## Botanical Magazine; <br> account

 OR,
## FLOWER-GARDEN DISPLAYED:

## IN WHICH

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 Linn eves; their Places of Growth, and Times of Flowering;
Together with the most approved Methods of Culture.

## A WORK

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

## By JOHN SIMS, M. D.

Fellow of the Royal and Linnean Societies.

> VO L. LI.
> Being the Ninth of the New Series.

The Flowers, which grace their native beds, Awhile put forth their blushing heads, But, e'er 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.

Love.

## \$0nTon:

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# Melastoma granulosa. Commerson's Melastoma. 



Class and Order.
Decandria Monogynia.
Generic Character.
Cal. 5-fidus, campanulatus. Petala 5, calyci inserta. Bacca 5-locularis, calyce obvoluta.

Specific Character and Synonyms.
Melastoma granulosa; foliis ovato-lanceolatis integris quinquenerviis supra granulosis, paniculis terminalibus, caule alato. Lam. Encycl. 4. p.44. Persoon Syn. 1. p. 476. n. 98. Smith in Rees Cycl. in loco.
Melastoma granulosa; ramis marginato-tetragonis, foliis ovali-lanceolatis longius acuminatis supra appresse hispidis lucidis subtus pannoso-villosis, petalis obovatooblongis acumine brevi abrupto, filamentis superne longe laxeque lanatis. Don in Bot. Reg. 671.
Rhexia Fontainesii Humb. et Bompl. Rhexia, 93. t. 36.

Melastoma granulosa owes its specific name to the granulated appearance of the upper surface of the leaves, arising from a number of callous excrescences, terminated by a short adpressed bristle. These are more remarkable in the dried state from the shrinking of the parenchymatous substance of the leaf; but were sufficiently evident, in our plant, while growing.

Our drawing of this beautiful shrub, by far the most splendid of any species of Melastoma that has as yet flowered in this country, was taken at the fine collection at Bayeswater, belonging to the Count De Vandes. It grows to the height of ten feet. A plant of this height, covered
with its pendent flowering branches, must make a most splendid appearance.

Native of Brazil. Requires to be kept in the stove, where it flowers, in this country, in the month of August.

The outline figure represents one of the stamens detached, to show the hairy filament and curiously wrinkled anther.


# Oxylobium arborescens. Tall Oxylobium. 

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

Class and Order.
Decandria Monogynia.
Generic Character.
Cal. profunde 5 -fidus, subbilabiatus. Cor. papilionacea: Carina compressa, longitudine alarum æquantium vexillum explanatum. Stylus adscendens. Stigma simplex. Legumen polyspermum, ventricosum, ovatum, acutum. Brown.

## Specific Character and Synonym.

Oxylobium arborescens; foliis lineari-lanceolatis, bracteis apicis pedicellis persistentibus, corymbis confertis, leguminibus calyce vix longioribus. Br. in Hort. Kew. ed. alt. 3. p. 10. Bot. Reg. 392.

The leaves in this species are long, linear with recurved margins, smooth, but wrinkled on the upper side, and tomentose on the under; in our specimen they grew by fours, in whorls; but this is not constant, Mr. Brown's native specimens more frequently growing by threes, and sometimes being simply opposite. The flowers are much crowded together at the extremities of the branches, and also in whorls lower down the stem, which is villous and brown.

The specimen from which our drawing was taken was communicated by the Hon. and Rev. William Herbert. It was raised from seeds gathered near Port Macquarrie, and flowered at Spofforth in June last. Through the favour of Mr. Brown this specimen has been compared with his native ones, and the comparison leaves no doubt of its being really the Oxylobium arborescens of the Kew catalogue.

A hardy greenhouse shrub. Native of Van Diemen's island and New South Wales. It was first discovered by Robert Brown, Esq. Introduced into the Kew garden in 1805. Flowers from April to Midsummer.


# Cissus quinquefolia. Five-leaved Brazil Cissus. 

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

Class and Order.
Tetrandria Monogynia.

## Generic Character.

Bacca 1-sperma, cincta calyce. Corolla quadripartita.

## Specific Character and Synonym.

Cissus quinquefolia; foliis quinatis: foliolis utrinque attenuatis acuminatis serratis pedicellatis, ramis teretibus nodosis lævibus.
Cissus quinquefolia; foliis quinatis ellipticis serratis glabris, ramis lævibus. Soland. Mss.

Descr. Stem ligneous at the lower part: Branches numerous, rounded, fleshy, swelled at the joints. Leaves alternate, petioled, quinate: leaflets petioled, elliptic (or attenuated at both extremities) unequally and acutely serrate, smooth, thin, unequal, the middle one the largest, being often three inches long. Common petiole mostly an inch and half long; partial ones four times shorter than the leaflets. Peduncles opposed to the petioles, longer than these, naked, branched: branchlets terminating in small compounded cymes. Bractes minute, lanceolate, one under each branchlet of the cyme. Calyx small, urceolate, obtusely four-toothed. Petals four, small, concave.

The above description is chiefly translated from the late Dr. Solander's manuscripts in the Banksian library, where it is said to be a native of the isle of Raza, near the mouth of the river Rio Janeiro, Brazil.

This species must not be confounded with pentaphylla, a native of Japan, nor with quinata, a native of the Cape.

Cissus striata of the Flora Peruviana resembles our plant in many points, but in that the branches are striate, in this rounded and smooth; in that the leaflets are sessile, and serrate towards the point only, in this they are pedicled, entirely serrate and acuminate; not to mention that our plant is void of all pubescence in every part.

It was observed by Professor Thunberg in his Flora Japonica, that Cissus and Viris must be united into one genus, varying with four or five stamens, and some modern botanists have accordingly united them; but, in the hope that some characters will be found, especially when the fruit shall have been more attentively examined, sufficient to keep them distinct, we have preferred adhering to the old division, according to which our plant must be arranged with Cissus. It has no appearance of the petals being united at the points, forming a sort of Calyptra, a circumstance so common in the genus Vitis; but we fear not constant enough to form a generic character. Had the one-seeded berry in Cissus, and five-seeded in Viris been found to be constant, no idea of uniting the two could have existed.

Our drawing was made in August last, at the garden belonging to the Horticultural Society at Chiswick, where the plant was raised from seeds sent to the Society in 1821, by Alexander Caldcleugh, Esq. from Rio Janeiro. Being a native of a country situate within the tropics, it of course requires to be preserved in the stove.


# Biscutella Hispida．Hispid Buckler Mustard． 

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Tetradynamia Siliculosa．

## Generic Character．

Silicula didyma，segmentis evalvibus foliaceo－compressis monospermis．Radicula deseendens！Cotyledones accum－ bentes，inversx．Brown．

## Specific Character and Synonyms．

Biscutella hispida；calycibus acute bicalcaratis，siliculis glabris in disco punctis elevatis scabris apice in stylum non cocuntibus，caule hispido．De Cand．Syst．Veg． Nat．2．p．408．Ann．du Mus．18．p．295．t．7．f． 1.
Leucojum montanum flore pedato．Col．Ecphr．2．p． 59. t．61．Moris．Hist．2．§3．t．9．f．7．ex figura Columne pessime corrupta．
Jondraba alyssoides lutea angustifolia．Barrel．ic． $\boldsymbol{t}$ ． 230. T－spicata lutea major．Barrel．ic．t． 1219. Thlaspi biscutatum villosum flore calcari donato．Bauh． Prodr．p．49．sine icone．Bauh．Pin． 107.
Thlaspidium hirsutum，calyce floris auriculato．Tourn． Inst． 218.

Descr．The whole plant is hispid．Stem branched． Leaves sessile，half－stem embracing，oblong，sinuate－ dentate，hispid on both sides Calyx ereet ：leafets connivent，two outward ones spurred at the base． Spur one－third the length of the whole calyx，in our plant not nearly so sharp pointed as represented in $\mathrm{D}_{\mathrm{E}}$ Candolle＇s figure above quoted．Claws of the petals the
the length of the calyx: limb flat, yellow. The longer filaments dilated on one side. Style longer than the stamens, persistent. Stigma capitate. Silicule 2-lobed: lobes orbicular, marginate, not hairy but the disk roughened by crystalline elevated glands, not united with the style or only for a very short distance.

The above description was taken from the plant from which our drawing was made, and appears to agree in most respects with that of De Candolle ; and certainly with the synonyms he has quoted, which are however the same as those adopted by Linneus for his auriculata; nor does it seem to us that the characters made use of by this learned botanist to distinguish this species from auriculata are entirely satisfactory: in our specimens the spurs of the calyx were rather obtuse than acute, though longer and less rounded at the end than in the specimens of auriculata which we have examined. The principal difference between the two appears to us to be, the much greater hairiness of hispida, and greater dentation of the leaves, even of the superior ones, which in auriculata are generally quite entire, or nearly so.

Biscutella, as a genus, is much extended since Linneus, who, in his Species Plantarum, has only two species, increased in the last edition of the Systema Vegetabilium to six, and finally extended by $\mathrm{De}_{\mathrm{E}}$ Candolle to twenty-three. These are by him very usefully' separated into two sections. lst, Such as have a calyx with two spurs, the Jondraba of some authors. 2dly, Those in which the leaflets of the calyx are equal; which have been considered as a distinct genus, under the name of Thlaspidium.

A hardy annual. Native of the south of France and the north of Italy. Communicated by N. S. Hodson, Esq. from the botanic garden at Bury St. Edmunds; where, we are informed by the intelligent curator, it was introduced by Mr. Fischer, of the Gottingen garden.


## Erodium Gussonif. Gussone's Heron's-

## Bill.



> Class and Order.

Monadelphia Pentandria.

## Generic Character.

Cal. 5-phyllus. Cor. 5-petala. Nect. Squamula 5, cum filamentis alternantes et glandula mellifere basi stanainum insidentes. Arilli 5 , monospermi, aristati, ad basin receptaculi rostrati: aristis spiralibus introrsum barbatis.

## Specific Character and Synonyms.

Erodium Gussonii; pedunculis longissimis multifloris, foliis petiolatis, cordato-ovatis inciso-lobatis crenatis, utrinque villosis, caule ascendente hirto.
Erodium Gussonii; pedunculis multifloris longissimis, foliis cordatis lobatis obtusis dentatis glaucis, caule petiolisque hirtis, corollis calycibus aristatis duplo longioribus, petalis emarginatis, caule erecto. Tenoré Prodr. f. Neap. p. 39.
Erodium Gussonî. Flor. Neap. p. 97. t. 63. Tenoré. Hort. reg. Neap. p. 38.

Descr. Root perennial. Stem herbaceous, decumbent, rounded, hairy: hairs pointing downwards. Cauline leares opposite, unequal, one being generally larger than the other, petioled, cordate-ovate, obtuse, somewhat lobed, crenate, soft-villous on both sides. Peduncles axillary, alternate, three or four times longer than the hairy petiole. Umbel about ten-flowered. Involucre scariose, two-leaved, kidney-shaped. Pedicels horizontal. Calycine leaftets unequal, streaked, each of them furnished with a short arista or mucro, inserted a little below the apex. Petals rounded,
quite entire (Tevoré says emarginate), purple, veined, two of them stained with a deeper colour towards the base. Filaments five fertile, bearing dark purple two-celled anthers, opening internally, and five sterile, alternating with the fertile. Stigma five-rayed, persistent.

This species has considerable affinity with Erodium malacoides, of which very variable species it perhaps may be thought to be only a variety. It differs however in having larger flowers; much longer seed vessels; pedicels longer and more horizontal; leaves softer and more glaucous.

Communicated, in flower, in July last, by Philip Barker Webb, Esq. to whom we are entirely indebted for the above synonymy. This gentleman informs us, that the plant was sent to Professor Tenoré by his pupil, Don Giovanno Gussoné, from Avellino, in Sicily, where Mr. Werb gathered both specimens and seeds. Gussoné, a zealous, active, and accurate botanist, was at that time curator of the Duke of Calabria's garden at Palermo, and gave Mr. Webs reason to expect from him before long, a Flora Sicula, with descriptions of many new species.


Ipomeea speciosa. Broad-leaved lpomga.

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

> Class and Order.

Pentandria Monogynia.

## Generic Character.

Cal. 5 -partitus, nudus. Cor. campanulata v. infundibuliformis, 5-plicata. Germ. 2-3-loculare, loculis dispermis. Stylus, indivisus. Stigma, capitatum, 2-3-lobum. Caps. 2-3-locularis. Brown.

## Specific Character and Synonyms.

I. Caulis volubilis. Folia indivisa.

Iromea speciosa; foliis integerrimis cordatis acutis subtus argenteo-sericeis, pedunculis petiolo longioribus umbelliferis, bracteis ovato-lanceolatis, stigmate bilobo.
Ifomesa speciosa; foliis cordatis subtus tomentoso-sericeis, pedunculis petiolo longioribus umbelliferis. Persoon Syn. 1. p.183. Roem. et Sch. 4. p. 239. et 788.

Convolvulus speciosus; foliis cordatis subtus tomentososericeis, pedunculis petiolo longioribus umbelliferis, calycibus acutis, caule volubili. Hort. Kewo. ed. $\mathrm{I}^{\text {mach }} 1$. p. 211-ed.alt. 1. p. 381. Smith. Ic. pict. t. 17. Willd. Sp. Pl. 1. p. 859.
Convolvulus nervosus; foliis cordatis multinerviis subtus tomentoso-sericeis, pedunculis umbellatis multifloris. Lam. Encycl. Bot. 3. p. 562.
Convolvulus nervosus. Burm Ind. 48. i. 20. f. 1? Descriptio bene, figura autem pessime quadrat. Samudra-Stjogam. Hort. Malab. 11. p. 125. t. 61.

[^0]quite entire, and clothed on the underside with silvery silky adpressed hairs, which pubescence extends to the peduncles, calyx, and outside of the corolla.

This is one of the most beautiful species of this extensive genus; was introduced by the late Right Hon. Sir Joseph Banks, from the East Indies, in 1778, but has but rarely flowered in our hot-houses, probably from having been generally confined to too limited a space. Our specimens were communicated by Lady Harland, of Oswell Park, Ipswich; in whose stove it flowered in August, September, and October, 1822. Her ladyship observes, that "it is an evergreen, and being planted in the corner of a pit of mould, in the stove, its branches extend over a trellis about twenty-three feet, and, if allowed, would fill the house, being constantly growing all the year round, so that the gardener is obliged to be continually cutting it in . The stem, just above the ground, measures eight inches in circumference. It would never flower in a pot, as it requires space for its roots, as well as a great deal of head-room."
The figure in Smith's icones pictæ represents the limb of the corolla with pointed lobes, and the stigma bifid and subulate, probably from the lobes of the stigma having fallen off. The outline figure in our drawing gives a true representation of the stigma in our specimens.

We have formerly mentioned the inadequacy of the character drawn from the stigma to distinguish Convolvulus from Ifomea; we are inclined to put more confidence in the funnel-shaped corolla of the latter, as contrasted with the campanulate or bell-shaped corolla of the former.


## Protea grandiflora, a. latifolia. Broadleaved Great-flowered Protea.

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

Class and Order.
Tetrandria Monogynia.

## Generic Character.

Petala 4, quorum 3 superne cohærentia. Anthera apicibus concavis corollæ immerse. Nux supera, undique barbata, stylo persistente coronata.

Specific Character and Synonyms.
Protea grandiflora; foliis oblongis sessilibus ramisque glabris, involucro hemisphærico imberbi nudiusculo: corollis tomentosis: unguibus dorso glabriusculis, aristis brevissimis, stylo glabro. Brown in Lin. Soc. Trans. 10. p. 85. Hort. Kew. ed. alt. 1. p. 191. Roem. et Sch. Syst. Veg. 3. p. 348.
Protea grandiflora. Thunb. Diss. 51.-Prodr. 27.-Flor. Cap. 1. p. 504. Lam. Illustr. 1. n. 1210.-Poirét Encycl. Bot. 5. p. 640. Willd. Sp. Pl. 1. p. 530.
Leucadendron cynaroides, $\beta$. Sp. Pl. 136.
Lepidocarpodendron folio saligno lato. Boerh. Ind. alt. 2. p. 183. cum tab.

Scolymocephalos foliis oblongis. Weinm. Phyt. 4. p. 286. t. 891.
(ß.) angustifolia. Bot. Reg. 569.
Protes marginata; foliis lineari-lanceolatis nudis venosis: margine cartilagineo subpubescente, calyce hemisphærico glabro. Lam. Ill. Gen. 1. p. 235. n. 1225. Wagenboom, Incolis Batavis.

There are several species of Proted with much larger flowers than this, which has probably acquired the name
of grandiflora from comparing it with Protea Scolymus, a much smaller, but somewhat related species.

Mr. Brown remarks that it sometimes varies with linearoblong leaves, and is then hardly to be distinguished from Protea abyssinica, a species known to us only by the figure, and account of it in the appendix to Bruce's travels.

The Protea grandiflora is said to form a tree eight or ten feet high. Native of the Cape of Good Hope, where it was detected by Professor Thunberg. Introduced to the Kew garden, by Mr. Francis Masson, in 1787. Our drawing was taken several years ago, by the late Mr. Sydenham Edwards, at Knight's Exotic nursery in the King's Road, not long after its first establishment, from a plant out of the collection of George Hibbert, Esq. Flowers in May and June. Requires to be kept in an airy greenhouse.


Amethystea cerdlea. Blue Amethyst.
*******************
Class and Order.
Diandria Monogynia.

> Generic Character.

Cor. 5 -fida: lacinia infima patentiore. Stam. approximata. Calyx subcampanulatus. Stam. 4, gibba.

## Specific Name and Synonyms.

Amethystea cærulea. Sp. Pl. 30.-edit. Willd. 1. p. 121. Amœen. Acad. 1. p. 386. Hort. Kero ed. alt. 1. p. 48. Roem. et Sch. Syst. Veg. 1. p. 207. Vahl. Enum. 1. p. 212. Gmel. Sib. 3. p. 248.

Amethystea corymbosa. Pers. Syn. 1. p. 24.
Amethystina montana erecta, foliis exiguis digitatis trifidis serratis, flosculis cum coma é cæruleo janthinis. Amm. Ruth. n. 70. Hall in Act. Ups. 1742. p 51. f. 1.

Descr. Stem herbaceous, erect, from one to two feet high, square, smooth, purplish. Branches opposite, square, with the sides deeply channelled. Leaves opposite on channelled footstalks, three parted: leaflets ovate-lanceolate, coarsely serrate: serratures unequal, obtuse, some of them denticulate: Flowers blue, in leafy corymbs, terminal, and axillary, on peduncles longer than the petioles. Calyx subcampanulate; half five-cleft : segments acute, spreading, crrulescent. Corolla minute, ringent, blue: Stamens 2: filaments short : anthers white, didymous. Germens apparently united to near the apex. Style longer than stamens, blue: Stigma bifid: lower segment, revolute. When ripe, the germen separates into four gibbous seeds, rough on the convex side. The whole plant is very fragrant. Amethystea appears to us to be a connecting link between the natural orders of Labiate and Vitices.

Native of Siberia. A hardy annual, cultivated by $\mathbf{P}_{\text {Hilis }}$ Miller, in 1759; but is rarely met with in our gardens. Communicated by N. S. Hodson, Esq. from the botanic garden at Bury St. Edmunds, under whose zealous auspices, and the skill of his curator, this establishment continues to thrive.


## ( 2449 )

## Phlomis Herba venti. Rough-leaved Phlomis.

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

> Class and Order.

Didynamia Gymnospermia.

## Generic Character.

Cal. 5-gonus, 5-dentatus. Cor. galea incumbens, cari-nato-compressa, barbata, emarginata $v$. incisa; lab. inferius proportionatum: lobo medio majore. Stigmatis labium superius brevius.

## Specific Character and Synonyms.

Phlomis Herba-venti; foliis ovato-oblongis serratis subtus hirtis, calycinis dentibus lanceolato-subulatis erectis, bracteis subulatis cauleque hirtis. Willd. Sp. Pl. 3. p. 122. Hort. Kew. ed. alt. 3. p. 408. Poir. Encycl. Bot. 5. p. 275. De Cand. fl. fr. 3. p. 556.
Phlomis Herba-venti; involucris setaceis hispidis, foliis ovato-oblongis scabris, caule herbaceo. Sp. Pl. 819. Hort. Ups. 171.
Phlomis Herba-venti; foliis venoso-rugosis subtus tomentosis serratis; inferioribus cordato-ovatis petiolatis; floralibus lanceolatis subsessilibus; calycinis dentibus patentibus bracteisque subulatis mucronatis. Fl. Taur. Cauc. 2. p. 55.
Phlomis narbonensis hormini folio, flore purpurascente. Tournef. Inst. 178.
Marrubium nigrum longifolium. Bauh. Pin. 230. Ger. emend. 701.
Herba venti. Lob. ic. 532.
Herba venti monspeliensium. Bauh. Hist. 3. p. 854.

Mr. Robert Brown, in his invaluable Prodromus, besides adopting Persoon's name of Leonotis for one section
of Phlomis, containing P. nepetifolia, P. Leonurus, and P. Leonitis of Linneus, has separated another division of the genus, under the name of Leucas, by which he has reduced the genus Phlomis very considerably, limiting it to fruticosa, purpurea, italica, Nissolii, armenica, Lychnitis, laciniata, samia, crinita, biloba, pungens, Herba venti, alpina, and perhaps tuberosa, of the hitherto recorded species.

It is surprising that this handsome plant, which has been in our gardens occasionally from the time of Gerard, should never before have been figured in any modern botanical work; the wooden cut of Lobel and its copies being the only representations existent.

When exposed to wind and rain, the leaves are apt to lose their softer parts, leaving merely a network of fibres, pervious to the wind, whence the old name of Herba-venti.

A hardy herbaceous perennial. Native of the South of Europe. Flowers from July to September. Communicated by Mr. Anderson, from the Chelsea Garden.


# Ononis hispanica. Small-leaved Rest- 

 harrow.
# ***************** 

> Class and Order.

Diadelphia Decandria.

## Generic Character.

Cal. 5-partitus: laciniis linearibus. Vexillum striatum. Legumen turgidum, sessile. Filam. connata absque fissura.

Specific Character and Synonyms.
Ononis hispanica; pedunculis aristatis subunifloris, foliis omnibus ternatis canaliculatis recurvatis totaliter serratis. Lin. Suppl. p. 324. Willd. Sp. Pl. 3. p. 1008. Onosis oligophylla. Tenoré.
Anonis non spinosa villosa et viscosa hispanica. Barrel. ic. 775.
Ononis crispa, $\beta$. Lam. Encycl. 1. p 510.

Descr. A low thickly branched shrub: branches short, somewhat viscid. Stipules lanceolate, patent, recurved, sheathing at the base. Leaves ternate, reflexed: petiole channelled: leaflets round-oval, margin entirely serrate, except a little at the base, fleshy, ciliate, with glandular hairs on the under side; terminal one somewhat largest and petioled. Peduncles solitary, axillary, one-flowered, twice the length of the leaf, jointed towards the apex, and divided; the upper portion is what is termed the arista in this genus, but seems to be only an abortive pedicel. Calyx five-cleft; segments subulate, patent, viscous, with hairy glands. Vexillum ovate, acute, yellow, streaked with purple; ala connivent. Carina very much curved.

