former, when covered with blossoms, is a highly ornamental object.

Native of the Alps of Switzerland, Dauphiné, Austria, and Stiria. Flowers in May and June, Should be planted in peat mould. Propagated by offsets, layers, or seeds, which, however, are but rarely perfected with us. As the natural situation of these plants is among the rocks on the summits of lofty mountains, where they insinuate their roots between the crevices of stone, we should recommend a trial of them on old walls, which, when such occur, might often be beautifully decorated by planting them with well-chosen subjects.

Caltivated by Mr. John Tradescant, jun. in 1656. Communicated by Joun Waleer, Esq. of Arno's-Grove.


## Bouvardia triphylla. Three-leaved <br> Bouvardia. <br> ********粎********

## Class and Order.

Tetrandria Monogynia.
Generic Character.
Cal. 4-phyllus, dentibus quibusdam interjectis. Cor. tubulosa. Anthere incluse. Caps. bipartibilis, polysperma. Sem. marginata.

## Specific Name and Synonyms.

Bouvardia triphylla. Salisb. in Parad. Lond. 88. Hort. Kew. ed. alt. 1, p. 245.
Houstonia coccinea. Bot. Repos. 106. Willd. Enum. 156. Ixora americana. Jacq. Hort. Scheenbr. 3. p.4. t. 257.
Ixors ternifolia. Cavanill. Ic. 4. p. 3. t. 305. Gazeler Recens. Repos. Bot. 10.

Bouvardia differs from Houstonia in having the cells of its capsule many-seeded, instead of one-seeded; and from Ixora, in its fruit being a capsule not a berry; besides other characters of minor consideration. R. A. Salisbury, Esq. gave it its present appellation, in memory of Dr. Charles Bouvard, formerly superintendant of the Jardin Royal, at Paris. Mr. Salissury says, that two varieties of this beautiful shrub are cultivated in some collections about London, some with shorter, and the other with longer, leaves. We do not remember to have seen any specimens with leaves so short as represented in the Paradisus Londinensis. Young plants have a broader foliage and flowers more erect, than full-grown shrubs; and there is a variety with pubescent leaves.

It is a native of Mexico, and is generally treated as a greenhouse shrub; but we have known it thrive and blossom very well, planted in the open air, in front of the conservatory, where it was protected from frost by the occasional covering of a mat.

Propagated by cuttings. Introduced in 1794, by the Right Hon. Sir Joseph Banks, Bart. K. B.


# Hippia frutescens. Shrubby Hippia. 

Class and Order.

Syngenesia Polygamia Necessaria.

Generic Character.
Recept. nudum. Pappus 0. Sem. latissimis marginibus, nuda. Cal. hemisphæricus, subimbricatus. Corollula radii 10, obsoletæ, subtrifidæ.

## Specific Character and Synonyms.

Hipria frutescens; fruticosa, villosa, foliis pinnatifidis, floribus corymbosis. Hort. Kew. ed. alt. 5. p. 179. Linn. Sup. 390. Syst. Veg. 795. Willd, Sp. Pl. 3. p. 2382. Thunb. Prod. 168. Gartn. Fruct. 2. p. 390. t. 164. f. 6. Martyn Mill. Dict. n. 3.

Hippia frutescens. Syst. Veg. ed. 13. p. 661. Linn. Mant. 291.

Tanacetum frutescens; foliis pinnatifidis: laciniis lanceolatis obtusiusculis integerrimis. Sp. Pl. 1182, Berg. Cap. 243. Kniph. Cent. 1. n. 88.
Eriocephalus pectinifolius; foliis planis pinnatis. Syst. Nat. ed. 12. p. 579.
Tanacetym africanum arborescens, foliis lavendulæ multifido folio. Commel. Hort. 2. p. 201. t. 101.

It has been the fate of this shrub to puzzle even the father of modern Botany, to determine to what genus it should be referred. In the Species Plantarum, Linnems first placed it under Tanacetum: in the twelfth edition of the Systema Natura (Vegetab.) he removed it to Eriocephalus: and in the thirteenth edition, he remarked, that it had more affinity with Iva than with Tanacervm; but concluding that it was distinct from both, he separated it as a genus, and
gave it the name of Hippia, under which it has been since generally recognized.

It is a native of the Cape of Good-Hope; may be considered as a hardy greenhouse shrub. Propagated by cuttings. Flowers early in the spring, and continues in succession most part of the summer. It was cultivated at Chelsea in 1710. Communicated by John Walker, Esq. of Arno's-Grove.


# (1856) 

Gentiana incarnata. Lyons's Gentian.


Class and Order.
Pentandria Digynia.

Generic Character.
Cor. 1-petala. Caps. 2-valvis, 1-locularis : receptaculis 2, longitudinalibus.

Specific Character.
Gentiana incarnata; corollis aggregatis terminalibus doliiformibus: ore lacero inæquali, foliis ovalibus, petiolis decurrentibus.

