


## PLATE CXLV.

## HILLIA LONGIFLORA.

## Long-flowered Hillia.

CLASS VI. ORDER I.<br>hexandria monogynia. Six Chives. Onc Pointal.

## GENERIC CHARACTER.

Calyx. Perianthium hexaphyllum; foliolis oblongis, acutis, erectis.
Corolla monopetala; tubus cylindricus, longiffimus; limbus fexfidus; laciniis oblongis, planis.
Stamina. Filamenta fex, breviffima. Antheræ oblongæ, erectæ, intra faucem corollæ.
Pistillum. Germen inferum, oblongum, obfolete hexagonum. Stylus filiformis, longitudine tubi. Stigma capitatum.
Pericarpium oblongum, compreflum, biloculare.
Semina numerofa, minima.

Empalement. Cup fix-leaved; leaflets oblong, tharp pointed and upright.
Blossom one petal, tube cylindrical, very long; border fix-cleft ; fegments oblong, flat.

Chives. Tireads fix very fhort. Tips oblong, upright, within the mouth of the bloffom.
Pointal. Seed-bud beneath oblong, flightly fix-fided. Shaft thread-fhaped, the length of the tube. Summit headed.
Seed-veisel oblong, flattened and two celled.
Seeds many, very fmall.

## SPECIFIC CHARACTER.

Hillia corollis fexfidis, laciniis lanceolatis, fupra convexis; foliis ovatis, acutis, glabris.

Hillia with bloffoms fix cleft, fegments lancethaped, convex above; leaves egg-fhaped, pointed and fmooth.

## REFERENCE TO THE PLATE.

1. A flower cut open, to expofe the number and fituation of the Chives.
2. The Shaft and its fummit, natural fize, placed by the Hower, to thew its proportional length to the tube.
3. The Seed-bud, with the leaflets of the Empalement attached, cut tranfverfely, to fhew the divifion of the cells in the center.

This fpecies of Hillia was firft introduced to our gardens in the year 1789 , from the Inand of Barbadoes, fent in plants, by Mr. J. Elcock, to Meffrs. Lee and Kennedy, Hammerfmith. Originally this thrub was ipecifically termed, parasitica by profeffor Jacquin, when he firf formed, and titled the Genus, after Dr. J. Hill, of voluminous memory; from a fuppofition that it was 10 be found growing, only, upon fome other plant; a circumftance, which being denied by Swartz, he has altered it to longiflora. We have followed the latter name that ours may go in unifon with the author of the laft Species plantarum now publifhing by Willdenow, as well as profeffor Martyn, who in his edition of Miller's Dictionary has followed Swartz; they appearing to be the moft accurate, as well as the moft read and followed of any modern Botanical authorities. It is a tender hot-houfe plant, ftrikes eatily from cuttings, thrives in rich mould and flowers about the end of February. To the Right Hon. Lord Vifcount Valentia we are indebted, for the fpecimen from which our figure was taken, fent from his Lordfhip's famed collection at Arley near Bewdley, Staffordhire; where, we believe, it has flowered for the firft time in England.


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## PLATE CXLVI.

## PSORALEA ACULEATA.

## Prickly Psoralea.

## CLASS XVII. ORDER IV.

## DIADELPHIA DECANDRIA. Chives in two fets. Ten Chives.

## GENERIC CHARACTER.

Calyx. Perianthium monophyllum, tuberculis punctatum, quinquefidum; laciniis acutis, requalibus, perfffentibus; infima duplo longiore.
Corolla papilionacea, pentapetala.
Vexillum subrotundum, emarginatum, affurgens.
Alce lunulatæ, obtufæ, parvæ.
Carina dipetala, lunulata, obtufa.
Stamina. Filamenta diadelpha (fimplex fetaceum ct novem coalita), adfcendentia. Antheræ fubrotundx.
Pistillum. Germen lineare. Stylus fubulatus, adfcendens, longitudine faminum. Stigma obtufum.
Pericarpium. Legumen longitudine calycis, compreffum, adfcendens, acuminatum.
Semen unicum, reniforme.

Empalement. Cup one leaf, dotted over with fmall tubercles, and five-cleft; the fegments equal and remaining, the lower one twice the length of the others.
Blossom butterfly-fhaped, five petalled.
Standard nearly round, notched at the end, turned upwards.
Wings half-moon-fhaped, obtufe, fmall.
Keel two-petalled, half-moon-fhaped, obture.
Chives. Threads in two fets (a fingle one like a briftle, and nine united), afcending. Tips nearly round.
Pointal. Seed-bud linear. Shaft awl-fhaped, afcending, the length of the chives. Summit blunt.
Seed-vessel. A pod the length of the cup, flattened, afcending, and tapered to the point.
Seed, one, kidney-fhaped.

## SPECIFIC CHARACTER.

Pforalea foliis ternatis, minimis, confertifimis, recurvatis, in ipinulam definentibus.

Pforalea with three-leafletted leaves, very fmall, very crow-ded, bent back, and ending in a finall fine.

## REEERENCE TO THE PLA'CE.

1. The Empalement.
2. The Standard of a Bloffom.
3. One of the Wings of the fame.
4. The two Petals of the Keel.
5. The Chives, a little magnified.

The Prickly Pioralea is not a ncw plant in our collections; for, it was firft introduced by Mr. F. Maffon to the Royal Gardens at Kew, as we learn from the Catalogue, in the year 1774. But although fo long a fojourner with us, it is not found in many collections, owing to the difficulty in its increafe, as it feldom ripens its feeds; and cuttings, the only remaining method, but seldom fucceed; although by taking them from a vigorous growing plant and giving them the affiftance of the bark bed of the hothoufe, early in March, a few plants have been procured occasionally. Our drawing was made: from a moft beautiful plant in the Claphan Collection, laft year, in the month of $\Lambda$ uguft.



## GLADIOLUS CUSPIDATUS.

## Spear-fpotted Gladiolus.

## CLASS III. ORDER I.

Triandria monogynia. Three Chives. One Pointal.

## ESSENTIAL GENERIC CHARACTER.

Corolla fexpartita, ringens. Stamina adfendentia.

Blossom fix divifions, gaping. Chives afcending.
See Gladiolus roseus. Plate XI. Vol. I.

## SPECIFIC CHARACTER.

Gladiolus foliis lineari-enfiformibus, glabris; corolla ringente; laciniis longiffimis, acuminatis, undulatis, fubæqualibus, tribus inferioribus in medio macula oblonga notatis.

Gladiolus with leaves that are linearly fiwordfhaped and fmooth; bloffom gaping; feg. ments very long, tapered to the point, waved and nearly equal, the three lower in the middle have an oblong fpot.

## REFERENCE TO THE PLATE.

1. The two theaths of the Empalement.
2. A bloffom cut open, with the Chives remaining attached.
3. The Seed-bud, Shaft, and Summit.

The Gladiolus here figured, reprefents a variety of one of the moft errant fpecies of the Genus, known commonly by the name of Spade Gladiolus, and of which we have drawings of eight, quite $e_{\text {, }}$ diftinct; yet all, unqueftionably, originating in one common parent. It was introduced in 1796, from the Cape of Good Hope, by Mr. R. Williams, nurferyman of Turnham-green, near Brentford; is a very hardy greenhoufe bulb, increafes from the root in abundance, if planted in very fandy peat earth, and flowers about the Month of April, or May.


## PLATE CXLVIII.

## LACHENALIA QUADRICOLOR.

## Four-coloured Lachenalia.

CLASS VI. ORDER I.<br>HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

## ESSENTIAL GENERIC CHARACTER.

Cor. 6-petala, infera; petalis 3 interioribus longioribus. Stamina erecta. Capfula fubovata, trialata. Semina globofa.

Bloss, 6-petals, beneath; the three inner petals the longest. Chives erect. Capfule nearly egg-hhaped, three winged. Seeds globular.

## SPECIFIC CHARACTER.

Lachenalia foliis geminis, lineari-lanceolatis; fcapo erecto; corollis propendulis, cylindricis, quadricoloratis, cum limbo petalorum interiorum patulo.

Lachenalia with leaves in pairs, linearly lancefhaped; flower-ftem erect; bloffoms hanging down, cylindrical, and four-coloured, with the border of inner petals fpreading out.

## reference to the plate.

1. A Flower cut open, with the Chives remaining.
2. An inner Petal, with its Chive, fhewn from the infide.
3. An outer Petal, fhewn from the outfide.
4. The Pointal complete.

About the year 1789, this very handfome fpecies of Lachenalia was firft received by Meffrs. Lee and Kennedy, Hammerfmith, from the Cape of Good Hope, fent in bulbs to them by J. Pringle, Efq. It is as hardy as the L tricolor, to which it much inclines, well known to collectors, and is equally eafily propagated; an excellent figure of which is to be found, in the 82d Plate of the Botanical Magazine of Mr. Curtis. The L. quadricolor is given as a fynonym by Willdenow to L. pendula, a plant we have already figured, and from which this fands quite diftinct in the conformation of every part; they are both to be found in the 2 d Vol. of Icon. of Jacquin, from whom we copy our fpecific title, the pendula, t. 400, the quadricolor, t. 396.


## PLATE CXLIX.

## STRUTHIOLA CILIATA.

## Fringed-leaved Struthiola.

## CLASS IV. ORDER I.

## tetrandria monogynia. Four Chives. One Pointal.

## ESSENTIAL GENERIC CHARACTER.

Perianthium diphyllum. Corolla tubulofa, 4 -fida; Nectarium, glandulæ octo fauci circumpofitæ. Semen unum, fubbaccatum.

Cup two-leaved. Bloffom tubular, 4-cleft; Ho-ney-cup, 8 glands placed round the mouth of the bloffom. One feed like a berry.
See Struthiola imericata, Pl. CXIII. Vol. II.

## SPECIFIC CHARACTER.

Struthiola foliis ovato-lanceolatis, mucronatis, ciliatis, concavis, quadrifariam imbricatis, apice incurvis; corolla fubalbida.

Struthiola with leaves between egg and lancefhaped, pointed, fringed, concave, tiled in four rows, turned inwards at the point; bloffom whitif.

## REFERENCE TO THE PLATE.

1. A leaf thewn fide-ways that the incurvature of the upper part may be feen.
2. A flower complete.
3. The two leaves of the Empalement, magnified.
4. A bloffom-cut open, to expore the fituation of the chives, at the mouth of the tube, magnified.
5. The Pointal, a little magnified.

This is the variety of Struthiola ciliata promifed in the laft number. It varics from the other in the largenefs and incurvation of the leaves, and colour of the flower, as well as, in the growth of the plant ; in this, the ftem rifes to three feet; in that, it feldom exceeds one. With rather lefs difficulty it is increafed and preferved than the red variety, and makes a very handfome figured plant, flowering in the month of Auguft, at which feafon, laft year, our drawing was taken from a plant in the Hibbertian Collection. This Var. has the advantage of the other, in having the bloffoms extremely fragrant, in the evening.


# GERANIUM PRÆMORSUM. Bitten-leaved Geranium. 

## CLASS XVI. ORDER IV. of Suppl. Syst. leg. 1781.

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

## ESSENTIAL GENERIC CHARACTER.

Monogyna. Stigmata quinque. Fructus roftratus, penta-coccus.

One Pointal. Five summits. Fruit furnifhed with long awns, five dry berries.
See Geranium grandiflorum, PI. XII. Vol.I.

## SPECIFIC CHARACTER.

Geranium foliis incifo-lobatis, reniformibus; lobis cuneiformibus, præmorfis; floribus fubfolitariis, heptandris; caule flexuoio, fubcarnoso.

Geranium with leaves deeply cut into lobes and kidney-fhaped; lobes wedge-fhaped, and bitten at the ends; flowers generally folitary, with feven fertile tips; ftem grows zig-zag, rather flefhy.

## REFERENCETO THE PLATE.

1. The Empalement cut open, to fhew its fubular firucture.
2. The Chives and Pointal.
3. The Chives fpread open.
4. The Pointal and Seed bud.

The Geranium præmorfum offers a moft beautiful addition to this already very extenfive genus, but is without doubt a true fpecies. It is a native of the Cape of Good Hope, and was introduced to us, from thence, in the year 1798, by Captain Quarrel; brought in feed, and communicated to Mr. J. Colville of the King's Road, Chelfea; who informs us, that it flowers from March, till November, that he keeps it in rich dungy earth, and that it is raifed, pretty freely, by cuttings; requiring the heat of a dry ftove in the winter months. Our figure was made at the nurfery, Chelfea, about the beginning of March this year.



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# PITTOSPORUM CORIACEUM. 

Thick-leaved Pittofporum.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

## GENERIC CHARACTER.

Calyx. Perianthium pentaphyllum, inferum, deciduum.
Corolla. Petala quinque; ungues concavi, in tubum urceolatum conniventes; laminæ ovato-oblongæ, patentes.
Stamina. Filamenta quinque, fubulata, receptaculo inferta. Autheræ fagittatæ, erectæ, filament is dorfo affixæ.
Pistillum. Germen ovatum, fuperum, compreflum. Stylus breviffimus, cylindricus. Stigma capitatum, planum.
Pericarpium. Bacca fubglobofa, $2-5$ locularis, $2-5$ valvis; loculamentis pulpa refinofa fcatentibus; diffepimenta valvulis contraria.
Semina tria feu quatuor, angulata, oblonga, obtufa, offea.

Empalement. Cup five-leaved, beneath, and falling off.
Blossom. Five petals; claws concave, clofing into a tube pitcher-fhaped; the borders oblong egg thaped, fureading.
Chives. Threads five, awl-haped, inferted into the receptacle. Tips arrow hlaped, upright, fixed by the back to the threads.
Pointal. Seed-bud egg-fhaped, above, flattened. Shaft very fhort, cylindrical. Summit headed, flat.
Seed vessel. $\Lambda$ roundifh berry $2-5$ cells, 2-5. valves; the cells filled with a refinous pulp ; partitions contrary to the valves.
Seeds, three or four, angulated, oblong, obtufe, and bony.

## SPECIFIC CHARACTER.

Pittofporum foliis ovalibus, obtufis, glaberrimis, || Pittofporum with oval leaves, blunt ended, coriaceis, integerrimis.

## תEFERENCE TO THE PLATE.

1. The Empalement.
2. A Petal of the Bloffom.
3. The Chives and Pointal.
4. The Pointal feparated from the Chives.
5. A Berry of the fize when ripe.

About the year 1753, this plant was firft raifed in Britain, from feeds which had been received from the Illand of Madeira, by Melfrs. Lee and Kennedy, Hammerfmith. It forms one of the moft decorative and confpicuous plants, either in the Confervatory, or Green-houfe; and if encouraged in its growth, by being planted in the border of the one; or kcpt in rich earth, in a large pot in the other, will attain the height of from 6 to 8 feet. The fineft fpecimen we believe, in England, of this plant is to be found in the elegant Confervatory of the Right Honourable Lord R. Spencer, Woolbedding, Suffex. The flowers, which grow in clufters from the ends of the branches in May, have the flavour of Jafmine; but are rather tranfitory. It is propagated but flowly and with difficulty, as it does not perfect its feeds with us, and it is not to be increafed by laying: the only method is cutings, which Thould be taken whilit very young and tender from the plant, about April, and put from 6 to o in a pot, fixed very tight, in ftiffifh loam; they must remain under a hand-glafs on a hhady border till Autumn, when they may be removed into the hot-houfe and plunged into the bark bed, where: they will begin to grow the enfuing fring.


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# GERANIUM SPATHULATUM. Spatula-lcaved Geranium. 

CLASS XVIs ORDER IV. of Suppl. Syst.<br>Veg. 1781.

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

## ESSENTIAL GENERIC CHARACTER.

Monogyna. Stigmata quinque. Fructus roftratus, penta-coccus.

One Pointal. Five summits. Fruit furnifned with long awns, five dry berries.
See Geranium grandiflorum, Pl. XII. Vol. I.

## SPECIFIC CHARACTER.

Geranium foliis integerrimis, fpathulatis, glabris, obtufis, radicalibus; calycibus monophyllis; ftaminibus quinque fertilibus; radice tuberofa.

Geranium with quite entire leaves, fpatulaflaped, fmooth, blunt, and growing from the root; cups one-leaved; five fertile chives; root tuberous.

## REFERENCE TO THE PLATE.

1. The Empalement cut open, to fhew its hollow ftructure.
2. The Chives and Pointal natural fize.
3. The Chives fpread open, to fhew the number and fituation of the fertile ones, which are alternate.
4. The Pointal magnified.

The greater number of Geraniums which have been introduced of late, are of the tuberous herbaceous kind; drawings of 14 we have, independent of thofe already figured; conftituting a diftinguifhed, and diftinct natural branch of this extenfive family. For the moft part, they have only five fertile chives with tubular empalements, fome only two, and others feven, with the footftalk of the flower folid up to the bottom of the cup. This fpecies is as yet, we believe, only in the Hibbertian Collection, Clapham, where our drawing was taken in $\Lambda$ pril this year. The roots had been reccived in the autumn of 1800 from the Cape. It appears to require the fame management as G. punctatum, and like it, may be increafed by the root.


# PLATE CLIII. V I OLA PEDATA. Bird's-foot-leaved Violet. <br> <br> CLASS XIX. ORDER YI. 

 <br> <br> CLASS XIX. ORDER YI.}

SYNGENESIA POLYGAMIA MONOGAMIA. Tips united. Flowers fimple.

## GENERIC CIIARACTER.

Calix. Perianthium pentaphyllum, breve, pcrfiftens; foliolis ovato-oblongis, erectis, apice acutioribus, bafi obtufis, fupra bafin affixis, equalibus, fed difpofitione variis; quorum duo fulciunt petalum $\alpha$; fingula fingulum petalum $\beta . \gamma$; unicum duo petala $\delta, \varepsilon$. fimill.
Corolla pentapetala, irregularis, petalis inæqualibus; quorum
Petalum $\alpha$. supremum rectum, deorfum fpectans, latins, obtufius, emarginatum, defi nens bafi in nectarium corniculatum, obtufum, inter calycis toliola prominens.
ß. $\gamma$. Lateralia paria, obtufa, oppofita, recta.
ס. є. Infima paria, majora, furfum reflexa.
Stamina. Filamenta quinque, minima, quorum duo petalo $\alpha$. prosina appendicibus annexis intrant nectarium. Antherie lexpius connexx, obtufæ, membranis ad apicem ancta.
Pistileum. Germen fubrotundum. Stylus filiformis, extra antheras prominens. Stigma obliquum.
Pericarpium. Capfula ovata, trigona, obtufa, unilocularis, trivalvis.
Semina plura, ovata, appendiculata, valvis affixa. Receptaculum lineare, per fingulam valvulam linex inftar excurrens.
Ols. Stigma vel in hamum simplicen reflectitur, vel capitulum est concavum apice perforato.

Cup five-leaved, fhort, permanent; leaflets ob. long-egg-fhaped, erect, fharpifin at the point, blunt at the botton, joined together above the bafe, cqual, but varionfly difpofed; of which, two fupport petal $\alpha$. one each petal $\beta . \gamma$ and one the two petals $\delta . \varepsilon$. together.

Blossom five petals, irregular, unequal petals, of which
The upper petal a. is upright, bent back, broader, and blunter than the reft, notched at the end, terminating at the bafe in a blunt hornfhaped honey-cup, protruding between the leaflets of the cup.
The luteral petals $\beta$. $\gamma$. grow in pairs, obtufe, oppofite, upright.
The lower petuls $\delta$. $\varepsilon$. grow in pairs, larger, and reflexed upwards.
Chives. Five threads, very fmall; of which the two nearct to the petal $\alpha$. have fmall appendages which enter the honey-cup. Tips generally united, blunt, enlarged by tkinny fubfances at the end.
Pointal. Seed-bud roundifh. Shaft threadthaped, projecting beyond the tips. Summit oblique.
Seed-vessel. Capfule egg-fhaped, three-fided, blint, one cell and thee valves.
Seeds many, egg-fhaped, having appendages, fixed to the valves. Receptacle linear, running like a line along each valve.
Ols. The summit is either reflexed into a simple hook, or a concave small head perforated at the cud.

## SPECIFIC CHARACTER.

Viola acaulis; foliis pedatis, feptempartitis; laciniis dentatis.

Vioter without a ftem, leaves formed like a hird's foot, with feven divifions; fegments toothed.

## REFERENCE TO TIIE PLATE.

1. The Empalement.
2. One of the upper Petals of the Bloffom.
3. One of the lateral Petals.
4. The lower Petal, with its Honey-cup.
5. The Chives and Pointal with the Appendages that fall into the Honey-cup from the two hinder threads.
6. The Pointal magnified.

The Bird's-foot-leaved Violet is a native of North America near Philadelphia; and (according to the Kew Catalogue) was cultivated by Mr. P. Miller, in 1759, at the Phyfic Gardens, Chelfea. It is a hardy herbaceous plant, but is fometimes deftroyed by the wetnefs of our autumnal months: the flowers, if kept in the open air, expand about May, or the beginning of June; but if kept in pots they, with a flight protection from the Spring frofts, will be produced in April. Peat earth is the foil it approves moft, and it fhould not be expofed to too much wet, whether planted in the borders or in pots. The roots may be parted in March.

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PLATE CLIV.

## ECHIUM ARGENTEUM.

## Silvery-leaved Viper's-Buglo/s.

CLASS V. ORDERI.<br>lentandrla monogynia. Five Chives. One Pointal.

## ESSENTIAL GENERIC CHARACTER.

Cosolla irregularis, fauce nudá.
Blossom irregular, mouth naked.
Sce Echium grandiflorum, Pl. XX. Vol. I.

## SPECIFIC CHARACTER.

Echium foliis lanceolatis, acutis, fericeo-villofis; fpicis terminalibus; corolla violacea, fubæqualia.

Viper's-buglofs with lance-fhaped leavcs, fharppointed and filkily-hairy; fpikes terminate the branches; bloffom violet colour, ncarly cqual.

## HEFERENCE TO THE PLATE.

1. The Empalement.
2. A Flower cut open, with the Chives remaining attached.
3. The Seed-buds, Shaft, and Summit.

This fine fpecies of Echium, was raifed from feeds received from the Cape of Good Hope in the year 1789, at the nurfery, Hammerfmith: where our drawing was made, laft year, from a plant which had been planted in the open ground, for the fummer months; and where it had grown to the height of four feet. It is a hardy green-houfe plant, and grows beft in light earth, either peat, or leaf mould; and flowers about July. It is as difficult to propagate as either, the E. grandiflorum, or E. ferociffimum; but only to be increafed, like them, by cuttings.



## I X I A POLYSTACHIA.

Many-fpiked Isia.

CLASS III. ORDER I.

## Triandria monogynia. Three Chives. One Pointal.

## ESSENTIAL GENERIC CHARACTER.

Corolea 6-partita, patens, equalis. Stigmata 3, crectiufculo-patula.

Blossom 6-divifions, fpreading, equal. Summits three, nearly upright and fpreading. See Ixia reflexa, Vol. I. Plate XIV.

## SPECIFIC CHARACTER.

Ixia foliis linearibus; fcapo fpicis ploribus; floribus oppofitis, fpicatis; corollis albidis.

Ixia with linear leaves; flower-ftem with many fpikes; flowers grow oppofite and fpiked; bloffoms white.

## REffRENCE TO THE PLATE.

1. The two fheaths of the Empalement.
2. A flower cut open to fhew the fituation of the Chives.
3. The Pointal natural fize.

Tuns is the plant which is figured by Miller, in the coloured plates which correfpond with the dictionary, 104, t. 155. fig. 2. under the fpecific title it here bears; and, fays the Kew Catalogue, was cultivated by him 1757. Since this is the firft which bore the title of Polyftachia, and being of the colour we think is moftly primitive in flowers, we have given it the preference; and thall confider all the other 18, (of which we have drawings and decidedly of this fpecies) as varieties from this. The flowers of this fpecies are more lafting than moft of the others; and are in general, efpecially this fort, very hardy. It propagates freely by the root and by feed. Our drawing was made at the nurfery, Hammerfinith, laft year, in the month of May.

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# BANKSIA ERIC efoliA. 

## Heath-leaved Bankjia.

## CLASS IV. ORDER I.

## tetrandria monogyniA. Four Chives. One Pointal.

## ESSENTIAL GENERIC CHARACTER.

Receptaculum commune elongatum, fquamofum. Corolla tetra-petala, Stamina limbo inferta. Capfula bivalvis, difperma, interjecto feminibus diffepimento mobili. Semina alata.

Common receptacle elongated, fcaly, Bloffom of four petals. Chives inferted into the limb of the bloffom. Capfule with two valves, two feeds, and a moveable partition betwen them. Seeds winged.
See Banksia serrata, Pl. LXXXII. Vol. II.

## SPECIFIC CHARACTER.

Bankfia foliis linearibus, margine revolutis, truncato-emarginatis, fupra glabris.

Bankfia with linear leaves, rolled back at the edge, appearing cut off at the ends, which are notched and fmooth on the upper fide.

## REFERENCE TO THE PLATE.

1. A Bloffom complete.
2. The fame fpread open.
3. The Petals of a flower, with their chives magnified.
4. The Pointal natural fize, with the Summit detached, magnified.
5. The rudiments of a cone, cleared from the flowers.

Tue feeds of this fpecies of Bankfia were amongft the firft which arrived from New Holland, and plants were raifed at the nurfery, Hammerfmith, in the fame year as the B. ferrata. To the directions in the management and increafe of which plant, we refer our readers for the treatment of this, as it requires no other. It grows to the height of five, or fix feet, very bufhy from the bottom, and the leaves, which are harkh and numerous, are not very fubject to decay. Although it has flowered in many collections, where we have feen it, we have had no opportunity of making an accurate drawing until laft month, March 1801, from a fine plant in the collection of G. Hibbert Efq. Clapham.

# C O R D I A S E B E T E N A. 

 Rough-leaved Cordia.
## CLASS V. ORDER I.

## pentandria monogynia. Five Chives. One Pointal.

## GENERIC CHARACTER.

Calyx. Perianthium monophyllum, tubulatum, apice dentatum, perfitens.
Corolla monopetala, infundibuliformis; tubus patulus, longitudine calycis; limbus erecto-patens, fectus in quinque (quatuor rel fex), lacinias obtufas.
Stamina. Filamenta quinque, fubulata. Anthere oblongre, longitudine tubi.
Pistillum. Germen fubrotundum, acuminatum. Stylus fimplex, longitudine ftaminum, fuperne bifidus, laciniis bifidis. Stigmata obtufa.
Pericarfium. Drupa globofa, acuminata, calyce accreta.
Semen. Nux fulcata, quadrilocularis.

Empalement. Cup one leaf, tubular, toothed at the upper part, remaining.
Blossom one petal, funnel thaped; tube widening, the length of the cup; border upright and fpreading, cut into five (four or fix) obtufe fegments.
Chives. Five threads, awl-fhaped. Tips ob. long, the length of the tube.
Pointal. Seed-bud roundifh, tapered. Shaft fimple, the length of the chives, two cleft at the upper part, fegments two-cleft. Summits blunt.
Seed-vessel, pulpy, globular, tapered, growing to the cup.
Seed. A furrowed, four-celled nut.

## SPECIFIC CHARACTER.

Cordia foliis oblongo-ovatis, fcabris; floribus miniatis, crifpis, hexandris.

Cordia with oblong egg-fhaped rough leaves; flowers deep orange colour, crumpled, and with fix chives.

## REFERENCE TO THE PLATE.

1. The Empalement.
2. A Bloforn fpread open, with the Chives in their place.
3. The Pointal and Seed-bud.

As it Chould feem a determined principle in the inferutable arrangement of nature's productions, to the greater humiliation of our very limited underfandings; that no effort as emanating folely from thence, fhall be perfect; fo mutt we be content to purfue our Botanical travcl, under the guidance of a fyftem decidedly defective; yet certainly, the beft we have to boaft. Scarce a genus, comprehending a number of ipecies, but muft be ftrained in its clafs or order, for the introduction of one, or more feccies, evidently of the fame family. So convinced was our great mafter of the fcience, of the impofibility of forming fuch certain data, tiat to prevent the coufufion and difficulty, which muft have arifen, from fuch an accumulation of Genera, if cvery fexual character was attended to, that, where certain other characters (called by him effential, and adopted as a fubtitute for fuch oceafional hiatus) are formed, the plant is retained under the Gemus fo characterifed. This difquifition is the natural refult of our examination of the prefent plant, which, although the chives are fix, is placed in the fifth class!

The Rough-leaved Cordia is a native of the Weft India Iflands, and was cultivated, fays Martyn's Dictionary, from Dillenius, in the year 1728 , by Dr. Sherard. It is a tender hot-houfe plant, may be increated by cuttings made about the month of April, if kept from too much moifture, in a pot of fandy loam, under a fmall ttriking glafs in the bark-bed. At prefent it is rather a fcarce plant in our collections, and as it is rather difficult to propagate, is likely to continue fo, at leaft for fome years. From an imported plant, received by Metirs. Lee and Kennedy, Hammerfmith, from the illand of Barbadoes, our figure was takn in the year 1789 , about the month of July. It is grown to the greateft perfection by keeping it in a mixture of rotten dung and loam.


## PLATE CLVIII.

# GERANIUM ECHINATUM. Var.forer rultopurpureo. 

## Prickly-falked Geranium. Reelpurple.fouered Var.

## CLASS XVI. ORDER IV. of Suppl. Syst. <br> Veg. ${ }_{7} 171$.

## MONADELPHIA DECANDRIA. Threads united. Ten Chives.

## ESSENTIAL GENERIC CHARACTER.

Monogyna. Stigmata 5. Fructus roftratus, penta-coccus.

One Pointal, Five Summits. Fruit furnifhed with long awns, five dry berries.
See Geranium Grandiflorum. Pl. XII. Vol.I.

## SPECIFIC CHARACTER.

Geranium foliis fericeis, cordatis, inequaliter dentatis; caule fpinofo, fubcarnofo, fpinis retrofractis; floribus hexandris, rubro-purpureis; calycibus pilofis.

Geranium with filky heart-fhaped leaves, unequally toothed; ftem fpiny, rather flefhy, fpines turned downwards; flowers with fix fertile tips and red-purple; cups hairy.

## REFERENCE TO THE PLATE.

1. The Empalement.
2. An upper Petal of the Bloffom,
3. An under Petal of the Bloffom.
4. The Chives and Pointal.
5. The Chives fpread open.
6. The Pointal, magnified.

This fine variety of the Prickly-ftalked Geranium, was introduced, at the fame time with the white variety, by Mr. Francis Maffon, to the Royal Gardens, Kcw, in the year 1795. It is a tender plant, and requires the heat of the hot-houfe, through the winter months to preferve it, being a native of that part of Africa near the Namaqua land, which is in moft parts a barren, arid fand, extremely hot and parched, experiencing little change through the whole year. The propagation is either produced by cuttings, or from the roots, which are tuberous, in moft inftances, if the plant is kept in light fandy peat earth. The drawing was made, in March this year, at the Nurfery of Mr.J. Colville, King's Road, Chelfea.


# I X I A C A P T A T A. Var. fire allo, fundo nigro. 

## Bunch flowering Ixia. Var. white foncered, $\begin{gathered}\text { lilack totom. }\end{gathered}$

## CLASS III. ORDERI.

## TRIANDRIA MONOGYNIA. Threc Chives. One Pointal.

## ESSENTIAL GENERIC CHARACTER.

Corolea 6 -petala, patens, æqualis. Stigmata tria, erectiufculo-patula.

Blossom fix petals, fpreading, equal. Summits three, nearly upright, fpreading.
See Ixfa beflexa, Vol. I. Plate XiV.

## SPECIFIC CHARACTER.

Ixia, foliis enfiformibus; floribus capitatis, confertis, albidis, petalis bafi nigriflime notatis.

Ixia, with fword-1haped leaves; flowers grow in clofe bunches, whitilh, the petals very dark, marked at the bafe.

## IEFERENCE TO THE PLATE.

1. The two theaths of the Empalement.
2. A Bloffom fpread open, with the Chives remaining.
3. The Seed-bud and Pointal, one Summit detached, magnified.

As no difference, eithcr in culture or increafe, is neceffary for this plant, more than is required for the other varieties of this fpecies of Ixia; we flall refer our readers to the directions for the treatment of them, for the management of thic. Our figure is from a drawing taken at the Hammerfmith nur. fery in the year 1799, about the month of May. It is one of thofe introduced to the Royal Gardens at Kew by Mr. F. Mafon about the year 1774, although loft to us for fome years, but fince received from the collections in Holland.