Filaments all connected. Germen oval, pubescent, with adpressed hairs. Style ascendent. Stigma pointed.

Ononis hispanica, crispa, and ramosissima appear to be nearly related species; the former is considered by Lamarce as a variety of the second; but if the character derived from the peduncle is of any value, they must be distinct species; hispanica being described as having aristated peduncles, while in crispa these are said to be unarmed.

Tenoré considered it as a distinct species, and published it under the name of oligophylla, but we see no reason to separate it from hispanica; we are certain, however, of its being Tenoré's plant, as it was raised by Mr. Philif Barker Webb, from seeds received from that botanist. Native of Spain and Italy. Requires to be protected from frost. Flowers from May to September.


# Coreopsis lanceolata. Spear-leaved 

 Coreopsis.*******************
Class and Order.
Syngenesia Polygamia Frustranea.

## Generic Character.

Receptaculum paleaceum. Sem. compressa, emarginata. Pappus bicornis. Cal. duplex, uterque polyphyllus.

## Specific Character and Synonyms.

Coreopsis lanceolata; foliis lanceolatis glabris integerrimis, pedunculis unifloris longissimis nudis.
Coreopsis lanceolata; foliis lanceolatis integerrimis ciliatis. Sp. Pl. 1283. Willd. Sp. Pl. 3. p. 22566. Hort. Kew. ed. alt. 5. p. 135. Lam. Encycl. 2. p. 108. Meerb. ic. 19 ?
Coreopsis lanceolata; brevicaulis; foliis cuneato-lanceolatis linearibusve integerrimis; pedunculis longissimis simplicibus nudis, seminibus orbiculatis convexo-concavis scabris manifestius alatis apice bidentatis emarginatis, a. glabella. Michaux Flor. Bor. Amer. 2. p. 137.

Coreopsis lanceolata; foliis sessilibus lanceolato-linearibus integerrimis ciliatis, pedunculis elongatis nudis, seminibus orbiculatis scabris alatis apice bidentatis emarginatis. Pursh. Fl. Am. Sept. 2. p. 567.
Bidens succisæ folio, radio amplo laciniato. Dill. Elth. 55 t. 48. $f .56$.

Bidens caroliniana, florum radiis latissimis insigniter dentatis, semine alato per maturitatem convoluto. Mart. Cent. 26. $t .26$.

There can be little doubt that our plant is the same species as figured by Dillenius, and by Martyn in his Centuria,

Centuria, both of which are referred to by Linneus as synonyms of his Coreopsis lanceolata; or if any hesitation can arise, it must be from the form of the seed, the magnified outline of which, in our figure, is represented as oblong; but it is not improbable that the form of the seed may vary in different parts of the disk.

The only species with which it can be confounded is the auriculata; if indeed lanceolata and auriculata are not mere varieties of the same species, which seems to us highly probable, and was perhaps the opinion of the accurate Nuttall, as he has omitted the latter in his enumeration of the species. The ciliæ on the leaves vary very much in different specimens, and in our plant were not visible to the naked eye.

A tolerably hardy biennial. Native of Carolina. Flowers from July to September. Communicated by Mr. Joseph Knight, of the Exotic nursery, in the King's Road, Chelsea.


## Ocimum canum．Hoary Basil．

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Class and Order．
Didynamia Gymnospermia．

## Generic Character．

Cal．lab．superiore orbiculato；inferiore 4 －fido．Cor． resupinatæ alterum labium 4 －fidum ：alterum indivisum． Filamenta exteriora basi processum emittentia．

## Specific Character．

Ocimum stamineum ；foliis oblongo－ellipticis serratis canis longe petiolatis，spicis verticillatis，verticillis subsex－ floris，staminibus corolla bis longioribus．

There are so many species of Ocimum which are but indifferently defined，that it is almost impossible to decide， whether this may not have been already described；but， after a careful examination，we cannot find that it altoge－ ther agrees with the description of any recorded species， and are therefore constrained to consider it as new．
We are informed that it is sweet scented；and that it was raised from seeds sent from China to the directors of the Horticultural Society，in whose garden at Chiswick，our drawing was taken last July．
It seems to be nearest related to Ocimum sanctum and tenuiflorum，both East Indian species，and we possess a specimen from thence，given us by the late Dr．Hexne，so similar，that we are unable to distinguish it from our plant． This had the name of Ocıмим album appended to it；but is nearly as unlike the album of Linnsus as any two species in the whole genus．We regret the not having had an opportunity of examining the living plant．It appears to be annual，and requires to be raised in the stove or hot－bed．


# Jonidium Ipecacuanha，$\beta$ ．White Ipecacuanha． 

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Class and Order．
Pentandria Monogynia．

## Generic Character．

Cal．5－phyllus，foliolis basi vix productis eidemque æqua－ libus．Cor．subbilabiata，calcare nullo．Nectarium glan－ dulæ binæ ad basin germinis．Anthere apice membra－ naceæ plerisque distinctæ．Stigma simplex uncinatum， Caps．trigona，trivalvis；valvulis medio seminiferis．Vent． Jard．de Malm．1．p． 27.

## Specific Character and Synonyms．

Jonidium＊Ipecacuanha；foliis ovato－oblongis pedun－ culis axillaribus solitariis cernuis，petalo inferiore maximo emarginato．
Jonidium Ipecacuanha．Roem．et Sch．Syst．Veg．5．p．398， Voca Ipecacuanha；foliis ovalibus margine subtusque pilosis．Lin．Mant．484．Suppl．Pl．397．Willd． 1. p．1172．Poir．Encycl．Bot．8．p． 645.
（a．）glabrum．
Jowidum Ipecacuanha；foliis ovatis serratis glabris，petalo inferiore plano．Vent．Malm．1．p． 28.
Pombalia Ipecacuanha．Vandelli fasc．p．7．t． 1.
（ß．）pubescens．
Pombalia foliis ovato－lanceolatis crenatis cauleque pubes－ centibus．Vandelli．
VIOLA grandiflora；veronicæ folio villosa．Barrere．Fr． equinoct．p． 113.
Joxidium Calceolaria．Roem．et Sch．5．p．394？Vent， l．c．？

Viola

[^1]Viola Calceolaria. Lin. Sp. Pl. 1327 ? Willd. 1. p. 1172? Viola Itoubou. Aubl. Guiàn. 2. p. 808. t. 318?

The genus Viola, as formerly constituted, contains an inconvenient number of species, on which account especially, we have followed Ventenat, in adopting his genus Jonidium; for which, by-the-by, the name of Pombala, given anteriorly by Vandeli, ought to have been preserved; but, as that of Jonidium is used in the new Systema Vegetabilium now publishing, and generally, by the French botanists, we leave it undisturbed.

The root of this plant is supposed to be the white Ipecacuanha formerly kept in the shops; but the only I pecacuanha now in use is certainly the product of a very different plant, also a native of the same country. There is no doubt, however, but that the present species is frequently used in Brazil, for the cure of several disorders, especially the dysentery.

Our plant was raised at the Botanic Garden, Chelsea, from Brazil seeds, sent us by Mr. Francis Sello, a very industrious and enthusiastic botanist, who has devoted several years to the collecting plants, and other subjects of Natural History, in that extensive empire. M. Auguste de Saint Hilaire, in his observations on a voyage in the interior of Brazil, published in the ninth volume of the Memoires du Museum d'Histoire Naturelle, page 329, asserts, that the Viola Calceolaria and Ipecacuanha of Linneus are the same species; and that the Itoubou of Aublém differs in nothing from the Brazil plant, except in its greater hairiness; a character, which, he observes, varies extremely in different individuals. The same author supposes that he had discovered another species, which he calls Jonidium indecorum, growing with the Ipecacuanha, and differing in nothing from it, but in having a corolla shorter by half than the calyx, and three of the filaments sterile. It is probable, however, that this was a mere variety from abortion, as many of the violets are known to produce apetalous flowers later in the season, which bear seeds, even more readily than the perfect blossoms; a circumstance, which, Mr. Anderson observed to take place in the very individual from which our drawing was taken.

We believe this plant has not before been introduced into any of our gardens. It flowered at Chelsea, in July in the present year.


## Desmanthus virgatus. Long-twigged Desmanthus.

*** $* * * * * * * * * * * * * * * * * * * *$
Class and Order.
Polygamia Monecia.

## Generic Character.

Hermaphrod. Cal. 5-dentatus. Cor. 5-petala, s. 5-partita. Stam. 10. Pist. 1. Legumen bivalve.
Neut. Cal. 5 -dentatus. Cor. 0 . vel 5 -petala vel 5 -partita. Stam. 10, sterilia, lanceolato-dilatata.

## Specific Character and Synonyms.

Desmanthus virgatus; inermis, foliis bipinnatis: partialibus quadrijugis: propriis duodecim-jugis, spicis paucifloris capitatis decandris, leguminibus linearibus, caule erecto angulato. Willd. Sp. Pl. 4. p. 1047. Hort. Kezo. ed. alt. 5. p. 458.
Mrosavirgata; inermis, foliis bipinnatis, spicis decandris; inferioribus castratis maximis, caule erecto angulato. Sp. Pl. 1502. Jacq. Hort. Vindob. 1. p. 34. t. 80.
Mmosa orientalis non spinosa, rarioribus ramis, floribus spicatis. Pluk. Alm. 252. t. 307. f. 4?

A delicate upright shrub, distinguished by its long linear pods, with which the figure of Reeede, Hort. Malab. v. 9 . t. 20. referred to by Linneus, does not in the least agree, we have therefore omitted that synonym altogether. Nor are We without doubts respecting the one from Plukenet, that figure representing the branches divaricate, and peduncles longer than the leaves. Jacquin's figure and description above referred to accords entirely with our plant, which Was communicated by John Walker, Esq. in August last, from his collection at Arno's grove, Southgate.
Native of the West Indies, and also of the East Indies, if it be the same with Linneus's plant.


# Momordica Charantia. Tuberculated Momordica. 

## $\boldsymbol{H}^{*} * * * * * * * * * * * * * * * * * * *$

## Class and Order.

Monecia Monadelphia.

## Generic Character.

Masc. Cal. 5-fidus. Cor. 5-partita. Filam 3.
Fem. Cal. 5-fidus. Cor. 5-partita. Stylus 3 -fidus. Pepo elastice dissiliens.

## Specific Character and Synonyms.

Momordica Charantia; pomis oblongis acuminatis angulatis tuberculatis, bractea cordata integerrima infra medium pedunculi, foliis septemloho-palmatis dentatis subhirsutis. Willd. Sp. Pl.4. p. 602. Hort. Kezo. ed. alt. 5. p. 342.
Momordica Charantia; pomis angulatis tuberculatis, foliis villosis longitudinaliter palmatis. Sp. Pl. 1432. Hort. Cliff. 451.
Balsamina cucumerina iudica, fructu majore flavescente. Comm. Hort. 1. p. 103. t. 54.
Amara indica. Rumph. Amb. 5. p. 410. t. 151.
Cucumis Zeylanicus. Herm. Lugd. p. 204.
Pandipavel. Hort. Malab. 8. p. 17. t. 9.

We are inclined to consider the Momordica muricata of Willdenow to be merely a variety of our present species; for in the natural order of Cucurbitacees but little confidence can be placed in the size, or even form of the fruit; witness the numerous varieties of Cucumbers, Melons, and Gourds.
The figures of Commelin and Rhede, above referred to, agree very well with our specimen, but that of John MilLER in his Illustrations of Botany, represents the fruit as much
much smaller and less tuberculated; but the bracte on the peduncle, with quite entire margins, proves it to belong to Momordica Charantia, and serves to distinguish the species from Momordica Balsamina, in which the bracte is dentate, and placed nearer to the fruit.

A tender annual. Native of the East Indies, where it is cultivated to cover fences, and to form a shade over arbours. The bitter leaves are used instead of Hops to check fermentation in the beer of the Dutch inhabitants, which is made from sugar, not from malt.

Flowers in June and July. Requires to be raised in the stove or hot-bed. Communicated by John Warker, Esq. of Arno's Grove.


## Cyrilla racemiflora. Carolina Cyrilla.


Class and Order.
Pentandria Monogynia.

## Generic Character.

Cal. parvus, subturbinatus, 5 -partitus. Petala 5, stellatim patentia. Stam. receptaculo inserta. Stylus brevis: stigmata 2, raro 3. Caps. bilocularis, non dehiscens: loculis 1 -spermis. Sem. e summo receptaculo axillari appensa.

Specific Character and Synonyms.
Cyrila racemiflora; foliis cuneato-lanceolatis acutis subtus subnervosis, racemis gracilibus elongatis, petalis pedicello longioribus.
Crilla racemiflora. L. Mant. 50. Syst. Veg. ed. 14. p. 241. Jacq. ic. rar. t. 47. Collect. 1. p. 162. Lam. Encycl. 2. p. 245.
Crrilla caroliniana; foliis cuneato-lanceolatis acutis membranaceis nervillosis, spicis gracilibus, petalis pedicello longioribus. Michaux Fl. Bor. Am. 1. p. 158." Per: soon Syn. 1. p. 175. Pursh Fl. Am. Sept. 1. p. 170. Nutt. Amer. 1. p. 144. Poir. Encycl suppl. 2. p. 436. Roem. et Sch. Syst. Veg. 5. p. 408.
ITeA Cyrilla; foliis lanceolatis integerrimis. L'Herit. Stirp. 1. p. 137. t. 66. Swartz Prodr. 50.-Flor. Ind. Occid. 1. p. 506.-Obs. p. 94.t.4. Willd. Sp. Pl. 1. p. 1146. Hort. Kerv. ed. alt. 2. p. 37.

Descr. An upright shrub, from four to six feet high. ( $\mathrm{SW}_{\text {artz }}$ says, that in the mountains of Jamaica, it grows occasionally into a tree twenty feet high). Leaves obovatelanceolate, smooth, quite entire. Racemes of white flowers, growing, sometimes singly, sometimes opposite, but more generally collected, a number together, at the cnd of the
last year's shoot, and bencath that of the present year, four inches long, slender: pedicels a line in length, very close together, with a subulate bracte of the same length, at the base of each. Calyx very small, 5 -parted : segments concave. Petals twice the length of the calyx, ovate, acute, spreading, marcesent. Stamens 5 : filaments inserted into the receptacle below the germen, somewhat shorter than the petals. Anthers oval, purple, didymous. Germen superior, ovate, two-celled: ocula, apparently two in each cell. Slyle short, divided half way into two, fleshy, divaricate, obtuse stigmas. Ripe capsule not seen.

Great confusion has taken place in consequence of $\mathrm{L}^{\prime} \mathrm{Hr}^{2}$ ritier having united the Cyrilla of Linnteus to Itea, in which he has been followed by Swartz, Willdenow, Lamarce, and the authors of both editions of the Hortus Kewensis. But since more attention has been paid to affinities, it has been found, that these genera cannot even belong to the same natural order, at least as these are at present defined; and in consequence the most modern authors have again restored the genus Crrilla to its original destination. In doing this, however, they have unnecessarily, and, as we think, improperly, changed the specific name from racemiflora to caroliniana.

The difference between these genera, consists in the different insertion of the stamens, the number and attachment of the seeds, the dehiscence of the capsule of Itea, and the division of the style in Crrilla.

A pretty shrub. Native of Carolina. Requires the protection of a greenhouse. Introduced in 1765 by Mr. Jons Cree. Flowers in July and August. Communicated by Messis. Loddiges and Sons.


## ( 2457 )

Echinops strictus. Upright GlobeThistle.
******************
Class and Order.
Syngenesia; Polygamia Segregata.

## Generic Charatter.

Calyces uniflori. Corollula tubulosæ hermaphroditæ. Receptaculum setosum. Pappus obsoletus.

## Specific Character.

Echinops strictus ; caule simplici stricto unifloro, foliis ero-so-pinnatifidis spinuloso-dentatis supra glabris subtus tomentosis.

Descr. Stem erect, simple, three or four feet high, furrowed, somewhat woolly. Leaves alternate, half-stem embracing, unevenly pinnatifid, toothed; teeth terminated with a small spine. Peduncle terminal, elongated, rounded, bearing a large globular head of florets without any involucre. Calyx (proper) imbricate: leaflets lanceolate with a bristly point, the inner ones largest. Florets tubular: tube white: limb linear, revolute, bright blue. Anthers blue, soon turning brown: stigma deeper blue, bifid, revolute. Germen oblong, hairy, white. Pappus none. Receptacle bristly; but the bristles adhere to the bottom of the calyxes, and when these are pulled off the receptacle is left naked and honey-combed.
This appears to be an undescribed species. Native of Russia. Communicated by Aylmer Bourke Lambert, Esq. in September 1823, and was raised at Boyton, from seeds received from Dr. Fischer, late of Gorenki, but now Director of the Imperial botanic garden at St. Petersburgh.


# Nicandra physaloides. Physalis-like <br> Nicandra. 

****************
Class and Order.
Pentandria Monogynia.

## Generic Character.

Cal. 5-partitus, 5 -angulatus, inflatus. Filamenta basi fornicata, germen tegentia. Bacca ex succa, 3-5-locularis.

## Specific Character and Synonyms.

Nicandra physaloides; foliis ovato-oblongis eroso-sinuatis, petiolis decurrentibus.
Nicandra physaloides. Gertn. sem. 2. p. 237. t. 131. f. 2. Persoon Syn. 1. p. 219. Willd. Enum. p.231. Pursh. Fl. Am. Sept. 1. p. 158. Nutt. Gen. Am. 1. p. 130. Roem. et Sch. Syst. Veg. 4. p. 681.
Atropa physaloides; caule herbaceo, foliis sinuato-angulatis, calycibus clausis acutangulis. Sp. Pl. 260. Willd. 1. p. 1017. Jacq. Obs. 4. p. 12. t. 98. Hort. Kew. ed. alt. 1. p. 392.
Physalis daturafolia; foliis ovatis acutis sinuato-angulatis, calycibus fructescentibus acutangulis. Lam. Encycl. 2. p. 102.

Calydermos erosus; caule pentagono, foliis ovatis erosoangulatis, pedunculis unifloris erectis, fructibus cernuis. Flor. Peruv. 2. p. 44.
Alisekengi amplo flore violaceo. Feuill. Peruv. 2. p. 724. $t .16$.

Descr. Root annual. Stem branched, upright, two or three feet high, sometimes considerably more elevated: branches angular. Leaves oblong-oval, unevenly sinuate, very like those of the stramonium or thorn-apple: petioles
decurrent. Peduncles opposed to the leaves, one-flowered, at first erect, afterwards cernuous. Calyx five-cleft: segments ovate, acute, sagittate at the base, sides compressed into five acute angles, persistent and becoming more inflated. Corolla bell-shaped: limb spreading, five-cleft: segments rounded. Stamens shorter by half than the corolla: Filaments hairy, broad and arched at the base, covering the germen, as in the Campanula. Germen globular in the specimens we have examined, always fivecelled. Capsule or dry berry globular, five-celled: Receptacles central, dilated outwards. Seeds many, oval, smooth.

The name of Nicandra was first given to this genus by Adanson, and adopted by Jussieu, Persoon, and others. Schreber applied the same name to the Potalia of Aublet which may occasion some confusion; but it will be better to retain Aublet's original name for his plant than to adopt a new name for this, as Ruez and Pavon have done. It ought, undoubtedly, to be separated from Atropa.

Native of Peru and Chili; grows very well in the open border ; but is best raised in a hot-bed and treated like other tenderer annuals; it may, however, be sown in the spring in the open ground, but will not flower so early Communicated by John Walker, Esq.


## ( 2459 )

## Ammobium alatum. Winged-stalked Амmobium.


Class and Order.
Syngenesia Polygamia equalis.
Sect. Discoidei.
Generic Character.
Receptaculum paleis distinctis. Pappus: margo dentatus. Anthere basi bisetæ. Involucrum imbricatum, coloratum, radians.

Herba erecta, tomentosa. Folia integerrima: radicalia lanceolata, basi attenuata: caulina minora, decurrentia. Caulis alatus, ramis unifloris. Involucra hemispherica laminis albis, intimis patulis radium abbreviatum efformantibus. Corollulæ uniformes, flava. Stigmata truncatodilatata. Semina ancipitia. Receptaculum convexum. Brown.

Specific Name.
Ampobium alatum. Br. Mss.

Descr. Root supposed to be perennial. Herb upright, tomentose. Leaves quite entire: radical ones lanceolate, narrowed towards the base: cauline ones smaller, decurrent. Stem winged. Branches one-flowered. Involucre (or common calyx) hemispherical, consisting of white scales; the inner one spreading and forming a short ray. Florets uniform, yellow. Stigmas dilated and truncate. Seeds flat, with two sharp edges. Receptacle convex.
An undescribed genus, belonging to the same tribe with

Gnaphalium, discovered by Robert Brown, Esq. in 1804, growing plentifully near the shores of Port Hunter (or the Coal River), in New South Wales, and named by him Aммовium, from its growing in sand. Our specimens were communicated by Edward Forster, Esq. in August 1823, from his garden at Hale-End house, where it flourished in the open ground. It was raised from seeds received from New South Wales, without name, but marked native of Bathurst Plains.


## Plectrantius ternatus. Ternate-leaved Plectranthus, or Omimé.

#  

Class and Order.
Didynamia Gymnospermia.

Generic Character.

Cal. bilabiatus, labio inferiore diviso striatus; fructifer basi subtus gibbosus. Corollce lab. super trifidum, lacinia media biloba: inferius longius, integrum (plerumque concavum). Stamina declinata, filamentis edentulis (nunc basi connatis): antheris unilocularibus, imberbibus. Brows.

> Specific Charaeter.

Plectranthus ternatus; caule sexangulato, foliis ternatis petiolatis ovatis crenatis rugosis, radicibus tuberosis, spicis terminalibus verticillatis.

Descr. Root fibrous, bearing tubers in the same manner as the potatoe. Stem and Branches decumbent till about to flower, when the stem becomes erect, six-angled, the sides deeply grooved. Leaves growing by threes, crowded together, ovate, crenate, rugose, on long chamelled petioles. Flowers in terminal verticillate spikes: whorls many-flowered. Bractes ovate, small, falling off before the flower expands. Calyx pubescent, appearing sprinkled with golden-coloured glands when seen through a lens, bilabiate: upper lip large, quite entire: lower lip 4 -toothed, Corolla bilabiate: lozver lip canoe-shaped, compressed, Stamens 4, didynamous: filaments withont teeth, connate at the base. Germens 4, seated on a fleshy receptacle : Style ascendent: Stigma bifid.

For this very rare and seldom flowering plant, we are indebted to our friend Robert Barchay, Esq. in whose stove at Bury Hill, it flowered for the first time, in November

Vember 1823. We are informed by this gentleman, that be received the tubers in November 1820, from his friend Charles Telfair, Esq. of the Mauritius, where the plant has been introduced from Madagascar, and is there cultivated under the name of Оміме́, for the sake of its tubers, which are esteemed as a choice and delicate esculent. The tubers arrived in good condition and kept sound some months, and were freely communicated by Mr. Barclay to several collections; but we do not find that any other person has succeeded in bringing it into flower, which we understand but rarely takes place, even at the Mauritius.