This hitherto undescribed species of Gentian is a native of Carolina, from whence it was brought, by Mr. Lyons, about three years since. It has a near affinity with $G$. Saponaria and ochroleuca, before published, especially with the latter; but the flowers are smaller and blush-coloured, the segments of the calyx longer, and the limb of the corolla is more unequally divided.

The leaves, in a vigorous plant, before the time of flowering, are of a deep green; the yellow and purple tinge of the leaves in the plant from which our drawing was taken, was probably owing to having been kept too dry.

A hardy perennial. Flowers in October. Communicated by Mr. William Kent, from his collection at Clapton.


## Cleome pubescens. Villous Cleome.



## Class and Order.

Tetradynamia Siliquosa.

## Generic Character.

Cal. 4-phyllus. Petala 4. Stam. 4-40. Siliqua 1-locaharis, bivalvis polysperma. Semina exalbuminosa. Brows.

## Specific Character.

Cцвоме pubescens; floribus hexandris, staminibus basi stipitis insertis, bracteis oblongo-cordatis simplicibus, calycibus reflexis, siliquis pendulis.

Descr. Whole plant, more especially the stem, clothed with a fine pubescence. Root annual. Stem simple, erect. Leaves digitate : leaflets five or seven, lanceolate-ovate, ribbed underneath with parallel veins. Flowers in a simple raceme, white: claws of the petal shorter than the lamina. Stamens six, inserted into the lower part of the stipes or footstalk of the germen, and not into the middle of it, as in Cleome pentaphylla. filaments naturally long, ascendant, and of a bright purple colour; but in the specimen from which our drawing was taken unfortunately abortive, a defect not observed till the plate was ready for publication. Bractes simple cordate. Siliqua very long, and hanging down.

For this, as it appears to us, undescribed species of Cleome, we are indebted to our friend Robert Barclay, Esq. of Bury-Hill, who raised it from seeds he received from Paris; but its native country is unknown to us.

Flowers in July. Requires to be raised in the stove or hot-bed, and to be kept constantly under shelter. It produced and ripened seeds, however, with us, in an airy epartment, without artificial warmth.


## Sideroxylion mite. Lance-leaved Iron-Wood. <br> *粦料************

## Class and Order.

## Pentandria Monoginia.

Generic Character.
Cor. 5 -fida. Nect. in plerisque 5 -phyllum. Stigma simplex. Baeca 5-sperma.

## Specific Charaeter and Synonyms.

Sideroxylon mite ; inerme, foliis perennantibus lanceolatis acutis, pedunculis teretibus brevissimis aggregatis simplicibus compositisque.
Sideroxylon mite; inerme floribus sessilibus. Syst. Veget. 232. Willd. 1. 1089 ?

Sideroxydon mite. Jacq. Collect. 2. p. 249. certo certius, excluse synonymo Milleri.
Scleroxylon mite, Willd. Enum. p. 249 . diversa videtup ob flores solitarios huic ascriptos.

From the want of an adequate description, it is uncertain whether this be the Sideroxylon mite of Linnaus or not, we have no doubt, however, but that it is the plant described under that name, by Jacquin, in his Collectanea, above quoted. The leaves are lanceolate, acute, quite entire, alternate, of a deep shining green on the upper, paler and smooth on the under side, petioles short, of a purple colour. Peduncles axillary, aggregate, rounded, very short, some simple and one-flowered, others branched and many-flowered. Corolla white, without nectaria. Filaments somewhat shorter than the corolla, white: anthers yellow. Germen roundish; stigma simple, obtuse, sessile, green. In all which characters it agrees exactly with Jaceuin's description. From melanophtaum,
melanophlaum, for which species it has been generally taken in our gardens, it differs, in that this last has obtuse leaves, square peduncles, which, with the calyx and corolla, are of a flesh colour, and a divided stigma ; in which respect Jaceuin remarks, that S. melanophlaum recedes from the character of the genus.

Willdenow, in his Enumeration of the Plants in the Royal Botanical Garden at Berlin, has separated from the genus Sideroxylon those species which want the nectarium, under the name of Scleroxylum ; but that which he calls mite can hardly be intended for our plant, as he ascribes to it solitary and lateral flowers.

A handsome evergreen greenhouse shrub, Native of the Cape of Good Hope. Propagated by cuttings. Flowers in June and July. Communicated by Messrs. Lopdiges and Sons.



Cal. 4-fidus, corolla major: lacinia suprema apice bifida, vel emarginata; infima maxima. Cor. persistens. Legumen subdispermum.

## Specific Character.

Crusta albifföra; ferrugineo-pubescens, calycibus semiquinquefidis: laciniis subæqualibus, bracteis ovatis acuminatis, corollis calyee majoribus.