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## PLATE CLX.

# ARISTEA MAJOR. Spike-flowered Arijtea. 

## CIASS III. ORDER I.

## Tridndria monog Ynia. Three Chives. One Pointal.

## ESSENTIAL GENERIC CHARACTER.

Petala 6. Stigma concasum. Capfula triloba, trilocularis, loculis compreffis. Semina in fingulo loculo bina, comprefla truncata.

Petais 6. Summit concave. Capfule threelobed, three celled; cells flattened. Seeds two in each cell, flattened and appearing cut off at the end.

See Aristea Cyanea, Pl. X. Vol.I.

## SPECIFIC CHARACTER.

Ariftea foliis enfiformibus longiffimis; floribus rpicatis, cæruleis.

Ariftea with very long leaves; flowers grow in fpikes, and blue.

## REFERENCE TO THE PLATE.

1. The two theaths of the Empalement.
2. A Bloffom with the Seed-buJ, both cut open and remaining attached, the Shaft removed.
3. The Pointal natural fize, with the fummit detached magnified.
4. A ripe feed-veffel, natural fize.
5. The fame with the cells laid open to fhew the fituation of the feeds.

The Genus Ariftea, having certainly been formed from a dried fpecimen of the plant, the alterations we have made in our Generic and Effential characters, will, upon infjecting the diffections, appear abfolutely neceflary; as the fhaft is not bent, in either fpecies we have examined, whilft the flower is perfect; but affumes that appearance on its decay, as it becomes involved with the petals, which twift up in the manner of Moraca, Iris, \&c. The Summit likewife, is not funnel-fhaped, but merely a little concase, with a border: other fmall variations have been made, in the character of the feedveffel and fecd. In the year 1794 , this fine plant was raifed by Meffrs. Lee and Kennedy, from feeds received by them from the Cape of Good Hope, where it is native. It is one of the very hardieft inhabitants of the greenhoufe, and is propagated, either from the feed, which ripens with us: or by the offiets made from the root. The plant is perfiftent, but does not acquire a ftem; the leaves growing to the length of from $t w o$, to three feet, the flower-ftem fometimes to the height of four feet; which was nearly that of the plant in the Collection of G. Hibbert, Efq. Clapham, from which our drawing was taken in the month of July 1800. It thould be planted in fandy peat.


## PLATE CLXI.

HERMANNTA PULVERATA.

## Powdered Hermannia.

## CLASS XVI. ORDER II. <br> MONADELPHIA PENTANDRIA. Threads united. Five Pointals.

## GENERIC CHARACTER.

Calyx. Perianthium monophyllum, quinquefidum, fubrotundum, inflatum; lacinulis inflexis ; perfifiens.
Corolla pentapetala, fpiralis; ungues longitudine calycis, utrinque aucti membranula connivente in tubum cucullatum nectariferum; limbus patens, latiuiculus, obtufus.

Stamina. Filamenta quinque, latiufcula, inferne levifime in unum corpus coalita. Antheræ crectx, acuminatæ, conniventes.
Pistillum. Germen fubrotundum, pentagonum, quinquangulare. Styli quinque, filiformes, approximati, fubulati, ftaminibus longiores. Stigmata fimplicia.
Pericarpium. Captula fubrotunda, pentagona, quinque-Jocularis, apice dehifcens.
Semina plurima, parva.

Empalement. Cup one leaf, five-cleft, roundifh and fwelled out; fegments turned inward; remaining.
Blosson, five petals, fpiral ; claws the length of the cup, widened on both fides by a fmall fkinny fubitance forming a honey-bearing, cowl-lhaped tubc; borderfpreading, broadilh, blunt
Chives. Five thrcads, broadith, nightly joined at the bafe into one body. Tips upright, tapered, and approaching each other.
Pointal. Sced-bud roundith, five-fided, fiveangled. Shafts five, thread-flaped, clofe together, awl llaped, longer than the Chives. Summits fimplc.
Seed vessel. Capfula roundifl, five-fided, fivecelled, fplitting at top.
Seeds, many, fmall.

## SPECIFIC CIIARACTER.

Hermannia foliis bipinnatifidis, fcabriufculis, albicantibus; pedunculis bifloris, longiffimis; corollis fordidé Juteis.

Hermannia with doubly wing-cleft leaves, rather rough and whitifh; flower-ftems twoflowered, very long; bloffoms of a dirty yellow.

## REFERENCETO THE PLATE.

1. The Empalement.
2. A leaf of the Blotrom, to fhew its incurved character at the bafe.
3. The Chives, magnified, with the pointals remaining, to flew their lengtlo with regard to the Chives.
4. The Seed-bud, Shafts, Summits, magnified.

This plant appears to ftand an intermediate character, between Mahernia and Hermannia : the general habit affines moft to the former, and indeed, the fhape of the threads, on which the effential generical diftinction refts, approaches very near to thofe in Mahernia; for, although they have not abfo. lutely foot.ftalks, they are much larger, above the middle, than is ufual in Hermannia, as may be feen on the plate; where thefe parts are thewn, magnified. It has likewife that fingularly curious character, feen in Mahernia, of the two bloffoms which terminate the flower-ftems, each taking a contrary direction, in its fpiral twift, to the other. As a greenhoufe plant, it is rather tender in regard to damp, though not to cold; therefore, fhould be kept in the molt airy part of the houfe. It is a native of the Cape, from whence it was introduced in the year 1796, to the Royal Gardens, Kew. By cuttings made in the month of April, it may be preferved, and increafed, as it is not a long-lived plant. Loam, with a fmall portion of old rotten dung, it thrives in moft. Our drawing was taken, at the Nurfery, Hammerfinith, in June 1800.


## PLATE CLXII.

# VERBASCUM FERRUGINEUM. 

Rufy-flowered Mullein.

CLASS V. ORDER I.<br>\section*{PENTANDRIA MONOGYNIA. Five Chives. One Pointal.}

## GENERIC CHARACTER.

Calyx. Perianthium monophyllum, quinquepartitum, parrum, perfiftens; lacinifs erectis, acutis.
Corolla monopetala, rotata, fub-inæqualis; tubus cylindraceus, breviffimus; limbus patens. quinque-partitus; laciniis ovatis, obtufis.
Stamina. Filamenta quinque, fubulata, corolia breviora. Antheræ fubrotundæ, comprelfæ, erectæ.
Pistillem. Germen fubrotundum. Stylus filiformis, longitudine ftaminum, inclinatus. Stigma craffiufculum, obtufum.
Pericarpium. Capfula fubrotunda, biloculajis, bivalvis, tuperne dehifcens. Receptacula dimidiato-ovata, diflepimento affixa.

Semina numerofa, angulata.
Ols. In plerifque famina inclinata funt, villifque coloratis inferne veftita.

Empalement. Cup of one leaf, with five divifions, fmall, remaining; fegments upright, flare pointed.
Blosson one petal, wheel-fhaped, rather unequal; tube cylindrical, very thort; border fpreading, five divifions; fegments eggfhaped, blunt.
Chives. Threads five, awl fhaped, fhorter than the blorfon. Tips roundilli, flattened, upright.
Pointal. Seed-bud roundifh. Shaft threadthaped, the length of the chives, bent downward. Summit rather thick and blunt.
Seed-vessel. Capfule roundith, with two cells, two valves, fplitting at the top. Receptacles the form of half an egg, fixed to the part,tion.
Seeds numerous, angular.
Ol:s. In the greatett number of fperies the chives are bent downward, and clothed with soft, coloured hairs on the lower part.

## SPECIFIC CHARACTER.

Verbafcum foliis fubvillofis, rugofis; caulinis fubfelfilibus, xqualiter crenatis, radicahbus oblongis, cordatis, duplicato crenatis.

Mullein with leaves a little liairy and rough; ftem leaves almoft without foot ftalks, equally foolloped; leases from the root oblong, heart-ihaped, and doubly fcolloped.

## REFERENCE TO THE PLATE

1. A Leaf of the plant, from the lower part.
2. The Empalenent.
3. A blolion, thewn from the front.
4. The fame cut open trom the fide, to thew the infertion of the chives.
5. One Chive magnified.
6. The Pointal and Seed-bud, magnified.

The rufty flowered Mullein of the Kew Catalogue, collated from Sutherland's Hortus Medicus Edinburghenfis, is undoubtediy our plant; but, though it ftands a name in the book, we much queftion its having graced the garden, at the time of its publication. It certainly has been loft to us above a century and but recently introduced to the Oxford Botanic Garden by the late Dr. Sibthorpe. Being a hardy biennial, it will perfect its feeds about July, which may be fown in Auguit the fame jcar. It will grow in any foil, but a fandy compott of light peat and loam fuits it mott. The flowers on the fikes, which grow fometimes to the length of four feet, continue to expand, upwards, for above two months; that is to fay, from April, till June. Our figure was taken from a fpecimen fent by the Hon. W. H. Irby, from his garden at the Parfonage, Farnham Royal, Bucks.


## PLATE CLXIII.

## A M A R YLLIS FOTHERGILLIA. <br> Fothergillian Lily Daffodil.

## CLASS VI. ORDER I.

## HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

## ESSENTIAL GENERIC CHARACTER.

Corolla 6-petala, campanulata. Stigma tri- Blossom 6-petalled, bell-fhaped. Summit three- $^{\text {a }}$ fidum.
cleft.
See Amaryllis radiata, Pl. XCV. Vol. II.

## SPECIFIC CHARACTER.

Amaryllis fpatha multifora; petalis lanceolatis, apice revolutis; genetalibus erectis; foliis linearibus, fub-canaliculatis, obtufis, glau* cis.

Lily Daffodil with many flowers in the fheath; petals lance-1haped, rolled back at the point; parts of fructification upright; leaves linear, rather channelled, obtufe, and of a fea-green colour.

## REFERENCE TO THE PLATE.

1. A Petal, with its Chive attached.
2. The Secd bud, and Pointal.
3. A ripe Seed-veffel, with the Seeds.

Even amidft this fplendid family, Amaryllis Fothergillia ftands confpicuoufly preeminent; the flowers have the fame vivid charader of refulgence, when expofed to the fun's rays, which is perceived in A. Sarnienfis, or the Guernfey Lily, to which it is nigh affined. The late Dr. Fothergill (to whom the botanical world is fo much indebted, for the zeal and extraordinary liberality he conftantly manifefted, in advancing the fcience) received this plant from China at the fame time with A. aurea, A. radiata, \&c. about the year 177\%. It is rather a fcarce and tender bulb, as it is fubject to rot by overmuch wet. It has hitherto been kept, as are moft plants on their firtt arrival from China, in the hot-houfe; but, from every appearance, we fhould be led to fuppofe, it would not perifh if kept in the Green-houfe, as we queftion much, whether it is not equally hardy with the Guernfey Lily, and a native, originally, as well as the latter, of Japan.

It fhould be planted in fandy toam, with a fmall quantity of rough peat, above the tiles in the pot, to make it flower. The propagation is from offsets, which are produced but rarely from the old bulbs. Our figure was taken from a plant in the Hammerfnith nurfery this year, 1801, in the month of May.



## PLATE CLXIV.

# GALAXIA GRANDIFLORA. 

## Large-flowered Galaxia.

CLASS XVI. ORDER I.

MON ADELPHIA TRIANDRIA. Threads united. Three Chives.

## ESSENTIAL GENERIC CHARACTER.

Spatha univalvis. Corolla monopetala, 6 fida, tubus filiformis. Stigma multipartita.

Sheath of one valve. Bloffom one petal, 6 -cleft, tube thread-haped. Summit many divifions.
See Galaxia ovata, Pl. XCIV. Vol. II.

## SPECIFIC CHARACTER.

Galaxia foliis canaliculatis, acuminatis, arcuatis; corolla magna, lutea, folia xquantia.

Galaxia with channelled leaves, tapered to the point, and arched; bloffom large, yellow, and the length of the leaves.

## REFERENCE TOTHE PLATE.

1. The theath of the bloffom.
2. A Blofom fpread open, with the Chives attached.
3. The Seed-bud, Shaft, and Summit, the fummit detached, magnified.

The figure of this delicate little bulb was taken from a plant in the Hibbertian Collection, which had been imported in the laft, and flowered in February this year 1801. It is a tender plant, and the roots are very fubject to decay after flowering, for which reafon, they fhould be removed from the pot before the leaves are quite decayed. Mr. Allen informs us he has kept it, in the greenhoufe, with the other Cape bulbs, planted in light fandy peat earth.


1'rinluastra graminly, ricri

## PLATE CLXV.

# ECHIUM GLAUCOPHYLLUM. <br> Sea-grecn-leaved Viper's-Buglofs. 

## CIASS V. ORDER I. <br> PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

## ESSENTIAL GENERIC CHARACTER.

Corolea irregularis, fauce nuda.
Blossom irregular, mouth naked.
See Echium grandiflorum, Pl. XX. Vol. I.

## SPECIFIC CHARACTER.

Echium caule fruticofo; ramis calycibufque glabris; foliis ovato-lanceolatis, glaucis, glabris, margine ferrulatis; corollis fubæqualibus.

Viper's-Buglofs with a flurubby ftem; branches very fmooth; leaves between egg and lanceAhaped, of a fea-green colour, fmooth, and nightly fawed at the margin; bloffoms nearly equal.

## FEFERENCE TO THE PLATE.

1. The Empalement.
2. A Bloffom cut open, to fhew the infertion of the chives.
3. The Seed-bud, Shaft, and Summit, magnified.

This frubby fpecies of Echium was introduced, to the Royal Gardens at Kew, by Mr. F. Mafon, in the year 1792, from the Cape of Good Hope. It grows to the height of three feet, or more, rather bufly at the top, flowers about the month of May, and perfects its feeds with us; by which only method, it is to be propagated. It thrives beft in a light loamy foil, with a fmall proportion of fandy peat, about one fourth.

Profeffor Martyn, in his Miller's Dic. has collated two deferiptions of Echiums under the titles of lævigatum, and glabrum; the firft, No. 9, from Lin. Sp. Plant. 199; the fecond, No. 19, from Vabl. Symb. 3. 22. Thunberg has likewife, in his Prodromus, 33. two names of plants. as E. lævigatum, and E. glabrum; from whom Willdenow, in his new Edition of Sp. Plant. p. 785, has copied them under the same titles; adding, the various fynonims, from Linnæus's Sp. Plant. to the one; and to the latter, l'rof. Jacquin's fpecific of glaucophyllum, taken from his Ic. rar. 2. t. 312, and his Collect. 2. p. 325. Now, we have little hefitation in declaring our opinion, and we think, thofe who choofe to compare our figure with the different defcriptions here mentioned, will coincide with us, that this is the plant from which they muft all have originated, except the E. glabrum of Vahl, which we take to be a different plant; as, the cup is defcribed hairy, the length of the tube of the bloffom; the chives longer, and the flower fmaller. Wherefore, we have taken, for our plant, the fpecific title of Jacquin, as being, in our idea, the moft appropriate.


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# PLATE CLXVI. <br> GLADIOLUS ABREVIATUS. 

## Shortened-petalled Gladiolus.

## CLASS III. ORDERI.

triandria monogynia. Three Chives. One Pointal.

## ESSENTIAL GENERIC CHARACTER

Corolla fexpartita, ringens. Stamina adfeendentia.

Blossom fix divifions, gaping. Coives afcending.

See Gladiolus roseus, PI. XI. Vol. I.

## SPECIFIC CHARACTER.

Gladiolus foliis linearibus, cruciatis, fcapo longioribus; corolla tubulofa, ftriata, ima anguftata, lacinia fumma magna, recta, ovata, reliquæ vero parvæ, abreviatæ.

Gladiolus with linear leaves, crofs fhaped, longer than the flower-ftem; bloffom tubular, ftreaked, and narrowed at the lower part, the upper petal is large, grows ftraight out, and egg-fhaped, the others are fmall, and appear as if fhortened.

## REFERENCE TO THE PLATE.

1. The outer fheath of the Empalement.
2. The inner theath of the Empalement.
3. A Bloffom fpread open, with the Chives attached.
4. The Seed-bud, Shaft, and Summits.

THis moft fingular Gladiolus was received, amongft a variety of others, in the year 1799, from the Cape of Good Hope, by Meffrs. Lee and Kennedy, Hammerfmith; at whofe nurfery it flowered in March, this year 1801, for the firft time. It is a hardy bulb, and propagates freely from the root; grows about two feet high, and, before flowering, has much the appearance of G. triftis.


# PLATE CLXVII. BRUNSFELSIA UNDULATA. Wazed-flowered Brunsfelsia. 

CLASS XIV. ORDER II.<br>DIDINAMIA ANGiOSPERMAA. Two Chives longer. Seeds covered.

## GENERIC CHARACTER.

Calyx. Perianthium monophyllum, campanulatum, quinguedentatum, obtufum, minimum, perfiftens.
Corolla monopetala, infundibuliformis; tubus Iongillimus, fubincurvus; limbus plans, quinquefidus, obtufus.
Stamina. Filamenta quatuor, brevifima. Anthere oblongæ, erectæ, filamentis dorio affixt.
Pistillum. Germen fubrotundum, parvum. Stylus filiformis, longitudine tubi. Stigma cratlufculums.
Pericarpiem. Capfula extus baccata, globofa, unilocularis, bivalvis.
Semina plurima, compretfa, hine convexa, inde angulata, punctato-fcabra.
Receptaculum fundo capfulæ adnatum, paleaceum; paleis coadunats, apice fubulatis, femina diftinguentibus.

Empalement. Cup one leaf, bell-fhaped, fivetoothed, blunt, very fmall, remainiug.

Blossom. One petal, funnel-fhaped; tube very long, rather curved; border flat, five-cleft, obtule.
Culves. Four threads, very flort. Tips oblong, upright, fixed by the back to the threads
Pointal. Seed-bud roundifh, finall. Slaft thread-haped, the leugth of the tube. Summit rather flelhy:
Seed-vessel. Capfule on the outfide a berry, globular, one cell, two values.
Seeds many, flat, convex on one fide, angular on the other, roughly punctured.
firceptacef fixed to the battom of the capfule, chaffy; chaffi, joining at the bafe, awl fhaped at the point, feparating the fceds.

SPECJFIC CHARACTER.
Brunsfelfia foliis lanceolato-obovatis, utrinque acuminatis, petiolis brevillimis; tubus parum incurvatus, laciniis limbi undulatis.

Erunsfelfia with leaves between lance and inveriely egg-fhaped, tapered to both ends, footitalks very fhort; tube a little incurved, the fegments of the border waved.

## REFERENCE TO THE PLATE.

1. The Empalement.
2. The tube of the blofiom cut open, to thew the infertion and claracter of the Chives.
3. The Pointal and Seed-bud.

The Genus Brunsfelfa (by Plumier fo named, in honour of Otho Brunsfels a monk, the firft who edited in 1.530 a Botanical work with good figures, it contained 238 plates) has undergonc a very necelfary revition fince the days of Linnæus; indeed, it appears fingolar that Vather Plumier, from whom Linmeus quotes his Generic character, fhould have committed fo great an overfight, as to defcribe it with five chives; a feature fcarcely to be expefted, from a !port of nature, in plants of this Clats. So however it is on record, and the fifth Clafs of the Gen. and Spre. Plant. and of the Syft. Nat. tom. ii. each includes this Genus; from which, we thould be induced to think he had defigned fome other plant; if the figure, and the reft of the defcription, did not confirm it. Sclireber, in his Gen. Plant. has likewife an obfervation, that the fruit thould be named a capfule, rather than a berry; as given by Linnæus, Miller, and Swartz; his reafon, that it fplits determinately, by a future, from the top to the bafe.

Our fpecies, is the third now in Britain; they are all natives of the Weft India l0ands. The If B . americana has been long an inhabitant of our hothoufes ; the 2d B. maculata is but little known to moft, though long cultivated here; as it has been treated as a variety of the firft fipecies, notwithftanding the ftrong fpecific differeste, in the fhape of the leaves and bloffom; which in the B. maculata, are beantifully marked at the bafe, and as large as the undulata; the leaves inverfely cgethaped and more downy. The prefent plant feldom grows more than four feet high, flowers freely about March, is very fweet fcented, and is eafily propagated by cuttings. It was firt fent to England in the year 1784 , by Mr. Elcock from the Ifland of Barbadoes, to Meffrs. Lee and Kicunedy, Hammerfmith. Our drawing was made from a plant in the Clapham Collection, in March 1800 . It thould be planted in rich earth.
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## PLATE CLXVIII.

## G ERANIUM PICTUM. <br> Painted-flowered Geranium.

## CLASS XVI. ORDER IV.

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

## ESSENTIAL GENERIC CHARACTER.

Monogyna. Stigmata 5 Fructus roftratus, penta-coccus.

One Pointal. Five Summits. Fruit furnifhed with long awns, five dry berries.
See Geranium Grandiflorum. PI. XII. Vol. I.

## SPECIFIC CHARACTER.

Geranium foliis cordato-oblongis, obtufis, inequaliter incifis, tomentofis, bumi adpreffis; corolla alba, petalis fuperioribus profundè fupra medium rubro maculatis; flaminibus feptem fertilibus; radice tuberofa.

Geranium with oblong heart-fhaped leaves, blunt, unequally gaflied, downy, and lying clofe to the ground; bloffom white; the upper petals deeply marked with red about the middle; feven fertile chives; root tuberous.

REFERENCE TO THE PLATE.

1. The Empalement.
2. The Chives and Pointal, magnified.
3. The Chives fpread open, magnified.
4. The Seed-bud, Shaft and Summit, magnified.

No Genus of Plants claims our notice, for its beauty, more than Geranium, and this fpecies, certainly, ranks amongft the foremoft. It is a native of the Cape of Good Hope, and we believe only to be found in the Clapham Collection; where, our figure was taken in April this year, from a plant, the bulb or root of which had been received the preceding autumn. It is nearly the only one, amongft twenty two fpecies of the tuberous kind, all having irregular petalled bloffoms and tubular cups, of which we poffefs drawings, that has feven fertile chives; the greater number have two, four, or five. It appears to flourifh under the treatment given it by Mr. Allen, which is, by keeping it in fandy peat, on a fhelf, very dry, in the green-houfe. The propagation appears to be the fame for this, as the other tuberous kinds, that is, by the root.


## PLATE CLXIX.

## CRINUM GIGANTEUM.

Gigantic Aphodel-Lily.

## CLASS VI. ORDER I.

## HEXANDrla MONOGYNIA. Six Chives. One Pointal.

## ESSENTIAL GENERIC CHARACTER.

Corolla fupra, infundibuliformis, fexpartita, æqualis; filamenta tubi fauci inferta; femina ad bafin corollarum, vivipara.

Blossom above, funnel-fhaped, fix-parted, equal; threads inferted into the mouth of the tube; feeds at the bate of the bloffoms, viviparous.

See Crinum spirale, Pl. XCII. Vol. II.

## SPECIFIC CHARACTER.

Crinum foliis flaccidis, undulatis; floribus felfilibus, umbellatis; petalis concavis, fubalbidis.

Afphodel.Lily with flaccid, waved leaves; flowers fitting clofe to the flower ftem in umbels; petals concave, nearly white.

## REFERENCE TO THE PLATE.

1. A miniature reprefentation of the whole plant.
2. A Petal with its chive.
3. The Seed-bud, Shaft, and Summit.

The coaft of Africa bordering on our fettlement at Sierra Leone, has furnifhed us with a number of beautiful plants; but none more fo, than thote of the natural order of Lily; witnefs our prefent figure, which was taken from a plant in the Hammerfmith collection, in the month of Auguft 1800. The bulbs of this grand fpecies of Crinum, were received by her Ladyfhip, the Right Honourable the Marchionefs of Rockingham, about the year 1792, from Sierra Leone; they may be confidered as hardy hothoure plants, and may be kept in any part of it: will flower, freely, about the month of Auguft, the flower-ftems rifing, fometimes, to the height of three feet. A mixture, of leaf mould, or fandy peat one half, and light loam the other, is the beft compoft to make them flourifh. It is propagated from the feed, or offsets. -Having made a fmall alteration, in the Enfential Character of the Genus; and as it is likely we may figure fome other fpecies of Crinums fhortly; we think it neceffary to add a fcw words, to that point. The moft offenfible difference, we have been able to trace, in comparing above 40 fpecies of Crinums and Amaryllis's, and on which to reft, with cortainty, for generical diftinction; can, unqueftionably, be taken only, from the feeds; as thefe in moft fecies of l'ancratium, Hemanthus, and all of this Genus, are viviparous or formed like flefhy bulbs, producing plants, like offsets taker, from the original bulbs. From Pancratium it is diftinct, in being deftitute of the Honeycup; and equally fo from Hemanthus, which has its fheath of many leaves, the flowers and chives upright, and the chives, twice the length of the bloffoms.



## PLATE CLXX.

IXIA B ULB OCODIUM. Var. fore speciasisimo.
Crocus-leaved Ixia. Jar, uith most teautifuldower.

## CLASS III. ORDER I.

## TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

## ESSENTIAL GENERIC CHARACTER.

Corolla 6-petala, patens, æqualis. Stamina || Blossom 6-petals, fpreading, equal. Chives tria, erectiufculo-patula.
three, uprigbt, fpreading.
See Imia reflexa, Pl. XIV. Vol. I.

## SPECIFIC CHARACTER.

Ixia fcapo unifloro; foliis linearibus, canaliculatis, fcapo æquantibus; corolla declinata, tubo brevi; ftigmatibus fextuplicibus.

Ixia with one flower on the ftem; leaves linear, and channelled, the length of the flowerftem; bloffom declined, with a fhort tube; fummits fextuple.

## REFERENCE TO THE PLATE.

1. The two fheaths of the Empalement.
2. A Bloffom cut and fread open, with the Chives, fhewn from the infide.
3. The fame, fhewn from the back or outfide.
4. The Pointal, with the Summits, magnified.

This extremely delicate, and beautiful little Ixia, flowered, for the firft time, in March this year, 1801, in the collection of G. Hibbert, Efq. Clapham Common; the bulbs having been received the preceding autumn from the Cape of Good Hope. It appears to be one of thofe plants, which feldom furvive the fecond feafon, in this climate; and we much fear, without a frefh fupply, it will be foon loft to this country ; as it does not ripen its feeds, and the roots do not feem as if inclined to increafe by offsets.

## PLATE CLXXI.

# HYPOXIS LINEARIS. <br> Linear-leaved Hypoxis. 

## CLASS VI. ORDERI.

## HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

## EsSENTIAL GENERIC CHARACTER.

Corolla 6-partita, perfiftens, fupera. Caprula bafi anguttior. Spatha 2 -valvis.

Blossom 6-parted, remaining, above. Capfule narrower at the bafe. Sheath 2 valved. See Hypoxis stellata, Pl. CI. Vol. II.

SPECIFIC CHARACTER.

Hypoxis foliis linearibus, glabris, canaliculatis, longiore fcapo unifloro; corolla intus aurea, extus viridis.

Hypoxis with linear leaves, fmooth, channelled, and longer than the flower-ften, which has but one flower; bloffon orange within, green without.

## REFERENCE TO THE PLATE.

1. Chives and Seed-bud.
2. Pointal and Seed-bud, magnified.
3. The Seed-bud cut tranfverfely.

Ar firft, we had fome doubts whether this plant fhould not be confidered as a variety of Hypoxis ftellata, to which it undoubtedly affines; but, upon due examination, find it a diftinct and new fpecies; as well, from the fhape and length of the leaves, as the fhape, character, and colour of the bloffom, and figure of the root.

Like Hypoxis ftellata it is a native of the Cape of Good Hope, and was introduced, from thence, by Meffrs. Lee and Kennedy, in the year 1792. For its treatment, \&c. we muft refer our readers to the above fpecies, Pl. 101. Vol. 2. Our drawing was taken in March 1801 from a plant in the Hibbertian Collection, Clapham Common. The flower of this plant, like many of the Ixias, \&c. is expanded but a few hours each day, and that only, whilft under the influence of a frong morning fun; as, if the weather is gloomy, it keeps clofe fhut, but does not fpeedily decay, for it will continue to open, with equal brilliancy, for eight or ten days.


## PLATE CLXXII.

## A N EMONE PALMATA.

Cyclamen-leaved Portugal Anemone.

## CLASS XIII. ORDER VII.

## POLIANDRIA POLYGYNLA. Many Chives. Many Pointals.

## GENERIC CHARACTER.

Calyx nullus.
Corolla. Petala duorum triumve ordinum, in fingula ferie tria, oblongiufcula.
Stamina. Filamenta numerofa, capillaria, corolla dimidio breviora. Antheræ didymæ, erectæ.
Pistilla. Germina numerofa, in capitulum collecta. Styli acuminati. Stigmata ob. tufa.
Pericarpium nullum. Receptaculum globofum, five oblongum, excavato-punctatum.
Semina plurima, acuminata, fylum retinentia.

Empalement none.
Blossom. Petals in two or three rows, three in a row, rather oblong.
Chives. Threads numerous, hair-like, half the length of the blolfom. Tips doubled, erect.

Pointals. Seed-buds numerous, collceted into a fmall head. Shafts tapered. Summits blunt.
Seen-vessel none. Receptacle globular or oblong, hollowed and dotted.
Seeds many, tapered, retaining the fhaft.

## SPECIFIC CHARACTER.

Anemnne foliis reniformibus, fub-lobatis, crenatis; involucro multifido; petalis exterioribus villofis, majoribus.

Anemone with kidney-haped leaves, a little lobed, fcolloped; fence many-cleft; the outer petals hairy and larger.

## REFERENCE TO THE PLATE.

1. An outer Petal of the Blofon, fhewn from the infide.
2. The Chives, as they ftand on the receptacle.
3. The fmall Head, as formed by the pointals.
4. A Seed-bud and its appendages, a little magnified.

This ipecics of Anemone, is a native of Portugal, having been brought from thence about the year-1; 88 , and firft cultivated at the Hammerfmith Nurfery; the feecific title of Lufitanica obtained for a time, but little doubt refts now of its being the A. palmata of Linnæus's Sp. Pl. p. 758, and of Vahl, Desfontaines, \&c. How the plant could firt acquire the name of palmata, is certainly a myftery; unlefs it might be, from the appearance of the fence, which neverthelefs but ill accords with that character. Bauhin's affination, as Cyclamen-leaved, is certainly the moft appropriate, as the leaves both in fhape, and the colour of the upper and under part, are cxact with C. coum. It is rather too delicate for our winters, if expofed in the open borders; but, makes a pretty appearance, in foring, if kept in a pot, in light, rich earth. Like moft Anemonies, it propagates beft by dividing the roots, which are long and cylindrical ; but, care muft be taken not to water the pots, for fome time after planting, as they ore apt to rot, where they are broken.


## PLATE CLXXIII.

# GERANIUM ROSEUM. <br> Rofy Geranium. 

## CLASS XVI. ORDER IV.

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

## ESSENTIAL GENERIC CHARACTER.

Monogyna. Stigmata quinque. Fructus roftratus, penta-coccus.

One Pointal. Five Summits. Fruit furnifhed with long awns, five dry berries.
See Geranium Grandiflorum. Pl.Xif.Vol.I.

## SPECIFIC CHARACTER.

Geranium foliis incifo-lobatis, tomentofis, lobis crenatis, obtufis; pedunculis multifloris; floribus erectis, confertis, rofeis, pentandris; calycibus monophyllis; radice tuberofa.

Geranium with deeply-gafhed, lobed, downy leaves, the lobes 1colloped and blunt ; flowerstems many flowered; the flowers erect, crowded, rofe-coloured and with five tips; cups one-leaved; root tuberous.

## REFERENCE TO THE PLATE.

1. The Empalement, with its hollow tube cut open.
2. The Chives cut open.
3. The Seed-bud, Shaft, and Summits.

About the year 1794, this fpecies of Geranium was firf introduced to the Royal Gardens, Kew, by Mr. Francis Maffon, from the Cape of Good Hope. Of all the tuberous kind, this is, certainly, the moft f́pecious yet in England; it flowers generally about March, in which month, our drawing was made, from a fpecimen in the nurfery of Mr. J. Colville, King's Road, Chelfea. Mr. Colville informs us, that the propagation is very difficult, and only to be performed by the root; as the plant does not produce any branches, and that the feeds do not ripen; he heeps it in a mixture of rotten leaves, and fandy peat, in which, it has every appearance of luxuriant health.