Mr. Barclay has grown this plant in the border, under a frame, and in the stove, but has not found, that in any case, it has with him produced any tubers. Yet his plants were raised from the imported tubers.

Dr. Roxburgh has described an East Indian species, undet the name of Ocimum tuberosum, which has a near affinity with this in the form of its leaves as well as its tuberous roots, and a specimen of it is preserved in the Banksian herbarium, now the property of Robert Brown, Esq.

## The outline Figures represent :

1. The Corolla laid open to show the insertion of the stamen.
2. The Pistil.
3. The Calyx. All magnified.
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ERRATA IN LAST NUMBER.
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2452. 2453. 9, for 'stamineum' read 'canum.'
1. p. 2, 1. 19, for 'Francis' read 'Frederick.'


# Rhipsalis salicornoides. Glasswortlike Rhipsalis. 

## *** * * 米 $* * * * * * * * * * * *$

> Class and Order.

Icosandria Monogynia.

## Generic Character.

Cal. superus, 3-4-partitus, brevissimus. Cor. polypetala. Stam. plurima. Stigma partitum. Bacca infera, unilocularis, pellucida. Semina duodena, centralia. Gaertn.

## Specific Character and Synonym.

Rhipsalis salicornoides; caule prolifero articulato, articulis teretibus clavatis, floribus terminalibus subsolitariis. Rhipsalis salicornoides; articulato-prolifer; erectus; valde ramosus ; ramis erecto-patulis teretibus subangulatisque ; fasciculis spinularum juniorum capillacearum minutis albicantibus, nudo oculo inconspicuis. Hazoorth Suppl. Pl. Succul. p. 83.

Descr. Plant trailing, proliferous; branches very nurmerous, spreading, jointed: joints club-shaped, rounded, tubercled, smooth, scarred, glaucous, older stems grey. Flowers terminal, solitary, or in pairs. Corolla superior, yellow; petals numerous, thin, beautifully reticulated, concave, connivent, never opening wide. Style long; stigma included, large, cleft.
The plant when young has a very different habit. It is then erect, the joints shorter, and more turgid at their lower portions, so as to be nearly oval instead of clubshaped; their tubercles are more numerous, and each is crowned with a little tuft of soft, white, diverging hairs. This appearance is not observed on plants whose stems sionally near the ground, but scars are seen upon them as
if the tufts of hairs had fallen off. This habit is shewn in a young specimen at the bottom of the plate.

The specimen drawn was raised from a cutting obtained from Mr. Shepherd, of the botanic garden, Liverpool, in 1818. It has been kept in the stove, and flowered for the first time, and very freely, in the spring of 1892.

For the above description and the drawing, by Mr . Syme, we are indebted to Dr. Graham, professor of botany, in the University of Edinburgh.


## Malpighia lucida. Wedge-leaved Bar* badoes Cherry.

#  

## Class and Order.

Decandria Trigynia.

## Generic Character.

Cal. 5-phyllus, basi extus poris binis melliferis. Petala ${ }^{5}$, subrotunda, unguiculata. Filamenta basi cohærentia (munc libera). Drupa 1-locularis, tripyrena: nucibus monospermis.

## Specific Character and Synonyms.

Malpighia lucida; foliis obovatis cuneiformibus integerrimis aveniis nitidis, racemo terminali. Szoartz Fl. Ind. Occid. 2. p. 852. Prodr. p. 74. Willd. Sp. Pl. 2. 736. Persoon Syn. 1. p. 506. Hort. Kew. ed. alt. 3. p. 105.

Descr. Calyx five-leaved, at first erect, afterwards recurved at the apex, persisting, surrounded by ten gibbous, reddish-brown, obovate glands, disposed like a crown around the top of the pedicel, indistinctly divisible into pairs, which correspond with the petals, and are alternate with the leaflets of the calyx. Petals five, lamine reniform, concave, perfectly smooth, but slightly irregular at the edges : Clazos linear, long, recurved, colour in the bud learly white, but after expansion gradually passing into a deep reddish orange, of singular and inimitable beauty. This gradation of tint from the apex to the base of the raceme, adds greatly to the beauty of the plant. Stamens Ien : Filaments erect, united one half of their length: men conical, sunk within the calycine glands: Styles three, filiform, sunk within the calycine glands: Styles
Raceines Racemes terminal: three, unequal, ovate-linceolate Bractes
at the foot of each pedicel. Leaves obovate-cuneiform, quite entire, sub-glaucous, firm, veinless; it belougs to Jussiev's natural order of Malpighiæ.

Native of the East Indies. Cultivated in the stove. It is uncertain when the plant was introduced into the Edinburgh Botanic garden ; but the original specimen has flowered very freely in the stove for several years, and is now a shrub of more than six feet high. The species is very ornamental, and deserves to be much more generally cultivated. It has never produced fruit, but is readily propagated by cuttings. The drawing was taken by Mr. Syme, in June 1821.

Dr. Graham, professor of botany in the University of Edinburgh, to whom we are indebted for the above account and the drawing, would insert this genus in Monadelphia Decandria; but as Persoon remarks that the filaments are not always connected, we think it best to retain it in the class where it has been inserted by all the systematic writers.


# Crinum Submersum. Lake Crinum. 

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Class and Order.
Hexandria Monogynia.
Generic Character.-Vide No. 2292.
Addendum. Scapus solidus, demum flaccidus.
Specific Character.
Sect. II. Semipatentes. Subd. I. Ornatæ.
Crinum submersum; bulbo oblongo-ovato rubescente; foliis loratis canaliculatis acutis margine scabro; scapo 8-[pluri ?]-floro sesquipedali compresso, viridi ; spathâ 4 -unciali, bracteis gracilibus; germine sessili oblongo-ovali viridi ; loculis 7 -spermis; tubo 5 -unciali viridescente ; laciniis 4 -uncialibus albis intùs et extùs rubro-striatis apice acuto rubro, ovalibus, basi canaliculato, temerè̀ $\frac{13}{18}$ vel $\frac{15}{15}$ latis, tribus externis uncatis; genitalibus assurgenter curvatis ; stylo rubro limbo breviore filamentis longiore; stigmate minuto trilobo albo; filamentis basi sub-gibbosâ; antheris pallidè cinerascentibus, polline luteo ; floribus fragrantibus ante expansionem nutantibus. W. $\boldsymbol{H}$.

Descr. Bulb oblong-ovate, purplish red, three inches diameter; leaves yellowish green, sharp-pointed, channelled, with a rough edge ; scape eight or more flowered, eighteen inches high, a little flattened, green, stained with reddish near the base ; spathe near four inches long, withering early; bractes slender ; germen sessile, oblong-oval, green; cells seven-seeded; tube five inches long, greenish yellow; lacinic four inches long, white, striped with pink, sharppointed, tipped with red, oval, channelled near the base, the three outer hooked; genitals curved upwards; style red, a little shorter than the limb, longer than the filaments; stigma minute, three-lobed, white; filaments a little knobbed at their insertion; anthers before their inversion pale ash-colour, mottled with straw-colour ; pollen deep yellow; fozvers nodding before expansion, fragrant.

This is a most interesting plant, whether it be an intermediate link connccting two species, which are widely separated from each other in the two sections of its genus, so closely, that it is difficult to say unto which it has most affinity, or a hybrid generated between them in the swamps of America. The bulb was discovered by George Hopkins, ill the vicinity of Rio Janeiro, growing in water in a spot, which, after an unusual course of dry weather, was still inumdated, in company with several plants of a smaller white Crinvm, which appears likely to prove a variety approaching to the Corantyne variety, of $\mathbf{C}$. crubescens. The bulb was received at Spofforth, in August, having three dead scapes adhering to it, and it flowered about six weeks after, having been planted in drift sand and well watered; being in every point of buib, leaf, and infloresence, intermediate between C. scabrum and erubescens. The bulb and foliage greatly resemble the artificial mules at Spofforth, between those two species, of which the flowering, which has not yet taken place, will now be expected with increased curiosity. The flowers of submersum have the fine nocturnal fragrance of erubescens, but less powerfully. The filaments are knobbed, and the connecting membrane visible between them as in erubescens, but less conspicuously. The upper filament detaches itself as in that species, but with less regularity, sometimes taking one of the laterals with it. The anthers before their inversion are of a paler ash colour than those of erubescens, mottled with the straw colour of scabrum. The petals have the channelled base and sharp-pointed long-oval form which belongs to the Crina of the first section, with the lesser expansion and the colouring which belongs to the second. The number of ovules is also intermediate between scabrum and erubescens. The ovules and pollen appeared perfect. Have we in this instance discovered a native mule in the wilderness? Have we lit upon the first origin of a new species? or, have we in this bulb an original link in the creation between two piants which have been placed by some writers in different genera? Whichever be the case, no unprejudiced botanist can now compare the three plants and not consider them of one genus. C. scabrum is known to grow on the woody hills near Rio, and its pollen may have been brought down to the lake on the plumage of a humming bird, and produced accidentally the same result in the wilds of Brazil, which art has effected in our stoves. W. $\boldsymbol{H}$.
a. Represents the whole plant in miniature. b. The ovules in one cell. $c$. the half-gibbous insertion of the filaments.


# Habranthus gracilifolius. Slenderleaved Habranthus. 

## 

> Class and Order.
> Hexandria Monogynia.

## Generic Character.

Spatha integra apice bifido. Scapus 1-2 [pluri?]-florus; pedunculatus, cavus. Germen a pedunculo declinatum, oblongo-subturbinatum, subtrigonum, triloculare. Corolla campanulata. Tubus brevis, campanulatus, membranầ crassî circumvallante clausus. Lacinic alternæ æquales, extere marginibus tubo imbricantibus. Silylus (uti filamenta) declinatus assurgenter curvatus. Filamenta pariter nembranâ tubo connexa, quorum quaterna discrepantia, summam et infimum mediæ longitudinis, infimum summo longius, lateralia duo superiora longissima, inferiora duo brevissima. Antherce mediâ parte annexæ, incumbentes. Pollen ut in Zephyranthe, Hippeastri et Amaryllidis polline ninutius Stigma trilobum. Semina non yisa.

## Specific Character.

Haranthus geacilifolius; bulbo oblongo, foliis subcylindraceis, scapo precoce 8 -unciali, corollâ $1 \frac{1}{2}$ unciali pallidè purpureo-ruluescente, tubo viridi membranâ crassâ viridi clausus, lacimiis acutis, exteris semunciam, internis $\frac{\frac{3}{8}}{8}$ unc. latis, stylo filamentis longiore limbo breviore, antheris et polline luteis. W. H.

Descr. Bulb oblong, blackish; leaves four or five, plosesy green, very sleader, cylindrical, with a channelled line on the inner side; scapes slender, seven or eight inches high, purplish near the base, appearing before the leaves, successive; spathe green, an inch and quarter long; peduncles green, erect, two or two and half inches long; flowers 1-2 [perhaps more] scentless, closing at night; ex-
panding more in the sun ; petals of alternate width, the outer half an inch, the inner less, pale purplish pink, with a green eye; tube and membrane green; membrane about one-twelfth of an inch thick; style of the same colour as the petals, longer than the filaments, shorter than the limb; pollen deep yellow.

This elegant little plant was imported from Maldonado, in S. America. The leaves having decayed in the summer, it produced one scape at Spofforth in September, and a second at the beginning of November. It is a hardy greenhouse bulb, and may perhaps succeed out of doors with us in a favourable situation. It agrees with no genus heretofore described. Habranthus in general appearance approaches to Zephyranthes, from which it is distinguished by filaments of four lengths, fasciculate, declined, not inserted, as in Zephyranthes, at the base of the petals without the mouth of the tube; but connected with its sides by a very thick fleshy membrane which fills up the whole tube. Species will perhaps be found bereafter in which the membrane may be less massive, in which case the union of the filaments with the corolla would be just within the mouth of the tube. It differs from Oporanthus, or Sternebergia, in having the germ pedunculated and declined, not oval or compressed, the filaments of four lengths and declined, and, doubtless, also in the seed; from Hippeastrum, in having the petals of alternate width; the limb campanulate, the mouth of the tube not abbreviated, the filaments equally inserted, with a different fourfold diversity of length; from Amaryllis, by a hollow scape which implies a difference of seed, peduncles erect, germ declined, and filaments of four lengths equally inserted. Chlidanthus differs from Habranthus in having a cylindrical tube, filaments erect, attached to the base of the petals, and of alternate length; anthers erect, attached at their base. The scape of Habranthus being hollow, its seeds are probably shelly. W. H.

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## Heath．

米米米米料米米粎米粎粎粎粎
Class and Order．
Octandria Monogynia．

## Generic Character．

Cal．4－phyllus．Cor．persistens：limbo 4－fido．Anthere ante anthesin per foramina 2 lateralia connexæ．Caps． 4 －8－locularis，4－8－valvis．

## Specific Character．

Sect．II．Longifloræ．Subdiv．C．Anthera muticæ．Folia quaterna．Flores terminales，pauci（ $1-8$ ）．

Erica bucciniflora：floribus subquaternis，bracteis a calyce remotis，foliis quaternis linearibus ciliatis．

Descr．Stem shrubby，in our specimen half a foot high， full of branches and twiggy，the branches spreading． Leaves by fours，linear，pointed at the top，beset with hairs at the edges，flat above，furrowed beneath，with very short footstalks pressed to the branches．Flowers terminal， growing by fours and sixes at the ends of the branches， with short red hairy foot－stalks，and furnished with two small bractes at their base．Calyx four leaved：leaflets lance－shaped，sharp at the point and keeled．Corolla trumpet－ shaped and slender，the segments of the border spreading， and very white；the tube of a flesh colour．Stamens eight： Filaments hair－like．Anthers beardless，included within the tube of the blossom．Germen club－shaped and fur－ rowed．Stigma four－cornered．
Native of the Cape of Good Hope，near the Roodezands mountains，where it was found by Mr．Burchall．Flowers from May to September．
We are indebted to Edward Rudge，Esq．FRS．AS．and LS．，author of the Plantæ Guianenses，for the description
of this new species of Erica, in whose conservatory at Evesham it flowered, in 1823, and to Mrs. Rudge for the drawing.

## Reference to the bottom Figures:

1. Flower. 2. Calyx. 3. Stamens and Pistil. 4. Germen and Style. 5. Filaments and Anthers 6. Anthers magnified. 7. Germen and Style magnified.

# Crinum Careyanum. Dr. Carey's Crinum. <br> ***** *** * * * * * * * * * $\boldsymbol{*} * * *$ 

Class and Order.
Hexandria Monogynia.
Generic Character.-Vide No. 2292.
Addendum. Scapus solidus, demum flaccidus.
Specific Character and Synonyms.
Sect. II. Semipatentes. Subd. I. Ornatæ.
Crinum Careyanum, bulbo sphærico, foliis loratis undulatis margine scabro scapo compresso multifloro longioribus apice acuto, germine trigono sessili, [loculis 5-6 spermis?] limbo patente, laciniis albis apice obtuso eroso reflexo extùs apicem versùs rubescentibus tubo rigidè curvato longioribus, stylo filamentis assurgenter curvatis longiore laciniis breviore, stigmate vel trifido vel breviter trilobo.
Crinum ornatum. Carey M. S. et Nobis in Spec. enum. No. 2121.j. 7. Species of the Ornate from Mauritius. Nobis in Append. 27. W.H.
$\mathrm{D}_{\mathrm{Escr}}$. Bulb sphærical, reddish. Leaves multifarious, undulate, thong-like, with a sharp point, above two feet long, two inches wide, channelled, deep green, with a rough margin. Scape green, flattened, near two feet high. Flowers six or more, fragrant. Spathe short, withering early. Tube with obsolete angles, three and half inches long, greenish, very much curved, rigid. Limb widely expanded, measuring about six and half inches across. Lacinice four inches long, one and quarter wide or less, with the point reflexed, very blunt, and notched near the end, all termilating with a hook, white, stained on the outside near the extremity with red. Filaments white, curved upwards, shorter than the style. Pollen very pale straw colour. Style curved, red near the extremity, shorter than the limb when
full blown, of the same length at the moment of expansion Stigma either deeply trifid, or shortly three-lobed, varying in the same umbel. Germen sessile, triangular. Celh with perhaps five or six very indistinct ovules.

This beautiful species deserves particular attention, be cause it forms a point of union between the first subdiv. of the section Patentes, or Linnæan Crinum, and the firs subdiv. of the second section which has been detached from the genus Amaryllis with which it does not conform.

Our figure represents the umbel not full-blown; at a later period the petals become more reflex, and, excepting their greater proportional breadth and bluntness, there is hardly any difference between the form of the flowers and those of Crinum americanum. The plant is, however, so closely allied to C.speciosum, which has the limb wide-funnel-shaped, that we hesitated whether it should be considered a variety of that species. It is distinguished from it by greater undulation of the leaves, which are also more acute, broader bractes, style longer than the filaments, occasional splitting of the stigma, tube more rigid and curved, petals much blunter and notched, longer than the tube, coloured only at the extremity, and the wide expansion of the limb. It is a native of Mauritius, from whence it was received by Dr. Carey, who transmitted it to the Spofforth collection. We could not retain his name, Ornatum, which if applied to any Crinum, would belong to C. Broussoneti, which is the Amaryllis ornata of Linn. fil. Crinum insigne has the coats of the bulb harder, the leaves tougher and not undulated, the points of the petals acute, and is of larger stature. The buds of C. insigne and speciosum just before expansion are very acute; those of $\mathbf{C}$. careyanum are clubshaped. These three species, and Crinum moluccanum, are, however, closely allied; there is another E. Indian bulb at Spofforth, belonging to the same group with leaves shorter, darker, and more obtuse. The anthers of C. moluccanum are represented in our figure 2292, as black, but the pollen had been rubbed off in the transmission of the specimen: the anthers in a perfect state would have been covered with pale pollen. No species of Crinum or Hippeastrum has been discovered with dark coloured pollen. The range in both genera is from whitish to deep gold colour. The point of the leaf in our figure of $\mathbf{C}$. moluccanum, is also more acute than is the usual habit of that plant. W. H.

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## ( 2467 )

## Eulophia guineensis. Sierra Leone Eulophia.

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

> Class and Order.

Gýńndria Monandria.

## Generic Character.

Petala 5, distincta, conformia, adscendentia, patentia. Labellum basi calcaratum; lamina sessili cristata triloba, postice indivisa. Masse pollinis 2, bilobæ lobulo postico,

## Specific Character and Synonyms.

Ellophia guineensis; foliis elliptico-lanceolatis, labelli lobis lateralibus convolutis cum columna connatis, lamina striata, calcare adscendente.
Eulophia guincensis; foliis lanceolatis: labelli calcare subulato adscendente laminam subæquante; laminæ lobis lateralibus cum columna in faucem lineate-cristatam convolutis: terminali grandiore ovato-rotundato converse explanato, disco erugato. Bot. Reg. 686.
Eulophis guineensis. Lodd. Cab. n. 818.
Eulophia is a genus belonging to the natural order of Orchidea, framed by Mr. Robert Brown "from several south African species hitherto referred to Limodorum and Cymbidium, viz. Limonorum barbatum, triste, longicorne, and perhaps hians of Thunberg (not however Satyrium hians of Linneus which seems to be a Disa), Cymbidium pedicellatum and aculeatum; together with several Indian species, referred by Swartz and Willdenow to Limodorum, especially L. virens, carinatum, and perhaps epidendroides. This genus is related to Dipodium (vide Prodr. Nov. Holl. p. 330. and to Lissochllus." Brown, in Bot. Reg. n. 573 .

Descr. Leaves elliptically lanceolate, in our specimens two, streaked, growing from the crown of the bulb. Scape lateral, three feet long, erect, rounded. Bractes alternate, distant, ovate-lanceolate, streaked, lower ones sheathing the stem for half their length, upper ones sessile, half the length of the peduncle. Peduncles alternate, erect, two inches long. Germen scarcely distinguishable from the peduncle, which only appears a little enlarged at the base of the flower. Petals 5, all erect, lanceolate, subequal, green, tinged with lurid on the outside. Labellum 3-lobed: middle lobe elongated, very obtuse, undulated, stained with crimson at the base, in slightly raised ridges, lateral lobes crenulate, rolled inwards, and connected with the column at its base. Spur subulate, ascending, half the length of the lamina. Column keeled at the back, and somewhat concave in front, terminated with a double hollow, containing two globular pollen masses, covered by a lid-shaped, obtusely three-toothed anther.

The name of Eulophia was given by Mr. Brown from the notable crest towards the base of the labellum in the other species, but which is not remarkable in this.

This beautiful plant of the family of the Orchidere is a native of the west coast of Africa, and was communicated to us by Messrs. Loddiges and Sons, who, as we are informed in their Botarical Cabinet, received a parcel of them in the autumin of 1822, procured by Mr. Walter Hawinis from the islands of Loss, on the west coast of Africa, between the ninth and tenth degree of north latitude. Requires to be kept in the stove. Flowered in September, and continued in flower till November.

The upper outline figure represents the apex of the column with the lid removed, showing the globular pollen masses; the lower one, the shape of the lid.


Antennaria triplinervis. Nepal Ever-
LASTING.

Class and Order.
Syngenesia Polygamia Necessaria. Br.
Generic Character.
Involucrum (Calyx Lin.) imbricatum, scariosum, coloratum. Receptaculum epaleatum, scrobiculatum. Flosculi dioici.
Masculi Antheris basi bisetis: stigmatibus truncatis: Pappo vel penicillato vel apice incrassato. Feminei filiformes, limbo parvo: staminum rudimentis nullis: Pappo capillari. Brown in Lin. Soc. Trans. 12. p. 122.

## Specific Character.

Antenvaria triplinervis; herbacea, erecta, foliis oblongoovatis triplinerviis subtus tomentoso-incanis, corymbis compositis laxis foliosis, squamis calycinis interioribus tenuissimis radiantibus.

Descr. Stem branched: branches rounded, woolly, white. Leaves alternate, half-stem-embracing, oblong, oval, quite entire, triply-nerved (or with three nerves uniting above the base), white-tomentose underneath, green but slightly woolly above. Flowers in a terminal compound lax corymb, with a small leaf-like bracte at the base of each pedicel. Involucrum or Calyx imbricate : scales many, the interior ones elongated very narrow, acute, and forming a white ray. Florets yellow, minute, in our plant chiefly or altogether female. Pappus capillary. Receptacle naked, punctate.
The genus Antennaria, of which this is an unpublished species, was framed by Brown, from Gnaphalum dioicum, alpinum, plantagineum, and margaritaceum of Linneus, and carpaticum of Wahlenberg, excluding G. Leontopodium and leontopdioides, which Gertner included in his
genus Antennaria, a name given by him from the form of the pappus, which in the male plants somewhat resembles the antennæ of insects. To the above species Antennaria contorta has been since added in the Botanical Register.

Antennaria triplinervis is a rather handsome herbaceous perennial, approaching A. margaritacea, and like it a good everlasting. Native of Nepal ; and probably may be sufficiently hardy to bear our winters when not particularly severe, with little or no protection. Flowers in September and October. Communicated by Mr. Brookes from his nursery at Ball's Pond.


# Lonicera punicea. Crimson - flowered Honey-suckle. 

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

Class and Order.
Pentandria Monogynia.
Generic Character.
Cor. 1-petala, irregularis. Bacca polysperma, bilocularis, infera.