Descr. Stem climbing, covered with a rust colour, as is in some degree the whole plant. Leaves ternate, petioled: leaflets ovate-acuminate; apex elongated by a very narrow acumen, veined. Stipules lanceolate-acuminate: Racemes axillary, in our specimen divided. Flowers looking all one way, yellowish white. Bractes membranaceous, rust-coloured, ovate-acuminate, deciduous. Calyx divided half-way down into five nearly equal segments, that is, the upper segment is divided very nearly as deeply as the other three; the lower segment is somewhat but not much longer than the rest. Corolla papilionaceous; vexillum orbicular, emarginate, with two teeth at the base of the lamina : ale small, with one tooth at the base. Carina very much curved at the point, consisting of two petals not united, except for a small space near the middle. Stamens diadelphous, 1-9;
anthers globular. Germen ovate, hairy ; style hairy; stigma capitate.

Communicated by Aylyer Burke Lambert, Esq, from his collection at Boyton, who raised it from seeds he received from the Isle of France. Requires to be kept in the stove.


In which the Latin Names of the Plants contained in the FortyThird Volume are alphabetically arranged.

## Pl.

1827 Acacia longifolia.
1808 Acanthus spinosus $(\beta)$.
1840 Allium stellatum ( $\beta$ ).
1822 Anchusa capensis.
1844 Berckheya grandiflora.
1798 Borago laxitlora.
1854 Bouvardia triphylla.
1820 Bryonia quinqueloba.
1836 Buphthalmum sericeum.
1831 Calla palustris.
1811 Callicoma serratifolia.
1835 Capsicum bicolor.
1829 Cassia ligustrina.
1789 Cerastium amplexicaule.
1845 Cerbera Manghas.
1786 Cineraria aurita.
1782 Cistus levipes.
1803 Cistus sampsucifolius.
1857 Cleome pubescens.
1816 Clematis cordata.
1834 Clerodendrum fragrans.
1805 Clerodendrum viscosum.
1813 Commersonia platyphylla.
1771 Crassula lactea.
1859 Cylista albiflora.
1800 Cyrtopodium Andersonii.
1814 Cyrtopodium Woodfordii.
1791 Delphinium urceolatum.
1775 Dianthus atrorubens.
1796 Diervilla humilis.
1828 Digitalis ferruginea.
1779 Echium fruticosum, ( $\beta$.) minor.
1826 Echium rubrum.
1773 Elichrysum splendens.
1793 Erica Blandfordiana.
1815. Erica flava, ( $\beta$.) imbricata.

1842 Gardenia radicans.
1841 Gardenia Randia.
1856 Gentiana incarnata.
1802 Gnaphalium fruticans.
1850 Hallia imbricata.
1837 Heliotropium indicum.
1855 Hippia frutescens.
1785 Jasminum Sambac, $(\gamma$. ) trifoliat.
1790 Ipomea insignis.

## Pl.

1847 Justicia Ecbolium.
1804 Lagasca mollis.
1810 Leptospêrmum grandifolium.
1812 Lythrum alatum.
1824 Mesembryanthemum albidum.
1821 Metrosideros saligna.
1852 Moluccella levis.
1830 Myoporum debile.
1799 Nerium odorum ( $\beta$ ).
1778 Nicotiana quadrivalvis.
1801 Nycterium amazonium.
1784 Peoniá officinalis.
1843 Phlomis frúticosa.
1797 Phyteuma Scheuchzeri.
1819 Podophyllum peltatum.
1817 Polyanthes tuberosa,
1780 Polygala speciosa.
1823 Pomaderris lanigera.
1779 Psidium cordatum.
1832 Punica Granatum.
1853 Rhododendron hirsutum.
1806 Rhus Toxicodendron, (a.) vulg.
1781 Rivina humilis.
1794 Rosa gallica, ( $\beta$.) versicolor.
1783 Rubus rosixfolins, ( $\beta$.) coronar.
1792 Sagittaria lancifolia.
1774 Salvia bicolor.
1807 Sedum oppositifolium.
1809 Sempervivum villosum.
1858 Sideroxylon mite.
1846: Smilax glauca.
1848 Stachytarpheta urticifolia.
1839 Stapelia gemmiflora,( $\beta$.)
1833 Stapelia maculosa.
1849 Stevia Eupatoria.
1788 Stobæa pinnata.
1787 Symphitum tauricum.
1818 Thalictrum aquilegifolium.
1825 Valeriana montana,( $\beta$.) rotundifolia.
1777 Verbascum bipinnatifidum.
1776 Viola altaica.
1795 Viola cucullata.
1851 Zamia integrifolia.
1838 Zamia media.


[^0]:    - Prestantissimus flos adonidum varietate constanti.

[^1]:    * Cyrtopodium Andersonii; labello angustius unguiculato, lobis lamine lateralibus divaricatis intermedio excavato longioribus.

[^2]:    * Ho x s a city, and ansos a flower. Flos wrbains. As this etymology is generally allowed, spelling the word with a y, Polyanthes, as has been sometimes done, is evidently erroneous. This spelling occurs in the Hortus Cliffortiames, but through inadvertence, as it was corrected by Linnows himself in the Species Plantarum ; where, as in all his other works, it is spelt Polianthes. Through similar inadvertence, the wrong spelling occurs in the last edition of Aiton's Hortus Kewensis, though it was right in the first.