## PLATE CLXXIV.

# ANTHOLYZA TUBULOSA. Var.fare variggato. 

## Tubular Antholy $\approx a$. Srried houered Var.

## CLASS III. ORDER I.

TriANDRIA MONOGYNIA. Three Chives. One Pointal.

## ESSENTIAL GENERIC CHARACTER.

Corolla tubulofa, irregularis, recurvata. Capfula infera.

Blosson tubular, irregular, and bent backward. Capfule beneath.
Sce Antholyza ringens, Pl. XXXII. Vol. I.

## SPECIFIC CHARACTER.

Antholyza floribus tubulofis, fubcylindraceis; fcapo difticho, foliis lanceolato-enfiformibus, breviore.

Antholyza with tubular, nearly cylindrical flow. ers; flower-ftem with the bloffoms pointing two oppofite ways, leaves between lance and fword flaped, fhorter.

REFERENCE TO THE PLATE.

1. A Bloffom of a variety, differing in the palenefs, and fize of the flowers, and without variegation.
2. The Empalement.
3. A flower cut open, with the Chives attached.
4. The Seed-bud, Shaft, and Summits, one Summit magnified.

This fine fpecies of Antholyza was received by Mefirs. Grimwood and Wykes, Kienfington, from the Cape of Good Hope, in the year 1796; they poffefs three varieties, and we fhould have been happy to have given a bloffom of the third, but, it was out of flower before our drawing was taken, which was, in the end of June, this year. It is a hardy bulb, and increafes freely, either by the feed, or from the root, and fhould be planted in fandy peat, with a fmall mixture of loam.


# PLATE CLXXV. <br> MELALEUCA ERICefoliA. 

## Heath-leaved Melaleuca.

## CLASS XVIII. ORDER IV.

## POL Y ADELPHIA POLYANDRIA. Threads in many fets. Many Chivcs.

## GENERIC CHARACTER.

Calix. Perianthium turbinatum, germini adnatum, quinquefidum feu quinquedentatum.
Corolla. Petala quinque, rotundata, calycis margini interiori inferta.
Stamina. Filamenta numerofa, filiformia, in fafciculos quinque connata. Anthere incumbentes.
Pistillum. Germen turbinatum, fundo calycis adnatum. Stylus filiformis, erectus. Stigma fimplex.
Pericarpium. Capfula fubglobofa, calycis ventre corticata, fummitate nuda, trilocularis, diffepimentis contrariis.
Semina plurima, oblonga, feu rotundato-angulata, feu alata.

Empalement. Cup turban-fhaped, growing to the feed-bud, five-cleft or five-toothed.
Blossom. Five petals rounded, inferted into the inner margin of the cup.
Chives. Threads numerous, thread-fhaped, united in five bundles. Tips incumbent.
Pointal. Seed-bud turban-fhaped, growing to the bottom of the cup. Shaft thread thaped, erect. Summit fimple.
Seed-vessel. Capfule nearly globular, coated by the belly of the cup, the upper part naked, three-celled, partitions contrary.
Seeds many, oblong, or rounded with angles, or winged.

## SPECIFIC CHARACTER.

Melalenca foliis fparfis oppofitifve, linearibus, enerviis, fubrecurvis, muticis; floribus ferfilibus, apicem verfus ramulorum confertis, fpicatis.

Melalenca with fcattercd or oppofite leaves, linear, without nerves, a little turned back and beardlefs; flowers grow clofe to the ftem, crowded together near the end of the fmaller branches in fpikes.

## REFERENCE TO THE PLATE.

1. A Prop, one which is to be found at the bafe of each flower.
2. A Blofiom, natural fize.
3. The fame magnified.
4. One of the five bundles of Chives, with its Petal, to which it is attached at the bafe, magnified.
5. The Cup, Seed-bud, Shaft and Summit, natural fize, the fummit detached and magnified.

The plants from New Holland, of the natural order of Myrti; comprized under the different Genera of Metrofideros, Eucalyptus, Leptofpermum, Myrtus, and this prefent one of Melaleuca; feen, from what we yet know, to conflitute a very diftinguished part, of the woody vegetable productions of that country: wherefore, we can have little hopes of fieing many of them flower with us, at leaft, for many years to come. The M. ericafolia was amongft the firft plants raifed in 1788 , by Meffrs. Lce and Kennedy, Hammerfmith, from feeds; but, till this year, we believe it has not been feen to flower, in any collection in Great Britain ; nor perhaps would it, as yet, had not a large and old plant, been planted out in the novel and elegant conferratory of the Right Hon. the Marquis of Blandford at White linights, near Reading, Berks, from a branch of which, obligingly communicated by his Lordthip, our drawing was taken, the beginning of July, this year.

The llant grows to the height of fix or feven feet, upright, very branching, the branches weeping, and the flowers, which grow in fpikes or branches of about fix inches in length, project, ftraight out, from about the middle of the fem.

It grows beft in a mixture of two thirds fandy peat, and one third loam; may be propagated by cuttings made, from the tender floots, in the month of March, and kept under a glafs, in the tan bed of the hothoufe, or in a melon frame until ronted.

This ipecies of Melaleuca and the Metrofideros Nodofa of Gaertner, 1 if Vol. de fruct. p. 172, t. 34, f. 6, we muft confider as the fame, though made by Dr. Smith, fee Lim. Tranf. Vol. 111. p. 276, diltinct fpecies; perhaps from fpecimens gathered at different times, differently dried, or from differrut parts of the country.


## CLASS NI. ORDER I.

## DODECANDRIA MONOGYNIA. Twelve Chives. One Pointal.

GENERIC CHARACTER. Scitrel. Gen. Plant. Tol. I. p. 320.

Calyx. Pcrianthium monophyllum, quadrifidum, deciduum, bafi planum; laciniis patentibus, ovatis, inæqualibus.
Corolla. Petala quatuor, oblonga, unguibus tenuibus, longitudine calycis, divifuris inferta.
Stamina. Filamenta fedecim vel plura, fetacea, corolla breviora. Antheræ erectæ, oblongæ.
Pistillum. Germen, pedicello filiformi, longiffimo, ovatum. Stylus nullus. Stigma felfile, capitatum.
Pericarpium. Bacca? carnofa, globofa, maxima, pedicellata, unilocularis, bivalvis.
Semina plura, fubrotunda, emarginata, nidulantia.

Empalement. Cup one lcaf, four-cleft, falling off, tlat at the bafe; fegments fpreading, egr-fhaped, unequal.
Blossom. Four petals, oblong, claws flender, the length of the cup and inferted into the divificns.
Chives. Threads fixteen or more, like briftles, thorter than the bloflom. Tips erect, oblong.
Pointal. Seed-bud on a thired-fhaped and very long foot-fialk, egg-hhaped. Shaft none. Summit fitting on the feed-bud, headed.
Seed-ressel. A Berry? flefly, globular, large, with a foot-ftalk, one-celled, two-valved.
Seeds many, roundifl, notched at the end, difperfed io pulp.

SPECIFIC CHARACTER.
Cratæra foliolis elipticis, glabris; floribus umbellatis, terminalibus, luteo-viridibus, petalis longiffimis, apicibus crifpis.

Cratæra with eliptical, finnoth leaflets; flowers grow in umbel, terminal and yellow green; petals wery long, crifped at the ends.

## REFERENCE TO THE PLATE.

1. Shews the Pointal, part of the Chives, and three Petals of the blofom; a few of the Chives, one of the Petals, and the leaves of the Empalement, being removed, the better to exhibit the ftructure of the bloflom.
2. The Pointal, complete.

To Mr. Eldred Elfzelius, a native of Sweden, we are indebted for this fpecies of Cratæva; by whom it was brought to Great Britain, on his return from Sierra Leone, in the year 1795. As a native of that burning clime, it will not endure our winters, without the protection of the hothoufe; to which, as a climber, it is a confiderable ornament, both in foliage, and flower; the flowers coming, in fucceflion, from Juue, till Auguft; perhaps, much later, as we believe, this is the firlt time its bloffoms have been produced in England. The propagation is extremely ealy, by cuttings; but, to give the plant fufficient vigour for flowering, it mutt be planted in a border, prepared of old rotten dung, fandy peat, and loam, of each, equal parts; feparated from the tan-bed by a partition of boards, fufficiently firong to fupport the earth, upon the removal of the tan. This method of treating many of the tropical climbers, and even the common Caper, though a native of the fouth of Europe, has been found neceffary to their production of flowers in this country. Our figure was taken from a plant, treated in the above manner, in the Stepney collection; from whence, through the kind indulgence of the truly urbanic, and indefatigable proprictor, T. Evans, Efq. we are in hopes of gratifing our botanieal friends, with the figures of a number of plants, new to this country; and of which he is, at prefent, the fole poirefior.


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PLATE CLXXVII.

## IXIA PUNCTATA.

## Dotted flowered Ixia.

## CLASS III. ORDER I.

TriAndria monogyniA. Three Chives. One Pointal.

## ESSENTIAL GENERIC CHARACTER.

Corolla 6-partita, patens, xqualis.
Stigmata 3, erectiufculo-patula.

Blossom 6 divifions, fpreading, equal.
Summits three, nearly upright, fpreading.
See Ixia reflexa, PI. XIV. Vol I.

## SPECIFIC CHARACTER.

Ixia foliis linearibus, fcapo vaginantibus; fcapus geniculatus, fubtriflorus; laciniis corolle obovatis, lineato-punctatis, purpureis.

Ixia with linear leaves fheathing the fem; flowerftem jointed, moftly three flowered; fegments of the bloffom inverfely egg-fhaped, dotted in lines, and purple.

## REFERENCE TO THE PLATE.

1. The two valves of the fheath.
2. A Bloffom cut open, with the Chives attached.
3. The Seed-bud, Shaft, and Summits; a divifion of one of the fummits magnified.

Thas curious Ixia was introduced from the Cape of Good Hope, in the year 1800 , by G. Hibbert, Efq. and is, we believe, in the poffeffion of no other in this kingdom. It is a tender bulb, flowering about April, or May, and appears, either by the bulb, or feed, to be flow of increafe. The bulb, from which our figure was taken, was planted in light, fandy peat earth.


# PLATE CLXXVIII. <br> FERRARIA PAVONIA. <br> Mexican Ferraria. 

## CLASS XVI. ORDER I. <br> MONADELPHIA TRIANDRIA. Threads united. Three Chives.

GENERIC CHARACTER<br>Schrel. Gen. Plant. V. II. p. 451.

Calyx. Spathæ binæ, alternæ, carinatæ, involutæ, unifloræ.
Corolla monopetala, fupera, fexpartita; laciniis oblongis, erecto-patentibus, undulatocrifpatis, maculatis; tribus alternis exterioribus latioribus.
Stamina. Filamenta tria, in tubum cylindraceum, corolla breviorem, connata, fuperne ditincta. Antheræ fubovatæ, didymx.

Pistillum. Germen oblongum, triquetrum, obtufum, inferum. Stylus filifcrmis, longitudine tubi.
Stigmata tria, profundè bifida.
Pericarpium. Capfula oblonga, triquetra, trilocularis, trivalvis; diffepimentis contrariis. Semina numerofa, fubrotunda, pulpa involuta.

Empalement. Sheaths two, alternate, keeled, involute, one-flowered.
Blossom one petal, above, fix divided; fegments oblong, upright fpreading, crifp. waved and fpotted; the three alternate outer ones the broadeft.
Chives. Thread; three, in a cylindrical tube fhorter than the bloffom, joined together, feparate at the top. Tips nearly egg-flhaped, double.
Pointal. Seed-bud oblong, three-fided, blunt, beneath. Shaft thread haped, the length of the tube.
Summits three, deeply two cleft.
Seed vestel. Capfule oblong, three fided, threecelled, three-valved; parsitions contrary.
Seeds many, roundifh, covered with a pulp.

## SPECIFIC CHARACTER.

Ferraria corollis fub campanulatis, fpeciofilimis; laciniis planis, tribus interioribus haftatis, nectariferis; foliis plicatis, bafi fpathaceis.

Ferraria with blofroms nearly bell fhaped and very thew ; fegments plain, the three inner ones are halbert-haped, and have honeycups, leaves plaited, fheathing at the bate.

## REFERENCE TO THE PLATE.

1. The two Sheaths of the Empalement.
2. An outer Petal of the Flower.
3. Au inner Petal of the Flower.
4. The Chives and Pointal.
5. The Chives fpread open.
6. The Pointal complete, one of the fummits magnified.

This is, without doubt, the Mexican plant given in the 211d. Vol. t. 31. f. 2. of Swertius's Florilcgium, publifhed in-1612; by F. Hernandez, in his Nov. Plant. \&c. Mex. Hıft. p 276, in 1618; and of Mutis, under the title it here bears, in his Flo. Amer. 1. t. 15; from whom it has been copied into the Suppl. Plant, of the younger Limmeus, p. $40^{-}$. and continued by Profeffor Martyn in his Mill. Dic. Art. Ferraria 2. This Genns, which was originally formed on the Ferraria undulata of the Cape, and placed to the clafs Gynandria by Linnæus, has been fo continued by Martyn, \&c. but upon what grounds, we are unable to determine; unlefs the miftake arofe from the impreticability of dividing the tube of the chives, from the fhaft, in a dried ipecimen; which, in fuch trmfitory flowers as thofe of Ferraria, Sifyrinchium. Galaxia. \&c, all of this clafs, feem, in that ftate, to form a perfect unifon. Schreber has referred thefe Genera, in his Ed. of Linn. Gen. Plant. to where they certainly muft fand, to Monatelphia. But, although we have continurd the plant under the title by which it is generally known, from an adherence to our original principle; yet do we think, it equally necelfary to ftate our opinion, why we confider its generical reference to have been as ill tahen up, as the Genus had been ill clafffied. This plant, as may be feen from our diffections, is much nigher affined to Sifyrinchium, as it wants every effential character of Ferraria, fuch as a fheath of one leaf, undulated crifped petals, hooded and fringed fummits, \&c. for we do not confiter the length of the tuhe of the bloffom of any moment, as it is not conftant. Now, every ditinguifhing feature of Sifyrinchium are here extant, viz. a fheath of two leaves, flat or plain petals, fummits neither hooded or fringed; but our figure will better explain, than words, thefe tirong marked differences. If indeed we were to give an opinion, it certainly would not be in coincidence with Thunberg, by placing the whole Genus to Moræa; but to create a new one from this plant; whofe whole firucture, but efpecially from the Nectaria or boneycups upon the margin of the inner petals, fands eminently dillinguifhed from all others.

This moft difinguifhed plant, wan fitt introduced to this country by Mrs. Hudfon of Manchefter, about the year 1797; but is now found in mot collections round the Metropolis. It is increafed by the fed, which ripens in this climate, and from the root, which makes abundance of offsets. The flowers expand in rotation, three or four upon each flem at the interval of a few days; the ftem growing to the height of about two feet. So very rapid is the progrefs of the bloffom in its decay, from the time of its opening, which is generally about feven o' clock in the morning; that before twelve, the luftre is gone, and it is quite decayed by three, or four. Our drawing was made at the Hammerfmith Nurfery in July; and fill there were a number of flower ftems, which had not, as yet, made an appearance of flowering. It is beft grown in peat earth.

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## PLATE CLXXIX.

# AMARYLLIS RETICULATA. Netted-flowered Lily-Daffodil. 

CLASS VI. ORDER I.<br>HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

## ESSENTIAL GENERIC CHARACTER.

Corolla 6-petala, campanulata. Stigma trifidum.

Blossom 6 -petalled, bell-fhaped. Summit threecleft.
See Amaryllis radiata, Pl. XCV. Vol. II.

## SPECIFIC CHARACTER.

Amaryllis fpatha multiflora; corollis reticulatis, purpureis; foliis oblongis, reticulatis, bafi attenuatis.

Lily Daffodil, fheath many flowered; bloffoms netted and purple; leaves oblong, netted, and tapered at the bafe.

## REFERENCETOTHE PLATE.

1. A Petal and its Chive, attached, as it is in the flower.
2. The Seed bud, Shaft, and Summit.

The Amaryllis retıculata, a native of Brazil, South America, was firt cultivated in the year 1772, at the Hammerfmith nurlery; the bulbs had been received from Portugal by Edward Whittaker Gray, M. D. of the Britifh Mufeum; and were by him commenicated to Meffrs. Lee and Kemedy. Our drawing was made this fpring, in May, from a plant in the invaluable, and extenfive collection of hothoure plants, at Stepney, belonging to T. Evans, Efq. where it flowers annually.

To enfure the flowering of this plant, it is neceffary to plunge the pot in the heat of the bark-bed of the hothoufe; and, during the winter months, to keep the earth rather dry, as the bulbs are very fubject to rot, without that precaution. It fhould be planted in a compofition of old rotten dung, or leaf mould, and a fmall proportion of loam.


Imaryllos releculalu

## PLATE CLXXX.

# ATRAGENE AUSTRIACA. <br> Auffrian Atragene. 

## CLASS XIII. ORDER VII.

POLYANDRIA POLIGYNIA. Many Chives. Many Pointals.

## ESSENTIAL GENERIC CHARACTER.

Calyx 4-phyllus. Petala, 12. Semina caudata.
Empalement 4 leaves. Petals 12. Seeds with tails.
See Atragene Cafensis, PI. IX. Vol. I.

## SPECIFIC CHARACTER.

Atragene foliis oppofitis, triternatis; foliolis rugofis, ferratis; floribus folitariis, tomentofis, cernuis; calyce magno, ceruleo, marginato.

Atragene with oppofite, twice-three-divided leaves; leaflets rough and fawed; flowers folitary, downy, nodding; empalement large, blue, and bordered.

REFERENCE TO THE PLATE.

1. A Leaf of the empalement.
2. A Cetal of the flower.
3. A Chive complete.
4. The Pointals as they ftand in the flower.
5. A ripe feed, with its feathered tail.

This is, unqueftionably, the Auftrian Atragene of Jacquin's Vind. 249; and, we think, no one who has had an opportunity of comparing the A. alpina with this plant, but will determine it a diftinet fpecies. It is a hardy, climbing fhrub; growing frequently, eight or ten feet in a feafon, and covers itfelf pretty abundantly with foliage; the foot-ftalks of the old leaves becoming cirrhi or tendrils, and the wood growing to a confiderable thicknefs. The flowers begin to appear about May; and continue in fucceflion, till July. It may be propagated by layers; but, the fureft mode is by feed, which may be fown as foon as ripe, and which will be perfected from the firt flowers, by Auguft. It grows the moft flourifhing in light rich earth; but will live in the molt common. Our figure was made from a plant in the Hammerfmith collection, to which it was firft introduced in the year 1792.


Alrayelie arnslriara.

## PLATE CLXXXI.

# VACCINIUMVIRGATUM. 

Green-twigged Whortle-berry.

## CLASS VIII. ORDER I.

oCTANDRIA MONOGYNLA. Eight Chives. One Pointal.

## ESSENTIAL GENERIC CHARACTER.

Calyx fuperus. Corolla monopetala. Filamenta receptaculo inferta. Bacca quadrilocularis, polyfperma.

Cup fuperior. Bloffom one petal. Threads fixed into the receptacle. A berry with four cells and many feeds.

See Vaccinium arctostaphyllos. Pl. XXX. Vol. I.

## SPECIFIC CHARACTER.

Vaccinitm foliis oblongo-ovatis, ferrulatis, deciduis, ramulis viridibus; floribus, fub-umbellatis, axillaribus; corollis, fub-cylindraceis; calycibus apice reflexis. Staminibus decem.

Whortle-berry with oblong egg-fhaped leaves, nightly fawed, deciduous, the fmall branches green; flowers grow rather umbelled from where the leaves are fixed to the ftem; bloffoms nearly cylindrical; cups reflexed at the upper part. Ten chives.

## REFERENCE TO THE PLATE.

1. $\Lambda$ flower complete.
2. The Cup.
3. The Chives, Pointal, and Seed-bud, the cup cut off, magnified.
4. A nearly ripe berry.

This fecies of Whortle-berry was, according to the Kew Catalogue, introduced by Mr. Young in the year 1770 . It is a hardy plant; and, as a native of North America, where it is an under fhrub of the woods, fhould be planted in a flhady fituation, in peat earth. It is rarely killed by our frofts; grows about two feet high, and lofes its leaves in winter. Our drawing was made in June, this year, at the Nurfery, Hammerfmith, where it is propagated by layers.


## PLATE CLXXXII.

# MALVA DIVARICATA. 

## Straddling-branched Mallow.

## CLASS XVI. ORDER VI.

MONADELPHIA POLYANDRIA. Threads united. Many Chives.

## ESSENTIAL GENERIC CHARACTER.

Calyx duplex; exterior 3-phyllus. Arilli plurimi, monofpermi.

Cup double; outer three-leaved. Seed-coats many, one-feeded.
See Malya reflexa, Pl. CXXXV. Vol. II.

## SPECIFIC CHARACTER.

Malva foliis lobatis, plicatis, dentatis, fcabridis; ramis ramulifque divaricatis, flexuofis.

Mallow with lobed leaves, plaited, toothed, and rough; the large and fmall branches grow ftraddling, and zig-zagged.

## REFERENCE TO THE PLATE.

1. The double Cup.
2. A Flower fpread open, with the threads remaining.
3. The Chives cut open, and magnified.
4. The Seed-bud, Shaft, and Summits, magnified.

As a lively, but little, green-houfe plant, this fpecies of Mallow has not many equals; and its property of continuing to flower from June, till December, muft confiderably enhance its value. It is a native of the Cape of Good Hope, and was introduced to us, about four years fince. Moft collections now poffefs it, from its facility of increafe, may be planted in rich earth, and is increafed by cuttings, or feeds, which ripen perfectly in this country. The drawing was made at the Nurfery; Hammerfmith.


# PLATE CLXXXIII. <br> G A R DENIA TUBIFLORA. <br> Tube-flowered Gardenia. 

## CLASS V. ORDER I.

## PEnt ANDRIA MONOGYNIA. Five Chives. Onc Pointal.

## GENERIC CHARACTER.

Calyx. Perianthium monophyllum, quinquefidum, fuperum, laciniis erectis, perfiftentibus.
Corolla monopetala, infundibuliformis; tubus cylindricus, calyce longior; limbus planus, quinquepartitus.
Stamina. Filamenta nulla. Antheræ quingue, ore tubi infertæ, lineares, ftriatæ, longitudine dimidia limbi.
Pistileum. Germen inferum. Stylus filiformis feu clavatus. Stigma exfertum, ovatum, obtufum, bilobum, fæpe fulcatum.
Pericarfium. Bacca ficca, uni bis feu-quadrilocularis.
Semina plurima, depreffa, per feries imbricatim fibi impofita.

Empalement. Cup one leaf, five-cleft, above, feginents upright, permanent.
Blossom one petal, funnel-flaped; tube cylindrical, longer than the cup; border flat, five divifions.
Chives. Threads none. Tips five, fixed into the mouth of the tube, linear, firiped, halt the length of the border.
Pointal. Seed-bud beneath. Shaft thread. flaped or club-fhaped. Summit ftanding out, egg-fhajed, obture, two-lobed, often furrowed.
Seed-vessel. A dry berry, onc, two, or fourcelled.
Seeds many, flattened, lying upon one another in tiers.

## SPECIFIC CHARACTER.

Gardenia inermis; foliis elipticis, undulatis, floribus ternis; corollæ laciniis tortis, linearibus, reflexis, tubo filiformi, longiffimo.

Gardenia without thorns; with eliptical, undulated leaves; flowers grow by threes; the fegments of the bloffom are twifted, linear, reflexed, the tube thread llaped, very long.

## REFERENCETOTHE PLATE.

1. The Cup and Seed-bud.
2. A Bloffom cut open, with the Chives remaining at the mouth.
3. The Shaft and its Summit, the fummit detached and maguified.

The Tube-flowered Gardenia was introduced to Britain, in the year 1789 , from Sierra Leone, and muft, therefore, be treated as a tender hot-houfe plant. It grows, with us, to the height of about two feet before it flowers; and, from the beauty and fize of the leaves, the regular, oppofite manner in which it forms its branches, becomes a very handfome lhrub. The flowers, which are produced in July, grow generally three together, at right angles, from the infertion of the lcaves, in a bunch, which lafts about fix or eight days, having but one flower open and perfect at a time, the decaying ones becoming brown. It is propagated, wihh eafe, by cuttings, made in the month of March, and kept under a bell-glafs, in a pot of fiffifh loam, in the bark-bed of the hot-honfe, or a melon frame. The agreeable character, of a delicate fragrance, attendant on the bloffoms of moft fpecies of this genus, is eminently powerful in this. Our drawing was made at the Hammerfmith nurfery; where, it was firf raifed, from feeds received in a prefent, by Meffrs. Lee and Kennedy, from the Hon. Sierra Leone Company.



## PLATE CLXXXIV.

PERGULARIA MINOR.
Smaller Pergularia, or $W$ eft-coalt Creeper.
C L A S S XX. O R D ER VI. of Linn. Gen. Plan. 1764. GYNANDRIA DECANDRIA. Chives on the Pointal. Ten Chives.

## GENERIC CHARACTER.

Calyx. Perianthium monophyllum, quinquefidum, erectum, acutun, perfifiens.
Corolla monopetala, hypocrateriformis; tubus cylindricus, calyce longior; limbus quinquepartitus, planus; laciniis oblongis.
Nectarium, duplex; exterium quinquefidum, quinquedentatum, plicato-angulatum, dentibus acutis, incurvis, apice corniculis nutantibus, approximatis; interium quinquetidum, exteriori bafi adnatum, fquamulæ membranaceæ, apice denticulatæ, obtufæ, fingula involvens ftamina duo, alterna.
Stamina. Filamenta decem, capillaria, brevia, divaricata, per paria adnexa glandulis quinque ftigmati affixis. Anheræ pellucidæ, lutex, fubrotundre.
Pistillum. Germina duo oblonga. Stylus breviflimus, carnofus. . Stigma corpufculum conicuii, obtufum, carnofum.
Pericarfium. Folliculi duo, uniloculares, introrium dehifentes per longitudinem.
Semina numerofa, parva, fubrotunda.

Empalement. Cup one leaf, five-cleft, upright, pointed and remaining.
Blossom one petal, falver-fhaped; tube cylindrical, longer than the cup; border fivedivided, flat, fegments oblong.
Honey-cup, double; the outer, five cleft, five toothed; plaited into angles, with the teeth pointed, incurved, approaching at the point by fmall nodding horns; the inner five-cleft, growing to the bafe of the outer, fcales fkinny, toothed at the end, blunt, each covering two oppofite chives.
Chives. Threads ten, hair-like, fhort, ftraddling, connected by pairs to five glands fixed to the fummit. Tips tranfparent, yellow, roundith.
Pointal. Seed-buds two, oblong. Shaft very fhort, flefhy. Summit a conical, obtufe, flefhy fubitance.
Seed-vessel. Two follicles, one-valved, fplitting lengthways from the infide.
Seeds numerous, fmall, roundih.

## SPECIFIC CHARACTER.

Pergularia foliis cordatis, acutis, apicibus tor. tis; laciniis corollx ovatis, erects, luteis.

Pergularia with heart fhaped leaves, fharppointed and twifled at the ends; the fegments of the bloffom are egg-flaped, upright, and yellow.

## IEFERENCE TO THE PLATE.

1. The Empalement.
2. A flower cut open.
3. The parts of fructification magnified.
4. Two Scales of tine honey-cup as they are attached together, magnified.
5. An outer Scale magnitied.
6. An imer Scale magnified.
7. The Seed-buds, Shaft, Summit, and Chives magnified.

That a juft judgment may be formed, upon what grounds we have taken up a fepeific diftinction, between the only two fpecies we polfers of this genus; fo diffimilar in our opinion, but, which have been confidered as fcarcely to be dcemed varieties, by much abler botanifts than ourfelves profefs to be; we have given the figures of both in confequence. Much is it to be regretted, that the whole natural order of plants forming the Apocinex of Juffieu, fo charactered in themfelves, have not undergone a proper revifion, in clatification, upon the original Linnæan sexual principles; which, we muft fuppofe, have bcen left in the prefent bewildered chaos, from the intricacy, fingularity and minutenefs of the parts, being fo difficult to develope. From critical and actual obfervations, taken from the living plants, we are in hopes of being able to illuftrate, and correct where neceffary, the characters of fuch as may come under our review.

Upon the changing the clafs of this genus, there needs no comment; as moft authors seem to allow, though they have not followed the hint, that it is properly Gynandrous; although they have not equally agreed as to the Order; fome taking the glands, furrounding the fummit, for the chives, and fome, for the fummits themfelves, of a columnar thaft. Dr. Smith, who has figured our other fpecies, has jufly taken, the parts fixed to the five glands, for what they certainly are; as may be eafily traced throngh the whole order of Orchidex, where the chives are nearly fimilarly placed and fo hooded.

The Genus is by no means new, in name, having been fo titled by Linnæus, from the names of Pergulans and Pergulanus of Burman and Rumphius; who derived them from the ufe made of the plants by the natives, of the weftern coaft of the peninfula of India; where, they are cultivated to form arbors, for the agreeable flavour of their flowers. This fpecies was firf introduced about the year 1784, by Sir Jofeph Banks, Bart. fome time before the other fpecies; wherefore, we have given it the preference. It is propagated by cuttings, and fhould be treated in the fame manner as directed for the Crateva capparoides of our latt Number, to have it flower in perfection. The figures of both fpecies were taken, in Auguft, from two plants in the collection of J. Vere, Efq. Kenfington Gore; where, Mr. Anderfon (to whom we mult beg our fincere acknowledgments for his frequent and ready obfervations and alliffance) informs us, they are treated in fuch mauner.


## PLATE CLXXXV.

# PERGULARIA ODORATISSIMA. <br> Sweet Pergularia, or Chinefe Crecper. 

## CLASS XX. ORDER VI. of Linn.Gen. Plant. 176.t.

Gynandria DECANDria. Chives on the Pointal. Ten Chives.

## ESSENTIAL GENERIC CHARACTER.

Contorta. Nectarium duplex, genitalia involvens; fquamulæ exteriores quinque, cuf pidatre; quinque interiores, membranaceæ, fingula fquamula occultans famina duo alterna.
Corolla hypocrateriformis.

Contort. Honey-cup double, concealing the parts of fructification; the outer fcales are five, and Spear-fhaped; the five inner are fkinny, each fcale covering two alternate chives.
Blossom falver-fhaped.
See Pergularia minor, Pl. CLXXXIV. Vol. III.

## SPECIFIC CHARACTER.

Pergularia foliis cordatis, fenioribus fubtomentofis; laciniis corollæ margine revolutis, tortis, linearibus, reflexis, viridibus.

Pergularia with heart-fhaped leaves, the older ones rather downy; the fegments of the bloffom rolled back at the margin, twifted, linear, reflexed, and green.

## REFERENCETOTHE PLATE.

1. The Empalement.
2. A Bloffom.
3. The fame, cut open.
4. The parts of fructification, as they appear when covered by the honey-cups, magnified.
5. The outer fcale of the Honey-cup, magnified.
6. The inner fcale of the Honey-cup, magnified.
7. The two Scales, as they are connected together at the bafe.
8. The Pointal, with the Chives; the Shaft, Summit, and Chives, with the bodies conneeting the Chives, detached and magnified.

This fpecies of Pergularia is a native of China, from whence it was received in the year 1789, by Lady Hume; in whofe collection at Wormleybury, Herts, it firft flowered in 1791. It is cultivated and increafed in the fame manner as the P. minor, and is equally fragrant. We have little doubt that our two fpecies comprife four, of the different authors who lave collated from each other; we thall take the laft, Willdenow. The P. glabra and P. Japonica as our P. minor; and the P. purpurea and tomentofa as our P. odoratiffima. The P. edulis of Thunberg is certainly Cynanchum.


## PLATE CLXXXVI.

## I X I A S PECIOSA.

Deep crimfon Ixia.

## CLASS III. ORDERI. <br> triandria monogynia. Three Chives. One Pointal.

## ESSENTIAL GENERIC CHARACTER.

Corolla fexpetala, patens, æqualis. Stamina tria, erectiufculo-patula.

Blossom fix petals, fpreading, equal. Chives three, upright fpreading.

See Ixia feflexa, Pl. XIV. Vol.I.