## Specific Character.

Lonicera punicea; foliis cordato-ovatis concoloribus, baccis distinctis, pedunculis axillaribus subterminalibus bifloris folio brevioribus.

Descr. A low shrub, with scattered branches covered with a reddish-brown smooth bark. The leaves ovate and cordate-ovate, bright green on both sides, opposite on the flowering branches, but on the young vigorous shoots in our plant, ternate, a circumstance so singular in this genus, that we can hardly help considering it as a monstrosity. $P_{\text {eduncles }}$ two-flowered, solitary, growing from the axils of the upper leaves, than which they are shorter. Germens distinct, inferior, with two obtuse bractes at the base of each: Calyx minute, five-toothed, persistent, and increasing after the flower falls. Tube of corolla a little gibbous at the base, limb five-cleft : lacirice nearly equal, irregularly arranged, three looking one way, two another. Ripe berries not seen. It belongs to Jussieu's genus XylosTEUM, and to his natural order of Caprifolia.
This pretty little shrub was communicated by Mr. Brookes, of Ball's Pond, Islington, in flower, in the month of April, 1822. Mr. Brookes received it from Mons. Parmentier of Brussels, under the name of Lonicera canadensis. But the plant recorded by that name, by Schultes,
in the new Systema Vegetabilium, from the late Professor Willdenow's manuscripts, appears to be different, and is probably the Xylosteum ciliatum of Pursh.

The detached sprig in our figure represents the end of a young shoot with ternate leaves.


## Coriaria sarmentosa. New-Zealand

## Coriaria.

******************

## Class and Order.

Diecia (potius mongecia) Decandria.

## Generic Character.

Masc. Cal. 5-partitus. Cor. 0. Glandule 5. Anthere bipartitæ.

Fem. Cal. 5-partitus. Cor. 0. Glandula 5, germinibus interpositæ. Styli 5. Caps. 5, monospermæ, glandulis ampliatis obtecta.

## Specific Character and Synonyms.

Coriaria sarmentosa; procumbens, diffusa, foliis cordatoovatis acuminatis integerrimis quinquenerviis subpetiolatis, racemis axillaribus elongatis nutantibus. Forst. Prodr. n. 377. Willd. Spec. Pl. 4. p. 818.

Descr. A diffuse shrub-like herbaceous plant. Stems square, with obtuse angles, somewhat twisted, smooth. Leaves opposite, quite entire, cordate-ovate, acuminate, five-nerved, on very short footstalks, or more frequently sessile, and even half-stem-embracing, very smooth, netveined. Racemes axillary, elongated, sometimes exceeding six inches. Male flowers numerous, on short patent pedicles, with a subulate bracte at the base of each. Calyx five-cleft : segments rounded. Petals none. Glands? 5. alternate with the segments of the calyx. Filaments filiform: Anthers purple, abounding with pollen.

Female flowers on similar racemes. Calyx and glands the same. Petals none. Stamens ten, effoete. Germens five; Stigmas five, spreading, purple. Capsules five, small, coherent, one-seeded, covered by the persistent calyx and glands.

Later in the season, the male flowers bore lengthened stigmas of a green colour, but no fertile germens. The glands or scales increase after deflorescence, and become succulent with purple juice; and as this takes place even in the male flowers, it appears, at first sight, as if these also produced seeds.

This very rare plant, native of New Zealand, perhaps never before seen in Europe, was communicated by Messis. Whitley, Milee, and Co. of the Fulham Nursery, who received it from Commissioner Biggs. It has stood the present winter in the open ground, and in that situation is altogether an herbaceous plant. In the greenhouse it is in some degree shrubby, but deciduous. Flowers in September and October.


# Cyrtanthus pallidus. Pale flowered Cyrtanthus. 

******************
Class and Order.
Hexandria Monogynia.
Generic Character.
Cor. supera, tubulosa, clavata, sexfida ; laciniæ ovatooblongæ. Filamenta tubo inserta, apice conniventia. Monella. Herbert's Appendix, p. 29.

Specific Character and Synonym.
Cyrtanthus pallidus; foliis lineari-lanceolatis carinatis hysterantheis, corollis nutantibus infundibuliformibus, limbo tubum subæquante.
Amaryllis bivaginata. Donn Cantab. ed. 8. p. 98.

This appears to us to be an undescribed species of Cyrtanthus. It comes nearest to C. ventricosus (angustifolius of Jaceuin) from which it differs in the paler colour of its flowers, in the regular diminution of size of the corolla from the limb to the base, without any sensible inflation of the middle of the tube, and especially in the nearly equal proportion of the limb to the tube including the faux, which latter character, as well as the absence of glaucescence in the leaves and scape, distinguishes it from collinus. From Cyrtanthus spiralis it differs totally in the form and colour of the leaves.
Mr. Herbert, in his valuable Appendix, in which he has displayed such an accurate knowledge of the family of Liliacea, has applied the name of Monella to this genus, reserving that of Cyrtantuus for the solitary species heretofore called C. obliquus. But allowing that obliquus is properly
properly separated from the genus, we prefer retaining the name of Crrtanthus for the more numerous assemblage.

Native of the Cape of Good Hope, from whence it was sent in 1822, by Mr. Vileet, a gentleman in correspondence with the Horticultural Society. It flowered at their magnificent establishment at Chiswick, in January 1893, but the leaves did not appear till sometime after the flower was quite decayed. Requires the protection of the greenhouse.


## Artemisia biennis. Biennial Wormwood.


Class and Order.
Syngenesia Polygamia superflua.

## Generic Character.

Recept. subvillosum vel nudiusculum. Pappus ○. Calyx imbricatus, squamis rotundatis conniventibus. Cor. radii 0.

## Specific Character and Synonyms.

Artemisia biennis; foliis glabris, radicalibus triplicatopinnatis; caulinis inferioribus pinnatifidis, superioribus indivisis linearibus, caule stricto, floribus subrotundis subsessilibus erectis. Willd. Sp. Pl. 3. p. 1842. Pursh. 2. p. 522.
Artemsia hispanica; foliis pinnatis utrinque glabris, pinnis pinnatifidis, pinnulis incisis, floribus subgemellis axillaribus erectis. Jacq. Ic. rar. 1. t. 172. Collect. 1. p. 98.

Artemisia annua var. $\beta$, Zelandica, biennis, racemis foliis brevioribus. Lam. Encycl. 1. p. 266. n. 25?

Though a plant of no beauty, this species of Wormwood cannot fail to excite some curiosity, the seeds of it, as we are informed by Mr. Sabine, secretary to the Horticultural Society, having been collected by Dr. Richardson, on his journey to the Coppermine river, during the fatal expedition under Captain Franklin, and presented by him to the society. As no botanist had ever before explored those inhospitable regions, we had naturally supposed it would turn out to be an undescribed species, and intended giving it the specific name of Richardsoni; but by the assistance of Mr. David Don, we have had the opportunity of comparing it with a specimen of biennis
from the Missouri, preserved in Mr. Lambert's extensive herbarium, with which it appears perfectly to agree; nor do we see occasion to dissent from its being the same species as figured by Jacquin in his Icones, under the name of hispanica, a name adopted by him only, because he raised it from seeds received under that designation, without knowing from what country it came. If it be likewise the same species as that, which we are informed, by Lamarce, was found by Captain Cooke in New Zealand, but of which we have not been able to discover any account in either of his voyages, this plant has a more extensive geographical range than is very frequently met with. Native of North America. A hardy biennial, raised in the garden belonging to the Horticultural Society, where our drawing was made in October 1823.


## Echites nutans. Nodding Savannah Flower.



Class and Order.
Pentandria Monogynia.

## Generic Character.

Contorta, Folliculi 2, longi, recti (aut apice conniventes). Sem. extremitate superiori comosa. Cor. hypocrateriformis : faux nuda (aut villosa.) Antherce medio cum stigmate cohærentes.

## Specific Character and Synonym.

Echites nutans ; volubilis, foliis ovatis acuminatis reticu-lato-venosis subtus villosis, pedunculis paniculatis nutantibus, corollæ laciniis obtusis crispatis.
Echites nutans. Anderson Cat, in Trans. Soc. of Arts. v.25. p. 203.

This plant was sent from the botanic garden at St. Vincents to that of the Horticultural Society at Chiswick, by Mr. George Caley, late superintendant of the former establishment. The red colour of the veins diappears in the older leaves, which then become more clothed with a very soft pubescence. There is a species of Echites described and figured in Tusac's Flore des Antilles, by the name of sanguinolenta (Bloody Savanna-flower of the inhabitants of Jamaica), which has similar red veins, but the shape of the corolla is totally different, the laciniæ being terminated with a filiform point.

Mr. Caley informs us, that the garden at St. Vincents was in some places overrun with this plant, but that it flowered in one spot only; he observes, also, that there was a variety of it in the garden with white or silvery veins instead
instead of red, so that this character is by no means constant.

Native of the West Indies. Requires to be kept in the stove. Our drawing was taken at the Horticultural Society's garden, in September 1823.


## Sedum sempervivoides. Houseleek-like

 Sedum.
Class and Order.
Decandria Pentagynia.

## Generic Character.

Cal. 5-fidus. Cor. 5-petala. Squamce nectariferce 5, ad basin germinis. Caps. 5.

> Specific Character and Synonyms.

Sedum sempervivoides; planifolium, foliis spathulato-ova-
tis acutis integerrimis pubescentibus, corymbo hemisphærico. Fl. taurico-caucas. 3. p. 313. Sedum sempervivoides. Fischer in Herb. Gorenk.

This species has entirely the habit of a Sempervivum, but in the number of stamens and capsules agrees with Sedum. Modern botanists, who pay less regard to number, may choose to consider it to belong to the former genus rather than to the latter ; but as we have hitherto adhered to the Linnean systematic arrangement, we, without hesitation, continue it under Sedum.

The stem is about a span high, thickly covered with alternate, ovate, concave, acute, fleshy, purplish leaves, covered, as is the whole plant, with a close short pubescence. The Rosula are green, only tinged slightly with purple. Flowers in a compound, panicled corymb, of a purplish deep red colour. Stamens somewhat shorter than the corolla.

A hardy succulent, we believe never before figured. Native of Iberia, a country to the south of Mount Caucasus. Communicated by Mr. Anderson from the Chelsea garden, where it was introduced by Dr. Fischer, superinintendant of the Royal Botanic garden at Petersburgh. Flowers in June, July, and August.


Hippeastrum subbarbatum．Slightly－ bearded Knights－star－lily．

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## Class and Order．

Hexandria Monogynia．
Generic Character．－Vide supra No． 2278.
Corrigendum．Semina uno ordine conserta，integumento exteriore nigro margine sæpissimè foliaceo cavo，interiore separabili，albumini conformi．

## Specific Character．

Hippeastrum subbarbatum，foliis $2 \frac{1}{2}$ uncias latis，nitidis， viridibus，corollâ magnâ miniatâ stellâ viridi－lutế， laciniis exteris multùm latioribus，tubo cernuo macu－ lato fauce rarissimè subbarbatâ，stigmate trifido，semi－ nibus planis margine foliaceo cavo．H．fulgido affine， tubo cernuo，laciniis obtusioribus，stelîa latiore，imâ laciniâ non ventricosè et fenestratè curvatâ，setisque minutis in fauce tubi distinguendum．W． $\boldsymbol{H}$ ．

This beautiful plant，from Rio Janeiro，occupies an intermediate place between H．fulgidum and equestre var． major，to which last it approximates in the colour and form of the limb，the shape of the star，and the vestige of a beard，which is just distinguishable at the mouth of the tube．With great doubt，however，we separate it from fulgidum，but it cannot be joined with that species without also including H．rutilum，crocatum and pulverulentum which approach nearer to fulgidum in flower；and we feel a difficulty in making that union，because the differences between them in the wild state continue when they are propagated by seed in cultivation：at the same time we are embarrassed and expect to be more so by the discovery of other species or varieties in a wild state connecting the links throughout the genus more closely．It will，per－ haps，be found expedient to unite H．fulgidum，subbar－ batum，rutilum，crocatum，and pulverulentum，as perma－ nent varieties of one species，which may be named proliferum，distinguished by the production of blind off－ sets，by glossy foliage，a deeply trifid stigma，limb five
times the length of the tube, and mouth of the tube smooth or nearly so. The throat of fulgidum, crocatum and pulverulentum appears to be always smooth; that of rutilum, which is distinguishable from fulgidum only by lesser size and a shade of colour, has mostly a little excrescence at the foot of the upper petal. We have another bulb from Rio, which in bulb, foliage, and habit, approaches to fulgidum, with a very pale flower, formed like that of crocatum, having one or two points distinguishable on each side of the throat, but more faintly than in subbarbatum, to which it approximates in no other respect. In fuigidum, the filaments are seen through an aperture formed by a ventricose curve of the lower petal, which in subbarbatum is straight.

We have amended the generic character of Hippeastrum so as to admit reticulatum and striatifolium, abandoning the genus Coburgia, which was only separated by the difference of rounder seed without a hollow foliaceous margin, concerning which separation doubts were expressed in our Appendix. It appears that they breed indiscriminately with any species of Hippeastrum, and the pollen of the mules so obtained is fertile; and, on further examination, it seems that there is no fundamental difference in the structure of the seed, but that the hollow margin, which remains unfilled by albumen in the species which have seeds more numerous and flattened, is completely filled in those which produce few and larger seeds. A similar habit was observed in the seed of a Brazilian Bignonia, now growing in the Spofforth collection, which was almost square and not winged, the hollow margin of both lobes of the seed being filled up by the thick kernel. Imported varieties of H. striatifolium give reason to believe that it is one species with reticulatum. There are at present thirty-five different hybrid crosses in the genus Hippeastrum at Spofforth, and four or five more in other collections; but every attempt to obtain a mule by the pollen of any other genus applied to Hippeastrum has failed. The pollen of all these mules appears to be fertile, and three have produced seedlings by their own pollen, viz. regina-vittatum, fulgido-rutilum, and rutilo-reginavittatum. It is singular that Hippeastra appear to be more easily fertilized by the pollen of another species, or of a mule, than by their own: for instance, one flower of subbarbatum bore seed by rutilo-vittatum, and one of rutilo-vittatum by subbarbatum, and the other flowers on both plants touched with their own pollen were sterile. Similar results have been frequently observed in this genus. W. H.


# Dorstenia arifolia．Arum－leaved Dor－ STENIA． <br>  

 Class and Order．Tetrandria Monogynia．

## Generic Character．

Receptaculum commune monophyllum，carnosum，dila－ tatum，patens，orbiculare aut angulatum，in quo semina solitaria nidulantur．Stam．1－5．

## Specific Character and Synonyms．

Dorstenia arifolia；foliis cordato－sagittatis undulatim－cre－ natis demum lobatis，receptaculis suborbiculatis．
Dorstenis arifolia；scapis radicatis，foliis cordato－sagit－ tatis undulatis subdentatis maximis，receptaculis ova－ libus．Lam．Encycl．2．p．317．－Illustr．t．83．f．2． Willd．Sp．Pl．1．p．682．Pers．Syn．2．p． 557. Donstenia arifolia．Hooker Exotic．Bot．v．1．t． 6.

Dorstenia arifolia was first discovered by M．Dombey， growing in shady places in Brazil，and described and figured by Lamarce；with his description and figure，both taken from dried specimens，our plant so nearly agrees， that we apprehend it must belong to the same species． Lamarck describes the leaves without the footstalks，as being ten inches long and three and a half wide，and the receptacles as oval，which in our plant are nearly orbi－ cular，or approaching to square with very rounded angles．
At the time our plant was in flower the leaves were entire as in the drawing，but afterwards it produced some that Were divided into lobes as in Mr．Hooker＇s figure，in which state its aspect is so different from our representation that they might easily be mistaken for two distinct species；but We are informed，in the Exotic Flora，that according to

Mr．Shepherd，

Mr. Shepherd, the early leaves were cordate-sagittate and quite entire, so that however different the drawings seem, there can be no doubt but that they belong to the same species. M. Lamarck makes the plant with divided leave a variety of the other.

We had no opportunity of examining the flower ourselves, but, according to Mr. Ноoкer, the male and female are mixed indeterminately, and the male are composed of two stamens without either calyx or corolla.

The genus belongs to the natural ordêr of Urticeer, and some of the species, if not all, are monœcious ; Persons has accordingly arranged the genus in the twenty-first clas of the Linnean System instead of the fourth.

Our drawing was made at the splendid establishment belonging to the Horticultural Society at Chiswick, in September 1823, at which time it flowered in the store


## Vernonia flexuosa. Zig-Zag Vernonia.

******************
Class and Order.
Syngenesia Polygamia equalis.

## Generic Character.

Recept. nudum. Cal. ovatus, imbricatus. Pappus duplex : exterior paleaceus, brevis; interior capillaris.

## Specific Character.

$V_{\text {ernonia }}$ flexuosa; caule stricto superne dichotomo: ramis flexuosis, floribus ad dichotomias et flexuras ramulorum sessilibus.

Descr. Radical leaves on short, flat footstalks, ovate, quite entire, fleshy, rigid, covered above with closely adpressed hairs, and somewhat woolly underneath. Cauline leaves lanceolate, margin quite entire and scabrous, narrowed towards the base, remote; upper ones smaller. Stem upright, straight, hairy, a foot and half high, dichotomously branched towards the top: branches spreading, zig-zag. Flowers in round heads, bright purple, sessile at the divisions and at the flexures of the branches, with a leaf-like bracte at the base of each. Calyx ovate, imbricate, hairy: leaflets mucronate. Receptacle indented. Limb of corolla five-cleft : segments linear. Anthers purple: pollen white. Style exserted; stigma bifid. Pappus double, outer one shortest, rather bristly than chaffy. Seed angular, pubescent.

This handsome species of Vernonia, appears to us not to have been heretofore described; but has a near affinity with sericea and remota. It was raised from seed sent to
us by Mr. Fredrrick Sello, from Brazil, in the garden of John Walker, Esq. of Arno's Grove, and flowered in September. Is probably annual or biennial. Requires to be raised in a stove or hot-bed.


# Angelonia salicarifefolia. Violet-flowered Angelonia. 


Class and Order.
Didynamia Angiospermia.
Generic Character.
Cal. 5-partitus, æqualis. Cor, tubo brevissimo; fundo concavo; limbo bilabiato, patentissimo; labio superiore bifido; inferiore majore, saccato-excavato, trifido; laciniis subæqualibus. Anthera loculis divergentibus. Stigma simplex. Caps. bilocularis, septicido ?-bivalvis; valvis apice bifidis; placenta centrali demum libera?

Herba oppositifolia facie Celsia. Flores axillares, spicati. Corolla violacer. Kunth.

Specific Name and Synonyms.
Avgelonia salicariæfolia. Humb. et Bonpl. Pl. aq. 2. p. 92.
t. 108. Kunth Syn. Pl. æquin. 2. p. 132. Bot. Reg. n. 415.

Angelon incolarum.

Descr. Root annual. Stem upright, square, simple. Leaves opposite, sessile, ovate-lanceolate, slightly serrate, soft-pubescent on both sides. Flowers in a long, terminal, raceme. Bractes like the leaves, but smaller and more pointed. Peduncles axillary, solitary, opposite, pubescent, cernuons. Calyx persistent, five-cleft ; segments acute, connivent after the corolla drops. Corolla bilabiate, segments of upper lip four, suborbiculate, nearly equal, two upper ones slightly acuminate : lower-lip elongated, concave at the base, with an emarginate tongue-shaped appendix at the lower margin of the cavity, and two small tubercles at the upper. Faux open, cup-shaped, spotted.

Stamens 4, didynamous. Anthers two-celled: cells divaricate, distinct. Germen conical, two-celled. Style erect: Stigma simple.

For this very shewy annual, we are indebted to Messrs. Whitley, Brame and Milne, in whose stove, at Fulham, it flowered in September ; but it appears that its natural season is the spring.

Native of South America; growing on the dry hills in the neighbourhood of Caracas. It belongs to the natural order of Scrophularince, and approaches the genus Alansoa, Hemimeris of Willdenow (supta n. 210, et 421. Celifi)

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## ( 2479 )

## Coix Lachryma. Job's Tears.

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

Class and Order.
Mongecia Triandria.
Generic Character.
Masc. in spicis remotis. Cal. Gluma 2-flora, mutica. Yor. gluma mutica.
Fem. Cal. Gluma biflora. Cor. Gluma mutica. Stylus ipartitus. Semen calyce ossificato tectum.

Specific Character and Synonyms.
'orx Lachryma; culmo superne semitereti obtuso, floribus nudis, fructibus ovatis. Willd. Sp. Pl. 4. p. 202. Hort. Kew. ed. alt. 5. p. 236. Persoon Syn. 2. p. 533. Lour. Cochin. p. 551.
orx Lachryma; spiculis axillaribus pluribus pedunculatis. Lam Encycl. 2. p. 422.-IIl. t. 750.
'orx Lachryma Jobi; seminibus ovatis. Hort. Cliff. 437. Sp. Pl. 1378.
athagrostis Lachryma Jobi. Gartn. fruct. 1. p. 7. t.1. f. 10.
ithospermum arundinaceum. Bauh. Pin. 213.
achryma Jobi. Clus. Hisp. t. 501. fig. bona. Clus. Hist.
2. p. 216. Dod. Pempt. 506. Lob. ic. 44-Advers.
p. 16. fig. mala. Tournef. t. 306. Rumph. Amb. 5.
p. 193. Ger. em. p. 88. Park. Herb. 430.
uтhospermum arundinaceum. Moris. Hist.3. p. 249. et Esamum arundinaceum semine nudo subcæruleo. Ibid. sect. 8. $t .13$.
Ilium arundinaceum, multis Lachryma Jobi. Raj. Hist. 2. p. 1252. Bauh. Hist. 2. p. 449.
atriconda. Hort. Malab. 12. p. 133. t. 70.

This very remarkable plant has been known in our ardens from the time of Gerard; but being a tender annual,
annual, rarely perfecting its seeds with us, is not very common. Its seeds, however, are often imported from the warmer parts of Europe, and from the East Indies. These are contained singly in a stony involucre or calyx, which incloses the female flower, and never opens till committed to the earth ; the style, however, is exserted, and a pedicle supporting the spike of male flowers issues with it from the bottom of the involucre. This stony calyx, which, when ripe, is very like a drop of white porcelain, with a bluish tinge, is generally supposed to be the seed itself. Its shape, round at bottom and pointed at top like a drop of liquid, readily suggested a name for the plant.

It is said to be cultivated as an esculent, and that a coarse bread is made of the seed; but the principal use to which it is put is to make necklaces or rosaries, which gives occasion to old Parkinson to make a rude remark in his usual quaint language. It is said to grow spontaneously in Candia, Rhodes, and in Syria, as well as in the East Indies. With us it must be treated as a tender annual, and raised in the spring in a hot-bed, to afford any chance of its producing perfect seeds.

Communicated by Jobn Walker, Esq. of Arno's Grove, in May last, at which time the involucre was changed from a green to a brightish purple.