## SPECIFIC CHARACTER.

Ixia foliis linearibus, medio coffatis, gramineis; fcapus bifforus, filiformis; corollis fubcampanulatis, profunde coccineis.

Ixia with linear leaves ribbed in the middle and graffy ; flower-ftem two-flowered and threadfhaped; bloffoms rather bell-fhaped and of a deep crimfon.

## REFERENCE TO THE PLATE.

1. The Empalement.
2. A Flower cut open.
3. The Pointal, one of the tips magnified.

Although this feecies is not icarce, yet, from the general method of treating it, that is, by giving it no more heat than has been found neceffary for the generality of Cape Ixias, few have feen its bloffoms, though they poffefs the roots. To enfure their flowering, as foon as the bulbs are well rooted, which will be about January, if planted in October; they may be then put into the heat of a melon or cucumber frame, or taken into the hothoufe, where they will flower about the latter end of May. This Ixia was firft introduced, from Holland, about the year 1778, under the name of Ixia Kermofina fpeciofa; and, under that title, is to be found, in moft collections; wherefore, confidering it a diftinct fpecies, having drawings of two varieties, we have continued the fpecific name of fpeciofa. Our drawing was made at the Hammerfmith nurfery, in May 1799.

# PLATE CLXXXVII. <br> ECHITESSUBERECTA Ozal-leaved Echites. 

## CLASS V. ORDER I.

pentandria monogyniA. Five Chives. One Pointal.

## GENERIC CHARACTER.

Calyx. Perianthium quinquepartitum, acutum, parvum.
Corolla monopetala, infundibuliformis; limbus quinquefidus, planus, patentiffimus. Nectarium glandulis quinque, germen circumflantibus.
Stamina. Filamenta quinque, tenuia, erecta. Antheræ rigidæ, oblongæ, acuminatæ, apice convergentes.
Pistileum. Germina duo. Stylus filiformis, longitudine ftanrinum. Stigma oblongocapitatum, bilobum, glutine antheris adnexum.
Pericarpium. Folliculi duo, longifimi, uniloculares, univalves.
Semina plurima, imbricata, coronata pappo longo.

Empalement. Cup five-parted, pointed, and finall.
Blossom one-petal, funnel-haped; border fivecleft, flat and fpreading very much.
Honey-cup five glands, fanding round the bud.
Chives. Five threads, flender, erect. Tips ftiff, oblong, tapered, and clofing together at the top.
Pointal. Seed-buds two. Shaft thread-hhaped, the length of the chives. Summit oblongheaded, two-lobed, attached to the tips by a glutinous fubftance.
Seed-vessel. Two follicles, very long, one celled, one valved.
Seeds many tiled, crowned with a long feather.

## SPECIFIC CHARACTER.

Echites pedunculis racemofis; foliis ovalibus, obtulis, mucronatis; floribus Iuteis, amplifimis; corolle tubus hirfutus.

Echites with bunched foot-ftalks; leaves oval, blunt and pointed at the ends; flowers yellow and very large; the tube of the bloffom hairy.

## REFERENCE TO THE PLATE.

1. The Cup.
2. A Flower cut open, with the chives remaining, but detached from each other.
3. The Chives and Pointal as they are in the flower, the lower part of the blofom remaining, the upper cut away, magnified.
4. One of the Chises a little magnified.
5. The Pointal and Seed-buds, magnified.

The Lady Dowager De Clifford received this plant from the ifland of St. Vincent's, in the year 1794; and we much queftion, whether it was ever feen in Britain prior to that period; although faid to be cultivated in 1759. by Millar, in the 7th Edit. of his Dietionary, and from thence, collated into the Kew Catalogue, p. 2s9, Vol. 1. It is a climbing plant, if fupported; but does not grow to any confide rable leight, if liept in a pot. The beft method of treating this plant, is the fame as that propofed for the Crarava capparoides, rl. 176. Vol. III. The rpecific name Suberecta, of Jacquin and Browne, muft undoubtedly lave been taken from the plants which grow in the Savannas; where, they feldom nequire abore the height of two feet. The whole plant, from which, if any part is cut or broken, there iffines a milky fubftance, is confidered by Dr. Browne as poifonous. Our figure was taken at Meffe. Lee and Kennedy's, this year, in Auguft. It is propagated by cuttings, put in about the month of May.

## PLATE CLXXXVIII.

## GLADIOLUS CAMPANULATUS.

## Bell-fowered Gladiolus.

CLASS III. ORDER I.<br>Triandria MONOGYNIA. Three Chives. One Pointal.

## ESSENTIAL GENERIC CHARACTER.

Corolla fexpartita, ringens.
Stamina adfeendentia.

Blossom fix divifions, gaping.
Chives afcending.
See Pl. XI. Vol. I. Gladiolus roseus.

## SPECIFIC CHARACTER.

Gladiolus foliis lanceolatis, nervofis, glabris; fcapo fubtrifloro, foliis longior ; corolla fubcampanulata, palidè purpurea, laciniis fubæqualibus; Atignatibus bifidis.

Gladiolus with lance fhaped leaves, nerved and fmooth; flower-ffem moftly three-flowered, longer than the leaves; bloffom rather bellmaped, of a pale purple, the fegments nearly equal, with the fummits two-cleft.

## REFERENCE TO THE PLATE.

1. The Sheaths of the Empalement.
2. A Flower fpread open, with the Chives attached.
3. The Seed-bud, Shaft, and Summits, one Summit detached and magnified.

The Bell-flowered Gladiolus, was amongft the number of thofe imported from Holland, in the year 1794, by Meffrs. Lee and Kennedy, Hammerfmith; when they partook of that large collection, brought to Haarlem by a Frenchman ; who had been long refident at the Cape of Good Hope, where he had cultivated moft of the bulbs prior to his bringing them to Europe. Nothing particular is required for the management of this, more than the moft common of the Genus, from the Cape. It flowers in May, and increafes by the root; the feeds rarely ripen.


## PLATE CLXXXIX.

## ZIN N I A VERTICILATA.

## Double Zinnia.

## CLASS XIX. ORDER II.

SYNGENESIA POLIGALIIA SUPERFLUA. Tips united. Superfluous Pointals.

## ESSENTIAL GENERIC CHARACTER.

Meceptaculumpaleaceum. Pappusariftis 2 erectis. Calyx ovato-cylindricus, imbricatus. Flofculi radii 5, perfiftentes, integri.

Receptacle chaffy. Feather with 2 uprightawns. Empalement cylindrical-egg-fhaped, and tiled. Florets of the ray 5 , remaining and entire.

See Zinnia violacea. Pl. LV. Vol. I.

## SPECIFIC CHARACTER.

Zinnia foliis verticillatis, feffilibus; floribus pedunculatis; flofeuli radii fæpe tria feries.

Zinnia with leaves growing in whorls without font-ftalks clofe to the ftem; flowers with foot-ftalks; the florets of the ray often three rows.

## REFERENCETOTHE PLATE.

1. An outer female Floret of the ray, the feed attached, a little larger than nature.
2. An inner hermaphrodite Floret of the dik, with its feed and ikinny chaff, magnified.
3. The Chives, Poiutal, and Seed of an hermaphrodite Floret, divefted of its corolla, inagnified.

The Englifh fpecific title to this plant, fhould feem to imply, that the flowers are fuch, as flould not come into our arrangement; but, as the character is not conftant in all the flowers, even on the fame plant, it cannot be confidered but as a feecific character in this particular fpccies, though the name has its proper force, in contradiftinction to its congeners, in our language. It is a native of Mexico, South America; and was intrudaced to our gardens about the year 1789, by Mons ${ }^{T}$ Richard, from the Paris gardens, at the fame time with the Virgilia; a moft beautiful aunual, of the habit of Aretotis, now loft in both countries from the difficulty of procuring ripened feeds. It is to be raifed in the fame manner as the other fecies, on a gentle liot-bed, in March, and planted out the beginning of May. The flowers make their appearance about the beginning of Auguft, and continue, in fucceffion, till they are deftroyed by the froft. To be certain of the feed, the heads muft be taken from the plant, whilft they appear yet frefh; as the petals are perfifient, and have not the appearance of entire decay, though the feed is nearly ripe; for if the receptacle once begins to rot, (which it is very fubject to, the feeds arc immeriately cont iminated and fpoilt. Our figure was taken, this year, at the Hammerfinith Nurfery, where, it was grown firft in this kingdom.


# PLATE CXC. <br> gERANIUM ASTRAGALIFOLIUM. 

## Aftragalus-leaved Gcranium.

## CLASS XVI. ORDER IV.

MONADELPHIA DECANDRLA. Threads united. Ten Chives.

## ESSENTIAL GENERIC CHARACTER.

Monogyna. Stigmata quinque. Fructus roftratus, penta-coccus.

One Pointal. Five Summits.
Fruit furnifhed with long awns; five dry berries.
Sec Gerinium Grandiflorum, Mi.XII. Yol. I.

## SPECIEIC CHARACTER.

Geranium foliis pinnatis, hirfutis, foliolis rotundato-ovatis; calycibus monophyllis; petalis undulatis ad bafin tortis; Ataminibus quinque fertilibus; radice tuberofa.

Geranium with winged, hairy leaves; leaflets of a roundifh-oval thape; cups one-leaved; petals waved, twifted at the bafe; five fertile chives; root tuberous.

## REFERENCE TO THE PLATE.

1. The Empalement.
2. The Chives and Pointal.
3. The Chives fpread open and magnified.
4. The Seed-bud, Shaft, and Summits, magnified.

By the Kew Catalogue we are informed, that this fpecies of Geranium, was introduced to this country, in the year 1788 , by Mr. F. Maffon. It is, like many of this branch of the cxtended family of Geranium, rather a tender Green-houfe plant; and will not flower, in perfection, without the affifance of the Het-houfe. It lofes its foliage after flowering, and remains in a fate of inaction for at leaft three months; during which period, it fhould be watered but feldom, and that fparingly. To prepagate it, the only mode is, by cutting fmall portions of the root off, and putting them into the flrong hest of a hot-bed, about the month of March; as hitherto, it has not perfected any feeds with us, and the plant produces no branch, except the flower-ftem may be fo denominated. Our drawing was made from the Clapham Collection, in July, this year. This fpecies has been confidered by Profeffor Martyn, (fee his edition of Mill. Dict. article Pclargonium 2.) as the fame with G. pinnatum, and G. prolificum of Linn. Sp. Plan. But, however, the fpecific characters in Linnæus, of thofe fpecies, may agree with our figure, the G. Aftragalifolium of Jacquin and Cavanilles, they are, unqueftionably, all different plants; drawings of the two former we have, and will be given in due courfe.



# PLATE CXCI. PLATYLOBIUM SCOLOPENDRUN. <br> Scolopendra-like ftemmed Flat-Pea. 

## CLASS XVII. ORDER IV.

## DIADELPHIA DECANDRIA. Threads in two Sets. Ten Chives.

## GENERIC CHARACTER.

Calyx. Perianthium, campanulatum quinqucdentatum; laciniis tribus inferioribus acutis, patentibus; duabus fupremis maximis, obtufis, obovatis, vexillo adpreflis.
Corolla papilionacea.
Vexillum, obcordatum, cmarginatum, erectum, maximum.
Ahe vexillo breviores, obtufæ, femi-obcordatæ, bafi denticulatæ.
Carina obtufa, compreffa, longitudine ct figura alarum.
Stamina filamenta decem, coalita in vaginam, fupra femififfam, apice libera, xqualia, affurentia. Antheræ fubrotundæ, verfatiles.
Pistillum. Germen lineare, pilofum. Stylus incurvatus, glaber. Stigma fimplex.
Pericarpium. Legumen pedicellatum, compresfum, obtufum, mucronatum, uniloculare, dorfo alatum.
Semina, plurima, compreffa, reniformia.

Empalement. Cup bell-fhaped, five-toothed; the three lower fegments pointed, fpreading; the two upper very large, obtufe, preffed to the ftandard.
Blossom butterfly-fhaped.
Standard, iuverfely heart-fhaped, notched at the end, upright, vcry large.
Wings fhorter than the ftandard, obtufe, half inverfely heart-1haped, toothed at the bafe. Kecl, obtufc, flattened, the length and hape of the wings.
Chives. Ten threads, united into a fleath, half cleft on the upper fide, feparate at the top, equal and turned upwards. Tips roundith, verfatile.
Pointal. Seed-bud linear, hairy. Shaft turned inwards, fmooth. Summit fimple.
Seed-vessel. Pod with a footfalk, flattened, obtufe, with a fmall point, one-celled, winged along the back.
Seeds many, flattened, kidney-fhape.

## SPECIFIC CHARACTER.

Platylobium foliis ovatis, glabris; ramis ramulifque compreffis, alatis, margine, cicatrifatis, floribus folitariis.

Flat-pea with egg-flaped fmooth leaves, larger and fimaller branches flat, winged and hatched at the edges; flowers folitary.

## REFERENCE TO THE PLATE.

1. The Empalement, natural fize.
2. The Standard of the bloffom.
3. One of the Wings of the bloffom
4. The two petals of the Keel.
5. The Chives and Pointal, with part of the cup, magnified.
6. The Seed-bud magnified.

This Genus of plants was firft named by Dr. Smith, in the Linn. Trans. Vol. II. 350, from the P. formofum, which he afterwards figured in the New-Holland fpecimens, Tab. VI. Our fpecies was introduced, to Britain, in the year 1.792, by Meffrs. Lee and Kennedy. It is a hardy greenhoufe plant; but has not, hitherto, been increafed in this country. It muft be planted in very fandy peat earth, and not much watered, in winter, as too much wet is apt to deftroy it. The young branches, which in the old plant appear much more like leaves, (as feldom any leaves are produced from the upper part of the plant, after a certain age, ) are very tender; but in time become as tough as leather, and are almoft equally pliable. Our drawing was taken in May 1799, from a plant, we believe, the firft that flowered in England, in the Hibbertian Collection.



## PLATE CXCII.

## A N THOLYZ A F U L G E N S.

 Refulgent-flowered Antholyza.> CLASS III. ORDER I.
triandria monogynia. Threc Chives. One Pointal.

## ESSENTIAL GENERIC CIIARACTER.

Corolla tubulofa, irregularis, recurvata. Capfula infera.

Blossom tubular, irregular and bent backward. Capfule beneath.
See Antholyza ringens, Pl. XXXif. Vol. I.

## SPECIFIC CHARACTER.

Antholyza floribus tubiformibus, curvatis, coccineis, fulgentibus; laciniis corollæ maximis, patentibus; foliis longiflimis, glabris, bafi attenuatis.

Antholyza with trumpet-fhaped flowers, curved, fcarlet, and refulgent; the fegments of the blolfom very large, foreading; leaves very long, fmooth, and tapered at the bate.

## REFERENCE TO THE PLATE.

1. Part of a Leaf, cut from the upper part.
2. The two theaths of the Empalement.
3. The Flower cut open, with the chives attached.
4. The Pointal and Seed-bud; one of the fummits detached and magnified.

This moft beautiful genus does not poffefs amongft its numerous fpecies, (drawings of twenty-two of which we have) a rival to A. fulgens; whether, for the fize of the plant, wnich grows to the lieight of three feet, or the extreme brilliancy of its bloffoms, which frequently make a fpike near a foot in length. The roots fhould not be taken from the pots, but fhifted into frefh earth annually, which may be a compofition of half fandy peat, and half loam, as the leaves do not decay, until frefh ones are produced. Our figure was taken at the Hammerfmith Nurfery, in May 1800, to which it was firft brought, from the Cape of Good Hope, in 1792 . It increafes by the root.

In a cotemporary, and fomething fimilar publication to our own, we were forry to obferve, a rifing itch to do away, what, under the conduct of its original fcientific proprictor, was allowed by all, to conftitute its chief merit and utility; efpecially to thofe, "u•ho wifh to lecome fcientifically acquainted with the plants they cultivate." The late Mr. Curtis, purfuing the path he planned, with rigour, to prevent confufion, and avoid as much as poffible the greateft difficulty of the fcience; feldom altered a cominonly known, or eftablithed name; unlefs abfolutely necelfary to fyftematic arrangement. We were naturally led to thefe obvious obfervations, from the hints thrown out in the laft Number of the Bot. Mag. in which, the $\Lambda$. tubulofa of all the collections, which poffefs the plant, and fo named and figured by us, in the preceding Number of the Botanifts Repofitory, has a new generic and fpecific title; and in which a gentleman "with INFINITE Jkill" of the name of Gawler, the acknowledged father of the innovation, is fpoken of a s qualified to fcrutinize and rectify the "crrors, falfe fynonims, and blunders upon blanders, which have from carelessness, \&c." crept into the, of courie, infignificant labours of a Iinnæus, a Jacquin, a 'I hunberg, a Willdenow, or a Curtis. It may perhaps be an acquifition to the fcience, that, fince fuch confufion prevails amongit "the mof learned Botani/fs," from their "acknou'ledged inalility to determine thofe plants;" which, nevertheless, they have all foolifhly attempted to do, we have one at laft, whole "frutinizing" eye "has leen able to make out all Linneus's and even Thunterg's fpecies." This elucidation, of to intricate a fubject, by a perfon whofe knowledge of living plants, we fear, does not lead him, fcarcely, to an acquaintancefhip with the difference of tace in a Plane from a Poplar, moit be matter of infinitc moment, to thofe, "who uift to lecome acquainted with the plants they cultivate;" and the fmall trouble, to molt perfons, of learning new, and oufting the old names for plants, which have been long rivetted to the memory by habitual ule, will be amply compenfated, by the pleafure of novelty, which muf neceffarily refult, from the certain alteration in fome part of the title, of every plant which has hitherto, or is to come under, this learned julge's dictatorial fiat. Our opinions, as do our labours, run counter to thefe new fafhions, of rendering a difficult ficience eafy; alsd our road muft ftill be in the old track of the triffer Linnæus.

## PLATE CXCIII.

# GERANIUM LINEARE. 

Linear-petalled Geranium.

## CLASS XVI. ORDER IV.

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

## ESSENTIAL GENERIC CHARACTER

Monogyna. Stigmata quinque. Fructus roftratus, 5 -coccus.

One Pointal. Five Summits.
Fruit furnilhed with long awns; five dry berries.
See Geranium Grandiflorum, Pl.XII.Vol. I.

## SPECIFIC CHARACTER.

Geranium foliis lanceolatis, obtufis, fubfinuatis; petalis fubæqualibus, linearibus; fioribus pentandris; radice tuberofa.

Geranium with leaves lauce-flaped, obtufe, and a little fcolloped at the edges; petals nearly equal, linear; flowers with five fertile chives; root tuberous.

REFERENCE TO THE PLATE.

1. The Empalement cut open, to fhew its hollow ftucture.
2. The Chives and Pointal natural fize.
3. The Chives fpread open, magnified.
4. The Pointal, magnified.

This is another of thofe curious tuberous Geraniums, which have been introducen, to this country, by Mr. Niven; who was fent to the Cape of Good Hope by G. Hibbert, Efq. for the fole pu: $\mathrm{p}_{\mathrm{a}}$ of enriching his Gardens and Herbarium, (now, we prefume, the firf in Europe) with the vegetable productions of that country. It has no apparent difference, in habit, to require any other treatment than has been mentioned in the former part of this work, as neceffary to the reft of its congeners. Our drawing was taken, from the Clapham Collection, in July 1801; the roots having been received the preceding autumn.

lererrntumin - Pincurer

# PLATE CXCIV. <br> HEMEROCALLIS ALBA. <br> White Day-Lily. 

CLASS VI. ORDER I. HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

## ESSENTIAL GENERIC CHARACTER.

Corolla campanulata; tubo cylindrico. Stamina declinata.

Plossom bell-fhaped; tube cylindrical. Chives declining.
See Hemerocallis cerulea, Pl. Vi. Vol. I.

## SPECIFIC CHARACTER.

Hemerocallis foliis cordatis, petiolatis; corolla alba, tubo longifimo.

Day-Lily with heart-hhaped leaves that have foot-ftalks; bloffom white, tube very long.

## REFERENCE TO THE PLATE.

1. The Chives and Pointal, as they are placed in the flower.
2. The Seed-bud, Shaft, and Summit.
3. A ripe Seed-vellel of its natural fize.
4. The Seed-veffel cut tranfverfoly, to fhew the fituation and number of the cells and valves.
5. A ripe Seed, natural fize.

The White Day-Lily is from the fame country, and of the fame date in our gardens, as the Blue; figured in the Firit Vol. PI. VI, and was introduced through the fame medium. It is herbaceous, and generally flowers, if kept in the hot-houfe, about Auguft; having that true and conftant character of the genus, and from which it bad its name, the producing but one folitary, perfect flower, per diem, till all the bloffoms on the fipike are exhaufted; which, in this fecies, are much more abundant than in any of the others It is increafed by the root or feed.

This plant, we prefume, is the fame as thofe fpecificd under the different titles of Lilium Longiflorum, and L. Japonicum, in Willdenow's new edition of the Species Plant.; the L. candidum, and L. Japonicum, of Thunberg's Japan; and the L. Longifloruan of the Linn. Tranf. Vol. II. P'. 333. The Hemerocallis formerly figured by us, under the ipecific title of Carulea, we tahe to be, the Hemerocallis Japonica, and Lilium Cordifolium of Willdenow; the H. Cordata of Thunberg's Japan; and the Hemerocallis Japonica, and Iilium Cordifolium of the Linn. Tranf. Vol, II. p. 332. Willdenow, who had never feen cven dried fpecimens of the plants in queftion, has hence bcen led to place the fame plant, under different genera; and to confider the Hemerocallis of the Botanifts Repofitory, as only a variety of H. Japonica, but ftill admitting it as an Hemerocallis. Now, as we have no doubt, (nor do we think any one can, that will take the trouble to examine the diffections given with each figure,) that if the one is an Hemerocallis, the other muft be admitted of the fame family; fo, have we made no fcruple in rejecting the generic name of Lilium, for the prefent plant; although we would gladly have adopted the fpecific one of Longiflora, had not that of Alba, already obtaincd fo generally in our gardens; a rule, for our direction, paramount to all others as to fpecific denomination.

## PLATE CXCV.

## H Y P O X I S OBLIQUA.

## Oblique-leaved Hypoxis.

## CLASS VI. ORDER I.

## HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

## ESSENTIAL GENERIC CHARACTER.

Corolla fex-partita, perfiftens, fupera. Capfula bafi anguftior. Spatha bivalvis.

Blossom fix-parted, remaining, above. Capfule narrower at the bafe. Sheath two-valved. See Hypoxis stellata. Pl. CI. Vol. II.

## SPECIFIC CHARACTER.

Hypoxis fcapo fubtrifloro, pilofo, longitudine foliorum; pedunculis flore triplo longioribus; foliis lineari-lanceolatis, oblique flexis, glabris; radice fibrofa.

Hypoxis with moftly three flowers on the ftcm, which is hairy, the length of the leaves; foot-ftalks three times the length of the flower; leaves linearly lance-1haped, obliquely bent downward, fmooth; root fibrous.

## REFERENCE TO THE PLATE.

1. A Petal of the Bloffom, with its Chive, as attached to its bafe.
2. The Seed-bud, on its foot-ftalk, with a part of the tube of the blofom, to which the Chives are fixed.
3. The Seed-bud, Shaft and Summit, magnified.

This fpecies of Hypoxis is from the Cape of Good Hope; and, we believe, folely in the poffeffion of G. Hibbert, Efq. Clapham; from whofe collection our drawing was made, in June, this year, 1801. It appears to be a hardy green-houfe plant; but, is certainly more curious than handfome, and, from its general character, we fhould judge the propagation would be from the root.

Profeffor Jacquin has given the Hypoxis Obliqua in his Icones Plantarum Rariorum, 2. 1. 371; and in his Supplement to the Collectanea, 54 ; but, we muft fuppofe from a more vigorous fecimen than ours; as, the appearance of a woolly character, at the margin of the leaves, was not to be traced in our plant, although every other part is exact. Wherefore, we have retained his name, though we have 1 ejected the latter part of his fecific character, to introduce one, which we confider, of more confequence, as oppofed to thofe with bulbous roots, this being fibrous.


## PLATE CXCVI.

IXIA MACULATA.
Spotted-flowered Ixia.

## CLASS III. ORDERI.

TriAndria monogynia. Three Chives. One Pointal.

## ESSENTIAL GENERIC CHARACTER.

Corolla 6-petala, patens, æqualis.
Stamina tria, erectiufculo-patula.

Blossom 6 petals, fpreading, equal.
Chives three, upright, fpreading.
See Ixia Reflexa, Pl. XIV. Vol. I.

## SPECIFIC CHARACTER.

Ixia foliis enfiformibus, glabris, fcapo duplo brevioribus ; floribus alternis, rub-fpicatis ; petalis bafi obfcuris, ovatis, concavis; ftigmatibus bifidis.

Ixia with fivord-fhaped, fmooth leaves, half the length of the flower-ftem ; flowers alternate, rather fpiked; petals dark at the bafe, egg-fhaped and concave; fummits twocleft.

## REFERENCE TO THE PLATE.

1. The two valves of the Empalement.
2. A Flower cut and fpread open, with the Chives in their natural fation.
3. The Pointal complete, with one of the Summits detached and magnified.

This Ixia has been long cultivated in Britain, fo fays Millar, \&c. but, till within thefe few years, we have not feen it in our gardens; perhaps it has been (like many others) loft to us, and recently introduced with the multitude of other fpecies, which now decorate our green-houfes; either from the Cape of Good Hope or Holland. It is one of the moft defirable of the genus, from the length of time it continues in flower; which is, at lealt a month, from the firft flowers beginning to expand. It increafes by the bulb, and is to be cultivated as other common lxias. Flowers in May or June.


# PLATE CXCVII. NYMPHÆA COERUEA. 

Blue Water-Lily.

CLASS XIII. ORDER I.
POLY゙ANDRIA MONOGYNIA. Many Chives. One Pointal.

GENERIC CHARACTER.

Calyx. Perianthium inferum, tetraphyllum, magnum, fupra coloratum, perfiftens.
Corolla. Petala numerofa (quindecem fæpe,) germinis lateri infidentia, ferie plus guam fimplici.
Stamina. Filamenta numerofa (feptuaginta fæpe,) plana, curva, obtufa, brevia. Antheræ oblongæ, filamentorum margini adnatæ.
Pistillua. Germen ovatum, magnum. Stylus nullus. Stigma orbiculatum, planum, pel-tato-feffile, radiis notatum, margine crenatum, perfitens.
Pericarpium. Bacca dura, ovata, carnofa, rudis, collo anguftata apice coronata, multilocularis (decem ad quindecem loculis,) pulpa plena.
Semina plurima, fubrotunda.

Empalement. Cup beneath, four leaved, large, coloured above, permanent.
Blossom. Petals numerous (often fifteen,) placed on the fide of the feed-bud, in more than one row.
Chives. Threads numerous (often feventy, flat, curved, blunt, fhort. Tips oblong, fixed to the margin of the threads.

Pointal. Seed-bud egg-fhaped, large. Shaft, none. Summit round, flat, central, fitting, marked in rays, fcolloped at the edge, remaining.
Seen-vessel. Berry hard, egg-fhaped, flefhy, rough, narrowed at the neck, crowned at the top, many-celled (from ten to fifteen cells,) full of pulp.
Seeds many, roundifh.

## SPECIFIC CHARACTER.

Nymphara foliis cordato-orbiculatis, fenioribus crenatis, lobis acutis imbricatis, acuminatis; petalis acutis, lanceolatis, cæruleis.

Nymphæa with bctween heart-fhaped and round leaves, the old ones fcolloped, lobes fharp, tiled, and tapered; petals fharp, lancefhaped, and blue.

## REFERENCE TO THE PLATE.

1. A Chive.
2. The Seed-bud and Summit.
3. The Seed-bud, cut tranfverfely, to thew the number of cells.

Amongst aquatic or water plants, the Nympheas are undoubtedly the moft defirable in cultivation; although, we fhould agree to the exclufion of N . Nelumbo, \&c. now forming a diftinct genus in the Sp. Plant. of Willdenow; taken from Uftcri's Ed. of Juffieu's Gen. Plant. claffed from the natural characters, under the title of Nelumbitum's. This plant may be kept in the green-houfe, or hot-houfe, in a large tub filled with water and a fmall portion of mud at the bottom. It propagates by the root, and the flowers, which are extremely fragrant, are produced in Auguft, in which month, this year, our drawing was made, from a large plant in the Hibbertian collection; but, from an omiffion in the figure, we were obliged to finifl the plate from a plant, in the collection of J. Vere, Efq. Kenfington Gore, fill in flower, the beginning of October. The leaves of this fpecies are moft beautifully fcolloped, and near a foot in diameter; but the indentitions are fcarcely to be perceived in the younger; one of which, as we could not introduce the larger, is fhewn on the plate of the natural fize.

It is a native of the Cape of Good Hope, and was introduced to the Royal Gardens, Kew, by Mr. F. Maffon, about the ycar 1792 .


# PLATE CXCVIII. BAUERA RUBIOIDES. 

Three-leaved Bauera.

## CLASS XIII. ORDER II.

## POLYANDRIA DIGYNIA. Many Chives. Two Pointals.

## GENERIC CHARACTER.

Calyx. Perianthium octophyllum, foliolis perfiftentibus, acuminatis, reflexis, dentatis.
Corolla. Petala octo, ovata, concava, patentia, æqualia, calyce majora.
Stamina. Filamenta numerofa, capillaria, corolla breviora, receptaculo inferta. Anthere latiufculx, obtufe, erecta.
Pistilla. Germen fubovatum, villofum. Styli duo, filiformes, longi, apice curvati. Stigmata fimplicia.
Pericarpium. Capfula fubrotunda, pilofa, apice dehifcens, bilocularis, bivalvis.
Sémina plurima, fubrotunda.

Empalement. Cup eight-leaved, remaining, leaflets tapered, reflexed, and toothed.
Blossom. Eight petals, egg-fhaped, concave, fpreading, equal, larger than the cup.
Chives. Threads numerous, hair-like, fhorter than the bloffom, fixed into the receptacle. Tips broadifh, obtufe and erect.
Pointals. Seed-bud nearly egg-fhaped, hairy. Shafts two, thread-fhaped, long, curved at the ends. Summits fimple.
Seed-vessel. Capfule roundifh, hairy, fplitting at the top, two cells, two valves.
Seeds many, roundifh.

SPECIFIC CHARACTER.
Banera folis ternatis, apice dentatis, feffilibns, oppofitis.

Bauera with leaves compofed of three Ieaflets, toothed at the point, growing clofe to the ftem, and oppofite.

## IEFERENCE TO THE PLATE.

1. The Empalement, with the Chives and Pointal.
2. The Chives and Puintal magnified.
3. The Empalement, Seed-bud, Shafts, and Summits, magnified.
4. The Seed bud cut tranfverfely, with the feeds in the cells, magnified.
'Tus handfome fhrub, a native of Port Jackion, New Holland, was firf raifed at the feat of the Hon. the Marchionefs of Rochinghan, Hillingdon, Middlefex, in the year 1793; and, from a plant, in the confervatory, ftill in flower, this prefent month November, our drawing was made, at the Nurfery, Hammerfmith. It is hardy, although delicate in fructure, and flourithes in the green-houle. The ftem of the plant from which our figure was taken, although the oldeft in the kingdom, and near fix feet high, is fcarce the thicknefs of a quill at the bafe, therefore muft be fupported. The young fhoots and leaves are covered with a flight pile; the fmaller branches fiand out at right angles, proceeding from the infertion of the leaves, and the whole plant has, at firft fight, much the appearance of a Rubus. It is propagated by cuttings, made in the month of March, and put under a fimall bellglats on the heat of a hot-bed; the cuttings flould be from the extreme ends of the young thoots. Sir J. Banks, Bart. P. R. S. \&c. from whofe natural genius and love for the fcience, and by whofe foftering and liberal hand to promote it, the ftudy of Botany has become fo general a taite; has named this genus, in honour of two moft eminent Botanical painters, of the name of Bauer, natives of Germany, and brothers. The one, now under the immediate patronage of Sir Jofeph, as Botanical Painter to his Majefty at Kew; well known for his fuperb and excellent coloured engravings of Heaths, \&c. in large folio. The younger confidered no lefs able, engaged under the fame influence, with the other artiffs, \&c. who are now upon the laft expedition for difcovery to the South Sea; but not equally known to Botanifts, as the perfon who accompanied the late Dr. Sibthorpe, on his voyages through Greece; and whofe pencil has produced all thofe drawinge, deligned to decorate and illuftrate the tamous Flora Graca, preparing for the public, under the aufpices of the intelligent Dr. Smith, F. L. S. \&c. \&c.


Bhaucrea rulicerdes

## PLATE CXCIX.

# CAMELLIA JAPONICA. Var. fio rulro pleno. <br> Double red Camellia. 

## CLASS XVI. ORDER VI. of Schreter's sth edit. of Gen. Plant.

MONADELPHIA POLYANDRIA. Threads united. Many Chives.

## ESSENTIAL GENERIC CHARACTER.

Calyx imbricatus, polyphyllus; foliolis interi- || Empalement tilcd, many-leaved; the inner leaforibus majoribus. lets the largent.

## SPECIEIC CHARACTER OF VARIETY.

Camellia foliis fenioribus bafi attenuatis, junioribus rubentibus ; pctalis interioribus diva-ricato-erectis ; floribus plenis, rubris.

Camellia with the older leaves tapered at the bafe, the younger ones reddifh; the inner petals fand upright fpreading different ways; flowers double and red.

Again have we to call upon the indulgence of our Botanical friends for their fufferance, in a third intrufion on the forms of our own prefcription. But, as we had given the two other varieties of this fine plant; and taking it for granted, by judging from our own feelings, that a figure of this very fcarce variety would be agreeable to moft ; that they might be (by comparifon) able to decide upon the difference which does exift, but has been denied by many, between this, and the Striped Var.; fee our figure, Vol. II. Pl. XCI. It has been thought by moft, who have not feen this plant ; that it was but the Striped Var. which had loft its variegation. This is certainly not the cafe; for, it ftands as diftinct from the Striped, as from the White variety; which may be readily traced, either from the plants themfelves, or our figures; by comparing the fpecific, or rather differing character we have afligned to each. The Double red Camellia was introduced about the year 1794 from China, by R. Prefton, Efq. Woodford, Effex.

The largeft plant now in Europe, of this variety, is in the felect and moft valuable collection of the Hon. T. Greville, Efq. Paddington, imported, laft year, from China in the higheft perfection. It is propagated by cuttings, or layers; and delights in a light, fandy loam; with about one-third of the pot, from the bottom, filled with peat earth. It flowers from November, till February, in the Hothoufe ; or from January, till April, if kept in the Green-houfe. Our figure was taken, in November, this year, at the Hammermith Nurfery.


## PLATE CC.

# MELALEUCA HYPERICIFOLIA. 

## St. John's-wort-leaved Melaleuca.

## CLASS XVIII. ORDER IV.

## POLYADELPHIA POLYANDRIA. Threads in manySets. Many Chives.

## ESSENTIAL GENERIC CHARACTER.

Calyx quinquefidus, femifuperus.. Petala quinque. Filamenta multa, lengiffima, connata in quinque corpora. Piftillum unum. Capfula trilocularis.

Cup five-cleft, half above. Petals five. Threads numerons, very long, united into five bodies. Pointal one. Capfule three-celled.

Sec Melaleuca ericfefolia, Pl.Cl.XXV. Vol. IlI.

## SPECIFIC CHARACTEf.

Melaleuca foliis oppefitis, eliptico-oblongis, uninerviis; foribus confertis; filamentis longiflimio, linearibus, apice radiato-multifidis.

Melaleuca with oppofite leaves, eliptic-oblong, one-nerved; flowers cluftered; threads very long, linear, rayed and many-cleft at the top.

## REFERENCE TO THE PLATE.

1. A flower, natural fize.
2. One of the five bundles of Chives, with its petal, to which it is attached at the baie, magnified
3. The cup, feed-bud, Alaft and fummit, natural fize, the fummit detached and magnified.

Aeout the year 1792 this plant was firft raifed from feeds, by the late Mr. William Malcolm, Nurferyman, at Stockwell, Surry; and was, from the very great refemblance it bears to the St. John'sworts, fo denominated, until it fowered. It has now become one of the commoneft, of what are generally termed, Botany Bay plants; yet unqueftionably ranks with the handfomett whether for its foliage, form of growth, or flowers, which are of a moft beautiful red-purple, fcarcely to be imitated in painting. The fingular manner in which the flower-ftem is thrown out, as it were, from the old wood, in a horizontal direction, is common to many other fpecies of the Genus. It grows to the height of four or five feet, very erect in every part ; is eafily increafed by cuttings, and thrives beft in peat earth. Although it is faid to grow in fwampy grounds in.New South Wales, fee Linnæan Tranfactions, Vol. III. p. 279, neverthelefs, with us, a dry, or damp fituation in the green-houfe, appears equally congenial to it. In the month of September 1799, our drawing was taken at the Confervatory of R. James, Efq. Grofvenor Place.

## PLATE CCI.

# AIZOON CANARIENSE. 

Purflane-leaved Aizoon.
CLASS XII. ORDER IV.

## ICOSANDRIA PENTAGYNIA. Twenty Chives. Five Pointals.

## GENERIC CHARACTER.

Calyx. Perianthium monophyllum, quinquepartitum ; laciniis lanceolatis, perfiftentibus. Corolla nulla.
Stamina. Filamenta plurima, capillaria, finui calycis per phalanges in ferta. Anthere fimplices.
Pistilla. Germen pentagonum, fuperum. Stili quinque, fimplices. Stigmata fimplicia.
Pericarpium. Capfula ventricofa, retufa, pentagona, quinquelocularis, quinque valvis.
Semina plura, fubrotunda.

Empalement. Cup one leaf, five-parted; feg. ments lance-fhaped, remaining.
Blossom none.
Chives. Threads numerous, hair-like, inferted into the hollow part of the cup in bunches. Tips fimple.
Pointals. Seed-bud five-fided, aboye. Shafts five, fimple. Summits fimple.
Seed-vessel. Capfule bellied, dented, five-fided, five-celled, five-valved.
Stieds many, roundifh.

## SPECIFIC CHARACTER.

Aizoon foliis cuneiformi-ovatis; floribus folitariis, fubfelfilibus, axillaribus.

Aizoon with leaves between wedgeand egg-fhaped; flowers folitary, growing almof clofe to the ftem from the infertion of the leaves.

## REFERENCE TO THE PLATE.

1. The Empalement thewn from the infide.
2. The fame thewn from the outfide.
3. $\Lambda$ Chive magnified.
4. The Pointals natural fize.
5. The fame, magnified.

This plant is herbaceous, and is found near the fea coaft, in noft parts of the world, within the tropics. It has a charater common to many Genera of the natural order of fucculents, fuch as Mefembryanthemum, Craffula, \&ic. that of an indeterminate number of pointals; which, in this genus, extend from three, to five, on different plants; this circumftance not having been fufficiently attended to has unfortunately occafioned fome confufion. Brown in his Natural Hiftory of Jamaica has defcribed it as growing on that Ifland, and with five pointals, therefore placed it to its right genus. Plumier, Sloane, S-c. treated it as Portulaca, to which, as the genus now ftands, it in no way affines. Lafling in his Iter Hifpanicum, publifhed in 1758 , having found the plant in Spain with three pointals, immediately placed it to another genus, Halimum ; upon whofe authority, corroborated by Jacquin, (who ackuowledges a variation in the number of pointals, on different plants, found in the different Caribee lflands,) Linnæus took up the plant, faid to have but three pointals, under the title Sefuvium. As to the plant faid to be cultivated by Miller in the Hort. Kew: under the laft named genus, we have no difficulty in referring that, to the Aizoon canarienfe of the fame work; as the time of flowering not being noticed, the diftinction of character could not be obferved, and the genus introduced, taken upon the gratis dictum of Miller. Burmann, in his Ed: of Rumphius's plants of Amboyna, has it as Halimus; and Plukenet as Portulaca from Eaft Indian fpecimens; with numbers of other Botanifts from different parts; as Ægypt, the Canary Iflands, \&ic. \&c. under different names.

Seeds received fron Spain of our plant were fown by Mr. Anderfon in 1793, at the gardens of J. Vere, Efq. Kenfington Gore; fince which time, it has annually died to the ground, about November, and re-appeared in Spring; from this circumftance, the gleat delicacy of the plant, and having been treated as an annual, it has been repeatedly loft to this country; though fo confantly introduced, in almoft every parcel of feeds which arrives from either the Eaft or Weft Indies. It may be increafed by cuttings made early in the year, and put in a hot-bed to accelerate their growth, and thould be planted in rich loamy earth. It flowers from July till September. To preferve it more than one year, it muft be kept in the hot-houfe.

tijenll alloanellir

## PLATE CCII.

## SAMYDA SERRULATA.

Sawed-leaved Samyda.

CLASS X. ORDER I.

## decandria monogynia. Ten Chives. One Pointal.

## GENERIC CHARACTER.

Calyx. Perianthium monophyllum, internc coloratum; tubus campanulatus, decemfriatus; limbus quinquefidus, laciniis ovatis planis, patentiffimis, obtufis, duabus acumine auctis.
Corolla nulla.
Nectarium monophyllum, conicum, truncatum, decemftriatum, longitudine fere calycis, ejufque limbo ad hatin infertum, ore obtufe 10 ad 18 -dentato.

Stamina. Filamenta nulla. Antheræ decem ad octo-decem, oblongæ, erectæ, parvæ, dentibus nectarii infidentes.
Pistillum. Germen ovatum. Stylus fubulatus, erectus, longitudine nectarii. Stigma capitatum, obtufum.
Pericarpium. Capfula fubrotunda, quadrifulcata, coriacea, craffa, unilocularis, quadrivalvis.
Semina plurima, fubovata, obtufa, bafi foraminulo notata, valvulis affixa, obvoluta pellicula pulpofa.

Empalement. Cup one leaf, coloured within; tube bell-fhaped, ten-ftriped; border fivecleft, fegments egg-fhaped, fmooth, very much fpread, obtufe, two lengthened by a pointed end.
Blossom none.
Honey-cup, onc leaf, conical, appearing cut off, ten-ftriped, ncarly the length of the cup and fixed to it at the bafc of the border, obtufely from 10 to 18 -toothed at the mouth.
Cinves. Threads none. Tips from 10 to 18 , oblong, upright, fmall, fixed to the teeth of honeycup.
Pointal. Seed-bud egg-fhaped. Shaft awlflaped, upright, the length of the honeycup. Summit headed, blunt.
Seed-vessel. Capfule roundifh, four-furrowed, leathery, thick, one-celled, four valves.

Seeds many, nearly egg-fhaped, blunt, marked with a fmall hole at the bafe, fixed to the valves, furrounded with a flight pulpy fkin.

## SPECIFIC CHARACTER.

Samyda floribus rofeis, dodecandris; foliis ovatooblongis, ferrulatis.

Samyda with rofy coloured flowers having twelve chives; leaves between egg-haped and oblong, flightly fawed.

## REFERENCE TO THE PLATE.

1. The Empalement, with its honcy-cup, and the tips, cut and fpread open.
2. The Pointal and feed-bud natural fize, the fummit detached and magnified.
3. The Seed-bud cut tranfverfely and magnified, to fhew the number of valves and fituation of the feeds.

The Sawed-lcaved Samyda is an inhabitant of moft of the Weft India Inlands, but was reccived in England, about the year 1795, from the Ifland of St. Vincent; tranfmitted from thence, by Mr. Anderfon, curator of the Botanic garden, originally eftablifhed there, under the fanction of our government, by Dr. Young. It is a very tender plant, grows to about three feet in height, making but few imall branches, and rather weak in the ftem. Our drawing was taken in July this year at the garden of T. Evans, Efq. Stepney, who we believe firft had it to flower in this kingdom. It is propagated by cuttings; muft be kept in the bark-bed of the hot-houfe, and thould be planted in very rich noould.


T'emusla uerrivlieles

## PLATE CCIII.

## IXIA COLUMNARIS.

Columnar-chived Ixia.

CLASS III. ORDER I.

triandria monogynia. Three Chives. One Pointal.

## ESSENTIAL GENERIC CHARACTER.

Cobolla 6 -petala, patens, æqualis. Stigmata tria, erectiufculo-patula.

Blossom 6 petals fpreading, cqual.
Summits three, upright-fpreading.

## SPECIPIC CHARACTER.

Ixia filamentis bafi cohærentibus; floribus capitatis; corollis purpureis.

Ixia with threads united at the bafe; flowers grow in heads; bloffoms purple.

## REFERENCE TO THE PLATE.

1. The two Valves of the empalement.
2. A Bloffom cut open.
3. The Chives and Pointal, with the tube of the bloffom, the border cut off.
4. The Chives cut and ipread open, with the tube of the bloffom, magnified.
5. The Pointal and Seed-bud, with one of the Summits detached and magnified.

Here we hare a plant which prefents one of thofe obflacles, conftantly met, in all attempts to a fyftematic arrangement of the productions of nature. Every feature of Ixia we find pofitively expreffed, but in the unison of the Threads ; a circumftance, which Linnæus in his fyftem, always deemed of fuch fingular moment, that a number of Genera have been formed, from this natural order of plants, hinging on this only character.

But, as this plant has been named, and accurately defcribed by Mr. Salisbury; in the Prodromus to his garden 36. n. 18; and continued, from him, by Profeffor Martyn, in his Edit. of Miller's Dict. article Ixia, 50 ; in the following therefore fuch fuperiour judgments to our own, we have thought it proper, not to make any alteration ; and in confequence, have retained his Generice and Specific title. The extreme brilliance of the flowers of lxia Columnaris, pervading all the varieties, (of which we have drawings of 6 , ) is not cxceeded by any in the whole Genus; they generally, are not longer expanded than for about fout hours, and that only under a hot fun; from about eight, till twelve o'clock; when they clofe for the day; but nevertbelefs they have a permanence not ufual in Ixias, as the fame bloffoms will open diurnally for above a week. It is a native of the Cape of Good Hope, and came firft to England, by the way of Holland, about the year 1794. It flowers in June and July, amongit the lateft of the tribe, and increafes by the root in abundance. Our figure was taken at the Hammerfmith Nurfery.

# GERANIUM L.ACINIATUM. Var.fore purpareo. 

## Ragged-leaved Geranium. Purplefovered Variety.

## CLASS XVI. ORDER IV.

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

## ESSENTIAL GENERIC CHARACTER.

Monogysa. Stigmata quinque. Fructus roftratus, penta-coccus.

One Pointal. Five fummits.
Fruit furnifhed with long awns; five dry berries.

## SPECIFIC CHARACTER.

Geranium foliis radicalibus, integris laciniatifque, petiolis filiformibus; calycibus monophillis; ftaminibusquinque fertilibus; radice tuberofa; floribus purpureis.

Geranium with leaves growing from the root, entire and jagged, footftalks thread-fhaped; cups one-leaved; five fertile chives; root tuberous; flowers purple.

REFERENCE TO THE PLATE.

1. The Empalement magnified.
2. The Chives fpread open.
3. The Pointal and feed-bud magnified.

This very handfome variety, (for we cannot confider it as a fpecies, ) of the Geranium laciniatum, was imported in 1800, from the Cape of Good Hope, by G. Hibbert Efq. ; in whofe collection it flowered, laft year, in the month of June, when our drawing wastaken; and we believe it is in no other at prefent in this kingdom. Mr. Allen, under whofe care that collection is preferved in fuch high order and perfection, and to whofe kind communications, we are much indebted; informs us, that he has not, as yet, been able to increafe it; but, from every appearance, the plant, he has no doubt, may, by the root, as are the other fpecies which have the tuberous character; and that he did not treat it differently from the reft of the Geraniums which compofe this branch of that interefting family.

C'eratuminn Cirernualum
Har fom paspere.

# PLATE CCV. <br> PLATYLOBIUM LANCEOLATUM. 

Lance-graped-leaved Flat-pea.

## CLASS XVII. ORDER IV.

## DIADELPHIA DECANDRIA. Chives in two Sets. Ten Chives.

## ESSENTIAL GENERIC CHARACTER.

Calyx campanulatus, quinquefidus; laciniis duabus fupremis maximis, obtufis. Stamina omnia coalita. Legumen pedicellatum, compreflum, dorfo alatum; polylpermum.

Cup bell-hhaped, five-cleft; the two upper fegments very large and obtufe. Chives all united Pod on a footitalk, compreffed, winged along the back; many feeded.
See Plate CXCI. Vol. III. Platylobium scolopexdrum.

## SPECIFIC CHARACTER.

Platylobium foliis glaberrimis, diftichis, linearilanceolatis; floribus folitariis, axillaribus; ramis junioribus fub-compreffis.

Flat-Pea with very fmooth leaves pointing oppoSite ways, linear-lance thaped; flowers grow folitary from the lower part of the leaves clofe to the branches; the younger branches are rather flatifh.

REFERENCE TO THE PLATE.

1. The Empalement of the flower.
2. The Standard, or upper petal of the bloffom.
3. One of the Wings, or fide petals of the bloffom.
4. The two lower Petals, or keel of the bloffom.
5. The Chives, natural fize.

6 . The fame, magnified.
7. The Seed-bud, natural fize.
s . The fame magnified, but rather more mature.

No Clafs, amongft the 24, is more diftinct in its natural character than Diadelphia ; yet, fince the difcovery of New South Wales, no one has prefented more difficulty to the botanist. From the great number of plants of that country, appertaining to this Clafs, and the ftrong differing characters which moft of them exhibit, fuch indeed, as might formerly have been thought of fufficient moment to conftitute new Genera; many muft now bend a little for tbe eafe of fcience; or otherwife they will in a fhort time become doubled in number; a matter of no fmall moment to weak although willing memories. Our having placed the P. fcolopendrum of this Volume, PI. CXCI., and our prefent plant to the Genus Platylobium, is the occafion of the above prelude; as it may be thought by fome who have not feen the feed veffel and feeds, the principal parts upon which the Genus is founded, that nature is a little outraged in fodoing; but, without we had fo joined them, we muft bave given them a new title. This plant was introduced at the fame time as the P. fcolopendrum, and the three other fpecies now in Britain; not one of them, but has baffled all our moft experienced cultivators to increafe it, by any other mode than from the feed; fome of which has been procured from the P. formofum, only. They all require to be kept in the dryeft part of the green-houfe, as they are impatient of damp. Our drawing was made in November 1801, at the Nurfery of Meffrs. Lee and Kennedy, Hammerfmith, by whom it was firt raifed in 1792. The general height of the Platylobiums, is about three feet and a balf, at moft, in this country, and they do not form bufhy fhrubs. They require a light, fandy peat foil, with rather lefs root room, than is in general neceffary for plants of equal fize.


1) Máhylatimum Cancerlaluun

## PLATE CCVI.

## DRACRNABOREALIS.

## Oval leaved Dracana.

## CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointals.

## GENERIC CHARACTER.

Calyx mullus.
Corolla. Petala fex, oblonga, erectiufcula, æqualia, unguibus cohærentia.
Stamna. Filamenta fex, unguibus inferta, fubulata, medio cralliora, bafi membranacea, longitudine vix corollæ. Antheræ oblongæ, incumbentes.
Pistillum. Germen ovatum, fexfriatum. Stylus filiformis, lougitudine ftaminium. Stigma trifidum, obtufum.
Pericarpium. Bacca ovata, fexfulcata, trilocularis.
Semina folitaria, ovato-oblonga, apice incurvata.
Ors. Character fere Afparagi, habitus diverfus.

Empalement none.
Blossom. Petal, fix, oblong, rather upright, equal, cohering by the claws.
Chives. Threads fix, inferted into the claws, awl-fhaped, thicker about the niddle, fkinny at the bafe, almoft the length of the bloffom. Tips oblong, incumbent.
Pointal. Seed-bud egg-fhaped, fix-ftreaked. Shaft thread thaped, the length of the chives. Sunmit three-cleft, obtufe.
Seed-vessel. Berry egg-fhaped, fix-furrowed, three-celled.
Seeds folitary, oblong-egg-haped, turned inward at the end.
Obs. The Character is very near Afparagus, the habit different.

## SPECIFIC CHARACTER.

Dracæna, herbacea, fubcaulefcens, fuliis elipticis.

Dracæna, herbaceous, rather afpiring to a ftem, leaves eliptic.

REFERENCE TO THE PLATE.

1. A Petal with its chive.
2. A Chive, magnified.
3. The Pointal, magnified.
4. A ripe Berry.
5. The fame, cut tranfverfely.

About the year 1776, this plant was firft received in England, by Meffrs Lee and Kennedy from Montreal, Canada, N. America. It is a native of all the northern parts of that comert, as far as New England; propagates itfelf by the root, and flowers in July. It will not ti rive but on a fhady border, which hould be made of light fandy peat.

Much we revere the name of Solander, and highly rate his merit as a Botanift; yet we cannor forbear ftating our diffent from the arrangement of this plant, as a Dracæna, certainly nothing can be more diffimilar, in every part; this may be eafily traced by comparing our figure and diffections, as connected with the Generic character. The whole natural habit of the plant, points out Convallaria for its genus, to which it is much nearer allied than Dracæna, even in the fexual characters. However, we only ftate our opinions, without even thinking of change, as the plan is known av Dracrea, having been figured and defcribed in the Firft Vol, of the Kew Catalogue, page 454, under the prefent title.


## PLATE CCVII.

## MIMOSA LONGIFOLIA.

Long-leaved Mimofa.

## CLASS XXIII. ORDER I.

## POLIGAMIA MONOECIA. Various difpofitions. Upon one Plant.

## ESSENTIAL GENERIC CHARACTER.

Hermaphrod. Calyx 5-dentatus. Cor. 5-fida. Stam. 5 fcu plura. Pist. 1. Legumen.
Mafcul. Calyx 5 -dentatus. Cor. 5 -fida. Stam. 5, 10, plura.

Hermaph. Cup five-toothed. Blofs. 5-cleft. Chives 5 or more. Pointal one. A pod.
Male. Cup j-toothed. Blofs. 5-cleft. Chives 5,10 , or more.
See Mimosa stricta. PI. LIII. Vol. I.

## SPECIFIC CHARACTER.

Mimofa foliis integris longifimis, utrinque glabris, obtufis; capituli geminati, racemofi, longiffimi, oppofiti, lutei, fubcernui.

Mimofa with entire, very long leaves, fmooth on both fides and blunt; flower heads grow by pairs in very long bunches oppofite to each other, yellow and rather nodding.

## REFERENCE TO THE PLATE.

1. A flower, magnified, fhewn fideways.
2. The Empalement, magnified.
3. The Blodom, magnified.
4. A Chive, magnified.
5. The Pointal, magnified.

About the year 1792 J . Ord, Efq. of Purfers Crofs, Fulham, received the feeds of this Mimofa from New South Wales; the plants were raifed, the enfuing year, by Mr. White, who has managed, much to his credit, the felect collection of that Gentleman near 20 years, and who obligingly fent us a fine fpecimen in March 1801, taken from a plant near 18 feet in height. Of the Mimofas now in Britain, we think, this fpecies is likely to exceed them all in height ; making a very handfome plant; and moft beautiful at the featon when covered with its long pendulons bunches of flowers. It is increafed by cuttings, but with difficulty; and, as jet, feeds have not been perfected in this country. A light fandy earth is what it thrives in moft, but it will grow in almort any foil.


Mrmaura liminyírla

## PLATE CCVIII.

# LASIOPETALUM FERRUGINEUM. 

Ruffy Woolly-blofom.

CLASS V. ORDER I.
PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

## GENERIC CHARACTER.

Calix. Perianthium triphyllum, foliolis fubulatis, tomentofis, perfiftentibus, ferruginofis.
Corolla monopetala, rotata, lanuginofa, quinquefida; laciniis ovatis, apicibus acutis, incurvatis.
Stamina. Filamenta quinque, brevia, erecta, germinis bafi affixa. Antheræ erectæ, dorio bilobæ, apice poris duobus.

Pistilium. Germen ovatum, fuperum. Stylus minutus, filiformis, erectus. Stigma obfoletum.
Pericarpium. Capfula fubrotunda, fupera, trifulcata, trilocularis, trivalvis, diffepimentis e medio valvularum.
Semina numerofa, fubrotunda.

Empalement. Cup three-leaved, leaflets awlflaped, downy, permanent, and of a rufty iron colour.
Blossom, one petal, wheel-fhaped, woolly, and five-cleft; fegments egg-thaped, fharp pointed and incurved at the point.
Chives. Threads five, fhort, upright, fixed to the bafe of the feed-bud. Tips upright, twolobed at the back, and two pores at the point.
Pointal. Seed-bud egg-haped, above. Shaft fmall, thread-lhaped, upright. Summit obfolete.
Seed-vessel. Capfule roundifh, above, threefurrowed. three cells, three valves, partitions from the middle of the valves.
Seeds numerous, roundifh.

## SPECIFIC CHARACTER.

Lafiopetalum fôliis fublinearibus, obtufis, inequaliter finuatis, fupra glabric, fubtus lanuginofis; floribus racemolis, axillaribus.

Woolly bloffom with nearly linear leavcs, blunt, unequally indented, fmooth above, woolly beneath; flowers grow in long bunches from the iufertion of theleaves into the ftem.

## REFERENCE TO THE PLATE.

1. The Empalement.
2. The Blotlom.
3. The Chives and Pointal.
4. A Chive, magnified.
5. The Pointal.
6. The fame magnified.

The fingularity of this plant recommends it to our notice, rather than its beauty. It is a native of New South Wales, near Port Jackfon, and is found in marnhy grounds; where its branches are feen to extend many yards, embracing all the under thrubs they meet; they feldom exceed the fize of imall twine, but are exceeding tough. The whole plant, when old, has a dirty or rufty brown ap. pearance, the leaves becoming very imall and narrow; although from culture in this country, we have leen the leaves, on fomc plants, near an inch in breadth, and three in length. For the Generic and Specific titles of this plant we are indebted to Dr. Smith, P. L. S. \&c. and we do not think more appropriate ones could have been invented. The giving fpecific names and characters to plants, where only one has been difcovered of the Genus, although a little from Linnæan principles, we muft confers accords with our ideas; for, although, to compare is neceffary to diftinctive difference; yet, if the moft oftenfible, and novel appearance of the parts, are taken from the firit difcovered plant, for the Specific character; there is no more danger of confufion, from any addition to the Genus, than if no fuch obfervations had been made; for, what muft in future be taken as fpecific diftinction muft arife from an oppofition to the firft plant on which the Genus was founded: wherefore we have adopted this manner, from the commencement of the work. This plant was firft raifed at the Hammerimith Nurfery, from feeds received from New South Wales in 1791. It is propagated by cuttings 1aken from the young ihoots, in April; thould be planted in very fandy peat earth, and kept very dry in winter. It is in flower nearly the whole year.


# PLATE CCIX. GERANIUM MELANANTHUM. 

Black-flowered Geranium.

## CLASS XVI. ORDER IV.

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

Monogyna. Stigmata quinque. Fructus roftratus, penta-coccus.

One Pointal. Five Summits. Fruit furnifhed with long awns, five dry berries.

SPECIFIC CIIARACTER.

Geranium foliis lobatis integrifque, hifpidis, obtufis; calycibus monophyllis, laciniis linearibus; floribus nigricantibus, dioicis; radice tuberofa.

Geranium with lobed, and entire leaves, hairy and obtufe; cups one leaved, fegments linear; flowers blackill, with the chives and pointals diftinct ; root tuberous.

## REFERENCE TO THE PLATE.

I. The Empalement, natural fize, the tube cut open.
2. The Chives of a male bloffom, natural fizc.
3. The fame, cut open and magnified.
4. The abortive Pointal of a male bloffom, natural fize.
5. The fame, magnified.
6. The abortive Chives of a female bloffom, natural fizc.
7. The fame, magnified.
8. The Pointal of a female bloffom, magnified.

This fpecies of Geranium has been given by Profeffor Jacquin in his Icon: rar. 514, and his Collectanea 4. 188 ; from him, we find it collated by Profefor Martyn into his Edit. of Miller's Dict. under the article Pelargonium, 59. But, as no notice has been taken by Jacquin of fo remarkable a circumftance as this fpecies being Dioecious, or with male and female flowers on different plants; we may be led to fuppofe, that it has not flowered in Germany ; or that the fpecimens he had feen, were from male plants, as he numbers the fertile chives as five, which could not have bcen difcovered from a female fpecimen. Of five plants we had the good fortune to examine, which were all in flower at the fame time, the roots of which had been imported from the Cape of Good Hope in the year 1793; three were male, with five fertile tips, the pointals obfolete ; and two female, without the leaft trace of a tip, in either bloffom, or bud. As the tips frequently fall upon the expanfion of the flower, in many fpecies, the bud is the only fure fitus whence to determine this character. It is increafcd from feed, procured from female plants only, which are much more unfrequent than the male; likewife from the roots, which, (like to thofe of moft of the fpecies forming this link of the Genus,) are tubcrous; forming fimall bulbs of unequal fizes, connected to the main root by flight radicles, and at a little diftance from it: which, indeed, is the reafon we have not adopted the term rapaceous, or turnip rooted, althongh it is a character which has been applied to them by very able Botanifts, yet we think unadvifedly, or from their not having had the opportunity of examining them clofely; as, we prefume, this term cannot with propriety be given to any root which is compofed of more than one body, as are the Turnip, Carrot, Parfnip, Radifh, Sc. where it applies. It muft be planted in light peat earth, and kept in the dryeft part of the green-houfe, where it will flower about the month of July. Our figure was taken at Clapham in June, this year, from a male plant in the Hibbertian Collcition.


PLATE CCX.

# ANTHOLYZA ETIIOPICA. 

## Broad-leaved Antholyza.

## CLASS IHI. ORDER I.

## TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

## ESSENTIAL GENERIC CHARACTER.

Corolla tubulofa, irregularis, recurvata. Capfula infera.

Buossom tubular, irregular, and bent backward. Capfule beneath.
See Antholyzaringens, PI. XXXII. Vol. I.

## SPECIFIC CHARACTER.

Antholyza foliis floribufque diftichis; lacinia fumma corolla recta, fpathulata, bafi ferrata; fpathis rigidis, adpreffis.

Antholyza with the leaves as well as the flowers pointing oppofite ways; the upper fegment of the bloffom ftraight, [pathula-1laped, and fawed at the baie; fheaths harfh and preffed to the bloffoms.

## REFERENCE TO THE PLATE.

1. The whole plant, upon a diminifhed fale.
2. The Einpalement.
3. A Bloffon cut open, with the chives remaining.
4. The Seed-bud, Shaft, and Summits.

This very handfome Antholyza, which is feen fo feldom to flower, in this kingdom, has been long an inhabitant of our gardens. So long ago as 1759 , it is faid to have been cultivated by Miller; and from the firm and harty character of the root, we fhould queftion its having been fince that period, ever, like many others of this natural order, loft to us. The unfrequency of its flowering has, perhaps, occafioned the inattention, which is in general hewn to its cultivation; though moft colleciors polfefs the bulbs, few have feen their flowers. Our figure was taken in the month of July, this year, from a plant in the collection of T. Evans, Efq. Stepney. It is increafed from the roots, which fhould be removed from the pots in July, and replanted the end of October. We have not been ahle to procure any rertain data on which to give directions to infure its flowering; but the plant in quettion was planted in a very lange pot, the earth was a compound of light peat one part, ftiff loam one part, and old rotten dung one part. It has been thought by fome, that the Antholyza we have figured in the Botanift's Repofitory, Plate XXXI. was the A. Æthiopica of Linnæus, \&c; but, we have given it as a broad-leaved variety of the A ringens of that author, as we have a drawing of the Narrow leaved Var: taken from a living plant, to which, as well as to our prefent figure, it much affines; and, we are led to think, natural order would not be much violated, if we had treated them all as varieties of one fpecies.

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PLATE CCNI.
IXIA COLUMNARIS. Var. versicolor.
Columnar-leaved Ixia. Changeallecoloured var.

## CLASS III. ORDER I.

## TrIANDRIA MONOGYNIA. Three Chives. One Pointal.

## ESSENTIAL GENERIC CHARACTER

Corolla 6-petala, patens, equalis. Stigmata tiia, erectiufculo-patula.

Blossom 6 -petals, fpreading, equal. Summits three, upright-fpreading.

## SPECIFIC CHARACTER.

Ixia filamentis bafi cohærentibus; floribus fubcapitatis; corollis verficoloribus.