## Entelea arborescens．New Zealand Entelea．

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Class and Order．
Polyandria Monogynia．

## Generic Character．

Cal．4－5－phyllus．Petala 4．Stamina indefinita，uni－ formia，antheris subrotundis，incumbentibus．Stigma den－ ticulatum．Capsula sphæroidea，echinata，sexlocularis， semisexvalvis，polysperma．

Arbor（parva，ligno levissimo spongioso．Solander） pube stellari（in pagina superiore folii adulti parciore et subsimplici）tomentosa．Folia cordata，angulata，dupli－ cato－crenata，5－nervia，stipulis persistentibus，parvis，foli－ aceis．Umbellæ simplices，terminales，pedunculata，invo－ lucro polyphyllo，brevi，pedicellis ebracteatis．

Flores albi，raro 5 －fidi，calyce deciduo，foliolis aristatis， gemma（alabastro）quadricorni，petalis flaccidis，apice sub－ laceris，staminibus corolla brevioribus，subtorulosis，om－ nibus antheriferis，stylo angulato，stigmate umbilicato， margine denticulato．Capsularum setæ longa，rigida， opaca，pubescentes，spinula pellucida acuta recta termi－ nate．Semina in singulo loculo biseriata，parva，obovata； albumine carnoso，semini conformi．Embryone recto，albo， longitudine fere albuminis：cotyledonibus planis cordatis．

Ord．nat．Inter Tiliaceas proximum genus Sparr－ mannie，quacum habitu，inflorescentia，antheris，stiginate， capsularum figura，earumque setis spinula pellucida ter－ minatis convenit；diversum filamentis omnibus antheriferis （unde nomen）vix manifeste torulosis，capsulis basi indi－ visis，nec longitudinaliter dehiscentibus，loculis poly－ spermis，nec oligospermis（secundum Thunberg in Sparr－ mannia dispermis，cujus tamen ovarii loculi certe poly－ spermi sunt）calycis foliolis aristatis nec muticis．$R$ ． $\mathrm{B}_{\mathrm{Rown}}, \mathrm{Mss}$ ．

Specific Name．
Entelía arborescens．R．Brozen，Mss．

Discovered in 1769, near Tigada, Tolaga, Opuragi, and Motuaro, in New Zealand, by Sir Joseph Bayks and Dr. Solander. It grows in its native country into a small tree, the wood of which is remarkably light, and, for this property, is used by the natives to float their fishing nets with.

Enteléa belongs to the natural order of Tiliacere, and approximates the genus Sparrmannia, from which Mr. Brown distinguishes it by its want of the sterile filaments (nectaria of Linneus), all of them in Enteléa bearing anthers; by its capsules being undivided to the base, and not as in Sparrmannia longitudinally dehiscent into six distinet valves; by the segments of the calyx being awned, and by the cells of the capsule containing many seeds, instead of only two, as described by Thunberg; but the value of this character is much weakened by Mr. Brown's observation, that the ovarium in Sparrmannia has certainly many ovula.

For this very rare plant, which perhaps never flowered in Europe before, we are indebted to Messis. Whitiey, Brame, and Milne, in whose stove, at Fulham, it blossomed in May 1823.
11.2481


## Urtica involucrata．Imbosomed Nettle．

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Class and Order．

Monecia Tetrandria．

## Generic Character．

Masc．Cal．4－phyllus．Cor．0．Nectar．centrale，cya－ thiforme．
Fem．Cal．2－valvis．Cor．0．Sem．1，nitidum．

> Specific Character.

Urtica involucrata；caule ramoso hirsuto，foliis oppositis rotundato－ovatis crenatis trinerviis lucidis ad apices ramorum congestis，paniculis sessilibus．

We had no opportunity of seeing this plant ourselves； but as far as we have been able to discover，it has not been hitherto described．
We are informed by Mr．Sabine that it was brought from the island of St．Vincent＇s，for the Horticultural So－ ciety，by Mr．James Mac Crae，late under－gardiner at the Botanic Garden there，in 1823．It flowered in the Society＇s slove in October，in the same year．


## Serratula simplex．One－flowered Saw－

## WORT．

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Class and Order．
Syngenesia Polygamia equalis．

## Generic Character．

Calyx imbricatus squamis inermibus．Receptaculum setosum vel paleaceum．Pappus pilosus，persistens，pilis rigidis inæqualibus．

## Specific Character and Synonyms．

Serratula simplex；foliis pinnatifidis：lobis distantibus costam non attingentibus，caule subsimplici unifloro， calyce globoso squarroso，seminibus tetragonis ver－ rucosis．
Serratula simplex；foliis radicalibus et superioribus line－ aribus；mediis pinnatifidis，lobis remotis costam non attingentibus，caule elongato subnudo unifloro，invo－ lucro tomentoso squarroso．De Cand．in Annales du Mus．v．16．p． $186 . \quad$ Poir in Encycl．Bot．6．p． 550. Serratula blanda；calycibus globosis inermibus squar－ rosis arachnoideo－lanatis，foliis pectinato－pinnatifidis supra villosis subtus albo－tomentosis，caule subnudo unifloro，seminibus scrobiculatis．Flor．Taur．－Caucas． 3．p． 549.
Serratula cyanoides．Geetn．Sem．2．p．379．t． 169. rejectis synonymis．
Carduus mollis；foliis pinnatifidis linearibus margine re－ volutis subtus tomentosis，caule subnudo unifloro， calycinis squamis tomentosis ovato－lanceolatis squar－ rosis．Willd．Sp．Pl．3．p． 1661. Cardues mollis Jacq．Austr．1．p．14．t． 18. $C_{\text {risium molle Scop．Carniol．2．p．126．n．} 1000 .}$ $C_{\text {ARDUUs }}$ mollis laciniato folio．Clus．Pann．661．t． 662. Bauh．Pin． 377.
$C_{\text {ARDues mollior primus．Clus．Hist．2．p．} 150 .}$
Serratula

N2483


## Oxytropis pilosa. Hairy Oxytropis.

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

> Class and Order.

Diadelphia Decandria.

## Generic Character.

Carina unguiculata. Legumen sutura superiore introflexa biloculare, aut semibiloculare.

## Specific Character and Synonyms.

Sect. II. Stipulis caulinis seu petiolo non adhærentibus.
Oxytropis pilosa; caulescens, erecta, villosa, leguminibus erectis teretibus subulatis villosis. Decand. Astrag. p. 73. n. 27. Fl. Taur. Cauc. 3. p. 502.

Astragalus pilosus; caulescens erectus pilosus, floribus spicatis, leguminibus subulatis pilosis. Lin. Sp. Pl. 1065. Gmel. Sib. 4. p. 39. t. 16.

Astragalus pilosus. Willd. Sp. Pl. 3. p. 1262. Jacq. Austr. 1. p. 32. t. 51. Pall. Astrag. n. 112. t. 80.
Astragalus pilosus; caulescens erectus hirsutus, foliolis lanceolatis, stipulis falcatis, spicis pedunculatis folio longioribus, carina unguiculata, leguminibus oblongis erectis. Flor. Taur. Caucas. 2. p. 185. n. 1462.
Astragalus villosus erectus spicatus, floribus flavescentibus. Amm. Ruth. p. 125. n. 166.
Astragalus caule erecto ramoso, ex alis spicifero, siliquis teretibus. Hall. Hist. 1. p. 179. n. A11.-Comment. Goett. 1752. p. 340. t. 12.
Cicer montanum lanuginosum erectum. Bauh. Pin. 347 ? Prodr. 148 ?

This herbaceous perennial is clothed in every part except the corolla with longish, patent, grey hairs. Stem upright,
upright, rounded, but little branched. Stipules lanceolate, somewhat oblique, inserted below the petioles. Leaves alternate, pinnate: leaflets about nine pair with an odd one, lanceolate, rounded at the base, reflexed. P $P_{8-}$ duncles axillary, stout, cylindrical, longer than the leaves. Flowers sessile, in an oblong spike, yellowish green. Bractes subulate, the length of the five-toothed Calyx: teeth subulate, the two lateral ones the longest. Vexillum oval, with sides reflexed, emarginate, ale shorter than the vexillum. Carina equal to the ala, sharp-pointed, onepetaled. Stamens diadelphous $\stackrel{9}{T}$. Germen linear, silky: Style ascending, half the length of the germen.

Native of Austria, Caucasus, and Siberia. Flowers in June. Communicated by Mr. William Anderson from the Chelsea Garden, where it was introduced by Dr. Fischer, late of Gorenki, now of the Royal Botanic Garden, St. Petersburgh.


## Nicotiana repanda. Stem-clasping Havanna Tobacco.

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Class and Order.
Pentandria Monogynia.

Generic Character.

Cal. tubulosus, 5 -fidus. Cor infundibuliformis v. hypo* crateriformis, limbo 5 -fido, plicato. Stigma capitatum. Caps. bilocularis apice quadrifariam dehiscens. Brown.

Specific Character and Synonyms.
Nicotiana repanda; foliis amplexicaulibus cordatis spathulatis subrotundis repandis, corollæ tubo gracili longissimo, limbi laciniis ovatis acutiusculis. Lehm. Hist. Nicot. n. 16. Roem. et Sch. Syst. Veg. 4. p. 320. Nicotiana repanda; foliis spathulatis subrotundis repandis cordatis amplexicaulibus. Herb. Willd. ex Humb. et Bonpl. Mss. R. et S. 4. p. 791.

A tender annual. Native of the island of Cuba. Introduced into the garden of the Horticultural Society, by Mr. George Don, from the Havannah, and said to be the plant from which the celebrated Cigars of that country are prepared.


# Habranthus Versicolor. <br> Changeable Habranthus. 

***************** Class and Order.

Hexandria Monogynia.

## Generic Character.

Spatha integra apice bifido. Scapus 1-2 [pluri?]-florus, pedunculatus, cavus. Germen a pedunculo declinatum, oblongo-subturbinatum, subtrigonum, triloculare. Corolla campanulata. Tubus brevis, campanulatus, clausus. Lacinice alternæ subæquales, exteræ marginibus tubo imbricantibus. Stylus (uti filamenta) declinatus assurgenter curvatus. Filamenta fasciculata, pariter tubo vix intra faucem connexa, quorum quaterna discrepantia, summum et infimum mediæ longitudinis, infimum summo longius, lateralia duo superiora longissima, inferiora duo brevissima. Antherce mediâ parte annexæ, incumbentes. Pollen, ut in Zephyranthe, Hippeastri et Amaryllidis polline minutius. Stigma trilobum. Semina non visa. W. H.

## Specific Character.

Habranthus versicolor, bulbo oblongo ; foliis viridibus, pedalibus vel sesquipedalibus, $\frac{1}{4}$ unc. latis, recumbentibus; scapo præcoce 5 -unciali; corollâ biunciali, ante expansionem rubrâ, demum albescente, rubro versus basin striatâ; laciniâ summâ cæteris latiore; imâ angustiore; tubo membranâ dentatâ clauso ; genitalibus albis; stigmatis lobis $\frac{1}{4}$ uncialibus; antheris et polline luteis. $\boldsymbol{W} . \boldsymbol{H}$.

Descr. Bulb oblong, blackish; leaves three or more, green, a quarter of an inch wide, above a foot long; scape about five inches high, appearing before the leaves, at first
first red, fading to a paler and greenish tint; spathe red, one inch and quarter long; peduncle about one and half long, very pale green ; germen green; corolla two inches long, red in the early bud, fading before the expansion to white, tinged with pink chiefly towards the tips of the outer petals; the upper exterior petal ${ }^{\frac{23}{3} \frac{3}{2}}$ wide, exterior laterals $\frac{80}{3} \frac{2}{2}$, interior laterals $\frac{88}{3} \frac{8}{2}$, lowest interior $\frac{17}{32}$; a red stripe three-quarter long on each side the midrib of each petal near the base, the lower part of the midrib greenish; membrane closing the tube, bearded, or dentate, and less massive than in H. gracilifolius ; stamens and style white; the latter an inch and quarter long; lobes of the stigma one-quarter long, fimbriated; anthers and pollen golden.

The bulb was imported from Maldonado, in S. America, and flowered at Spofforth in January, the leaves having decayed in the summer. It is not less hardy than Habranthus gracilifolius; but the flowering of both species is promoted by artificial heat while the bulbs are at rest: on close inspection it appears that there is a fourfold diversity of the petals, as above stated, in this species, and probably the same difference, will, on re-examination, be found to exist in H. gracilifolius, though in a less degree: in this diversity of the petals Habranthus agrees with Hippeastrum, but the diversity of its filaments follows a different rule. Our prediction that "species will, perhaps, be found hereafter, in which the membrane may be less massive," has been quickly verified; nor should we be surprised at the appearance of a species with the tube perfectly smooth. We have consequently made a slight alteration in the generic character. In the characters of Lycoris and Prrolyrion in the Appendix, we did not notice the membrane in Lycoris aurea and Prrolyrion flammeum, because we had not the means of ascertaining whether its conformation was similar in all the species of their respective genera, which were sufficiently defined by other features. W. H.

## ERRATUM:

In the generic character of Gastronema supra 2291; for Tubus intus brevis, read Tubus intus lavis.


## Dalea mutabilis. Changeable Dalea.

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

Class and Order.
Diadelphia Decandria.
Generic Character.
Ale et Carine columnæ staminum adnatæ. Stam. 5-10, connata, absque filamento libero. Legumen monospermum.

## Specific Character and Synonyms.

Dalea mutabilis; foliis impari-pinnatis; pinnulis obovatis emarginatis glabris punctatis, spicis terminalibus. Cav. Ic. 4. n. 485. t. 394. (sub Psoralea).
Dales mutabilis; decandra, spicis cylindraceis terminalibus, foliis decemjugis obcordatis. Willd. Sp. Pl. 3. p. 1339 .

Dalea bicolor: spicis terminalibus elongatis, foliis subquinquejugis obovatis, caule fruticoso. Willd. Hort. Berol. 2. p. 89. t. 89. Enum. p. 787.

Descr. A slender shrub; branches smooth. Leaves alternate, odd-pinnate: leaflets from seven to fifteen, obovate, with the point sometimes rounded, more frequently emarginate, dotted with transparent glands, which, when held to the light, give an appearance as if the leaf were perforated, as in the common St. John's Wort. Stipules small, subulate, inserted within the footstalk. Peduncles terminal, solitary, bearing the flowers in a close spike, lengthening as the flowers expand. Bractes ovate, concave, mucronate, persistent. Calyx of one leaf, five-toothed, hairy, membranaceous, with ten green streaks. Standard white, ovate-cordate, with a slender claw, longer than the limb; wings and keel shorter by half than the standard, white tipped with purple, colour encreasing with age. Filaments all connected downwards, free above: Anthers oval,
oval, dark purple : pollen orange-coloured. Germen oval, hairy: Style longer than the stamens: Stigma acute.

We have no doubt but that the Dalea bicolor, figured in Willdenow's Hortus Berolinensis is the same plant as the Psoralea mutabilis of Cavanilles; we have, therefore, retained the specific name of the latter author, this having the right of priority.
Native of Cuba and Mexico. Cultivated with us in the stove. Communicated by Mr. Anderson from the Chelsea Garden, in October, 1823, where it was introduced by Mr. Отто, in 1821.
a. The vexillum or standard. $b$. Wings and keel separated from the sheath of the stamens with which they are naturally connate. c. Germen and style. d. Stamens.


# 2487 ) <br> <br> Justicia geniculata. Jointed stalked <br> <br> Justicia geniculata. Jointed stalked Justicia. 

 Justicia.}


## Class and Order.

Diandria Monogynia.

## Generic Character.

Cal. 5-partitus, æqualis, raro 4-partitus. Cor. valde irregularis, bilabiata vel ringens, labio inferiore diviso. Stam. 2, antherifera. Anthere biloculares, loculis insertione sæpe inæqualibus. Filamenta sterilia nulla, vel obsoleta. Germinis loculi dispermi. Dissepimentum adnatum ; semina retinaculis uncinulatis subtensa. Brown.

## Specific Character.

Justicia geniculata; paniculis terminalibus laxis cernuis, bracteis subulatis, foliis ovato-lanceolatis glabris subtus pallidis distantibus.

This species has great affinity with Justicia secunda (supra, No. 2060) and lucida (No. 1014); but differs from the former in having the upper lip of the corolla quite entire and the lower lip terminated with three obtuse rounded teeth; from the latter in having fewer and smaller flowers, not crowded together, leaves much narrower, more pointed, not decurrent down the footstalk; and from both in having a more lax, cernuous panicle, with a much longer, naked peduncle. Introduced into the garden of the Horticultural Society from St. Vincent's, by Mr. George Caley, under the name which we have adopted, given to it by the late Dr. Anderson, several years superintendent of the Botanic Garden in that island. Mr. Caley informs us that it loves to grow in the shade.

Native of the West Indies. Requires to be kept in the stove. Our drawing was taken at the Society's Garden in August, 1823.


Cissus antarctica. Kanguru Vine.
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Class and Order.
Tetrandria Monogynia.

## Generic Character.

Cal. 1-phyllus, 4-partitus. Cor. 4-partita. Bacca 1sperma (rarissime 4-5-sperma), calyce cincta.

Specific Character and Synonyms.
Cissus antarctica; foliis ovatis laxe serratis glabriusculis subtus glandulosis. Vent. Choix. t. 21. Hort. Kew. ed. alt. 1. p. 259.
Cissus antarctica; foliis ovatis subcordatis remote serratis subtus biglandulosis, ramulis ferrugineo-pilosis. Willd. Enum. 163. Roem. et Sch. Syst. Veg. 3. p. 308.
Crssus glandulosa; foliis ovatis glabris laxe dentato-serratis, nervis basi glandulosis, petiolis ramisque pubescentibus, caule fruticoso. Poir. in Encycl. Bot. Suppl. 1. p. 105.n. 14.

This climbing shrub is described and figured by M. Ventenat, as quoted above; the description is also repeated by Roemer and Schultes in the New SystemaVegetabilium, to which we have nothing to add, but to remark that the reason our figure does not represent any tendril, is because in the branch from which our drawing was taken, the peduncles all bore flowers, in which case the tendrils are of course wanting, these always having their origin in abortive peduncles.

Native of New South Wales, and known in our gardens by the name of the Kanguru Vine. Introdnced into the Kew Garden in 1790, by Sir Joseph Banks. Is a hardy greenhouse plant, only requiring to be kept from frost. Communicated by our friend John Walker, Esq. from his collection at Southgate.


## Bubon Galbanum. Lovage-leaved Bubon

## 

Class and Order.
Pentandria Digynia.

## Generic Character.

Fructus ovatus, striatus, villosus et glaber.

## Specific Character and Synonyms.

Bubon Galbanum ; foliolis ovato-cuneiformibus acutis argute serratis, umbellis paucis, seminibus, glabris, caule frutescente glauco. Hort. Kerv. ed. I. 1. p. 352. ed. alt. 2. p. 146. Willd. Sp. Pl. 1. p. 1439. Pers. Syn. 1. p. 317.
Bubon Galbanum; foliolis rhombeis dentatis glabris striatis, umbellis paucis $S p$. Pl. 364. Berg. Cap. 77. Jacq. Hort. Vind. 3. p. 21. t. 36.
Selinum Galbanum; caule frutescente pruinoso glauco, foliis triternatis glabris, foliolis ovato-cuneiformibus inæqualiter serratis rigidulis, extremis trifidis acutis, involucro lineari polyphyllo. Spreng. in Roem. et. Sch. Syst. Veg. 6. p. 563.
Anisum africanum fruticescens, folio anisi galbaniferum. Pluk. Alm. 81. t. 12. f. 2.
Ferdia africana galbanifera; folio et facie Ligustici. Herm. Parad. 163. cum tab.
$0_{\text {reoselinum anisoides. Breyn. Prodr. 2. p. } 88 .}$
Anisum fruticosum africanum galbaniferum. Moris. Hist. 3. p. 297.

Professor Schultes, in the new Systema Vegetabilium; has after Sprengel, referred this plant to the genus Selinum, and asserts that upon examining the fruit received from the Cape of Good Hope, he finds it to be winged, and exactly answering to the fruit of Selinum; not, as Linneus and $L_{\text {AMARCK }}$ have described, striate without winged margins,
but
but in a specimen in our own Herbarium, the fruit is smooth, ovate-rounded and striate without wings; the seeds when separated quite convex on one side, with two or three ribs, and flat on the other.

Although this plant exudes a milky juice with the flavour of Galbanum, we should doubt whether that drug is obtained from it, unless it be also a native of the north of Africa or Asia, as Galbanum was known to the ancients many ages before the discovery of the Cape, and we believe it has never been imported from thence, but generally from Persia, by way of Odessa.

Bubon Galbanum grows to the height of eight or ten feet, and is woody towards the base, being a native of the Cape of Good Hope, it requires the protection of the green-house, in which situation it is ever green. Flowers in August; but rarely produces seed with us. Communicated by our late highly valued and now lamented friend John Walker, Esq. of Arno's Grove, Southgate, whose loss we shall long deplore.

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## Eucrosia Bicolor. Particolored

Eucrosia.

## 

Class and Order.
Hexandria Monogynia.

## Generic Character.

Bulbus tunicatus; scapus solidus; germen pedunculo continuatum, triloculare; ovula biseriatim cumulata, alternantia, angulo interiori loculi alligata; calyx nullus; corolla supera, 6 -fida; tubus declinatus fauce obliquâ, anticè abbreviatus; limbi lacinixe alternæ dispares; corona stanninea, declinata, concavo-rutelli-formis, basi cylindricâ erectiore; filamenta infernè dilatata et complanata; sinuosè recurvata, mox porrecta, demum (ubi pollen emittitur) sursum curvata; superiora duo mediis breviora, inferiora duo longiora; superiora duo tubum propius, inferiora duo remotiùs, media puncto intermedio membranâ tenui obliquè connexa; stylus sinuosè recurvatus, mox (ubi pollen emittitur) deorsum, demum (ubi stigma maturescit) sursum curvatus; stigma obtusum, dilatatum, puberulum; anthere hinc unâ parte, hinc duâbus pendulæ; pollinis particulæ Hippeastri pollinis particulis minutiores, Zephyranthis longiores; capsula ovata, trisulca.