Ixia with threads united at the bafe; flowers grow nearly in heads; bloffoms change-able-coloured.

## REFERENCE TO THE PLATE.

1. The Empalement.
2. A Bloffom fpread open.
3. The Seed bud, with the Chires, as they fland upon the mouth of the bloffom; the petals being cut off, and the fummits as they appear through the tips, the whole magnified.
4. The Threads cut open, magnified.
5. The Seed bud, Shaft, and Summits, magnified.

This moft beautiful variety, of the Columnar-chived Ixia, was introduced to us, from Holland, in the year 1799. It flowers about the beginning of June, and continues in bloforn about thrce weeks. The beautiful manner in which the colours of the flowers, of this variety, are blended, and which appear to change, as regardel from different points of view, is beyond the painter's ikill; the beft that can be done is but a faint imitation. The roots of this plant are rather more delicate than the other varieties of this fpecies.


## PLATE CCXII.

## POGONIA DEBILIS.

Slcnder-femed Pogonia.

CLASS V. ORDER I.

PENTANDRIA IONOGYNIA. Five Chives. One Pointal.

## GENERIC CHARACTER.

Calyx. Perianthium pentaphyllum perffens; foliolis lanceolatis, erectis, acutis, apicibus rettexis.
Corozla monopetala, infundibuliformis, tubus cylindricus, longitudine calycis, ore villis claufo; limbus femiquinquendus, laciniis concaris, acutis
Stamina. Filamenta quinque, tubo fupra medium inferta. Althere ercetx, fagittata, intia fancem.
Pistililum. Germen ovatum. Sivhus filiformis, apice parum curvatus, longitudine tubi, perlitiens. Stigma concavum.
Piricirfium. Bacca orata, compreffi, calyci accreta
Semen. Nnx quadrilocularis, putamine durifimo; nuclei oblongi.

Empalement. Cup fise-leaved, permanent; leaflets lance-flinped, upright, pointed, and reflexed at the ends.
Blossom one fetal, funncl-fhaped, tube cylindrical, the length of the cup, the mouth c'ofed with foft hairs; border half fivedift; fegments concave and pointed.
Culves. Threads five, inferted into the tube above the middle. Tips npright, arrowflaped, within the monh.
Pointal Seed-bud egg-liaped. Shaft threadOh pect, a litite curved at the end, the leagth of the ube, romanis? Summit coucave.
Sied-veseel. An (gg-thapert, flattenal berry, growille to the cup.
Seed. A four-celled nut, thell very hard; kernels oblung.

## SPECIFIC CHARACTEF。

Pugonia foliis lanceolatis, apicibus fæpe ferrulatis, diftichis; floribus foiitariis, axillaribus, caruleis; cortice fabrola.

Pogonia with lance-flaped leaves, often Aightly fawed at the condi, and puinting oppofte way; flowers folitary, growins from the infertion of the leaves intu the fiem, and blac; bark rough.

## REFERENCETO TIE PLATE.

1. The Empalement.
2. A Flower cut open, with the Chises as they fand in the bloffom.
3. A Chive, magnitied.
4. The Pointal.
5. Summit, with part of the Shaft, marnified.
6. The Cup, with the ripe Berry, the thaft remaining, and the cup a little enlarged.
7. A Berry cut tranderfly, to thew the fitnation of the kernels in the eells.

The Pogonia herefigured, is the orly one of the gemus we at prefent poffer; it is a native of Port Jach fon, New South Wales, and was firf trammitted to England, by Col. Pateri n, in the year 1793. It is a climbing plant, the branches acquiring a confiderable lengih, the bark being covered with fmall tubercles, like giands, and the younger branches covered, their whole length, with blofoms. Although this is not to be reekoned amongit the handfomefi of the production of that country, yet, from the lively colour of the flowers, the profufion of them which the plant produces, and their continued fucocif:on, from $\Lambda_{\text {pril }}$, till Sepueniber, it maft be confidered as a vatuble addition to the imall number of fomdent plants, as yet in ourguen houfe: more paticularly at the prefent juncture, when, from famion, a trellis has breme a neerellary appendage to them. It is propagated from the feeds, which ripen in this country; as well as from cottinge, which thould be made in May, and kept in the heat of a cucumber-frame, or hot-houte, till thee are ronted. It is grown beft in fandy peat. Our figure was taken at the Hammerfmith Norfery, where it was firlt railed in this kingdom. The name, Pogonia, is derived from the apprance of the mouth of the flower which is bearded: Hur/wrow, Iogonion, fignifying a little beard.


## PLATE CCXIII.

# IXIA COLUMNARIS. Var, Ianfolia. <br> Columnar-chived Ixia. <br> Broad-leaved var. 

CLASS III. ORDER I.

## TRIANDRIA MONOGINLA. Three Clives. One Pointal.

## ESSENTIAL GENERIC CHARACTER

Corolla 6-petala, patens, equalis. Stigmata tria, erectiufculo-patula

Buossom 6 -petals, fpreading, equal. Summits three, upright-fpreading.

## SPECIFIC CHARACTER.

Ixia filamentis bafi coherentibus; floribus fubcapitatis; corollis pallide cæruleis; foliis latioribus, falcatis.

Ixia with thread; cohcring at the bafe; flowers grow nearly in heads; bloffoms pale-blue; leaves broader, feymitar ilhaped.

## REFERENCE TO THE PLATE.

1. The Einpalement.
2. A Bloliom cut open, wilh the chives remaining attached.
3. The Tube of a blofiom, with the chives, the petals cut off.
4. The fame, cut open and magnified.
5. The Seed-bud, Shaft, and Summits; the fummits detached and magnified.

The variety here given, was introduced to England, with the changeable-flowered variety, in 1599, from Holland. It is the firongeft marked variety of the fix we poffels; it tlowers in May. The petals of this variety are remarkably thick at the insertion into the tube, and have a foft, heautiful brown on the outfide, when the flower is clofed, which ftill is never fo fully fo, but a finuli margin of the blue appears; which gives them a mof beautiful appcarance in that ftate. No particular regime is neceffary to this plant, more than what is necelfary to all the common fpecies.

# PLATE CCNIV. <br> WESTERINGIA ROSMARINACEA. <br> Rojemary-like Wefteringia. 

CLASS II. ORDER I.

DIANDRIA MONOGYNIA. Two Chives. One Pointal.

## GENERIC CHARACTER.

Calyx. Perianthium monophyllum, fub-cylindricum, erectum, perfittens, quinquedentatum, æquale; bracteis binis fuffultum.
Corolla monopetala; petalum tubulatum calyce paulo longius; limbus patens, quinquepartitus, fub æqualis; laciniis duabus fuperioribus emarginatis.
Stamina. Filamenta quatuor, filiformia, fauci tubi inferta, quorum duo fuperiora longiors, fertilid; duo bresiora ferilia. Anthere liculi- oblongis, dur fuperiores dependentes; duæ inferiores erectï, fagillatæ, iquaniformes.

Pistillual. Germen tetragonum. Stylus filiformis, parum curvatus, longitudine tubi. Stigma bifidum, reflexum.
Pericarpicia bullum. Calys in fundo femina continens.
Semina quaiuor, ovalia.

Empalement. Cup one-leaf, nearly cylindrical, upright, remaining, five-toothed, equal; fupported by two leaflets.
Blossom one petal; petal tubular, rather longer than the cup; border fpreading, five-diridel, nearly equal; the two upper fegments notched at the end.
Chives. Four threads, thread-maped, inferted into the mouth of the tube, of whicl the two upper ones are longer, and fertile; two florter, and fterile. Tips with oblong cells, the two upper ones hang down; the two lower are upright, arrow-fhaped, and like thin fcales.
Pointal. Seed-bud four-fided. Shaft threadthaped, a little curvell, the length of the tube. Summit two-cleft, reflesed.
Seed-vessel none. Cup coutaining the feeds at the bottom.
Seeds fuar, oval.

## SPECIFIC CHARACTER,

Wefteringia foliis verticillatis, fub-linearibus, aculis, fubtus fericeis; floribus axillarious, fpicatis.

Wefteringi. with leaves growing in whorls, nearly linear, pointed and filky underneath; flowers grow from the bafe of the leaves clofe to the ftom, in finkes.

## REFERENCETOTHEPLATE.

1. The Empalement, with the two props attached to the bafe.
2. A Flower fpread open, with the chives in their place, magnified.
3. The Pointal, natural tize.

4 . The fame magnified.

The prefent plant was introduced to our gardeus, in the year 17 gl , from Nicw Sumh Wates, by Meff. Lee and Kennedy, Hammerfnith. It was firt named Cunila verticillata, and, from what we can judge, it might, without much furcing of the charaflers of the genus, have been fo comsinued; but our opinions fhall always give way, when the decifion is paft from fuch fuperior talents as thofe of Dr. Smith; by whom it has been thought to poffels a fufficiency of diftinctive character, on which to form a new geves, under the title it here bears. It is a buthy hhrub, grows to the height of three feet, the bratuches tianding out almoft horizontally, in whorls, and the whole plant bcaring a great refemblance to the Rofomary. It is propagated by cultings made in March from the end of the fimall branches;
 fcentleis.


## PLATE CCXV.

# EMBOTHRIUM SALIGNUM. 

## Willow-like Embothrium.

## CLASS IV. ORDER I.

## TETRAND RIA MONOGYNIA. Four Chives. One Pointal.

## ESSENTIAL GENERIC CHARACTER.

Calyx nullus. Cor. tetrapetala. Stamina limbo petalorum inferta. Folliculus polyfpermus. Sem. alata.

Empalement none. Blof. four-petalled. Chives inferted into the limb of the petals. One-celled-pod, many feeded. Seeds winged.

Embothrium foliis lanceolatis, uninervis, utrinque glaberrimis; umbellulis axillaribus; corollis fubalbidis.

Embothrium with lauce-fhaped leaves, one nerved, very fmooth on both fides; the fmall umbels of flowers grow from the infertion of the leaves into the ftem ; bloffoms whitifh.

## REFERENCE TO THE PLATE.

1. A flower complete, with the fummit relieved from the petals, magnified.
2. The fame with the fummit yet reftrained by the petals.
3. One petal with the tip, magnified.
4. The Seed-bud, Slaft, and Summit, magnified.

This Genus, if we may judge from what we already poffefs, amounting to 6 fpecies, promifes to furnifh an ample feaft for Botanifts; for we have no doubt, but the fpecies are as numerous as of any one from New Holland. The Willow-like Embothrium makes a very handfome bufhy green-houfe plant; the leaves are not fubject to damp, and the ftem acquires the height of 5 or 6 feet. It flowers about May, and from the manner in which the leaves rather fall downwards, from their infertion, leaving the bunches of flowers fully expofed, at their bafe, it has a very picturefque appearance, as the whole plant is fometimes covered with bloffoms. It thrives beft in fandy peat earth, and is increafed by cuttings, made about March, or April, and placed in the heat of the Hot-houfe, or a cucumber frame. Our figure was takeu at the Hammerfmith Nurfery ; where, it was firft raifed from feeds, in the year 1791.


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# plate cexvi. EPIDENDRUM SINENSE. Chinefe Epidendrum. 

## CLASS XX. ORDER I.

## GlıANDRLA DIANDRIA. Chives on the Pointal. Two Chives.

## ESSENTIAL GENERIC CHARACTER.

Nectarium turbinatum, obliquum, reflexum. || Honey-cup top-fhaped, oblique and reflexed.
See Plate XIII, Vol. I. Epidendrum cochleatum.

## SPECIFIC CHARACTER.

Epidendrum foliis enfiformibus, nervofis, radicalibus; nectario revoluto, punctato; petalis friatis.

Epidendrum with fword-fhaped leaves, nerved, andigrowing from the root; honey-cuprolled back, and dotted; petals ifriped.

## REFERENCE TO THE PLATE.

1. $\Lambda$ flower, one of the petals and the honey-cnp cut off; to thew the fituation, and place of the parts of fructification.
2. The Honey-cup.
3. The Seed-bud, Shaft, Summit, and Chives; the fmall hood which covers the Chives, lifted up.

This long genus of plants, fo little known hitherto, but in our books, bids fair to become one of the greateft ornaments of our hot-houfes; 20 fpecies we already enumerate, in the different collections in the vicinity of London; one of which, the prefent plant, has not flowered in this kingdom, till this year, although introduced, fo long ago as 1793 , by the late J. Slater, Efq. of Layton-ftone; at the fame time with the two varicties of the Double Camellia, from China. Our figure was taken in September 1801, from a plant which had been placed in the fpring of the fame year, in the Confervatory built on purpofe for the protection of Chinefe plants, and where they flourifh to a degree, not feen before in this country, in the garden of G. Hibbert Efq. Clapham common. It is propagated by offsets, from the root ; is rather a hardy hot-houfe plant; and thrives moft in a mixture of fandy loam, and peat ; about one fourth of the loam, and three fourths peat, or leaf-mould.

Upon the firft obfervation of this plant, we were inclined to think it the fpecies defigned by Thunberg in his Icon. Plant. Japon. 28, under the Genus Limodorum; and afterwards, altered by him, in the Linnæan Tranf. Vol. ii. p. 327, to Epidendrum friatum. But upon clofe examination of it, as anfwering his defcriptions, sic. we camnot but think it, if not a different fpecies, at leaft a very ftrong variety of his plant; wherefore, we have retained the name it is in common known by, in the various collections in which we have feen it. If we were to decide on the fubject, it fhould be to place both that and this plant again to Limodorum ; to which, they hold greater affinity than to Epidendrum; but indeed, we have an opinion, that one title might readily ferve for the plants conftituting both genera.


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## ONLY

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# PASSIFLORA MALIFORMIS. <br> Apple-fruited Paffon-Flower. 

## CLASS XX. ORDER IV.

GYNANDRIA PENTANDRIA. Chives on the Pointal. Five Chives.

## GENERIC CHARACTER.

Calyx. Perianthium quinquepartitum, planum, coloratum, petalis conforme.
Corolla. Petala quinque, femi-lanceolata, plana, obtufa, magnitudine et figura calycis. Nectarium corona triplex ; exterior longior, intra petala itylum cingens, fuperne magis coarctata.
Stamina. Filamenta quinque, fubulata, ad bafin germinis columnx annexa, patentia. Anthere incumbentes, oblongæ, obtulie.
Pistillum. Germen fubrotundum, apici columux cylindraceæ, recta infidens. Styli tres, fuperne craffiores, patuli. Stigmata capitata.
Pericarpium. Bacca carnofa, fubovata, unilocularis, pedicellata.
Semina plurima, ovata, arillata. Receptaculum feminum triplex, cortici pericarpii longitudinaliter adnatum.

Empalement. Cup five-parted, flat, coloured, like the petals.
Blossom. Petals five, half lance-ihaped, flat, blunt, of the fize and thape of the cup. Honey-cup, a tiple crown; the outer longer, encircling the thaft within the petals, more contracted above.
Chiver. Five threads, awl-1haped, fixed to the bafe of the column of the leed-bud, fpreading. Tips fixed by their backs, oblong, obtule.
Ponstal. Seed-bud roundith, falling into the end of a cylindrical, upright column. Three fhafts, thicker above. fpreading. Summits lieaded.
Seed-vessec. A flcthy berry, riearly egg-fhaped, one-celled, pedicelled.
Seeds many, egg-fhaped, covered by a leed-coat. Receptacle of the feeds triple, fiscal longitudinally to ti e rind of the berry.

## SPECIFIC CHARACTER.

Palfiflora foliis indivifis, cordato-oblongis, integerrinis; petiolis biglandalofis; involucro triphyllo, flore majore; fructu maliformi.

Paffion-Flower with undivided leaves, heart-Alape-oblong, quite entire; foot-italks with two glands, tence three-leaved, larger than the flower; fruit like an apple.

## REFERENCE TO THE PLATE.

1. A ripe fruit.
2. A Flower cut perpendicularly through the middle, to fhew its inteinur firueture, with the parts of tructification complete.

This fpecies of Paffion-Flower is faid to be a fojourner with us fince the year 1731, and to have been then cultivated by Miller. It is likewife laid to be a native of Dominica, but it is found in all the Weft India iflands. It rarely flowers in this climate; and we fhould not now have been able to gratify our friends with this figure, but for the particular ingenuity, in the treatment of hot houle plants, by Mr. Anderfon, fuperintendant of the rich collection of plants in the gardens of J. Vere, Efq. Kenfington Gore, who by a long experience in cultivation, added to a particular love for the profeflion, has placed his knowledge in the treatment of exotics, in particular, much beyond mote cultivators of the prelent day. Our figure was taken from a plant which continued in Hower from july till November; it was planted in a border of rich earth, clofe to the tan pit, and trailed along the front rafter of the houfe; the only method, we prefume, by which it can be induced to flower, as we have never feen it elfewherc. It is propagated with eafe by cuttings.

Much contention has arifen among Botarifts, fince the day's of Limmeus, where to place this tribe of plants. Swartz placed it to Monadelphia, who is lately followed by Willdenow. Schreber, Thunberg, \&ic. have thrown it to Pentandria. But our antiquated notions of the capability of that great man, in claffifying to his own fyttem, thofe plants which came under his actual review, has occafioned our retaining it, under its old clafs, jult as lie lett it.



## PLATE CCXVIII.

## EMBOTHRIUM BUXIFOLIUM.

## Box-leaved Embothrium.

CLASS IV. ORDER I.
TETR ANDRIA MONOGYNIA. Four Chives. One Pointal.

## ESSENTIAL GENERIC CHARACTER.

Corolea tetrapetala. Stamina limbo inferta. Folliculns polyfpermus. Semina alata.

Blossom four-petals. Chives inferted into the limbs. One-celled pod, many feeded. Seed. winged.
See Embothrium sericeum, Pl. C. Vol. II.

SPECIFIC CHARACTER.

Embothrium foliis ellipticis, integerrimis, margine revolutis, pubefcentibus; umbellis terminalibus; folliculo villofo.

Embothrium with elliptical, entire leaves, roliec back at the edge, and downy; umbels terminal; feed-pod hairy.

## REFERENCE TO THE PLATE.

1. A Flower, magnified, the petals yet attached to each other.
2. The fame, the petals difengaged.
3. The Pointal, magnified.
4. A Seed-veffel, natural fize.
5. A ripe Seed, natural fize.

This we believe is amongft the moft rare of the plants, hitherto introduced, from New Holland. It has been figured in the third Number of New Holland Botany, publifhed by Dr. Smith in 1793: it is there faid not to have been, at that time, in England; but, as it had not then flowered, the plant was not known, although in the collection of Meflis. Lee and Kennedy, three years precedent to that publication; and where, it firft flowered in 1795. Our figure was taken in September 1789 from a plant (we fear the only one at prefent in this kingdom) in the Hibbertian collection. It has not yet been propagated with us, and the feeds do not mature. The plant is nearly four feet high, and forms a handfome, bulhy ihrub, continuing in flower nearly the whole fummer. Over the whole plant there is a brown, or rufty-like appearance, which takes much from its beauty. It flourifhes in peat earth.


Simfectivume luxyfoluen

## PLATE CCXIX.

## GLADIOLUS CUSPIDATUS. Var. petalis crifis.

Spear-fpotted Gladiolus. Var.with crifped petals.

CLASS III. ORDER I.<br>Triandria monogynia. Three Chives. One Pointal.

## ESSENTIAL GENERIC CHARACTER.

Corolla fex-partita, ringens.
Stamina adfcendentia.

Blossom fix divifions, gaping.
Chives afcending.
Sce Gladiolus roseus, Plate XI. Vol. I.

## SPECIFIC CHARACTER.

Gladiolus foliis lineari-enfiformibus, glabris; corolla ringente ; laciniis longiffimis, acuminatis, crifpatis, fubæqualibus, tribus inferioribus in medio macula oblonga notatis; corollis albicantibus.

Gladiolus with linear-fword-fhaped fmooth leaves; bloffom gaping, fegments very long, tapered to the point, crifped and nearly equal, the three lower ones in the middle have an oblong fpot; bloffoms whitifh.

## REFERENCE TO THE PLATE.

1. The two valves of the Empalement.
2. The Bloffom cut open, with the chives.
3. The Seed-bud, Shaft and Summit, one divifion of the fummit magnified.

Although this fpecies of Gladiolus is as old in our gardens as, almoft any, we have; yet, it is not much known, from the unfrequency of its flowering, of which there is no certainty. The beft method to affift it with a vigorous growth, is to place it in a confiderable degree of warmth, fuch as the heat of the hot-houre, the pot being kept in a pan, with water. With this affiflance, it may be made to flower, fometimes, about the end of Myy. It is a very hardy bulb, in what regards the root, and its prefervation. Our figure was made in May, 1800, from a plant which had been treated in the above poanner, at the Hammerfmith nurfery.

## PLATE CCXX.

# MASSONTA SCABRA. <br> Rough-leaved Mafonia. 

## CLASS VI. ORDER I.

## HESANDRIA MONOGYNIA. Six Chives. One Pointal.

## ESSENTIAL GENERIC CHARACTER.

Corolla infer., limbo 6-partito. Filamenta collo tubi impofita. Capfula 3-alata, 3-1ocularis, polyfperma.

Blossom beneath, border 6-divided. Threads placed on the neck of the tube. Capfule 3 -winged, 3 celled, many-feeded.

See Massonia violacea, Pl. 46. Vol. I.

## SPECIFIC CHARACTER.

Mallouia foliis cordato-orbiculatis, fupra fcabrofis ; laciniis corollæ reflexis.

Maffonia with leaves between heart-fhaped and round, rough on the upper fide; the feg. ments of the bloffom reflexed.

## REFERENCE TO THE PLATE

1. A 1 kinny theath, one being attached to each flower, at the lower part of the foot-ftalk.
2. A Flower complete.
3. The Bloffom cut open, to thew the infertion of the chives into the mouth, juft within the honey-cups.
4. The Seed bud, thaft and fummit.

The rough-leaved Maffonia is, as well as all the hitherto difcovered fpecies of the genus, a native of the Cape of Good Hope, and was introduced to Britain, in the year 1796, by Meffrs. Lee and Kennedy; at whofe nuriery, our figure was taken in the year 1800; where, it had then flowered for the firft time, in this kingdom. It is a hardy greenhoule bulb; propagates from the root, and perfects its feeds; flowers in February and March, and lofes its leaves in June. It fands quite diftinct from M. latifolia, both in the character of the lcaves and bloffoms; though, at firft fight, it has much the appearance of that fpecies. A loany foil lightened by a imall mixture of fandy peat is that it moft approves. The root, thould not be taken from the pots after the decay of the leaves, but kept rather dry till the leaves begin to re-appear.

Much will it contribute to the illuftration of fcience, to find our prefent figure, when copied into a certain magazine at fome future pcriod, (and of which we have no doubt,) (pecifically denominated, fimooth-leaved; as unfortunately, the other fpecies figured by us, Pl. 46 . Vol. I. with obovate, bluntended, or fpathula-Thaped leaves, has been, by a certain hocus-pocus conjuror, and our very good friend, converted into fword haped! rifum teneatis.


Nraforsueen umation

# PLATE CCXXI. <br> WURMBEA CAPENSIS. var. в. <br> Cape Wurmbea. <br> 2. Var.: 

## CLASS VI. ORDER III.

## HEXANDRIA TRIGYNIA. Six Chives. Three Pointals.

## GENERIC CHARACTER.

Calyx nullus.
Corolla monopetala, fexfida, infera; laciniis lanceolatis, acutis, erectis.
Stamina. Filamenta fex, filiformia, erecta, fauci corollæ infertæ. Antheræ erectæ, didymæ.

Pistilla. Germen triquetrum, apice tripartitum, glabrum, fuperum. Styli tres, triquetri, fubulati, inenrvi, longitudine flaminum. Stigmata obfoleta.
Pericarpiem. Capfula oblonga, triquetra, trifulca, trilocularis, a medio tripartita.

Semina plurima, rotunda.

Empalement none.
Blossom one petal, fix-cleft, beneatly ; fegments lance-fhaped, pointed and upright.
Chives. Threads fix, thread-hhaped, upright, inferted into the montls of the blofiom. Tips upright, double.
Pointals. Secd-bud three-fided, three-divided at the top, finouth and abuve. Shats hiree, three-fided, awl-fhaped, turned inwards, the length of the Chives. Summits obfolete.
Seed-vessel. Capfule oblong, threc-fided, threefurrowed, three-celled, three-divided from the middle.
Skeds many, round.

## SPECIFIC CHARACTEF.

Wurmbea folis cucullatis, lanceolatis; ficamultiflora; floribus feffilibus, atro-purpureis.

Wurmbea with hooded, lance-flaped leaves; fike many-flowered; flowers fitting clofe tis the fem and dark-purple.

## IEEFRENCETO THE PLATE.

1. A Bloftom cut and fprcad open, with the Chives in their place.
2. The l'ointals, natural fize.
3. The fame, magnified.

This genus was firlt formed by Thunbers as diftinct from Melanthium, in his Differtatio Nova Genera Plantarum, under the title Wurmbea, from the conftrution of the bloffom, which in this, is formed of one petai, but in that, is compufed of fix ; a diftinction which has always been confidered as momentous, in defermining the limits of the different genera of this clats; fince which, however, it has been abandoned by him, and thrown to'Melanthiun; although Schreber, in his Genera Plantarum, G. 617 p. 239. Vol. I. made no fernple in adopting it. Willdenow has, in his Species Plantarum, G. j03. 1. 265 . 'I'. 11 P. 1. we think with propiety, renewed its claims to particular diftinction, under the firft tille; but with this difference, that out of the four varieties given by Thunberg, all under the pecific name of capenfis, he has made three fpecies; referving his opision on the fourth, our prelent plant, and the fecond Var. of Thumberg, for want, as he obferses, of proper documents. Now, as our idcas run not exactly with Willdenow, in this alteration; but thinking with Thunberg, who mult have feen the plants alite, and thence, of courle, the beft judge; we have the rather followed him; as we poffets drawings of two more of the varieties quoted by him, taken from living fecimens, and whole trifling difference of charatier does not warrant them to be treated as ipecificaliy different, but as mere vasietie; of each other.

The roots of this fpesies, with the others, of which we have drawings, werc received by G. Hibbert, Efq. in the year 1800, from the Cape of Good Hope. The bulls are folid like thole of Ixia, \&c. but ot a mot fingular form, having an appendage at the bate like the pat of a mole. None of the varietics we have feen produce more than three leares, which theath the flower-ftem one above the other, and are rather longer than it. It flomrifhes in tindy peat earth, and flowers in May or June ; but has, certainly, more to recommend it to our notice trom its fingularity, as forming a feparate genus; than from its beauty. Our figure was taken from the Clapham collection.

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# PLATE CCXXII. <br> GERANIUM RADIATUM. <br> Rayed-leaved Geranium. 

## CLASS XVI. ORDER IV.

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

## ESSENTIAL GENERIC CHARACTER.

Monogyna. Stigmata quinque. Fructus roftratus, penta-coccus.

One Pointal. Five fummits. Fruit furnifhed with long awns, five dry berries.

## SPECIFIC CHARACTER.

Geranium foliis fub-obovatis, crafiufculis, integerrimis, radiatis, humi adpreffis; calycibus monophyllis, laciniis erectis; floribus pentandris, maximis, luteis; radice tuberofa.

Geranium with leaves nearly obovate, thickif, quite entire, placed in a ray about the ftem, and lying on the ground; cups of one leaf, the fegments erect ; flowers with five fertile chives, very large and yellow; root tuberous.

## REFERENCE TO THE PLATE

1. The Cup laid open, to thew its hollow ftructure.
2. The Chives and Pointal, natural fize.
3. The Chives fpread open, to thew the number and fituation of the fertile ones.
4. The Puintal, magnified.

The only plants of this fpecies of Geranium are to be found in the Clapham collection; they were among the laft, received by Mr. Hibbert from the Cape, in 1801. To affix any particular period as the exact feafon of its flowering, would be premature; as, the plant from which our figure was taken, in the month of Auguit, laft year, had been kept conftantly in the green-houfe; and, we muft prefume, as the root arrived nearly dry, the regular feafon of its flowering nuft have been materially altered. It appears to flourifh in a light fandy foil. The propagation mult be from the feeds, or from the root.


## PLATE CCXXIII.

## CLUSIA FLAVA. <br> Ycllow-flowered Balfani-Tree.

## CLASS XXIII. ORDER l.

## POLYGAMIA MONOEGLA. Various difpofitions. Upon one plant.

## GENERIC CHARACTER.

Calyx. Perianthium imbricatum; foliolis concavis, perfiftentibus, exterioribus gradatim minoribus.
Corolla. Petala 4, 5, 6, fubrotunda concava, craffa, cochleata.
Stamina. Filamenta plura, fimplicia, corolla breviora. Antheræ fimplices, apicis lateri adnatæ.
Pistillum. Germen ovato-oblongum. Stylus nullus. Stigma stellatum, planum, obtufum, perfiftens.
Pericarfium. Capfula ovata, fulcis exerata, locularis, valvis tum radiatim dehifcentibus.

Semina numerofa, ovata, pulpa obtecta, affixa receptaculo columnari, angulofo.
$\mathrm{Ol} \cdot \mathrm{s}$. Numerus in parte fructus differt a quatuor ad duodecim proportione obfervata in ftigmate, valvulis, loculis, \&c. Flotes alii a parte mafculina, alii a feminina feriles funt.

Empalement. Cup tiled; leaflets concave, remaining, the outer ones gradually fmaller.

Blossom. Petals 4, 5, 6, roundith, concave, thick and thell-like.
Chives. Thrcads many, fimple, thorter than the blorrom. Tips fimple, growing to the fide of the point.
Pointal. Seed-bud oblong-egg- fhaped. Shaft none. Summit flarred, Hlat, obtufe, remaining.
Seed-vessel. Capfule egg-fhaped, ftrongly furrowed, celled, the valves burfing into a ftarred form.
Seeds numerous, egg- fhaped, covered with pulp, fixed to an angular, columnar receptacle.
Ols. The number in the parts of the fruit differs from four to twelve, according to the proportion obferved in the fummit, valves, cells, \&c. Some of the flowers are terile with refpect to the male organs, and others with refpect to the female ones.

## SPECIFIC CHARACTER.

Clufia foliis aveniis; corollis tetrapetalis, luteis.

Balfam Tree with veinlefs leaves; bloffoms with four petals, and yellow.

REFERENCE TO THE PLATE.

1. A Flower complete.
2. $\Lambda$ petal thewn from the infide.
3. $\Lambda$ petal fhewn fideways.
4. The Pointal and Chives, one Chive detached, magnificd.
5. The Pointal cleared of the Chives, the Seed-bud and Sunmit detached and magnified.

The Balfam Tree is a native of all the Weft India Iflands, and has been defcribed by Plumier, Sloan, Jacquin, Browne, \&ic.; but no good figure of the plant, according with our ideas, has hitherto been given of it. The C. rofea, C. alba, and C. flava of Jacquin, the three various (pecies, are faid to grow to different heights, in the different Infands; which we are led to think, are but varieties of the fane plant. Limmeus has taken them up as fpecies, upon his authority; although jacquin himfelf allows, that the one Le denominates flava, varies in its bloffoms to red and white. This plant does not grow to above the height of eight or nine feet, in this country, and feldom flowers. Our figure was taken laft year in September 1801, from a plant in the Stepney Collection. Miller fays it was cultivated by him in 1759; and had been introduced by Mr. Parker, of Croydon, in Surrey, from Barbadoes. It is readily propagated from cuttings, and thrives in rich, dungy earth. A flight miftake occurs, in the quotation from Brownc, in Martyn's Edition of the Dictionary; where, the petals are delcribed as fcrew-1haped; Browne has it, "cochleata," or fhell-fhaped, a moft expreflive term for the thape of these petals.

## PLATE CCXXIV.

# GERANIUM REFLEXUM. Reflexed-leaved Gcranium. 

## CLASS XVI. ORDER IV.

## MON ADELPHIA DECANDRIA. Chives united. Ten Chives.

## ESSENTIAL GENERIC CHARACTER.

Monogyna, Stigmata quinque. Fructus roftratus, 5-coccus.

One Pointal. Five fummits. Fruit furnifhed with long awns, five dry berrics.

Geranium foliis longe petiolatis, trifoliatis; foliolis lobato incifis, recurvis; floribus umbellatis, pentandris; ftaminibus duobus fuperioribus ftigmatibufque reflexis; radice tuberofa.

Geranium with leaves that have long foot-falks, and three leaflets; leaflets gafh-lobed, and rolled back; flowers grow in umbels, have five fertile chives, with the two upper chives and the fummits reflexed; root tuberous.

## REFERENCE TO THE PLATE.

1. The Empalement.
2. The Chives and Pointal:
3. The Chives fpread open, magnified.
4. The Pointal, magnified.

This pretty Geranium, from the Cape of Good Hope, is another of thofe which were introduced by G. Hibbert, Efq. in the year 1800, through the medium of Mr. Niven. The root being tuberous, we judge that from a divifion of the finaller lobes it is to be increafed. From the reflexed character, which pervades the whole plant, petals, leaves, parts of fructification, \&c. we have adopted our fecific title. The cultivation is the fame, as for the other tuberous fpecies of this genus. Our figure was made at Clapham in the month of July 1801.


## PLATE CCXIV.

## GNIDIA OPPOSITIFOLIA.

## Oppofite-leaved Gnidia.

## CLASS VIII. ORDER I.

## OCTANDRIA MONOGYNIA. Eight Chives. One Pointal.

## ESSENTIAL GENERIC CHARACTER.

Calyx infundibuliformis, quadrifidus. Petala quatuor, calyci inferta. Semen unicum, fubbaccatum.

Empalement funnel-flaped, four-cleft. Petals four inferted into the empalement. One feed berry-like.
See Gnidia pinifolia, Pl. LII. Vol. I.

## SPECIFIC CHARACTER.

Gnidia foliis ovatis, oppofitis, concavis, tomentofis; floribus terminalibus, tomentofis.

Gnidia with egg fhaped, oppofite, concave, downy leaves; flowers terminate the branches, and are downy.

## REFERENCE TO THE PLATE.

1. A Flower complete.
2. The Bloffom fpread open, with the Chives in their place.
3. The fame, magnified.
4. The Sced-bud, Shaft and Summit.

The Oppofite-leaved Gnidia is from the Cape of Good Hope, and muft be treated as a tender greenhoufe or dry fove plant; as, but a little excefs of wet, in the winter, is fure to deftroy it ; even in fummer, much rain, if it is expofed to it for a few days. will overwhelm it. The Kew Catalogue mentions this fpecies to have been introduced in the year 1788, by Mr. F. Mafion. The plant grows to the beight of three feet, with a very flender ftem, and, often, lofes moft of its leaves to a confiderable height from the earth, which gives it rather a difagreeable appearance towards the lower part. A mixture of two-thirds loam, and one of fandy peat, is a foil it mott approves. It is increafed by cuttings, made in the month of April, from the tender fhoots. Our figure was taken in July, from a plant in the Hibbertian Collection


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## PLATE CCXXVI.

# MAGNOLIA PUMILA. Dwarf Magnolia. 

CLASS XIII. ORDER VII. polyandria polygynia. Many Chives. Many Pointals.

GENERIC CHARACTER.

Calyx. Perianthium triphyllum; foliolis ovatis, concavis, petaliformibus, deciduis.

Corolla. Petala novem, oblonga, concava, obtufa, bafi anguftiora.
Stamina. Filamenta numerofa, brevia, acuminata, compreffa, receptaculo communi piftillorum infra germina inferta. Antheræ lineares, margini filamentorum utrinque adnatæ.
Pistilla. Germina numerofa, ovato-oblonga, bilocularia, receptaculum clavatum tegentia. Styli recurvi, contorti, breviffimi. Stigmata longitudinalia styli, villofa.

Pericarpium. Strobilus ovatus, tectus capfulis compreflis, fubrotundis, vix imbricatis, confertis, acutis, unilocularibus, bivalvibus, feffilibus, extrorfum dehifcentibus, perfiftentibus.
Sbmina bina feu folitaria, fubrotunda, baccata, filo pendentia ex finu fingulæ fquamæ ftrobili.

Empalement. Cup three-leaved; leaflets eggfhaped, concave, the form of the petals, falling off.
Blossom. Nine petals, oblong, concave, obtufe, narrower at the bafe.
Chives. Threads numerous, fhort, tapered, flattened, inferted below the feed-buds into the common receptacle of the Pointals. Tips linear, fixed on fide to the margin of the threads.
Pointals. Seed-buds numerous, oblong-eggfhaped, two-celled, cr vering a club-fhaped receptacle. Shafts turned backward, twifted, very fhort. Summits grow out of the fhafts longitudinally, hairy.
Seed-vessel. Cone egg-fhaped covered with capfules which are flattened, roundifh, fcarcely tiled, crowded, pointed, one-celled, two-valved, fitting clofe to the receptacle, fplitting from the outfide and remaining.
Seeds by twos or folitary, roundifh, like berries, hanging by a thread from the infide of each fcale of the cone.

## SPECIFIC CHARACTER.

Magnolia foliis elipticis, undulatis, acuminatis, fubglaucis; floribus nutantibus, albis; petalis carnofis, obovatis, concavis.

Magnolia with eliptic, waved leaves, tapered to a point, rather glaucous; flowers hanging down and white; petals thick, inverfely egg-fhaped and concave.

## REFERENCE TO THE PLATE.

1. One of the outer petals.
2. An inner petal.
3. The Chives and Pointals, on the receptacle.
4. The outfide of one of the Chives.
5. The infide of the fame.
6. The fame, magnified.
7. The Pointals.

The Magnolia pumila, (as are, generally, all plants upon their firf arrival from China,) has been hitherto treated as a hothoufe plant; by which means, a continued foliage has been preferved: but, from every appearance of the plant, it is by nature deciduous, and, certainly hardy enough to be preferved in the greenhoufe, if not to bear the expofure of the open ground. It grows to the height of about two feet, flowers in the hot-houle about September or later, and is propagated by cuttings. The bloffoms are very fragrant, but of fhort duration. To the late J. Slater, Efq. of Laytonftone, we owe this plant; which was one of that rich cargo brought home in the Carnatic, for him, by Captain Connor, in the year 1793. Our figure was taken at the Hammerfimith nurfery. The accelfion to this magnificent Genus has been confiderable within a very few years: to the fpecies formerly cultivated in Britain, viz. the grandiflora with its four varieties, the glauca and its two varietics, the acuminata and tripetala, are now added; the auriculata and maxima, from America; the pumila, fuscata and tomentosa or Yow-lang, from China; making in all, with the varieties, tifteen. The fhort acquaintance we have with the three laft from China, or the knowledge of what part of that extenfive country they are natives, does not enable us to decide, whether they will endure our winters; although we may on the two from America, as being hardy plants, or at least equally hardy with the grandiflora, being from the fame part of America.


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## PLATE CCXXYII.

## GLADIOLUS RINGENS. Var. mulifiorus.

Gaping Gladiolus. Many-fouered Far.

CLASS III. ORDERI.<br>triandria monogrnia. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.
Corolla fex-partita, ringens.
Stamina adfeendentia.

Blossom fix-divided, gaping.

- Chives afcending.

See Gladiolus roseus, Plate XI. Vol. I.

## SPECIFIC CHARACTER.

Gladiolus foliis fub-linearibus, coftatis; floribus ringentibus cineriis, odoratiffimis; fcapo multifioro.

Gladiolus with nearly linear-ribbed leaves; bloffoms gaping, afh-coloured, and very fweet fcented; ftem many flowered.

## REFERENCE TO THE PLATE.

1. The two-valved Sheath.
2. A Bloffom, with the chives in their place, fpread open.
3. The Pointal complete.

This is a fine variety of the Gladiolus ringens, given on Plate XXVII. Vol. I. of this work; the only fpecimen we have ever feen of it, is in the Hibbertian collection, from whence our figure was taken, latt year, 1801, in the month of May. It is a frong variety, but we cannot confider the difference it exhibits, from our firf figure, of fufficient prominence to warrant a fpecific diftinction. The bulbs were received at Clapham, in the autumn of 1800 , from the Cape of Good Hope; they are rather delicate, and the treatment muft be fuch as directed for the former variety of this fpecies.


# PIATE CCXXVIII. <br> HIBISCUS MUTABILIS. Var. fore pleno. 

 Changeable-Rofe Hibijcus. Doatlefouerered Var.CLASS XVI. ORDER VI.

## MONADELPIIA POLYANDRIA. Threads united. Many Chives.

## GENERIC CHARACTER.

Calyx. Perianthium duplex.
Exterius polyphyllum, perfiftens; foliolis linearibus, rarius monophyllum, multifidum.
Interius monophyllum, cyathiforme, femiquinquefidum, perfiftens; feu quinquedentatum, deciduum.
Corolla. Petala quinque, fubrotundo-oblonga, bafi anguttiora, patentia, tubo ftaminum inferne adnata.
Stamina. Filamenta plurima, inferne coalita in tubum, fuperne (in hujus apice et fuperficie) divifa et laxa. Antheræ reniformes.
Pistillum. Germen fubrotundum. Stylus filiformis, ftaminibus longior, fuperne quinquefidus. Stigmata capiata.
Pericarpium. Capfula quinquelocularis, quinquevalvis; diflepimentis contrariis, duplicatis.
Semina folitaria feu plura, ovato-reniformia.
Ols. Capfula aliis ovata, aliis longa; calys exterior 3-12-phyllus.

Empalement. Cup double.
The outer many leaved, permanent; leaflets linear, more rarely one-leaved, manycleft.
The inner one-leaved, cup-lhaped, half five. cleft, permanent; or five toothed, and deciduous.
Blossom. letals five, roundifh-oblong, narrower at the bafe, fpreading, faftened at bottom to the tube of the chives.
Chives. Threads numerous, $u$ itited at the bafe into a tube, at top (in its apex and iurface) divided and loofe. Tips kidney-1haped.
Pointal. Seed-bud roundith. Sliaft threadfhaped, longer than the chives, at top fivecleft. Summits headed.
Seed-vessel. Capfule five-celled, five-valved; partitions contrary, doubled.
Seeds folitary, or many, between egg and kid-ney-fhiped.

Ols. The capfule of fome fpecies is eggfhaped, of fome long; the outer cup, 3 -12-leaved.

## SPECIFIC CHARACTER.

Hibifcus foliis cordatis, angulatis, quinquelobis, acuminatis, dentatis; calyce exteriore octophyllo; capfula villofa; caule arboreo; floribus plenis.

Hibifcus with heart-flhaped leaves, angled, fivelobed, pointed and toothed; outer cup eight-leaved; capfule hairy; ftem growing to a tree; flowers double.

## REFERENCE TO THE PLATE,

1. The double cup with the Seed-bud, Shaft, and Summits in their place.
2. The Threads cut and fpread open, with thofe which are perfect and have the tips, remaining; thofe which give the plant the double flowered character being cut away; one tip detached and magnified.
3. The Seed-bud, cut tranfverfely to thew the perfect feeds in their cells.

Barnard Dickinson, Efq. of Monks.Houfe, near Devifes, Wilts, we believe to be, at prefent, the only poffeffor, in Britain, of this fine variety of Hibifcus mutabilis. The plants were produced in 1788, from fome Jamaica feeds, which were fown at Bowden, another adjoining feat of that gentleman, and where they have flowered for feveral years. Although the flowers are double; yet good feeds are produced, which is common to moft plants of this natural order, fuch as Alcea Malva, \&c. the fullneis of the bloffoms being, as ufual, formed from fome of the chives becoming petals, many neverthelefs remaining perfect ; which in thefe plants itand particularly diftinct from the pointal, being feated on the upper part of the tube, formed by the connection of the lower part of the threads, leaving the pointal as perfect as in a fingle flower. It is alfo propagated by cutting, and thrives in rich earth. It may be confidered rather a tree, than fhrub, as even in this country, it acquires the height of from 15 to 20 feet. It is a native of Japan, China, and the Eaft Indies; where it is much efteemed for the extreme beauty of its flowers, as well as in our Weft India iflands, where it is also cultivated. The Singleflowered has been known in England above a century, having, fays the Kew Catalogue, been introduced by Mr. Bentinck in the year 1690 , The fpecific title is atfumed on the fingula1 change of the flower, from white to flefh colour, before its decay, as hewn in our figure; which was taken from a fine branch received in a perfect fate from Bowden in the month of November 1801, and obligingly communicated, to the author, by Mrs. Dickinfon.



PLATE CCXXIX.
MAGNOLIA FUSCATA.
Brown-ftemed Magnolia.

CLASS XIII. ORDER VII. of Schrel. Gen. Plant.
polyandrit PoLygivit. Many Chives. Many Pointals.

## ESSENTIAL GENERIC CHARACTER.

Calyx 3-phyllus. Petala 6-12. Capfulæ 2-valves, imbricatæ. Semina baccata, pendula.

Cup 3 leaved. Petals 6-12. Capfules 2-valved, tiled. Seeds, berries, pendulous. See Magnolia pumila, Pl. 226. Vol. IV.

## SPECIFIC CHARACTER.

Magnolia foliis elipticis, fenioribus glabris, junioribus ramulifque tomentofis, fufcatis; petalis interne fubalbidis, marginibus elegantiflime coloratis.

Magnolia with eliptical leaves, the old ones fmooth, the younger as well as the fmall branches are downy, and browned; petals whitifh within, the margins elegantly coloured.

## REFERENCETOTHE PLATF.

1. The outer fence of the flower, which falls off before the flower expands.
2. An outer petal of the bloffom.
3. A Chive, with the parts complete, before the pollen has been emitted, a little magnified.
4. The fame fhewn from the outfide.
5. A Chive fhewn from the infide with the tips burf, magnified.
6. The Chives and Pointals, natural fize.
7. The Pointals, as they are placed on the columnar fhaft, the Chives being removed, natural fize.

Of all the Magnolias with which we are as yet acquainted, this fpecies is the moft elegant; whether for the growth of the plant, the brilliancy of the foliage, or the extreme delicacy, fragrance, and beauty of the flowers. It is a native of China; from whence it was firf introduced to us, in the year 1796 , by T. Evans, Efq. of Stepney; from a plant in whofe collection, our figure was taken, this year, 1802, in the month of February, the general feafon of its flowering in this climate if kept in the hot-houfe; to which ftation it has, as yet, been doomed, although, from the general character of the Genus, we thould be led to treat it more hardily. It is increafed by cuttings, and layers; but the firft is the bett method, as, in the latter mode the branches do not take root under two years. The plant from which our drawing was made, did not exceed a foot and a half in height, which leads us to fuppofe it never becomes a large fhrub, even in China. It thrives in leaf mould, and light loam. We believe this plant has not hitherto come under the review of any botanical author.


[^1]
## PLATE CCXXX.

# D O D O N A TRIQUETRA. <br> Three-fided Dodonaa. 

CLASS VIII. ORDER I. oCTANDRIA MONOGYNIA. Eight Chives. Oné Pointal. GENERIC CHARACTER.

Calyx. Periantbium tetraphyllum, planum; foliolis ovatis, obtufis, concavis, deciduis.
Corolla nulla.
Stamina. Filamenta octo, breviflima. Antheræ oblongæ, arcuatæ, comiventes, longitudine calycis.
Pistileum. Germen triquetrum, longitudine calycis. Stylus cylindricus, trifulcatus, erectus. Stigma fubtrifidum acutiufculum.

Prricabrium. Capfula trifulca, inflata, trilocularis; angulis membranaceis, magnis.
Semina bina, fubrotunda.

Empalement. Cup four-leaved, flat; leaflets egg-fhaped, obtufe, concave, falling off.
Blossom, none.
Chives. Eight threads, very fhort. Tips oblong, curved, approaching, the length of the cup.
Pointal. Seed-bud three-fided, the length of the cup. Shaft cylindrical, three-furrowed, upright. Summit nearly three-cleft rather pointed.
Seed-vessel. Capfule three-furrowed, fwelled out, three cells, angles skinny, large.
Seeds by twos, nearly round.

## SPECIFIC CHARACTER.

Dodonæa foliis lanceolatis, utrinque attenuatis, glaberrimis; ramulis triquetris; floribus dioicis.

Dodonea with lance-fhaped leaves, tapered to both ends, very fmooth; the fmall branches three-fided; flowers with chives and pointals diftinet.

REFERENCE TO THE PLATE.
Male Flower.

1. The Empalement, magnified.
2. The Empalement and Chives, before the burfing of the tips, magnified.
3. The fame, when the tips have emitted the pollen, magnified.

## Female Flou'er.

1. The Empalement, magnified.
2. The Empalement, feed bud, fhaft and fummit, magnified.
3. A ripe capfule, natural fize.
4. One of the divifions of the capfule.
5. A ripe feed, natural fize.

The fpecies here figured of Dodonæa is from New Holland; where, Forfter fays he found it, as we have given it, with the chives and pointals diftinct; but, that the fame fpecies was hermaphrodite, when growing in New Zealand, which may perhaps be the fact, though we thould fufpect, from fuch circumftance, they were different fpecies. Martyn in his Ed. of Miller's Dict mentions this plant, and throws it to the broad-leaved fpecies found in the tropical climates of America and Afia. Willdenow, in his Sp. Plant. Tom. 11. P. 1. p. 345, has made it a fpecies, without any obfervation on its parts of fructification; which leads us to fuppofe, he had not feen flowering fpecimens. It is as hardy as any greenhoufe plant we poffefs, but will not refift the feverity of our frofts; is cafily propagated by cuttings, and thrives in almoft any earth. It is fo very common in New Holland, that, fcarce a parcel of feeds has arrived from thence, but has contained fome of the feeds. The two figures were taken from two plants at the nurfery Hammerfmith.


## PLATE CCXXXI.

## CERBERA AHOUAI.

## Oval-leaved Cerbera.

# CLASS V. ORDER I. <br> Pentandria monogynia. Five Chives. One Pointal. 

## ESSENTIAL GENERIC CHARACTER.

Contorta. Drupa monofperma. Corolla infundibuliformis.

Flowers contorted. Pulpy feed-veffel, onefeeded. Blofinn funnel-fhaped. See Plate 130, Cerbera undulata, V'ol. II.

SPECIFIC CHARACTER.

Cerbera foliis ovatis, acutis, laciniis corollx undulatis; calycis foliolis reflexis.

Cerbera with egg-fhaped, pointed leaves; fegments of the blollom waved; leafiets of the cup reflexed.

## REFERENCE TO THE PLATE.

1. The Empalement.
2. A Bloffom cut open, the Chives in their place.
3. The Seed-bud, Shaft and Summit; with the fummit detached, magnified.

The oval-leaved Cerbera is a native of the continent of South America, in Brazil and the other provinces within the tropics; therefore, muft be treated as a tender hothoufe plant. It is increafed by cuttings, delights moft in a rich foil, and flowers in July, or Auguft. It is faid to acquire the height of ten feet, in its native clime, but, with us, it feldom attains to three; becoming a landfome, bufhy fhrub. The flowers have a faint fmell, as have moft of this natural order; the whole plant is replete with a whitifh juice, of a moft deleterious quality; and the wood when rubbed emits a difagreeable odour. The fruit is confidered by the indians as a deadly poifon againft which there is no antidote. Our figure was taken from a plant in the Hibbertian Collection, Clapham. Introduced to England, (or rather cultivated about that period) fays the Kew Catalogue, by Mr. Miller, in the year 1739.


Ciertera . ilicuar

# I X I A C A P T ATA. Var. Sellata. 

## Bunch-fowering Ixia. Var. Star-fowered.

## CLASS III. ORDER I.

triandria monogyniA. Three Chives. One Pointal.

## LSSENTIAL GENERIC CHARACTER.

Corolla 6 partita, patene, requalis. Stigmata tria, erectiulculo patu'a.

Blossom 6 divifions, fpreading, equal. Summits three, between upright and fpreading.

See Ixia reflexa, Plate XIV. Vol. I.

## SPECIFIC CHARACTER.

Ixia foliolis enfiformibus, erectis, fcapo brevioribus: fioribus capitatis, contertis, pallide carneis; petalıs bafi ftellatis.

Ixia with fword-flaped leaves, upright fhorter than the ftem; flowers grow in heads, crowded, of a pale flefh-colour; petals farred at the bafe.

## REFERENCE TO THE PLATE.

1. The two valves of the fheath.
2. A flower cut open, the Chives remaining.
3. The Pointal.

As we cannot think this plant poffeffes fufficient ditlindtive character, to entitle it to a particular fpecific title, we have placed it as above; although we mult confefs that the root, in this plant, is very diffimilar from moft of the bunch-flowering fpecies. It is a very hardy bulb, and in no ways liable to rot, increafing very abundantiy, and flowering, without any aflifance from heat, about the end of May. Our figure was takrn at the Hammerfinith nurfery in 1799; to which it had been introduced, about four years previous.


## PLATE CCXXXIII.

# MELANTHIUMVIRIDE. 

## Green-flowered Melanthium.

## CLASS VI. ORDER I.

## HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

## GENERIC CHARACTER.

Calyx nullus.
Corolla. Petala fex, ovato-oblonga, patentia, unguibus linearibus longioribus, perfiftentia.
Stamina, Filamenta fex, filiformia, erecta, longitudine corolla, cui inferta fupra ungues. Antheræ globofx.
Pistilla. Germen conicum, friatum. Styli tres, diftincti, curvi. Stigmata obtufa.
Pericarfium. Capfula ovata, trigona, trifulca, trilocularis, ex capfulis tribus, introrfum unitis.
Semina plurima, compreffa, femiovata.

Empalenent, none.
Blossom. Six petals, oblong egg-haped, fpreading, with linear longer claws remaining.
Chives. Threads fix, thread-fhaped, upright, the length of the bloffom into which they are inferted above the claws. Tips globular.
Pointals. Seed-bud conical, fireaked. Shafts three, diltinet, curved. Summits blunt.
Seed-vessel. Capfule egg-fhaped, three-fided, three furrowed, three-celled, formed of three captules united within.
Seeds numerous, flattened, half egg-fhaped.

## SPECIFIC CHARACTER.

Melanthium foliis ovato-lanceolatis, fcapo vaginantibus, erectis; corollis viridi-purpureis, reflexis.

Melanthium with leares between lance and eggflaped, theathing the ftem and upright; blofioms greenilh-purple, reflexed.

## REFERENCE TO THE PLATE.

1. A Petal with its Clive attached, magnified.
2. The Seed-bud, Shaft, and Summits, magnified.
3. The Seed-bud cut tranfversely, magnified.

The Green flowered Melanthium was introduced to the Kew collection, by Mr. F. Maffon, in the year 1788, as we are informed by the catalogue of that garden, from the Cape of Good Hope. The plant from which our figure was taken, had been fent to the Clapham collection amongft other bulbs which were received from Mr. Niven in the year 1800; it flowered the fucceeding year, when our drawing was made. We believe, at prefent, it is in no other collection than that of Mr. Hibbert; nor do we think, without a frefl fupply, it will be long feen in this country, as it has been often introduced, and as often loft; nor does it increafe with us by the root, and the feeds have not, as yet, matured in this country; it appears to grow luxuriantly in fandy peat earth, and flowers in July.


## PLATE CCXXXIV.

## PROTEA SPICATA.

## Spike-flower ed Protea.

## CLASS IV. ORDER I.

## tetr andria monogynia. Four Chives. One Pointal.

## ESSENTIAL GENERIC CHARACTER.

Corolla 4-fida feu 4-petala. Anthere lineares, infertæ petalis infra apicem. Calyx proprius nullus. Semina folitaria.

Blossom 4-cleft or 4-petalled. Tips linear, inferted into the petals below the point. Proper cup none. Seeds folitary.
See Protea formosa, Plate XVII. Vol. I.

## SPECIFIC CHARACTER.

Protea foliis bipinnatis, fubfiliformibus, pinnulæ canaliculatæ, apice glandulofæ; capitula fpicata, quadriflora.

Protea with twice-divided leaves nearly threadfhaped, fmall divifions channelled and glandular at the end; fmall heads in fpikes and four-flowered.

## REFERENCE TO THE PLATE.

1. The Empalement.
2. One of the fmall heads of flowers, not yet expanded.
3. The fame, with the flowers open.
4. A flower taken from the general cup, with one of the petals detached, magnified.
5. The Pointal, the Summit detached, magnified.

From a plant now in flower, May 1802, in the Hibbertian collection, our figure was taken. It is one of thofe defcribed by Thunberg in his Differtatio de Protea, n. 11, and in his Prodromus 25, under the title we have given it ; and which is, certainly, very appropriate; although many have the flowers growing in fpikes. We believe this is the firft time it has flowered in Britain, and that, at prefent, it is very fcarce; having been introduced by Meffrs. Lee and Kennedy in the year 1790. It is a hardy greenhoufe plant, is increafed by cuttings, and thrives in a fandy loam with a fmall portion of fandy peat earth. Native of the Cape of Good Hope.


## PLATE CCXXXV.

# MIMOSA DISCOLOR. 

## Two-coloured leaved Mimofa.

## CLASS XXIII. ORDERI.

POLIGAMIA MONOECIA. Various difpofitions: Upon one plant.

## ESSENTIAL GENERIC CHARACTER.

Hermaph. Calys 5-dentatus, Cor. 5 -fida. Stamina 5 fell plura. Pift, 1. Legumen. Masc. Calyx 5 -dentatus. Cor. 5 -fida. Stamina 5, 10, plura.

Hermaph. Cup 5 -toothed. Bloffom 5 -cleft. Chives 5 or more. Pointal 1. A pod.
Male. Calyx 5 -toothed. Bloffom 5 -cleft, Chives 5, 10 , or more.

## SPECIFIC CHARACTER.

Mimofa inermis; foliis bipinnatis, fexjugis, bicoloribus; pinnis acutis, xqualibus; fpicis axillaribus; capitulis globofis; filiquis latif. fimis, planis.

Minofa without fpines; leaves doubly winged, in fix pairs, and two coloured ; wings fharp pointed and equal; fpikes grow from the infertion of the leaves; fmall heads globular; pods very broad and flat.

## REFERENCE TO THE PLATE

1. The Empalement, natural fize.
2. The fame, magnified.
3. A Bloffom.
4. A Chive, magnified.
5. The Pointal natural fize, from an hermaphrodite flower.
6. The fame, magnified.

In the year 1788 the feeds of this plant were received, from New South Wales, by a number of perfons; and were raifed, the fane year, by moft of thofe who fowed the feeds. The character of the plant from whence it derives its feecific title is much loft in its advanced ftate; but in the firft wo or three years of its growth, it is extremely powerful; the under part of the young leaves being of a bright purple. It is extremely difficult to propagate from cuttings; and it has not, as yet, peifected its feeds in England. It grows to the height of fix or feven feet; is a hardy green-houfe plant; and thrives mof in fandy peat earth. Our figure was made from a very fine fpecimen, communicated by the Hon. W. H. Irby, in September 1801, from his elegant collection at the Parfonage, Farnham Royal, near Windfor, Bucks.


## PLATE CCXXXVI.

HYPOXIS STELLATA. Var. fore allo.

## Star-flowered Hypoxis. White Var.

## CLASS VI. ORDER I.

## HEXANDRIA MIONOGYNIA. Six Chives. One Pointal.

## ESSENTIAL GENERIC CHARACTER.

Corolla Kexpartita, perfiftens, fupera. Capfula bafi anguftior. Spatha 2 -valvis.

Blossom fixparted, remaining, above. Capfule narrower at the bafe. Sheath two valves. See Hypoxis fellata. Pl. 101. Vol. II.

## SPECIFIC CHARACTER.

Hypoxis fcapo unifloro; foliis fublinearibus, laxis, friatis; petalis bafi maculatis; corolla intus alba.

Hypoxis with but one bloffom on the flowerftem; leaves nearly linear, flexible and fcored; the petals fpotted at the bafe; bloffom white within.

## REFERENCE TO THE PLATE.

1. A Petal of the Bloffom, fhewn from the outfide.
2. The Chives and Pointal.
3. One of the Chives.
4. The Pointal, cleared of the chives.

This moft brilliant variety of Hypoxis ftellata, is as old an inhabitant of our gardens as the other Var. figured in the 2 d Vol. of the Repofitory, Pl. 101; it was likewife introduced by Mr. F. Mafton. The roots of this plant are rather more tender, or delicate, than thofe of the yellow variety; which makes it fearecr, and much lefs known. The nurfery, Hammerfmith, is the only place at which we have feen it; and, we believe, they have it not in Holland. The root from which out figure was taken, had been imported, from the Cape, in 1801. It flowers in April, and increafes by the root; fhould be planted in very light fandy peat earth, and removed from the pot foon after the flowers are decayed.



# PLATE CCXXXVII. CYTISUS TOMENTOSUS. Downy-leaved Cytifus. 

CLASS XVII. ORDER IV.

## DIADELPIIIA DEC'ANDRIA. Threads in two fets. Ten Chives.

## GENERIC CHARACTER.

Calys. Perianthium monophyllum, campanulatum, breve, bafi obtufum; ore bilabiato; labio fuperiore bifido, acuminato; inferiore tridentato.
Corolla papillionacea.
Vexillum ovatum, affurgens, laterioribus reflexis.
Als longitudine vexilli, rectx, obtufx.
Carina ventriculofa, acuminat?.
Stamina. Filamenta diadelpha (fimplex et novemfidum) affurgentia. Antheræ fimplices.

Pistillum. Germen oblongum. Stylus fimplex, affurgens. Stigma obtufum.
Pericarfium. Legumen oblongum, obtufum, bafi attenuatum, rigidum.
Semina nonnulla, reniformia, compreffa.

Empalement. Cup one-Icaved, bell-maped, fhort, blunt at the bafe; mouth two-lipped; upper lip two cleft, tapered; lower tip threeclett.
Blossom butterfly thaped.
Standard egs-thaped, rifing upwards, turned back at the fides.
Wings the length of the ftandard, ftraight, blunt.
Keel a littlc bellied, tapered.
Chives. Threads in two fets (one fingle, the other nine-cleft) turned upwards. Tips fimple.
Pointal. Seed-bud oblong. Shaft fimple, turned upwards. Summit obtufe.
Seed-vessel. Pod oblong, obtufe, tapered at the bafe, fliff.
Seeds a few, kidney-flape, flattened.

## SPECIFIC CHARACTER.

Cytifus racemis lateralibus, erectis; ramis teretibus, divaricatis; foliolis ovatis, tomentofis; vexillo crenulato; corollis luteis.

Cytifus with the bunches of flowers growing from the fides of the branches, which are round and ftraddle; leaflets egs-nlaped and downy; ftandard a little fcolloped; blor. foms yellow.

## REFERENCETO THE PLATE.

1. The Empalement.
2. The fiandard.
3. One of the Wings.
4. The Keel.
5. The Empalement, Chives, and Pointal, a little magnified.
6. The Seed-bud, magnified.
7. A ripe Pod.
8. The fame, fplit open, to expofe the fituation of the feeds.

This pretty Cytifus, a native of the Cape of Good Hope, was raifed from feeds at the Hammerfmith nurfery, in the year 1798. It is rather a weak, and loofe growing fhrub, attaining the height of a foot and a half, and flowering about Auguft. It delights in a light foil, and is propagated with cafe by cuttings; it likewife perfects its feeds. The whole habit of the plant much more refembles Crotolaria than Cytifus; but the feed-veffel and empalement preclude its admiffion to that Genus.

## PLATE CCXXXVII.

# R O ËLLA D E CRRENS. <br> Decurrent-leaved Roella. 

CLASS V. ORDER I.

## pentandria monogrnia. Five Chives. One Pointal.

## GENERIC CHARACTER.

Calyx. Perianthium monophyllum, turbinatum, quinquepartitum, perfiftens; laciniis lanceolatis, acutis, dentatis, magnis.
Corolla monopetala, infundibuliformis, decidua; tubus calyce paulo brevior; limbus erecto-patens, quinquepartitus, calyce longior.
Nectarium e fquamis quinque, conniventibus, in fundo corollx.
Stamina. Filamenta quinque, fubulata, nectario infidentia. Anthere fubulatæ, conniventes, longitudine filamentorum, altitudine calycis.
Pistillum. Germen oblongum, inferum. Stylus filiformis, longitudine ftaninum. Stigmata duo, oblonga, depreffa, patentia.
Pericarpium. Capfula cylindracea, calyce brevior, coronata calyce patenti majoreque facto, bilocularis.
Semina plurima, angulata.
Obf. Campanulæ valde affinis.