## Specific Character and Synonyms.

Eccrosia bicolor; bulbo globoso; foliis latis, petiolatis, viridibus, sub-pedalibus; scapo glauco, pedali, præcoce, infernè crassiore, gradatim minore; numbellâ 4-florâ; spathâ bipartitâ, bracteatâ ; pedınculis circiter uncialibus; germine brevi, rotundatè trigono, loculis 12 -spermis, ovulis oblongis complanatis; tubo brevi, germine crassiore, ex viridi flavescente, mediâ parte inflato; limbo sursum curvato lateribus compressis; laciniis uncialibus, miniatis, viridi et flavo striatis, exteris uncatis angustioribus, internis obtusis planioribus;
planioribus; coronâ melliferâ, $1 \frac{1}{4}$ unciali, limbum non expansum prorumpente ex laciniis inferioribus imâ dimotâ ; coronæ parte cylindricâ superne quasi cornutâ; glandulis sex ad coronæ basin extra tubum filamentis appositis ; filamentis stylo brevioribus, pallidissimè miniatis; stylo triunciali; antheris viridicinerascentibus. W. $\boldsymbol{H}$.
Eucrosia bicolor. Bot. Reg. 207.
We have paid the most minute attention to the drawing and description of this curious plant, because the only figure and account of it published are very inaccurate, the flowers being represented with a funnel-shaped limb and otherwise distorted (probably in consequence of having been forced out of their natural posture and form by the fingers of the curious) and the generic character being, in several respects, incorrect and imperfect. Bulbs of this species were imported from South America into the Hammersmith nurscry, where one of them flowered in 1817. They were soon after lost by exposure in a cold frame, and we believe our specimen from the Spofforth collection is the only one that has been since produced in Europe. The flower has a singular resemblance to a winged insect, taking the germen for its head. The four flowers are placed back to back, nearly at right angles. The petals are bent upwards and pressed together sideways, and, if pulled apart, close again immediately. No expansion of the flower takes place. On the first day the point of the cup forces itself out in front between the two lower petals, the filaments being bent back and crumpled in the bud. The next morning the further protrusion of the cup pushes aside one of the lower petals, and the style and filaments, bent in the form of an S , are gradually and slowly produced without any parting of the other petals, and become by degrees straitened. On the following day the anthers discover the pollen; the filaments and petals being then curved upwards, and the style curved downwards. About twenty-four hours after, the style begins to reascend, and two days after the inversion of the anthers, it becomes curved upwards like the filaments. Of course the periods stated may vary in different temperatures. Our figure represents a bud with one petal forced aside, and a flower with the style bent downwards. The dissection shews the ultimate posture of the style, and, the petals being broken off, it
gives a view of the singular shape of the cup, and of the glands attached to each filament inside the cup, and seen faintly through the web that connects them. The cup is filled with honey which exudes from the glands. The detached petal generally slides back into its place, when the limb and filaments take their final attitude, excluding from the sight the lower part of the cup. When effete, the style and filaments collapse, the petals continuing rigid.
The leaf of the full-grown bulb, which follows the flower, is near a foot long, and too large for the plate. The bulbs thrive in the stove in light loam, requiring moisture and shade while growing, drought and complete rest in autumn and winter. The plant flowered at Spofforth in April. We are, as yet, unacquainted with the seeds. The leaves are frequently solitary; probably, their number rarely exceeds three. We have inserted in the generic character those features which are essential to the genus. The compression and upward curve of the petals, the glands in the cup, the two-leaved spathe, and the bractes, which accompany the secondary peduncles, will probably be found throughout the genus; but their absence would not justify the separation of an individual species from the genus, and are therefore more safely placed in the specific character. This species should have been rather called tricolor than bicolor. W. H.

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# Bossifa linophylla. Narrow-leaved Bossiea. 

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> Class and Order.

Dindelphia Decandria.

## Generic Character.

Cal. bilabiatus: labiosuperiore majore semibifido obtuso. Stam. omnia connexa. Legumen plano-compressum, pedicellatum, polyspermum, margine utroque incrassatum. Semina strophiolata. Brown, in Hort. Kerw.

## Specific Character and Synonym.

Bossiea linophylla ; ramis foliosis compressis, foliis linearibus: marginibus recurvis, legumine uniloculari. Brown Mss. Hort. Kew. ed. alt. 4. p. 268. Lodd. Cab. 174.

A pretty little green-house shrub, with delicate flexile branches, covered towards their extremities with beautiful small blossoms of an orange colour, streaked with red, and having a green eye. It is a native of the South-west coast of New-Holland, where it was first detected by Robert Brown, Esq. Introduced in 1803. Flowers in May and June. Communicated by Messrs. Loddiges and Sons, who inform us in their Cabinet, that "it is not readily increased except by seeds. A light loam with a little peat mixed is a proper soil for it. Is not particularly tender, and only requires the common green-house protection, with a moderate quantity of water. Planted out in the conservatory it grows far more luxuriously, and flowers much better than when confined in a pot."


# Campanula pulla. Austrian Bell- 

FLOWER.
******************
Class and Order.
Pentandria Monogrnia.

## Generic Character.

Cor. campanulata, fundo clauso valvis staminiferis. Stigma trifidum. Caps. infera, poris lateralibus dehiscens.

## Specific Character and Synonyms.

Campanula pulla; cauliculis unifloris, foliis caulinis ovatis crenatis, calycibus cernuis. Sp. Pl. 231. Willd. 1. p. 890. Roem. et. Sch. 5. p. 91. Pers. Syn. 1. p. 188. Jacq. Obs. 1. p. 30. t. 18.-Austr. 3. t. 285. Scop. Carniol. 1. p. 143. Hort. Kew. ed. alt. 1. p. 344. Lam. Encycl. 1. p. 57. n. 6. Lodd. Cab. 554. Campanula alpina latifolia, flore pullo. Bauh. Pin. 93. Prodr. 33.

Campanula pulla is a rare alpine plant, of very considerable beauty, and likely to be especially prized by the admirers of the diminutive productions of the vegetable kingdom, such as our predecessor and dear friend, the late Mr. William Curtis, used to compare to Cabinet Pictures.

We have designedly omitted the synonym from Caspar Bauhin's Prodromus, p.35, generally referred to as variety $\beta$ of this specics, being convinced in our own mind that it must be totally distinct, not only from its bearing so many flowers upon the same stem, but more especially from the style being exserted so far beyond the corolla. The last circumstance will probably exclude also Lamarce's variety, $\gamma$

A hardy perennial, native of the Austrian Alps. Flowers in July and August. Communicated by Messrs. Loddiges and Sons. Cultivated according to Mr. Aiton, in 1779, by John Blackburne, Esq.


# Centaurea Spinosa. Prickly-brancued Centaury. 

 Class and Order. Syngenesia Polygamia Frustranea.

> Generic Character.

Recept. setosum. Pappus simplex. Cor. radii infundibuliformes, longiores, irregulares.

## Specific Character and Synonyms.

Cextaurea spinosa; calycibus ciliatis, foliis radicalibus indivisis pinnatifidisque glabris; caulinis tomentosis pinnatifidis, ramis spinosis. Willd. Sp. Pl. 3. p. 2093. Hort. Kewo. ed. alt. 5. p. 148.
Centaurea spinosa; calyce subciliato, ramis spinosis, Lin. Sp. Pl. 1290. Sm. Prodr. Fl. graca 2. p. 199. Fl. Grac. $t$ 902. ined.
Stere spinosa maritima. Bauh. Pin. 273 ? Stere spinosa cretica. Moris. Hist. 3. p. 136. Park. Theatr. 477. f. 8. Cranus spinosus. Alpin. Exot. p. 163. cum. tàb. $\mathrm{J}_{4 C E_{A}}$ cretica, aculeata, incana. Tourn. Inst. 445.

Centaurea spinosa is a rare plant, and, though it was known to the older Botanists, no figure, we believe, has been hitherto given of it, except the very indifferent one of Prosper Alpinus, copied by Parkinson; the plate referred to in Flora Greca not being as yet published. We have quoted Baurin dubiously, because his synonyms hardly belong to this, as far as we can judge from the figure in the Codex cessareus, as copied by Dodoens.
It is a herbaceous perennial, looking from its rigidity Very shrublike, the branches are terminated with a simple spine. The scales of the calyx are ciliated, and both
this and the foliage are unarmed. The whole plant is covered with a white cottony pubescence, more remarkable in native than in cultivated specimens.

Indigenous in Candia and in several of the Greek islands. Requires to be protected from frost. Flowers in July and August. Communicated by P. Barker Webb, Esq. who gathered the seeds from which it was raised in the island of Delos.


## Alpinia tubulatá．Demerara Alpinia．

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## Class and Order．

Monandria Monogynia．

## Generic Character．

Anthera duplex．Filam．extra antheram non elonga－ tum．Stylus longitudine filamenti，in sulco antheræ recep－ tus．Stigma obsolete trigonum．Caps．carnosa．

Specific Character and Synonyms．
Alpinia tubulata；scapo radicali laterali，bracteis sca－ riosis corollam tubulosam subæquantibus，labello incluso．
Alpinis tubulata；foliis alterne bifariis remotissimis；scapo vaginato laterali bracteis communibus divaricatis ari－ dis acuminatis persistentibus；corolla tubulosa ；labello incluso ；anthera sessili．Bot．Reg． 777.

Mr．David Don，who examined this plant very particu－ larly，considers it clearly to belong to the genus Alpinia； otherwise from the radical inflorescence and tubular corolla， with a nectarium or labellum so small as not to be at all ex－ serted，＇we should scarcely have conceived it to belong to the same genus as Alpinia nutans，and the other species with which we are acquainted；but we had no opportunity of examining the structure of the flower；and if we had，we should hardly have had confidence enough in our observati－ ons to have opposed our opinion to that of so good a botanist， having had ourselves so little opportunity of studying the natural order of Scitaminece．We may remark，however， that in Dr．Roxburgh＇s Flora Indica there is a section of the species of Alpinia，all having radical scapes，and that the first botanists do not consider the difference of a cau－ line or radical infloresence as sufficient to constitute a distinction of genus．

This species appears never to have come under the notice of Botanists till it was raised at Boyton, from seeds which Mr. Lambert received from Demarara; Mr. Don, however, pointed out to us among Plumier's unpublished drawings, a copy of which is contained in the Lambertian library, a figure of a plant having considerable affinity with this, but scarcely belonging to the same species.

The stem and foliage, in our figure, are very much reduced in size, the leaves exceeding a foot in length.


# ( 2495 ) <br> <br> Sida aurita. Eared-stipuled Sida. <br> <br> Sida aurita. Eared-stipuled Sida. <br> $* * * * * * * * * * * * * * * * * *$ 

## Class and Order.

Monadelphia Polyandria.

## Generic Character.

Cal. nudus, 5 -fidus, sæpe angulatus. Stylus apice multifidus. Carpella capsularia (Capsulæ) 5-30 circa axim verticillata, plus minusve inter se coalita, 1-locularia, mono-aut oligo-sperma, apice mutica aut aristata. DE Cand.

## Specific Character and Synonyms.

Sida aurita; foliis subrotundo-cordatis acuminatis crenatodentatis subtus incanis, paniculis terminalibus laxis, stipulis ovatis basi auritis.
Sida aurita; (Wallich) Herba tomentosa superne pilis patulis, foliis acuminatis dentatis subtus incanis, pedunculis petiolo longioribus, petalis reflexis, capsulis muticis. Link Enum. Hort. Berol. 2. p. 206.
Sida aurita; foliis sinu angusto profunde cordatis acuminatis serrulatis superne pilosis subtus canis, stipulis latis cordato-auritis acuminatis, floribus paniculatocorymbosis, staminum tubo villosissimo, carpellis quinque hirsutis. De Cand. Prodr. 1. p. 468. n. 117.

Descr. Stem shrubby? villous. Leaves orbicular-cordate, acuminate, crenate-dentate, white-tomentose underneath, green, and velvety above, on petioles nearly the length of the leaf, hairy, inserted somewhat within the margin. Stipules ovate, acuminate, eared at the base, sides reflexed. Flowers in a terminal lax panicle, of an orange-hufr colon", streaked. Calyx of five, ovate, acute segments, villous. Petals five, ovate, acuminate, reflexed. Stamens shorter than the corolla, sheath very hairy. Anthers kidney-shaped: Pollen globular, united in chains.

Style 5-10-cleft, longer than stamens, purple. Capsules (immature) 5-10, truncate, united nearly their whole length.

De Candolle, in his elaborate Prodromus of the vegetable kingdom, enumerates no fewer than one hundred and ninety-five species of Sida;- many of these, however, are undoubtedly a repetition of the same, the characters by which they are in general defined being in many cases much disposed to vary.

Our plant was raised at the late Mr. Vere's garden, at Kensington Gore, from seeds received from Dr. Wallich, and flowered in December 1821. In Mr. Lambert's Herbarium, there is a fine specimen of this plant, ticketed with the name we have adopted, in Dr. Wallich's handwriting, by which it appears to have first flowered in the garden at Calcutta, in 1819, and to have been introduced there from the island of Java.

In De Candolle's enumeration of the species, it is arranged in the third section, Abutilon of Kunth.

Native of the East Indies. Requires the heat of the stove, where it flowered in December 1821.


# Conanthera bifolia. Violet-flowered Conanthera. 

## 

Class and Order.
Hexandria Monogynia.
Generic Character.
Cor. supera. Petala sex reflexa. Anthere in conum acutum coalitæ. Caps ovata, 3 -locularis, 3 -valvis. Sem. pauca, subrotunda.

## Specific Character and Synonyms.

Conanthera bifolia; foliis lineari-lanceolatis, scapo superne ramoso, pedunculis bifloris, petalis alternis ciliatis.
Conanthera bifolia; pedunculis bifloris, petalis variegatis, bulbo articulato solido. Flor. Peruv. 3. p. 68. t. 301. Poirét Encycl. Suppl. 2. p. 326.
Conanthera bifolia; pedunculis bifloris, foliis 2. radicalibus lineari-ensiformibus. Pers. Syn. 1. p. 370
Bermudiana bulbosa; flore reflexo cæruleo. vulgo Illmu Feuill. Obs. v. 3, p.8. t. 3.

Conanthera bifolia is a native of the mountains of Chili, and our plant was raised from seeds, which came from that country, by the late John Walker, Esq. of Southgate, where it flowered in June last year, 1823.
The figures in the Flora Peruviana, and in Feuillée, represent the petals narrower and more reflexed than they Were in our plant; but the descriptions agree so well with it that we cannot consider them as distinct species. The leaves on the flowering plant decay before the blossoms expand; those represented in the figure, belonged to a bulb that did not flower, which is probably the reason of a third leaf being produced.
The bulbs are eaten by the natives both boiled and raw; aind Feuilée found them very good in soup.


## Laurus aggregata. Cluster-flowered

## Bay.

## 

## Class and Order.

Enneandria Monogynia.

## Generic Character.

Cal. o. Cor. calycina, 6-partita. Nectarium glandulis 3 , bisetis, germen cingentibus. Filamenta interiora glandulifera. Drupa 1 -sperma.

## Specific Character.

Laurus aggregata; foliis perennantibus ovatis acuminatis triplinerviis subtus glaucis, pedunculis simplicibus axillaribus aggregatis, bracteis scariosis ovatis concavis.

Not having had an opportunity of examining the flowers of this shrub, we are not certain that it may not belong to the genus Tetranthera, but are not able to unite it with any described species of that genus. It has been supposed to be the Laurus Myrrha, which Brown refers to Tetranthera; but we think can hardly belong to that species, which is described as having a four-leaved involucrum, containing five floscules; for if the Bractes at the base of the peduncles are to be considered as an involucrum, they consist of many leaves, irregularly arranged and seem to be only the scales which protected the flower-buds. The leaves are evergreen, alternate, petioled, ovate, acuminate, of a yellowish or apple-green on the upper side and very glaucous on the under, with three nerves uniting a little above the insertion of the petiole, and terminating short of the point of the leaf. The young shoots, which are likewise axillary, and come out from among the flowers,
are furnished with several membranaceous slightly coloured scales, or a sort of stipules which are very deciduous.

Loureiro's plant is said to be extremely bitter, and to taste and smell strong of the myrrh of the shops, and he questions whether that drug may not be the product of the same species; the leaves of our's, when long chewed, discover a bitter taste, but not durable, and we could perceive nothing resembling myrrh in smell or taste.

Our drawing was taken at the Horticultural Society's garden last February, from a plant sent from China, by John Reeves, Esq. in the Orwell, Captain Lindsay, in 1821. We suppose it must be kept in the greenhouse or conservatory.


# ( 2498 ) <br> Canná edulis. Tuberous-rooted Indian Reed. 

Class and Order.
Monandria Monogynia.

## Generic Character.

Anthera simplex, filamenti margini adnata. Stylus crassus, claviformis. Stigma obtusum. Caps. 3 -locularis. Sem. globosa, numerosa.

## Specific Character and Synonyms.

Canva edulis; foliis lato-ovatis nitidis, vaginis marginibus foliorum cauleque coloratis, radice tuberoso.
Canva edulis; limbi interioris labio summo tripartito erecto, laciniis ovali-oblongis retusis late unguiculatis, media plurimum breviore; labello lineari-oblongo recurvato retuso ; caule punicante. Bot. Reg. n. 775. Canva indica; foliis ovato-oblongis, laciniis corollæ subæqualibus. Ruiz et Pavon. Fl. Peruv 1.p. 1.

Descr. Stem of the specimen from which our drawing was made, rounded, and a little flattened, purple, between three and four feet high, clothed with leaves all the way, of which the lower ones were sixteen inches long, and seven wide, bright shining green on the upper surface; the margins and sheaths, as well as the stem, purple. Peduncle in our specimen, scarcely emerging from the upper leaf, few-flowered. Germen oval, tuberculated, with two small concave bractes at the base. Calyx superior, three-leaved, about the length of the germen. Three outer lacinice of the corolla erect, equal, acute, purplish scarlet, three inner ones, as usual, variable in size and position, of a bright scarlet colour. The nectarium of Linneus, the upper lip of which bears the anther on its margin, and is
the filament of later authors, is revolute and tinged strongly with yellow, as is also the lower lip, now generally called the labellum.

This very fine species of Canna, was raised by Mr. Lambert, at Boyton, from seeds gathered in Peru, near thirty years before they were sown. Pavon's own specimen of Canna indica, now in the Lambertian Herbarium, proves it to be this species, and not the indica of Linneus, from which, indeed, its tuberous esculent roots are alone sufficient to distinguish it.

The variable size and position of the inner lacinix of the Corolla, together with the petal-like filament and labellum, often so confuse the different parts of the flower in many of the species, that hardly any figure shows the whole distinctly ; on this account we have given a rough sketch of one of the flowers of this species in which all the parts are brought into view, and distinguished by letters of reference, as under.
a. a. Two of the outer laciniz; the third being behind is out of sight.
b. The largest of the inner laciniæ, in this flower, quite erect.
c. A similar laciniæ, facing the former, and revolute.
d. The third lacinia, in this instance, very little exceeding in size one of the outer laciniæ, but of the same scarlet colour with the others.
c. The filament or upper lip of the nectarium, revolute at the point and bearing on its margin.
$f$. The anther, which in this stage is become effete, the pollen being discharged before the flower expands.
$g$. The obtuse ensiform style.
h. The labellum, or lower lip of the nectarium, likewise revolute.

These two parts ( $e$ and $h$ ) are always opposed to each other and embrace the style (g), the point of which for some way down is generally covered with adhering pollen.
i. The calyx.
k. The germen.
l. The bractes.


## Aspidistra lurida. Dingy-flowered Aspidistra.

 ****************** Class and Order. Octandria Monogynia.
## Generic Character.

Cor. infera, 1-petala, 8-fida, æqualis. Anthere fundo tubi sessiles, biloculares, introrsum dehiscentes. Stigma clypeatum, carnosum, magnum, faucem corollæ operiens. Germen 4-loculare, loculis 1-spermis.

## Specific Name.

Aspidistra lurida. Bot. Reg. 628.

Mr. Robert Brown has suggested, that there exists some affinity between this plant with Tupistra (vide supra No. 1655), as established by Mr. Ker, whose generic character of our present subject in the Botanical Register we have adopted, with some little alteration. The flowers we examined had an eight-cleft, not six-cleft limb. The most remarkable character in the parts of fructification is the large stigma, filling the faux of the corolla, which is, in the Register, not unaptly compared to a mushroom in miniature.
Our drawing was taken in Mr. Colville's stove in the King's Road, in March last ; but we could obtain no certain information of the country from whence it came.


# ( 2500 ) <br> Wulfenia carinthiaca. Carinthian Wul- 

 FENIA.*****************
Class and Order.
Diandria Monogynia.

## Generic Character.

Cal. 5-partitus. Cor. 2-labiata, ecalcarata: labio superiore breviore integro ; inferiore 3-lobato, barbato. Stam . sub labio superiore adpressa, conniventia. Caps. 9-locularis, supera.

## Specific Name and Synonyms.

Wulfenia carinthiaca. Jacq. Misc. 2. p. 62. t. 8. f. 1.Icon. rar. 1. t. 2. Willd. Sp. Pl. 1. p.78.-Enum. Hort. Berol. p. 24.
Wulfenia carinthiaca; caule nudo, foliis crenatis. Smith in Transt Lin. Soc. 6. p. $96 . \quad$ Vahl Enum. 1. p. 87. Schrad. Fl. Germ. 1. p. 47.
Pederota nudicaulis; foliis radicalibus oblongis obtusis, spica secunda, caule nudo Lam. Ill. 1. p. 48. t. 13. f. 2.-Encycl. 4. p. 693.

The learned President of the Linnean Society, in the sixth volume of the Society's Transactions, has united $P_{\text {ederota }}$ to this genus, with the exception of the Cape species, and the characters of the two seem to us to be but little different; but neither Willdenow, Schrader, nor Roemer and Schultes have adopted this change. WulFENIA, therefore, continues still to consist of a solitary species. It belongs to the natural order of Scrophularine, the Personato of Linnews.
Native of the loftiest Carinthian Alps, growing in a very rich soil. Appears to be rare even where indigenous, and does not occur in the last edition of the Hortus Kewensis.

A hardy peremnial, not annual, though it has been frequently noted as such.

Our drawing was taken from a plant communicated by A. B. Lambert, Esq. from his collection at Boyton, where it flowered in May last.


## Psidium cattleinnum. Purple fruited

Guava.
*******************

> Class and Order.

Icosandria Monogrnia.

## Generic Character.

Cal. 5-partitus. Petala 5. Stamina per totam tubi calycis parietem inordinatim inserta. Ovar. 3-loculare ; loculis placenta septiformi ad marginem fissa, utrinque reflexa, bipartitis; ovula plurima, horizontalia, margini placentæ inserta. Stigma capitatum. Bacca calyce coronata, polysperma. Testa ossea. Embryo hippocrepicus: cotyledonibus quam radicula multoties brevioribus. Lindher. Guaiava. Gert.

## Specific Character and Synonyms.

$\mathrm{P}_{\text {sidium cattleianum ; ramis teretibus, foliis obovatis petio- }}$ latis coriaceis glaberrimis, floribus solitariis. Lindl. Collect. Bot. 16. Bot. Reg. 622.
Psidum cattleianum. Sabine in Trans. Hortic. Soc. 4. p.315. t. 11.

The specimen of this fine fruit, from which our drawing was taken, was sent us by our lamented friend, the late John Walker, Esq. It was originally introduced into this country from China, about the year 1817, by Mr. Brookes, of the Ball's Pond nursery. The fruit is said to exceed in flavour that of any of the known species of Guava, several of which are cultivated both in the East and West Indies, and from one or more of these the well known Guava jelly is prepared.
The first account we have of this handsome tree is from $W_{\text {iliam Cattley, Esq. in }}$ in fourth volume of the Transactions of the Horticultural Society. In this gentleman's conservatory
conservatory at Barnet two crops of fruit were produced from one tree in the same year; a fine figure of a fruitbearing branch, from the pencil of Mr. Ноoкer, is added, and also some remarks by the Society's very zealous secretary, who applied the name of Cattleianum to it. An illustration of the botanical character of the genus, as well as of this particular species, may be seen in Lindley's Collectanea Botanica above quoted, together with a fine figure of a flowering branch and separate fruit.

The flower is very little larger than that of the common broad-leaved myrtle, which it is not unlike. The fruit contains a juicy pulp, sweet, with some acidity. In the one we tasted, perhaps from being too ripe, we could not discover the delicious flavour described by Mr. Lindeey.

May be propagated by cuttings, and these, with good management, Mr. Cattley observes, may be brought into fruit the second year. It seems to be a fast grower, Mr. Catrley's plant, when purchased, being only twelve inches high, had, in two years, attained the height of three yards.


# Sarcophyllum carnosum. Cape SarcoPHYLLUM. 

## 

## Class and Order.

## Diadelphia Decandria.

## Generic Character.

Cal. campanulatus, 5-partitus regularis. Legumen acinaciforme, acutum. Thunb.

## Specific Name and Synonym.

Sarcophyllum carnosum. Thunb. Prodr. p. 125.-Nov. Genera. p. 135. Willd. Sp. Pl. 3. p. 969. Persoon. Syn. 2. p. 283. Lam. Encycl. 6. p. 542.

Descr. A small shrub, with long curved branches. Leaves chiefly at the extremities of the branches, growing in fascicles, curved, fleshy, linear, cylindrical, with a joint a little above the middle. Flowers lateral, distinct, but collected together near the extremities of the branches ander the leaves, without bractes, peduncled. Calyx campanulate, smooth, five-toothed; two upper teeth very divaricate; three lower ones somewhat the longest, acute. Corolla papilionaceous: Vexillum nearly round, concave, streaked, quite entire, with a short recurved claw. Alce shorter than the vexillum, applied close to, and nearly concealing the Carina, which is somewhat longer. Stamens monadelphous : filaments all united more than half way, free above; alternate ones shorter, with oblong anthers, which on the longer filaments are round. Germen linear, a little curved. Style ascending : stigma capitate, pubescent, small ; ovules many.
Native of the mountains of the Cape of Good Hope, where it is said to flower in March. Raised from Cape seeds at the Fulham nursery, and commumicated to us in Hower,
flower, by Messrs. Whitley, Brame, and Milne, in June 1820.

We received this plant under the name we have adopted, but after attentively considering. Thunberg's description of his Sarcophyllum carnosum, in his nova genera plantarum, we cannot but entertain some doubts whether we have done right in referring it to that genus.


# Astrapea Wallichit. Wallich's As- 

TRAPRA.

Class and Order.
Monadelphia Polyandria.

## Generic Character.

Flores umbellati iuvolucrati. Involucrum (polyphyllum, inæquale). Cal. simplex, 5-phyllus, 1-bracteatus. Petala 5, convoluto-clausa. Stam. 25 in tubo corollifero connata, quorum 5 sterilia. Germen 5-loculare, oligospermum. Stylus 1. Stigmata 5. Lindley.

Specific Name and Synonyms.
Astrapea Wallichii. Lindl. Collect. Bot. 14. Bot. Reg. 691. De Cand. Prodr. Syst. Nat. 1. p. 500.

This very beautiful plant, said to grow to a large tree, but which flowers in our stoves at the moderate height of a few feet, belongs to the natural order of Malvacee of Jessiev ; and to the division proposed by Mr. Robert Brown, in the Appendix to Flinder's Voyage, to be separated into a distinct order, under the name of Buttneriacea. This separation has been adopted by De Candolle in his Prodromus, who has inserted Astrapea in his fifth division or tribe of the order, the Dombeyacea.
This fine plant was introduced into Kew Garden from Calcutta, by Dr. Wallich ; but its native country is not positively ascertained, though supposed to be Madagascar, from whence it is thought that it was brought to the Mauritius, and thence to Calcutta.
Our drawing was taken at the garden of the Horticultural Society at Chiswick, in June last, from a plant presented to the Society in 1823, by William Townsend Aiton,

Esq. from his majesty's collection. We saw it in flower at the same time, at Mr. Colville's nursery in the King's Road.

Not having had any opportunity of examining the fructification of this plant ourselves, we must refer to Mr. Lindeey's account of it in his Collectanea Botanica, as we are not in the habit of copying the descriptions of other writers, when we have not had it in our power to make our own observations.


## Erinus Lychnidea. Phlox-like Erinus.

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

Class and Order.
Didynamia Angiospermia.

## Generic Character.

Cal. 5 -partitus. Cor. limbus 5 -fidus, æqualis; lobis emarginatis. Caps. bipartibilis, polysperma.

## Specific Character and Synonyms.

Erinus Lychnidea; foliis lineari-oblongis obtusis subdentatis oppositis; bracteis alternis, limbi laciniis semibifidis.
Erinus Lychnidea; foliis lanceolatis serratis, corolla tubo pubescente, limbi laciniis semibifidis. Lindl. in Bot. Reg. 748.
Erinus Lychnidea. Willd. Sp: Pl. 3. p. 333. Lin. Suppl. 287. Persoon Syn. 2. p. 147.

Erinus capensis; floribus spicatis, foliis linearibus dentatis. Lin. Mant. 252.
Erinus lychnideus; foliis lanceolatis glabris apice serratis, caule herbaceo. Thunb. Prodr. 102 ?
Lychnidea villosa, foliis ex alis floriferis florum petalis cordatis. Burm. Afric. 138. t.50. f. 1 ?
Euphrasia Ethiopica, Drabæ foliis, summis oris flosculorum altius divisis. Pluk. Mant. p. 73?

Descr. Stem rounded, branched: branches assurgent. Leaves opposite, sessile, linear-lanceolate, obtuse, with two or three teeth near the point. Flowers in a terminal spike. Bractes, or floral leaves, alternate, sessile, like the cauline leaves, but with a broader base. Calyx sessile in the axil of the Bracte, five-cleft: segments linear, erect, nearly as long as the bracte. Tube of corolla slender, three times the length of the calyx, dull purple in the middle, and greenish
greenish at both extremíties, villous: Limb four times shorter than the tube, five-cleft; lacinia bifid more than half-way down, dark purple on the outside, and pure white within: faux bearded, stamens four : two of the anthers concealed within the tube, and two just appearing at its mouth. Germen superior, two-celled ? ovula many, inserted into a central receptacle. Style filiform, the length of the tube. Stigma simple. The flowers are closed during the day, but expand after sun-set, and are then very fragrant.

There is much difficulty in applying with certainty the synonyms of this species; those quoted by us from Burman and Plukenet are generally referred to africanus, but appear to us to belong to our present subject. The Enisus Lychnidea of Lamares's Encyclopædia is the fragrans of Hortus Kewensis. Linneus having described capensis as having a yellow flower, alone throws any doubt upon that synonym, and it may vary in this respect, as fragrans is said to do.

For this very beautiful plant we are indebted to Mr. Alexander Cuthbert, gardener to the late Lady Wake of Pheasant Grove, Chiselhurst, who communicated the specimens from which our drawing and description were taken, in September 1823. A greenhouse plant. Native of the Cape of Good Hope,

## Ixora barbata. Bearded Ixora.



> Class and Order.

## Tefrandria Monoginia.

## Generic Character.

Cor. 1-petala, infundibuliformis, longa, supera. Stamina supra faucem. Bacca 4 -sperma (2-sperma. Roxb)

## Specific Character and Synonym.

Ixora barbata; foliis oppositis oblongo-ovatis breviter petiolatis, panicula terminali trichotoma laxa, corollx tubo longissimo, fauce barbata.
Ixora barbata ; tubo corollæ longo; fauce barbata, foliis oppositis breviter petiolatis oblongis integris levibus nitidis ; floralibus rotundis cordatis sessilibus. Roxb. Flor. Ind. 1. p. 394.
Bem-Schetti. Hort. Malab. 2. t. 14?

Descr. Flowers white, in terminal panicles, always trichotomously divided; the terminal flower of the last division sessile, the two lateral ones peduncled. Bractes very minute, opposite, two at each division of the panicle, and two at the base of the germen. Pedicels dull purple. Germen globular, inferior, two-celled; segments of the calyx four, minute, applied close to the tube of the corolla. Tube exceeding an inch in length. Limb four-cleft : lacinic oval, obtuse, spreading, finally reflexed. Anthers sessile in the bearded faux, spreading, alternate with the lacinia, acute, before they burst of a yellow colour, with a transparent apex. Style erect, longer than the tube, at first club-shaped, afterwards bifid.
Roxburgh describes the leaves as oblong, from six to nine inches long, and the floral leaves as round, sessile, and embracing the base of the panicle.
Dr. Wilich remarks, that this shrub must not be confounded
founded with the Pavetta barbata of Smith, in Rees's Cyclopædia.

Dr. Roxburgh never met with this species out of the botanic garden at Calcutta. Requires to be kept in the stove. Drawn at the Horticultural Society's garden, in July 1823.

Ixora barbata was sent from the botanic garden at Calcutta, under that name, by Mr. John Potes, a very meritorious collector, in the service of the Society; but who unfortunately fell a victim to consumption, on his return from his mission to the East Indies and China, in 1823.


## Pedicularis canadensis. Canadian Louse-

WORT.
*****************
Class and Order.
Didynamia Angiospermia.
Generic Character.
Cal. 5-fidus. Caps. 2-locularis, mucronata, obliqua: Sem. tunicata.

## Specific Character and Synonyms.

Pedicularis canadensis; caule simplici, foliis pinnatifidis inciso-dentatis, capitulo basi folioso hirsuto, corollis galea setaceo-bidentata. Pursh. Flor. Amer. Sept. 2. p. 425. Sweet Flower Garden, 67.

Pedicularis canadensis; caule simplici, spica subfoliosa, corollis galea setaceo-bidentata, calycibus deorsum truncatis. Lin. Mant. 8. Willd. Sp. Pl. 3. p. 211. Hort. Kezo. ed. alt. 4. p. 4.
Pedicularis canadensis; caule simplici debili, capitulo basi frondoso, calycibus deorsum truncatis. Michaux Fl. Amer. Boreal. 2. p. 18.

Descr. Stem simple, assurgent, pubescent. Radical leaves lanceolate, pinnatifid: pinne doubly incised-dentate, petioled, hairy on the underside, especially along the nerves: cauline leaves petioled, sub-opposite, pinnatifid, dentate. Flowers in a terminal oval capitulum, with leaflike Bractes at the base and intermixed, upper ones quite entire. Calyx inflated, angular, hairy at the angles, with an oblique quite entire opening, giving the appearance of a one-lipped calyx. Tube of the Corolla straight, longer than the calyx; upper-lip or galea falcate, with two bristle-like teeth at the lower edge; lower-lip three-lobed: lobes rounded, hollowed underneath. Capsule (unripe) conical,
conical, a little curved, mucronate. Stamens the length of the tube of the corolla: anthers incumbent, included. Style projecting beyond the coralla; stigma capitate, small.

Kalm, in the Mantissa, deseribes the leaves as alternate; but, in the two specimens from North America, preserved in the Banksian Herbarium, one from Canada, the other from the neighbourhood of New York, the leaves are opposite as in our figure, or very nearly so; but, as the insertion of the petioles is not always exactly opposite, they may occasionally become alternate. This author also describes the flowers as white; but Pursh as yellowish white, with a tinge of purple.

Our drawing was taken at the garden of the Horticultural Society, the latter end of April, in the present year, 1824. "The plant was purchased for the Society by Mr. Prince of Long Island, New York, under the name of Pedicularis gladiata, and brought home by Mr. David Douglas, one of the collectors, who went to North America in 1823, and returned this year with his collection of plants."

A hardy perennial. Native of woods and meadows ${ }_{2}$ from Canada to Carolina.


# ( 2507 ) <br> Fuchsiá decussata. Cross-branched 

Fuchsia.
********** * * * * * * * * *

> Class and Order.

Octandria Monogynia.

> Generic Charater.

Cal. 4-partitus, coloratus, corollifer. Cor. 4-petala. Bacca infera, 4-locularis, polysperma.

## Specific Character and Synonyms.

Fuchsin decussata; pedunculis axillaribus unifloris, foliis ternis oppositisque lanceolatis obsolete denticulatis. Flor. Peruv. 3. p. 88. t. 123. f. B. Pers. Syn. 1. p. 411. Poirét Encycl. Suppl. 2. p. 679.

Descr. Shrub. Stem brown, scarred, round, swollen at the origin of the branches; branches decussating, frequently three together, drooping, younger shoots red, very slightly pubescent. Leaves opposite, or in threes, lanceolate, acuminate, toothed, soft, bright green, very slightly pubescent above, shining and paler below, petioled, veined, middle rib furrowed above, prominent, and round below, red; veins curved, nearly undivided; petiole shorter than the leaf, furrowed above, round below, red. Stipules lateral, two at the base of each leaf, small, pointed. Flowers three, in a whorl, drooping; peduncles equal in length to the calyx, filiform, red. Calyx bright red, every where very slightly pubescent, except on the inside of the segments of the limb, four-cleft: segments pointed, moderately spreading, converging slightly at the points, each having three obscure ribs; tube almost cylindrical, but bulging slightly near the germen, half as long as the limb. Petals four, obovate, and bluntly pointed, inserted into the faux of the calyx, at first, rich purple, afterwards much more
red, and paler ; claws and central rib more red than the rest of the petal; veins indistinct, undivided, curved; the petals are sometimes flat, and sometimes convolute. Stamens eight, inserted into the faux of the calyx within the petals; anthers small, incumbent, bilocular; pollen pale yellow; filaments bright red, longer than the calyx, unequal, shining. Pistil one; germen inferior, nearly cylindrical, four celled, dull purplish red; seeds obovate, very numerous, attached to the central column: Style filiform, slightly pubescent, projecting beyond the anthers, the same beautiful colour as the filaments and calyx, swelling near the stigma, which is of a dull purple colour, fourpointed, with an opening between the points. Nectaries eight, green glands in the bottom of the calyx tube.

The above description was taken by Professor Graham, from a plant that flowered in the botanic garden at Edinburgh, in June 1824; and the drawing was made by Dr. Greville, at the same time.

Raised from seeds sent from Chili, in 1822, by Mr, Cruikshanks, through Francis Place, Esq.

Hitherto the plants have been kept in the greenhouse; but some are now planted in the open air and are expected to prove as hardy as the Fuchisia coccinea.


## Arum bulbiferum. Bulb-bearing Arum.

## **** 粎 $* * * * * * * * * * * *$

> Class and Order.

Monecia Polyandria.

## Generic Character.

Spatha monophylla, cucullata. Spadix supra nudus, inferne femineus, medio stamineus.

Specific Character.
Arvm bulbiferum; acaulis, radice tuberosa, foliis decompositis bulbiferis; spatha cucullata spadice cylindraceo parum longiore. Roxb. Flor. Ind. inedit. ex anglico.

This magnificent species of Arum, of which we believe no figure has been hitherto published, was communicated to us in flower by Mr. Brooke of Ball's Pond, Islington, in May 1820, at which time it showed no appearance of foliage, nor had we an opportunity of adding this to our drawing till March, in the present year, 1824.
The flower was drawn of its natural size, but the leaf, which was nearly three feet high, and spread over an area of several square feet, was from necessity extremely diminished. Bulbs are formed always at the primary, and sometimes at all the divisions of the leaf, from whence the specific name was derived.
Native of Bengal, where it flowers in the wet season, and is called by the natives, Umber Bale. Requires to be kept in the stove.


# Azalea indica. var. ß. plena. Double Rose-coloured Indian Azalea. 

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

Class and Order.
Pentandria Monggyia.

## Generic Character.

Cal. minimus, 5 -partitus, inæqualis. Cor. infundibuliformis, quinquefida, inæqualis. Stam. sub pistillo inserta : flamenta declinata, exserta : anthere poro gemino operculato supra dehiscentes. Stylus exsertus, declinatus. Caps. 5-locularis.

## Specific Character.

Azalea indica; floribus subsolitariis pentandris decandrisve calycibus pilosis. Supra No. 1480, ubi synonyma petenda.
ß. plena. flore incarnato pleno, foliis minoribus pilosis.

Descr. Of the numerous varieties of this beautiful shrub recorded by Kæmpfer, as occurring in Japan, only one is mentioned as being double, and that only with two Corollas one within another. In the one here represented, the Stamens were all obliterated, being converted into petals.
The flowers are more numerous than in the variety before given, but rather smaller, the leaves are smaller and more hairy. It seems to be one of those which, when full grown, are described as appearing entirely covered at the upper part with blossoms.
So much attention has been of late paid to the importation of curious plants from China, that we can hardly fail of receiving more of the varieties of this beautiful shrub from that country, and when once imported they are not difficult to propagate by layers.
Communicated in March last by Mr. Вrookes, who imported it from China in the year 1819, in the Lady Melville Idiaman.


# Ornithogalum narbonense．Narbonne Star of Bethlem． 

米料米米米米粎粎粎洣粎粎 Class and Order．Hexandria Monogymia．

## Generic Character．

Cor．6－petala，erecta，persistens，supra medium patens． Filamenta basi dilatata．Caps．3－locularis．Sem．subro－ tunda，nuda．

## Specific Character and Synonyms．

0nnithogalum narbonense；foliis linearibus scapo dimidio brevioribus，racemo elongato，filamentis æqualibus， petalis alternis tridentatis pedunculisque patentissimis． $0_{\text {rithogalum }}$ narbonense；racemo oblongo，filamentis lanceolatis membranaceis，pedunculis floribusque pa－ tentibus．Lin．Sp．Pl．440．Willd．2．p．118．Per－ soon Syn．1．p． 364.
$0_{\text {rithegalum narbonense；remo longissimo，genitalibus }}$ æqualibus，petalis lanceolatis，foliis linearibus planis． Flor．Taur．－Caucas．1．p． 276.
Ornithogalum majus spicatum flore albo．Bauh．Pin． 70. $0_{\text {rimithogalum narbonense．Dod．Pempt．222．De Cand．}}$ Flore franc．3．p 216.
$0_{\text {ritithogalum majus II．Clus．Hist．p．187．quoad de－}}$ scriptionem，byzantinum verò quoad iconem，quæ eadem ac Dodonæi．

Descr．Leaves linear，in our plant channelled，（not plain as described in the Flora Taurico－Caucasica）wither－ ing at the point．Scape roundish，erect，pale green，twice the length of the leaves，bearing many flowers，sometimes up to a hundred．Bractes lanceolate，small，five times shorter than the peduncle．Peduncles very patent but be－ coming
coming erect as the fruit ripens, one-flowered. Corolla divided to the base into six segments or petals, which are very patent, white within, with a green stripe along the mid-rib on the outside; alternate ones three-toothed at the tip. Filaments erect, widening at the base, accuminate, of equal length, shorter by half than the petals: Anthers oval, versatile : pollen yellow. Germen obtusely threecornered, yellow. Style shorter than the stamens, truncate.

By some authors this species has been considered to be a variety of pyrenaicum, from which it especially differs in its humbler growth; in having longer peduncles; no yellow colour in the flower; style shorter than the stamens; bractes a fifth part, instead of half the length of the peduncles. From stachyodes it differs in having all the stamens of equal length.

Native of the south of France. Communicated by Mr. Anderson, from the Chelsea garden in July 1821, who received it from Russia, by favour of our friend Dr. Fischer.


Bellis sylvestris. Large Portugal

## Daisy.

*******************
Class and Order.
Syngenesia Polygamia Superflua.
Generic Character.
Receptaculum nudum, conicum. Pappus o. Calyx hemisphæricus: squamis æqualibus. Sem. obovata.

## Specific Character and Synonyms.

Bellis sylvestris; scapo nudo unifloro, foliis obovatis crenulatis subtriplinerviis, seminibus hispidis.
Bellis sylvestris; scapo nudo unifloro, foliis obovatis crenatis trinerviis. Willd. Sp. Pl. 3. p. 2122. Hort. Kero. ed. alt. 3. p. 86. Persoon Syn. 2. p. 459.
Beluis sylvestris; scapo nudo, foliis ovato-oblongis crenatis trinerviis. Cyrill Neap. 2. p. 12. t.4.

Whether this plant be really different from Arnica Bellidiastrum seems not quite certain; both, however, are recorded as distinct in the Hortus Kewensis, as well as by Willdenow and Persoon. The specimens of each, which we have examined, are extremely similar, yet in the Arnica we find so long a pappus crowning the germen as to appear quite evident amidst the florets; whereas, in our present plant, the germen is covered with short bristles, which project but little beyond the seed, and do not form a true pappus. There can be very little doubt but that Bexis sylvestris is properly united to the genus Beliss, whether it be really distinct from the Bellidiastrum of Micheli or not; but we cannot agree with M. Poirét (Encycl. Bot. Suppl. 4. p. 298,) in considering it as a mere variety of Bellis perennis, from which it differs not only in size, but in the proportion of the radius and calyx; the
former
former in this plant being barely one-third longer than the latter, which in $\beta$. perennis is twice as long. The compressed bristly seeds too are quite different from the smooth ones of the common daisy.

A tolerably hardy perennial. Native of Portugal and Italy, growing chiefly in woods and under shady hedges. Flowers in the spring. Is propagated by dividing its roots, as it seldom perfects its seeds here. Communicated by Mr. Anderson from the Chelsea garden, in May 1820.


## (2512)

## Coreopsis tinctoria. Arkansa Co-

## REOPSIS.

*****************
Class and Order.
Syngenesia Polygamia Frustranea.

## Generic Character.

Recept. paleaceum. Sem. compressa emarginata. Pappus bicomis. Cal. duplex uterque polyphyllus.

## Specific Character and Synonym.

Coreopsis tinctoria; foliis oppositis; inferioribus pinnatis linearibus; superioribus trifidis, calyce exteriore dimidio breviore, radio basi maculato, disco discolore.
Coreopsis tinctoria. Barton Flora of North-Amer. 2. $t .45$.

Descr. Root annual. Stem upright, very slender, and thence apt to be variously distorted; fluted, trichotomously divided. Lozer leaves, which fall off as the plant advances, opposite, odd-pinnate, with the leaflets in three or four distant pairs, linear, some of them irregularly divided, terminal one longer, and somewhat broader than the rest, higher up the leaves, have one pair of leaflets at the base, and three at the extremity, and the upper ones are simply trifid, sometimes with bundles of young leaves in the axils. Peduncles terminal, nearly naked, one-flowered. Outer calyx spreading, not half the length of the inner, which is upright, scariose. Radius about eight-petaled : petals wedge-shaped, for the most part three-toothed at the point, the middle tooth generally the longest, and often notched; but sometimes the petal is as it were truncated, with several unequal teeth; colour a golden yellow, with a dark crimson
spot
spot at the base. Disk black-purple; but the styles and stigma being yellow and exserted, occasion the outer rim, when the florets are expanded, to appear yellow. The palee are linear, and equal the floret in length. Seeds small, compressed, black, curved, naked.

This species has a near affinity to tenuifolia; from which, however, it is readily distinguished by its slender distorted stems; its outer calyx being barely half the length of, instead of equal to, the inner; and above all by the dark crimson base of the petals.

Native of the whole of the Arkansa territory, as far as the Red River, North America, where it was discovered by Professor Nuttall, during his travels in that country, and an account of it transmitted to Professor Barton. It is of late introduction, and generally treated as a tender annual. Flowers the greater part of the summer. Communicated by Mr. Anderson from the Chelsea garden, in September 1823, at which time our drawing was taken. We also received fine specimens in July last, from the botanic garden at Bury St. Edmunds.

# ( 2513 ) <br> Monarda Russeliana. Dotted-flowered Monarda. 

******************* Class and Order.

Diandria Monogynia.

## Generic Character.

Cal. tubulosus dentatus. Cor. ringens: labio superiore lineari, filamenta involvente. Semina. 4.

## Specific Character and Synonyms.

Monarda Russeliana; caule acutangulo bisulcato, foliis ovatis acuminatis basi rotundatis; inferioribus serratis, labio inferiore revoluto guttato.

Descr. Stem erect, acute-angled with two deep grooves, smooth. Leaves ovate, acuminate, rounded at the base, lower ones serrate, upper ones quite entire, roughish, on very short incurved petioles. Flowers capitate. Involucrum consisting of six bractes, ovate-acuminate, longer than the calyx, ciliate, pale-flesh-coloured on the upper surface and green on the lower. Tube of Calyx curved. striate, with five-toothed border: teeth subulate, ciliate. Corolla ringent: upper-lip very narrow, a little dilated upwards, entire or minutely emarginate: loveer-lip much wider, revolute, obsoletely three-toothed, white, with distinct crimson dots.
This very handsome and distinct species of Monarda Was communicated by Robert Barclay, Esq. of Bury Hill, in June last. We are informed by Mr. David Cameron, the head gardener, that it was flowered in the greenhouse, for though sufficiently hardy to bear our winters in the open ground, it will not in this situation blossom till late n the autumn. Native of North America. Raised from eeds received from Professor Nutrall, under the name We have adopted.


# Euphorbia carinata. Keel-leaved EuPHORBIA. <br> 米***************** <br> > Class and Order. <br> <br> Class and Order. <br> <br> Class and Order. <br> Dodecandria Trigynia. 

## Generic Character.

Cor. 4- s. 5-petala, calyci insidens. Cal. 1-phyllus, ventricosus. Caps. tricocca.

## Specific Character and Synonyms.

Euphorbia carinata; fruticosa, corollis calceoliformibus, foliis ellipticis subtus acutissime carinatis.
Crepidaria carinata; foliis ovatis acuminatis supra obso-lete venosis subtus costa profunde carinata: carina minute tuberculatim exasperatis. Haworth Pl. Succ. Suppl. p. 67.
Euphorbin carinata. Donn Hort. Cantab. ed. 9. p. 155. Euphorbia canaliculata. Lodd. Cab. 727.

The chief account we have found of this rare plant is in Haworth's Supplement to his history of succulent plants. At the time of this publication, in 1819, it does not seem to have flowered in this country, the author having only seen a small plant of it at the Fulham nursery. The Howers are very like those of E. Tithymaloides, but the leaves are remarkable for a sharp broad keel along the midrib on the underside, which in the younger leaves is undulated, but in the older ones quite plain, and sharp edged. Mr. Haworth, from the slipper-shaped corolla, has raised the section to which this species belongs into a genus, under the name of Crepidaria, as has been before done by Neckar, under the name of Pedilanthus.
Native of Trinidad. Requires to be kept in the stove. Communicated by Messrs. Whitley, Brames, and Milne, in May last.


## Malva prostrata. Pimpernel-flowered Mallow.

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

Class and Order.
Monadelphia Polyandria.

## Generic Character.

Cal. duplex: exterior 3 -phyllus. Caps. plurimæ monospermæ v. dispermæ.

> Specific Character and Synonyms.

Malva prostrata; foliis palmato-quinque-lobatis incisodentatis, pedicellis solitariis petiolo longioribus, fructu glabro, petalis integris. De Cand Prodr. p. 436. Cav. Diss. 2. t. 16. f. 3 .

Descr. Stem prostrate, hairy : branches divaricate, flexuose. Stipules semi-ovate, two at the base of each petiole. Lower leaves round, kidney-shaped, crenate : Upper leaves palmately divided into five wedge-shaped segments, incised towards the point. Peduncles axillary, solitary, one-flowered, when seed-bearing considerably longer than the petiole. Outer calyx consists of three subulate leaflets : inner calyx five-cleft, leaflets ovate. Petals suborbiculate, scarcely longer than the calyx, quite entire. Capsules many, two seeded, nearly smooth, two-awned : awons short, subulate.
In Professor De Candolle's elaborate account of the natural family of Malvacea, he has divided the genus Malva into four sections, to the last of which our plant belongs. This section is formed into a separate genus by Mench, under the name of Modiola, adopted by De Canpolle as the name of the section, with a question, whether it ought not to be considered as a distinct genus.

Native of South America, particularly by the way side in the neighbourhood of Monte-Video. Our plant was raised from seeds sent us from Brazil by Mr. Frederick Sello, in the garden of our lafe friend John Walker, Esq. of Arno's Grove, and flowered in May.

## Ophrys arachnites. Black-Spider Ophrys.

Class and Order.

Gynandria Monandria.

## Generic Character.

Cor. subpatens. Labellum ecalcaratum. Glandula poltinis cucullis distinctis inclusæ.

## Specific Character and Synonyms.

Ophrys Arachnites; bulbis subrotundis, scapo folioso, nectarii labiolato emarginato appendiculato. Syst. Veg. ed. 14. p. 813. Host. Syn. p. 492.
Ophrys Arachnites; caule folioso, labello villoso trilobo : lobo medio obovato apice brevissime trilobo, petalis patentibus; tribus exterioribus oblongis obtusis, binis interioribus lineari-lanceolatis brevissimis. Willd. $\$ p$. Pl.4.p. 67.
Ophrys arachnites. De Cand. fl. franç. 6. p. 332.
Ophrys arachnoides. Bot. Repos. 470 ?
Ophrys insectifera. n. arachnites. Sp. Pl. 1343.
Orchis (fuciflora ad iconem) radicibus subrotundis, labello holosericeo emarginato appendiculato. Hall. Hist. n. 1266. t. 24. fig. opt.
Orehis Arachnites. Scop. Carn. 2. p. 194. n. 1115. Lob. ic. 185.
Orchis araneam referens. Bauh. Pin. 84. Vaill. Paris. t. 30. f. 10, 11, 12, 13.
$0_{\text {rchis }}$ serapias secunda Dodonæi. Hort. Eystt. Ord. Ast. 4 t. 5.

Haller, who has given a full description of this plant, observes that the marking and appendices on the labellum, as well as the colour of the petals, are subject to much variation. In our specimen the stem was erect, clothed half-
half-way with sheathing, ovate-lanceolate leaves. Spike distant flowered; bractes lanceolate, the length of the slightly curved germen. Petals or Lacinice rose coloured, tinged with green: three outer ones ovate, concave, nearly equal, but the upper one something narrowest and incurved : two inner lacinice conical, somewhat fleshy, minutely ciliate when examined with a lens. Labellum round, with the sides reflected, hollowed underneath, velvety, black-purple, with yellow marks, and three green appendices, two towards the base, conical, villous, a third at the apex, incurved, emarginate, with a small acumen in the sinus. Column erect, incurved, mucronate, green, tinged with yellow, not unaptly compared to a bird's head. Pollen masses yellow, pedicled, and attached to a globular gelatinous gland, contained in distinct sheaths, opening in front.

Native of Germany, Austria, Switzerland, and France. Communicated in June last by our friend, Mr. Mcleay, from the garden of Charles Hampden Turner, Esq. Rook's-nest Park, Surry. The roots were brought by Mrs. Turner from Switzerland three years ago, with several other curious plants.

# ( 2517 ) <br> <br> Aloe africana, ß. angustior. Narrower <br> <br> Aloe africana, ß. angustior. Narrower Sword-leaved Aloe. 

 Sword-leaved Aloe.}


Class and Order.

## Hexandria Monogynia.

## Generic Character.

Corolla erecta, ore patulo, fundo nectarifero. Filam. receptaculo inserta.

## Specific Character and Synonyms.

Aloe africana; fruticosa, foliis ensiformibus glaucis amplexicaulibus, spica terminali longissima, floribus pendulis imbricatis, staminibus exsertis.
Aloe africana; foliis ensiformibus glaucis; inferioribus distantibus; apicibus reflexis, dentibus marginalibus igneis. Hazorth in Lin. Soc. Trans. 7. p. 21.-Syn. Pl. Succ. p. 76. Hort. Kew. ed. alt. 2. p. 296.
Aloe perfoliata, $\beta$. africana; foliis latioribus amplexicaulibus margine et dorso spinosis, floribus spicatis, caule fruticoso. Hort. Kew. ed. I ma 1. p. 466. Mill. Dict. Willd. Sp. Pl 2. p. 185.
(ß.) latifolia; foliis erecto-patulis superne parum recurvis.
Haworth Suppl. Pl. Succ. p. 47.
(a.) angustior; foliis patenti-recurvantibus, fere duplo angustioribus quam in var. a. Id. l. c.

Descr. At the time Mr. Haworth published his elaborate arrangement of the genus Aloe in the Seventh Volume of the Transactions of the Linnean Society, he had never seen the flowers of this species, which it rarely has been known to produce till it has acquired a very considerable size ; the figures of it which have been hitherto published, have, in consequence, represented the form of the plant only,
without any flower, such as those quoted with doubt by Mr. Haworth, from Commeliñ, and those in Weinman's Phytographia, which are therefore not quoted above.

Aloe africana grows with an upright stout stem, marked with the vestiges of fallen leaves. Leaves alternate, stemembracing, most crowded at the upper part, more or less recurved, sword-shaped, concave on the upper surface, armed at the margins, with conical rigid teeth or spines, which are of a red-orange colour at their points, some of the leaves have also a few similar spines on the under side towards their extremities; when cut, a watery moderately bitter juice exudes. From the extremity of the stem rises the scape, bearing a very long spike of greenish-yellow pendulous cylindrical flowers, which, as they expand, become ascendent at the point, and the orange-red coloured stamens and style are protruded for some distance beyond the corolla.

Our drawing was taken from a specimen kindly communicated by Mr. Thomas Hitchen, of Norwich, from his very extensive collection of succulent plants, in December 1823. Mr. Haworth suggests that the blossoms might have had more of a red tinge, if they had been produced later in the season, when they could have enjoyed a greater share of light.


# Cotyledon decussata. Cross-leaved Cotyledon. ******粎********** 

 Class and Order.Decandria Pentagynia.

## Generic Character.

Cal. 5-fidus. Cor. 1-petala. Squama nectariferx 5, ad basin germinis. Caps. 5 .

## Specific Character and Synonyms.

Cotyledon decussata; fruticosa, foliis concinne decussatis subteretibus mucronatis glaucis, floribus paniculatis pendulis.
Cotyledon papillaris; farinoso-alba, foliis concinne decussatis oppositis numerosis oblongo-cuneatis teretibusve vel subclavatis acutis, subhorizontalibus; pagina superiore depressa. Haworth Suppl. Pl. Succ. p. 21.vix C. papillaris Thunbergii.
Cotyledon foliis angustis oppositis cum limbo purpureo, floribus pendulis. Burm. Afr. n. 54. t. 22. f. 1 .

Descr. Stem shrubby, erect, but very little branched. Leaves opposite crosswise, sessile, fleshy, nearly cylindrical, somewhat flattened on the upper side, glaucous, or even hoary, narrowed at both ends, varying somewhat in shape, and terminated with a dark purple mucro. Common peduncle terminal, erect, smooth, half a foot long, purple, nearly naked, or furnished with a pair of smaller leaves only, terminated in a panicle of many opendulous, red flowers. Calyx five-toothed, four times shorter than the tube of the corolla. Corolla large, shewy, red : tube cylindrical, nearly an inch long: limb half the length, divided into five lacinice rolled back, Stamens ten, exserted :
filaments pass through a hairy ring near the bottom of the tube: Anthers, before the flower opens, upright, with four grooves. Styles 5 , rather longer than the stamens: stigmas lobular, villous. Nectaries five concave scales, one at the base of each germen.

There can be no doubt but this is the Cotyledon papillaris of Haworth, but this author himself doubted of its being the papillaris of Thunberg. At the time he wrote his Supplement, there was no possibility of coming to a certain decision in this respect, from the very insufficient specific character given in the Prodromus; but since the publication of the Flora Capensis, it is evident that our plant cannot belong to that species, which is there described, as having a herbaceous decumbent stem, and very much smaller leaves and flowers, with the limb of the corolla equal in length to the tube. Burman's figure and description, quoted by Haworth, however imperfect, evidently apply to our plant. And as this figure is not quoted to any other species, and the description of no recorded one corresponds, we are constrained to apply to it a new specific name, that of papillaris being, as above-stated, already preoccupied. We have accordingly given one from the striking decussate position of the leaves.

This very rare and beautiful species of Cotyledon, was kindly communicated to us in June last, by Mr. Hoop, Surgeon, South Lambeth, who possesses a fine collection of rare succulent plants, which he cultivates with great success.


Lobelia Rhizophyta. Spathula-leaved Lobelia.

## 

Class and Order.<br>Pentandria Monogynia.

## Generic Character.

Cor. tubo hinc fisso (raro integro) ; limbo 5 -partito: Antherce connatæ. Stigma bilobum (nunc indivisum). Caps. 2-locularis (raro 3-loc.) apice supero bivalvi. Brown.

## Specific Character and Synonyms.

Lobelia Rhizophyta; caule decumbente alato, folis obo-vato-spathulatis repando-dentatis, pedunculis axillaribus solitariis unifloris folio multo brevioribus.
Lobelia Rhizophyta; caule basi radicante adscendente triquetro glabro, foliis inferioribus petiolatis obovatis repando-dentatis glabris crassiusculis; superioribus lanceolatis sessilibus subdecurrentibus; summis ciliatis integerrimis, pedunculis brevissimis axillaribus, capsulis cylindricis glabris. Schultes Syst. Veg. 5. p. 44. ex Sprengelio. Link. Enum. 1. p. 219.

This little plant has long passed in our nurseries for Lobelia bellidifolia, under which name we received it from Messrs. Loddiges and Sons, in September, 1823. But, upon examination, we immediately found that it does not agree with the character of that species; and upon shewing our drawing to Mr. Sweet he obligingly pointed out to us that it had been described by the name of Rhizophyta. This appellation we find was given it by Professor Sprengel, and is recorded in the new Systema Vegetabilium, publishing by Professor Schultes; we have, therefore, adopted, without approving, it,

We received specimens of the same species several years ago from Mr. Barr, late of the Ball's Pond nursery, and from Mr. Dons, at that time curator of the Cambridge garden,
Lobelia bellidifolia, under which name Sprengel also received the present species, differs from it in having an annual root, a simple erect stem, in being hairy, and having flexuose peduncles longer than the leaves, according to Thunberg's description.
Our plant is perennial, with a decumbent winged stem, which frequently takes root near the base; obovate leaves very sparingly toothed, fleshy, the upper leaves in some specimens are much narrower than in our figure, and with the calyxes and peduncles are slightly pubescent. It is a plant of little beauty, from the smallness of its flowers; but we are happy in the opportunity of rectifying a prevailing mistake respecting it.

Native country the Cape of Good Hope. Requires to be protected from frost.

Flowers in September and October. Propagated by dividing its roots.


## （ 2520 ）

Euphorbia anacantha．Scaly Finger－ flowered Spurge．
＊粎粎粎料 $* * * * * * * *$

## Class and Order．

Dodecandria Trigynia．

## Generic Character．

Cor．4－s．5－petala，calyci insidens．Cal．1－phyllus，ven－ tricosus．Caps．3－cocca．

## Specific Character and Synonyms．

Euphorbia anacantha；inermis，imbricata，tuberculis foliolo subrotundo instructis，floribus terminalibus solitariis sessilibus，petalis palmatis．Hort．Kew．ed．I max， 2. p．136．—ed．alt．3．p．158．Willd．Sp．Pl．2．p． 888. Euphorbia tridentata；inermis ramosa，subtuberculata， calycum laciniis exterius supra concavis coloratis tri－ dentatis．Lam．Encycl．2．p．416．Decand．Plantes Grasses 144．fide Hort．Kew．
Dactylanthes anacantha．Haworth Syn．Succ．p． 132. Euphorbium anacanthum squamosum lobis florum triden－ tatis．Isnard．Mem．de l＇Acad．1720．p．518．t． 11.
Euphorbium erectum aphyllum，ramis rotundis，tuberculis tetragonis．Burm．Afr．16．t．7．f． 2.

Descr．This plant has altogether the habit of a Stapelia， the same kind of fleshy，jointed，tuberculated branches：the tubercles are generally four－sided，marked at the point with the remains of a small ovate，deciduous leaf．At the extre－ mities of the flowering－branches from three to five oval fleshy leaves are produced，serving as an involucrum to the flower，from the centre of which issues the peduncle，bear－ ing，according to the usual language，a single flower，with four or five tubular petals，each having a two－lipped limb， the under－lip much the longest，and terminated with three
subulate teeth, green on the under side, rugose and beautifully variegated on the upper ; the upper-lip three lobed, white tinged with purple. From a flat receptacle ir the centre of these petals grows the female flower, a single, obsoletely three-cornered germen, with a tripartite style, and lobular stigmas; at first erect, but speedily, as in most of the genus, cernuous; the germen is surrounded by several stamens, which rise in succession: anthers twolobed: lobes divaricate. The whole plant when wounded exudes a white milk, which is not acrid.

The above description is given according to the Linnean notions of the parts composing the flowers of an Euphorbia; but our friend Mr. Robert Brown has given a much more satisfactory explanation of the organs constituting the flower; which cannot be better described than in his own words, in the appendix to Flinder's Voyage, page 556.
"The view I take (says this intelligent botanist) of the structure of EUPHORBIA is in oue important particular, at least, different from those given by Lamarck, Ventenat, Richard, and Decandolle, though possibly the same as Jussieu has hinted at; so briefly, however, and, I may add, obscurely, that if his supposition be really analogous to what I shall presently offer, he has not been understood by those who profess to follow him in this respect.
"With all the authors above quoted, I regard what Linnæus has called Calyx and Corolla, in Euphorbia, as an involucrum, containing several male flowers, which surround a single female. By some of these authors the male flowers are described as monandrous, and in this respect also, 1 agree with them; but the body, which all of them describe as a jointed filament, I consider to be made up of two very distinct parts, the portion below the joint being the footstalk of the flower, and that above it, the proper filament: but, as the articulation itself is entirely naked, it follows, that there is no perianthium; the filiform, or laciniated scales, which authors have considered as such, being on this supposition analagous to bracteæ: The female flower, in conformity with this supposition, has also its pedunculus on the dilated, and, in a few cases obscurely lobed; apex of which the sessile ovarium is placed. If this be a correct view of the structure of Euphorbia, it may be expected that the true filament, or upper joint of what has commonly been called filament, should, as in other plants, be produced subsequent to the distinct formation of the anthera, which consequently will be found at first sessile on the lower joint or peduncle, after that has attained nearly its full length, and accordingly, this proves to be the case in such species as I have examined. Additional probability is given to this view, by the difference existing between the surfaces of the two joints in some species. I consider it, however, as absolutely proved, by an unpublished genus of this order, having an involucrum nearly similar to that of Euphorbia, and like it, enclosing several fasciculi of monandrous male flowers, surrounding a single female, but which, both at the joint of the supposed filament, and at that by which the ovarium is connected with its pedicellus, has an obvious perianthium regularly divided into lobes."

Native of the Cape of Good Hope. Requires to be kept in the greenhouse, or dry-stove. Propagated by cuttings. Flowers in Scptember and October.
Communicated by Messrs. Loddiges and Sons.


## ( 2521 )

Schizanthus porrigens. Spreading Schi-

## ZANTHUS.

## 

Class and Order.

## Diandria (Didynamia Hooker) Monogynia.

## Generic Character.

Cal. 5-partitus. Cor. bilabiata, resupinata: labio superiore 5-partito ; inferiore tripartito. Stam. 4: duo sterilia. Caps. bivalvis, bilocularis.

## Specific Character and Synonym.

Schizanthus porrigens; caule diffuso racemis paniculatis: pedicellis divaricatissimis.
Schzanthus porrigens; pedicellis fructus patentibus distichis rectiusculis (corollæ labio inferiore pallide purpureo). Graham in Hooker Exotic Flora, 86.

Descr. This species is a larger, more branched, and diffuse plant than the Schizanthus pinnatus figured at No. 2404 of this work. The leaves and colour of the flowers seem to be too subject to vary to be depended upon for distinguishing the one from the other. Professor Graham seems to have had some confidence in the paler colour of the lower lip of the flower in Schizanthus porrigens; but in our specimens the lower lip was a full violet colour, even deeper than in S. pinnatus. The present species is much the most showy, and is a valuable acquisition to the flower-garden, being a perfectly hardy annual, as we are informed by Mr. Milne of the Fulham nursery, to whom we are obliged for the communication of the specimens from which our drawing was taken.

This species is still more unlike the Schizanthus figured in the Flora Peruviana than pinnata, and in the descrip-
tion given in that work, the stem is pointedly said to be upright, and but little branched.

Native of Chili. Flowers in the open ground in July, August, and September.


# Crinum confertum. Crowded-flowered Crinum. 

 Class and Order. Hexandria Monogynia.

Generic Character.—Vide supra No. 2292, et No. 2463.

## Specific Character.

Crinum confertum; bulbo ovato, foliis bipedalibus margine lævi, $1 \frac{1}{4}$ unc. latis, canaliculatis, apice obliquo gradatim attenuatis ; umbellâ circiter 8 -florâ ; scapo compresso viridi pedali ; spathâ viridi $3 \frac{3}{4}$-unciali, bracteis gracilibus; germine viridi semunciali oblongo sessili, loculis 5-8-spermis ; tubo viridi erecto 3-unciali ; limbo albo $3 \frac{3}{4}$-unciali, laciniis exteris $\frac{5}{8}$, internis $\frac{1}{4}$ unc. latis ; stylo purpureo laciniis aliquantulum breviore; stigmate trilobo purpureo; filamentis stylo sesquiunciam brevioribus, divaricatis, purpureis, versus basin albis, basi gibbosâ, apice aliquantulum sursum curvato; polline aureo. W.H.

Descr. This species differs from Crinum arenarium in having the coats of the bulb harder, the leaves more attenuated, the flowers more numerous and erect, the germen longer, oblong, and sessile, the style a little shorter than the limb, and the limb longer than the tube. Our specimen flowered in June, in the stove of the Earl of Carnarvon at Highclere. It is a native of the N. W. coast of Australia, from whence it was sent by the collector, under the name of Crinum angustifolium of Brown, a species with roughedged leaves, which does not appear to have becn yet introduced into this country. $\boldsymbol{W} . \boldsymbol{H}$.

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[^0]:    There is a considerable affinity between Ipomea speciosa and insignis (No. 1790), but the leaves of the former are

[^1]:    ＊From＂on a violet，and＂idon peculiar．

[^2]:    a. The style, filaments, and membrane. b. The upper petal and filament, shewing a section of the membrane. c. A leaf. d. An offset with thel eaf.

[^3]:    a. The Germen shewing one cell opened with the indistinct ovules.

[^4]:    a. An offset with the leaf. b. The flower with the petals broken off shewing the form of the cup, which is a little horned or hooded on the upper side, and the final posture of the style and filaments. c. Particles of the pollen magnified. d. An ovule magnified.