Empalement. Cup one leaf, top fhaped, fivedivided, remaining; fegments lance-1haped, pointed, toothed, large.
Elossom one petal, funnel-fhaped, deciduous, tube a little fhorter than the cup; border bet ween upright and fpreading, five-divided, longer than the cup.
Honey-cup formed of five fcales, approaching, at the bottom of the bloffom.
Chives. Five threads, awl-fhaped, placed upon the honey-cup. Tips awl-fhaped, approaching the length of the threads, the height of the cup.
Pointal. Seed-bud oblong, beneath. Shaft thread-flaped, the length of the chives. Summits two, oblong, flattened, fpreading.
Seed-vessel. Capfule cylindrical, fhorter than the cup, crowned with the Spreading cup which has become larger, two celled.
Seeds many, angled.
Obf. This Genus is very nigh affiued to campanula.

## SPECIFIC CHARACTER.

Roëlla foliis lanceolatis, ciliatis, integerrimis, decurrentibus; floribus folitariis, pedunculis longiffimis, axillaribus.

Roella with lance.fhaped leaves, fringed, quite entire, decurrent; flowers folitary, foot. ftalks very long, growing from the bafe of the leaves clofe to the ftem.

## REFERENCE TO THE PLATE.

1. The Empalement, Chives, and Pointal, the bloffom removed.
2. A Bloffon cut on one fide, and fpread open.
3. One of the fcales of the Honey cup, with its Chive magnifitd.
4. The Fointal, cleared of the other parts of fructification.

As an annual, this is a mof beautiful little plant; but, although the feeds have been received feveral times, from the Cape of Good Hope, where it is native; and firf at the Royal Gardens, Kew, in 1787, fent by Mr. F. Mafion; yet, has it never been feen the fecond year; owing, we fuppofe, to the impracticability of procuring ripe feeds in our climate. Perhaps future trials, by different treatment, may meet with a happier iffue. The figure was taken at the Clapham Garden, in Auguf 1800; when the plant had apparently attained its greateft perfection; but unfortunately, no feeds ripened; and at prefent, we believe, there is no veftige of the plant in Britain. It appears to delight in fandy peat, and to be kept under cover, even in the fummer feafon.


# GERANIUM SELINUM. 

Rock-Parlley-leaved Geranium.

## CLASS XVI. ORDER IV.

## MONADELPHIA DECANDRIA. Threads united. Ten Chives.

## ESSENTIAL GENERIC CHARACTER.

Monogyna. Stigmata quinque.
Fructus roftratus, penta-coccus.

One Pointal. Five Summits.
Fhuit furnifhed with long awns, five dry berries. See Geranium grandiflorum. Vol. I. Pl. XII.

## SPECIFIC CHARACTER.

Geranium foliis pinnatis, foliolis alternis, laciniatis, hirfutis; petala bina fuperiora refracta, 3 inferiora concava, conniventia, recta; ftaminibus 5 fertilibus; radice tuberofa.

Geranium with winged leaves; leaflets alternate, ragged, and hairy; the two upper petals appearing broke back, the 3 lower concave, approaching and ftraight; five fertilc chives; root tuberous.

## REFERENCE TO THE PLATE。

1. The Empalement.
2. The Chives, cut open and magnified.
3. The Pointal and Seed-bud magnificd.

Geranium felinum claims the priority of introduction, with us, to any of that numerous divifion, in this large family, which are tuberous rooted and ftemlefs, not including the G. trifte, G. lobatum, or G. prolificum; and of which, although we have given many figurcs, we still poffefs drawings of 18 handfome fpecies, befides numberlefs varieties. It was introduccd in 1788 by Meffrs. Lec and Kennedy; is a hardy greenhoufe plant, being lefs fubject to rot, after the decay of the leaves, than any of its congeners; flowers freely about June, and is propagated by the root; the feed (fomctimes) ripens likewife. Our figure was taken from a plant, whofe root had been received at the Clapham Garden, in 1800. As all the plants figured in the Botanift's Repofitory, are titled with the commonly accepted names, if any, in England; and, as many have been given under different names, in fome other publications, whence much confufion; we fhall defer all attempt at fynonim, till the end of this Volume, when a copious Index Synonimorum will be publifhed, of all the plants figured in the work, for the ufe of thofe who wifh for fuch authorities.


## PLATE CCXL.

## GLADIOLUS CARNEUS.

## Flefh-coloured Gladiolus.

## CLASS III. ORDERI.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

## ESSENTIAL GENERIC CHARACTER.

Corolla fexpartita, ringens.
Stamina adfcendentia.

Blossom fix divifions, gaping.
Chives afcending.
See Gladiolus roseus, Pl. 11. Vol. I.

## SPECIFIC CHARACTER.

Gladiolus foliis enfiformibus, coftatis, glabris; floribus fecundis, cernuis, carneis; petalis tribus fuperioribus divergentibus, inferioribus fupra medium punctatis.

Gladiolus with fword-fhaped leaves, ribbed, and fmooth; flowers pointing one way, nodding and flefh-coloured; the three upper petals diverge, the three lower are dotted upon the middle.

## REFERENCE TO THE PLATE.

1. The two valves of the fheath.
2. The Bloffom fpread open, with the Chives in their place.
3. The Pointal, complete.

OUr prefent plant has a nigh affinity with G. communis, and indeed might, perbaps, be confidered as a variety of it; but, as upon a clofe examination this will be found to differ, in many refpects, we have adopted the name, quoted by Willdenow, from Jacquin, De la Roche, Burman, \&c. It is a native of the Cape of Good Hope, and introduced, from thence, to us, in 1800 . Our figure was made at the Hammerfmith Nurfery, this year, being the firft of its flowering in this country. It is a very hardy bulb, and increafes freely. Flowers in May.

## PLATE CCXLI.

# GLADIOLUS ORCHIDIFLORUS. 

## Orchis-like-flowered Gladiolus.

CLASS III. ORDER I.

triandria monogynia. Three Chives. One Pointal.

## ESSENTIAL GENERIC CHARACTER.

Corolla fexpartita, ringens.
Stamina adfecendentia.

Blossom fix divifions, gaping.
Chives afcending.
See Gladiolus roseus, Pl. II. Vol. I.

## SPECIFIC CHARACTER.

Gladiolus foliis linearibus; fcapo polyftachio; floribus fpicatis, fecundis; laciniis binis lateralibus corollæ latiffimis, fumma erecta, tribus inferioribus dependentibus, maculatis.

Gladiolus with linear leaves; flower-ftem branched; flowers grow in fpikes, all from one fide; the two fide fegments of the bloffom are very broad, the top one upright, the three lower hang down, and are fpotted.

## REFERENCE TO THE PLATE.

1. The two valves of the theath.
2. A Bloffom fpread open, with the Chives in their place.
3. The Pointal, one of the divifions of the fummit magnified.

As a fingularity among its fellows, this Gladiolus ftands prominently diftinet; and the uncommon and curious formation of its flowers will, undoubtedly, counterbalance, in the eye of the botanift, what they want in brilliancy of colour. It is a hardy bulb, and appears to require only the ufual treatment of the hardier fpecies of the genus. The Clapham collection is, we believe, the only one in which it is to be found in England; to which it was introduced, by Mr. Niven, in the fpring of the year 1801, and where our drawing was made, this prefent year, in the month of March 1 S02.


## PLATE CCXLII.

# XERANTHEMUM FASCICULATUM. <br> Bundled-leaved Everlafting-flower. 

CLASS XIX. ORDER II.<br>SYNGENESIA POLIGAMIA SUPERFLUA. Tips united. Superfluous Pointals.

## ESSENTIAL GENERIC CHARACTER.

Receptaculum paleaceum. Pappus fetaceus. Calyx imbricatus, radiatus; radio colorato.

Receptacle chaffy. Feather briftly. Cup tiled, rayed; the ray colored.
See Xeranthemum speciocissinum, Pl.LI.Vol.I.

## SPECIFIC CHARACTER.

Xeranthemum foliis caulinis lineatibus fubteretibus, fafciculatis, longiffimis; floribus folitariis; fquamis calycinis lanceolatis, pallide-luteis.

Everlafting-flower, with the fem leaves linear, roundifh, bundled, very long; flowers folitary; the fcales of the cup lance-ihaped, and pale yellow.

## REFERENCETO THE PLATE.

1. A fcale of the cup.
2. An hermaphrodite floret, with its feed, magnified.
3. A female floret, with its feed, magnified.
4. The Pointal of a female floret, magnified.

Amongst the number of very beautiful plants introduced by Mr. Niven, and which now enrich that fund of botanical rarity, the Clapham collection, this fpecies of Xeranthemum does not ftand the leaft confpicuous. Twelve years fince we poffetted but four fpecies of this genus, viz. X. fulgidum, X. retortum, X. veftitum, and X. fpeciociffimum; now they extend to fourteen. The others, as well as the foregoing, are all (but one, the X. lucidum of Port Jackfon, New South Walcs) from the Cape of Good Hope, and introduced to us from thence, by various hands, in the following order; X. proliferum, through Holland, by Meifrs. Lee and Kennedy; X.formofum and X. candicans by the fame, from Cape feeds; X. Selfamoides by Mrs. Goftling, of Hounflow; X. filiforme by Mr. Dom, of Cambridge; X. fafciculatum and X. truncatum by G. Hibbert, Efq. X. argenteum and X. fpirale by Montague Burgoyne, Efq. of Mark Hall, Effex. They are very fubjeet to damp in the leaves, from a confined air; therefore, fhould be kept in the window, or moft airy part of the greenhoufe. The mof fandy peat that can be procured is the beft fur their growth. They may be all, thus, propagated by cuttings, taken off in the early part of the month of June; put thefe into a pot filled with fand, and covered by a bell-glafs the fize of the pot; plunge it in a north or eaft border, and let the whole be covered with a hand glafs, which muft be kept quite clofe till the cuttings are rooted; then the inncr glafs muft be removed, and in about a week the pot may be taken from under the outer one, when the plants may be removed into fmall pots in about a fortnight. Our prefent plant feldom grows higher than two feet, of which, at leaft, one is the foot-Ralks of the flowers; it continues in flower from March till September.


## PLATE CCXLIII.

# PROTEA LAGOPUS. <br> Hoolly-leaved Protea. 

## CLASS IV. ORDER I.

TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

## ESSENTIAL GENERIC CHARACTER.

Coholla 4 fida feu 4-petala. Antherx lineares, infertæ petalis infra apicem. Calyx proprius nullus. Semina folitaria.

Blossom 4-cleft or 4-petalled. Tips linear, inferted into the petals below the point. Proper Cup none. Seeds folitary.

See Protea formosa, Pl. XVII. Vol. I.

## SPECIFIC CHARACTER。

Protea foliis bipinnatis, filiformibus; capitulis fpicatis, aggregatis, quadrifloris; corollis intus purpureis.

Protea with doubly winged leaves, threadfhaped; fmall bcads grow in fpikes clofe together, four flowers in each; blolloms purple within.

## REFERENCETO THE PLATE.

1. The fcales of the cup of one of the fmall heads.
2. $\Lambda$ fmall head of flowers, one of the flowers open, the reft not yet expanded.
3. A floret, with the petals expanded.
4. A petal, with its chive, magnified.
5. A Pointal, natural fize, with the fummit detached and magnified.

This handfome Protea we owe to Mr. R. Williams, of Turnham-green, nurferyman, who raifed it by feeds received from the Cape of Good Hope in the year 1797. It is one of the handfomelt we yet poffefs of the winged-leaved kind of Proteas; of which divifion, in this large family, there are now in the Hibbertian collection eighteen difinet fpecies. This plant grows to the height of three feet, makes a very bully head, and, when in flower, has a handfome appearance; as there are fometimes twenty fpikes of flowers on it at one time. It is propagated by cuttings, thrives in fandy loam, and flowers in June; in which month this year, 1802, our drawing was made at Clapham.

## PLATE CCXLIV.

## HEMEROCALLIS GRAMINEA.

Grafs-leaved Day-Lily.

## CLASS VI. ORDER I.

## hexandria monogynta. Six Chives. One Pointal.

## ESSENTIAL GENERIC CHARACTER.

Corolla campanulata; tubo cylindrico.
Stamina declinata.

Blossom bell-fhaped; tube cylindrical.
Chives declining.
See Hemerocallis cerulea, Pl. VI. Vol. I.

SPECIFIC CHARACTER.

Hemerocallis foliis linearibus, carinatis, gramineis; petalis tribus interioribus majoribus undulatis, exterioribus minoribus, extus bruneis.

Hemerocallis with linear leaves, keeled and grally; the three inner petals larger, waved, the outer fmaller, brown on the outfide.

## REFERENCE TO THE PLATE.

1. An outer leaf of the Bloffom, fhewn from the outfide.
2. The Chives aud Pointal.
3. The Poiutal and Seed-bud, cleared of the chives.

We have little doubt but that this is the fpecies of Day-Lily known to botanifts, fince the days of Parkinfon and Gerarde, under the character of a fmall leaved variety of the Yellow Day-Lily, although it has been many years loft to the country. It is one amongft the many plants introduced by the late Dr. Sibthorpe, to the Oxford botanic garden. As a native of the northern parts of Europe, it is as hardy as either the H. flava or H. fulva, to both which fpecies it bears ftrong affinity; although, we conceive, fufficiently diftinet from either, to conftitute a fpecies; which however we fhould not have done, but that the plant is now known in our gardens, under our fpecific title. The flowers of this plant laft, in general, two or three days before they decay, are very fweet feented, and as large as thofe of the H.fulva. It is increafed as eafily as any of the genus, by parting the roots, and thrives in almoft any foil.

iMomermerrlles gramenea.

## PLATE CCXLV.

## IXIA PUSILLA.

## Dwarf blue Ixia.

## CLASS III. ORDERI.

## TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

## ESSENTIAL GENERIC CHARACTER.

Corolla 6 partita, patens, æqualis. Stigmata tria, erectiuiculo-patula.

Blossom 6-divided, fpreading, equal. Summits three, between upright and fpreading.

See Ixia reflexa, PI. XiV. Vol.I.

## SPECIFIC CHARACTER.

Ixia foliis fublinearibus, coftatis, craffis; fcapo bifloro, longitudine, foliorum; floribus diftantibus, cæruleis.

Ixia with nearly linear leaves, ribbed, thick; flower-ftem two-flowered, the length of the leaves; flowers grow diftant, and are blue.

## REFERENCE TO THE PLATE.

1. The two valves of the fheath.
2. A Flower cut open, with the Chives in their place.
3. The Pointal, one of the fummits detached and magnified.

This pretty little Ixia is quite new to our gardens, never having, as far as we can learn, been feen to flower before this year. It is the moft delicate in fhape and character of any we have as yet examined; and as we could not trace it as defcribed in any author, we have given it the trivial name it here bears. The figure exhibits a large fpecimen of the whole plant, which is too weak to fupport itfelf, although the leaves are thick and ftiff. Our drawing was made in the month of April, from a plant in the Clapham collection, where only it is to be found; the roots having been fent from the Cape of Good Hope in the autumn of the preceding year. It appears to flourith with the treatment Mr. Allen has given it, a dry fituation, planted in very fandy peat. From the conftruction of the root, which has a hard fmooth ikin, we fhould be led to think its increafe will not be very abundant.


# GERANIUM INCRASSATUM. 

## Flefly-leaved Geranium.

## CLASS XYI. ORDER IV.

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

## ESSENTIAL GENERIC CHARACTER.

Monogyna. Stigmata quinque. Frucrus roftratus, penta-coccus.

One Pointal. Five Summits.
FRUit furnified with long awns, five dry berries. Sce Geranium grandiflorum. Pl. Xli. Vol. I.

## SPECIFIC CHARACTER.

Geranium fo'iis carnofis, inequaliter pinnatis feu lobatis, laciniis tridentatis, obtufis; corollis faturate rubris, ftriatis; floribus pentandris; radice tuberofa.

Geranium with flefhy leaves, unequally winged or lobed, fegments three-toothed, blunt; bloffoms of a deep red, and freaked; flowers with fise fertile tips; root tuberous.

## REFERENCE TO THE PLATE.

1. The Empalement cut open, to fhew its tubular ftructure.
2. The Chives fpread open.
3. The Pointal, natural fize, with the fummits detached, magnified.

OUr figure, which exhibits a fmall plant, of this fupcrb fpecies of tuberous Geranium, was taken in the month of June, this year, 1802, at Meffrs. Colville's nuriery, King's Road, Chelfea, and where it is ftill in high perfection, this prefent month of July. We have every reafon to belicee, from all the authorities we are mafters of, that this plant has not, till now, flowered in Europe. It forms a very large tuberous root, by the dividing of which it is to be propagated; as we fufpect the feeds will not ripen on this fpecies more than moft of its congeners. It has the fame manner with the reft of the tuberous fpecies, lofing its leaves in winter, when they are fubject to rot, if much watered. Appears to flourifh in fandy peat, with a fmall portion of rotten dung.

féranemm encrafizalum

4 (4)

## PLATE CCXLVII.

# GERANIUM CILIATUM. 

Fringed-leaved Geranium.

CLASS XVI. ORDERIV.<br>MONADELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

Monogyna. Stigmata quinque. Fructus roftratus, pentacoccus.

One Pointal. Five fummits. Fruit furnifhed with long awns, five dry berries.
See Geranium grandiflorum, Pl. XiI. Vol. I.

## SPECIFIC CHARACTER.

Geranium foliis intigerrimis, concavis, lanceotis, marginibus ciliatis ; floribus pentandris; radice tuberofa.

Geranium with quite entire leaves, concave, lancefhaped, and fringed at the edge; flowers with five fertile chives; root tuberous.

## REFERENCE TO THE PLATE.

1. The Empalement.
2. The Chives fpread open, magnified.
3. The Pointal, magnified.

The fingular thape and number of the lcaves of this plant, which are but two, large, concave, thickifl, between lance and egg-dhaped, and fringed at the edge, conflitute the moft effential fpecific difference it polfeffes; the flowers, and other parts, much refemble many of its fellows. It is from the Cape of Good Hope, and introduced to us by Meffrs. Colvills, nurferymen, of the King's Road, Chelfea; who received it, from thence, at the fame time with the Geranium incraffatum, of our laft. For the treatment, and increafe, we mult refer to any other of the tuberous kind of Geranium.

Incion ral " 4aternl wition

# PROTEA UMBELLATA. 

Umbellaied Protea.

CLASS IV. ORDER I.<br>TETRANDRTA MONOGYNTA. Four Chives. One Pointal.

## ESSENTIAL GENERIC CHARACTER.

Corolla 4 -fida feu 4 -petala. Antheræ lineares, infertæ petalis infra apicem. Calyx proprius nullus. Semina folitaria.

Blossom 4 cleft or 4 -petals. Tips linear, inferted into the petals below the point. Cup proper none. Seeds folitary.

See Photea formosa, Pl. XVII. Vol. I.

## SPECIFIC CHARACTER.

Protea foliis lineari-fpathulatis, glabris; capitulis terminalibus; bracteis multifidis; floribus luteis.

Protea with linearly-fpathulate leaves, fmooth; heads of flowers terminate the branches; floral leaves many cleft; flowers yellow.

## REFERENCE TO THE PLATE.

1. One of the floral leaves or fcales of the general empalement, magnified.
2. A flower, magnified.
3. One of the heads of flowers, divefted of the fcales, or floral leaves.
4. The Pointal and feed bud, of one of the florets, magnified.

The Protea umbellata has been cultivated in England fince the year 1777, at which time it was firft raifed from feeds; received from the Cape of Good Hope by Meffrs. Lee and Kennedy, Hammerfmith, at whofe nurfery our figure was taken in the month of Auguft 1800 . It is a very hardy plant, and not at all fubject to the very common fate of its congeners; that is, to damp in the leaves, or rot at the root in winter; is propagated by cuttings, to Le made in the month of April or May, and treated as directed for the other Proteas. The plant feldom grows higher than three feet, and does not make many branches; but is of a lively green colour, both leaves and ftem. We have, as ufual, adopted the name this plant is generally known by, it having been to named by the younger Linnæus in his Suppl. Plant. 118, and by Thunberg in his Differtatio de Protea, n. 34, and his Prodromus 26. But why or how a fmall, clofe head of flowers may be denominated an umbel we muft confefs our ignorance in this application of terms.


# PLATE CCXLIX. <br> PITCAIRNIA SULPHUREA. <br> Sulphur-coloured Pitcairnia. 

CLASS VI. ORDER I.
hexandria monogynia, Six Chives. One Pointal.

## GENERIC CHARACTER。

Calyx. Perianthium monophyllum, femi-fuperum, tubulofum, bafi ventricofum, trifidum, perfiftens; laciniis lanceolatis, erectis.
Corolla tubulata, calyce duplo longior, marceffens, trifida, demum tripetala; lacinix lineari-oblongæ, fuberectæ.
Stamina. Filamenta fex, filiformia. Antheræ oblongæ, erectæ.
Pistillum Germen fuperum, ovato-trique. trum. Stylus filiformis longitudine flaminum. Stigmata tria, contorta.
Pericarpium. Capfula ovatis, obtufe triquetra, trilocularis; loculis fub-cylindraceis, fub-diflinctis.
Semina numerofa, alata, linearia.

Empalement. Cup one leafed, half fuperior, tubular, fwelling at the bafe, three-cleft; fegments lancc-fhaped, erect.
Blossom tubular, twice the length of the cup, withering, three-cleft, at laft three petalled; fegments linearly-oblong, nearly upright.
Chives. Threads fix, thread-fhaped. Tips oblong, erect.
Pointar. Seed-bud above, three-fided-eggfhaped. Shaft thread-fliaped the length of the chives. Summits three, twifted.
Seed-vessel. Capfule egg-fhaped, bluntly three cornered, three valved; cells nearly cylindrical, not very diftinet.
Seeds numerous, winged, linear.

## SPECIFIC CHARACTER.

Pitcairnia foliis non fpinofis, flaccidis, longiffimis; corollis fulphureis.

Pitcairnia with leaves without fpines, weak and very long; bloffoms fulphur coloured.

## REFERENCE TO THE PLATE

1. The Empalement and floral leaf.
2. One of the Petals fiewn from the infide to expofe the Honey-cup at its bafe.
3. The Chives and Pointal.
4. The Pointal and Seed-bud, the three fummits detached and untwifted.
5. The Seed-veffel cut acrofs.

This fpecies of Pitcairnia was fent in the year 1799, from the ifland of St. Vincent, by Mr. Anderfun, to T. Evans, Efq. Stepncy; at whofe gardens the plant has flowered, for the firft time, in England this year, in the month of April, and at which time our figure was taken. The Pitcairnias are all natives of Weft India Inlands, and Itand, as the link, between the Bromelia or Pine-apple plant, and the Tillandfia; to either of which Genera the firlt fight of the leaves, only, would confign them. Five fpecies are now in Britain, and we do not doubt, but the fpecies are as numerous, as thofe of Tillandfia. The cultivation of all the fpecies is perfectly eafy, as they require no particular foil, or management, if kept in the hot-houfe; where they grow luxuriantly and throw out, from the roots, abundance of fuckers; which fhould be taken off, to encourage the flowering of the central fhoot.

# IXIA COLUMNARIS. Var. grandifora. 

## Columnar-chived Ixia. Large fowered Var.

## CLASS III. ORDER I.

## Triandria monogynia. Three Chives. One Pointal.

## ESSENTIAL GENERIC CHARACTER.

Corolla fex-petala, patens, æqualis. Stigmata tria, erectiufculo-patula.

Blossom fix petals, fpreading, equal. Summits three, upright-fpreading. See Ixia reflexa, Pl. XIV. Vol.I.

## SPECIFIC CHARACTER.

Ixia filamentis bafi cohærentibus; floribus fubcapitatis corollis purpureo-violaceis, maximis.

Ixia with threads united at the bafe; flowers grow nearly headed; bloffoms purple violet, very large.

## REFERENCE TO THE PLATE.

1. The two valves of the fheath.
2. An intire flower cut open in the tube only, which is extended nearly to the end of the threads.
3. The Chives cut open, magnified.
4. The Pointal complete, one of the Summits detached and magnified.
5. The Seed-veffel cut acrofs.

We have nothing farther to fay upon this fine variety of the Columnar-chived Ixia than what has been faid on the other varieties of this fpecies; but, that it was introduced from Holland with the changeable coloured variety in 1799; and that it flowers the end of June; in which month our drawing was made, this year, at the Hammerfmith Nurfery.


## PLATE CCLI.

# LACHENALIA PURPUREO-C ERULEO. 

Sweet violet-colourd Lachenalia.

CLASS VI. ORDER I.<br>hexandria monogynia. Six Chives. One Pointal.

## ESSENTIAL GENERIC CHARACTER

Corolla 6-petala, infera; petalis tribus interioribus longioribus.
Stamina erecta. Capfula fubovata, trialata. Semina globofa.

Blossom 6 -petals, beneath; the three inner petals the longeft.
Chives erect. Capfule nearly egg-fhaped, three winged. Seeds globular.
See Lachenalia pendula, Pl. XLI. Vol. I.

## SPECIFIC CHARACTER.

Lachenalia corollis campanulatis, pedunculatis; petalis obtufis, revolutis; faminibus corolla longioribus; foliis lanceolatis; floribus purpureo-cæruleis, odoratiffimis.

Lachenalia with the bloffoms bell-fhaped, and with foot-ftalks; petals obtufe and rolled back; chives longer than the bloffom; leaves lance-fhaped; flowers of a purplifh blue colour, and very fweet-fcented.

## REFERENCE TO THE PLATE.

1. A flower fhewn from the outfide.
2. The fame fhewn from the infide.
3. The Pointal and feed-bud.

This very fine fpecies of Lachenalia, with its variety, have been figured by Prof. Jacquin in his Icones, and Collectanea; but whether from dried fecimens or not we cannot determine. As yet there is no figure, of either, in any Britifh publication. Mr. Williams, of Turnham Green, nurferyman, was the firft who had it to flower in this kingdom, and to his kindnefs in fending us a fine fpecimen, this jear, in April, we are indebted for our prefent figure. It is equally hardy with the reft of the fpecies of the Genus, and propagates abundantly by the root; delights molt in a fandy peat foil.


## PLATE CCLII.

## HEBENSTREITIA AUREA. Golden-flowered Hebenftreitia.

## CLASS XIV. ORDER II.

DIDYNAMIA ANGIOSPERMIA. Two Chives longer. Sceds covered.

## GENERIC CHARACTER.

Calyx. Perianthium monophyllum, tubulofum, membranaceum, emarginatum, fubtus longitudinaliter dehifcens.
Corolia monopetala, unilabiata; tubus cylindricus, calyce longior, latere inferiore ad dimidium dehifcens; limbus unilabiatus, adfeendens, planiufculus, quadrifidus, fubæqualis.
Stamina. Filamenta quatuor, horum duo priora fub fauce margini corollæ inferta, extantia; duo feriora, interiora, inferiora, reflexa ad latera. Antheræ lunares, compreffæ, extrorfum truncatæ.

Pistillum. Germen minimum. Stylus filiformis, per fiffuram corollæ reflexus. Stigma fimplex.
Pericarpium. Capfula oblonga, unilocularis, bivalvis.
Semina duo, oblonga, hinc convexa, trifulca, inde plana.

Empalement. Cup one-leafed, tubular, membranaceous, notched at the end, folitting lengthways from beneath.
Blossom one-petalled, one-lipped; tube cylindric, longer than the cup, fplitting from the lower fide half way; border one-lipped, afcending, flattilh, four-cleft, the clefts nearly equal.
Chives. Threads four, of which the upper pair is inferted into the edge of the bloffom under the throat, ftanding out; the lower anterior pair is bent back to the fides. Tips crefcent-fhaped, flattith, appearing cut off on the outfide.
Pointal. Seed-bud very fimall. Shaft threadfbaped, bent back through the fiffure of the bloffom. Summit fimple.
Seed-vessel. Capfule oblong, one-celled, twovalved.
Seens two, oblong, convex on one fide, threefurrowed and flat on the other.

## SPECIFIC CHARACTER.

Hebenftreitia foliis linearibus, integris, fub-teretibus, obtufis, glabris; floribus congeftis, racemofis, aurantiis.

Hebenftreitia with linear leaves entire, roundilh, blunt, fmooth; flowers grow crowed together in long bunches, of a gold colour.

## REFERENCE TO THE PLATE.

1. A flower.
2. The Empalement magnified.
3. A Bloffom cut open with the chives remaining attached, magnified.
4. The Pointal natural fize.

5, The fame, magnified.

The Hebenfreitias may all be reckoned as rather biennial plants than perennial firubs; they muft be increafed every year to keep up a fucceflion, which is a matter of no difficulty; as, if cuttings of any of the fpecies are put into feparate fmall pots, and kept from the air by a hand-glafs, for about a month, they will become flowering plants by September, if the cuttings are made in May. Our prefent plant was introduced in 1796 by Meffrs. Lee and Kennedy, Hammerfmith, at whofe nurfery the drawing was made this year in the month of March. They moflly flower in fpring, and autumn; the flowers are very fragrant at night. They are natives of the Cape of Good Hope.


Mfílicmotirelar arnima
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## PLATE CCLIII.

# TALINUM PATENS. 

 Panicled Purlane.
## CLASS XI. ORDER I.

## dodecandria monogynia. Twelve Chives. One Pointal.

## GENERIC CHARACTER.

Calyx. Perianthium diphyllum, parvum, fuperum, apice compreffum, perfiftens.
Corolla. Petala quinque, plana, erecta, obtufa, calyce majora.
Stamina. Filamenta multa, capillaria, corolla dimidio breviore. Antheræ fimplices.
Pistillum. Germen fubrotundum. Stylus fimplex, brevis. Stigmata quinque, oblonga, longitudine ftyli.
Peficarpium. Capfula tecta, ovata, trivalvis. Receptaculum liberum.
Semina plurima, parva.

Empalement. Cup two-leaved, fmall, abore, compreffed at the tip, remaining.
Blossom. Five petals, flat, fmooth, upright, blunt, larger than the empalement.
Chives. Threads many, hair-like, fhorter by half than the bloffom. Tips fimple.
Pointal. Germ roundifh. Sbaft fimple, mort. Summits five, oblong, the length of the fhaft.
Seed-vessel. Capfule covered, egg-fhaped, three-valved. Receptacle free.
Seeds numerous, fmall.

## SPECIFIC CHARACTER.

Talinum foliis lanceolato ovatis, feflilibus, planis; panicula ramofa, terminali; floribus rubris.

Purgane with leaves between lance and eggfhaped, without foot-ftalks, flat; panicle branching and terminal; flowers red.

## REFERENCE TO THE PLATE.

1. The Empalement and Pointal.
2. A Chive, magnified,
3. The Seed-bud. Shaft, and Summit.
4. The Sced-veffel nearly ripe, and the cup,
5. A ripe Capfule, cut tranfverfely.
6. A Seed, magnified.

We now exhibit a plant which may, perhaps, be known by many, under the name of Portulaca, rather than that of Talinum. But, as the adoption of this new formed genus, upon a divifion of the fpecies which have capiules of a different conftruction, from the old generic character of Portulaca, feems generally to obtain, amongft modern botanifts; fuch as Jufieu, Cavanilles, Willdenow, \&c. we fhall not diffent; although we, at the fame time, take the liberty to fay, from the particular tendency of the old genus Portulaca, to vary in moft parts of the fower, both as to number and character, we have taken up the prefent genus, but reloctantly. This plant is a native of the Weft Indies, and is, by fome, confidered as an annual; whilft by others it is treated of as a fhrub; but, indeed, it partakes of both characters, in fome meafurc; for the ftem generally decays down, near to the earth, and often the whole plant dies, after flowering. It grows to the height of two feet, half of which is formed of the flower.ftem. It makes a very gay appearance about Auguft, and feeds abundantly. Our figure was taken from a plant in the collection of J. Vere, Efq. Kenfington Gore; where it flowers, annually, in the higheft perfection. Introduced, fays the Kew Catalogue, by Chevalier Murray, in the year 1776.


## P LA TE CCLIV.

## GERANIUM PROCUMBENS.

## Procumbent Geranium.

CLASS XVI. ORDERIV.

## MONADELPHIA DECANDRI.1. Threads united. Ten Chives.

## ESSENTIAL GENERIC CHARACTER.

Monogyna. Stigmata quinque. Fructus roftratus, 5 coccus.

Ove Posntas. Five fummits. Fanit furnilied with long awns, five dry berries.

## SPECIFIC CHARACTER.

Geranium caule fubcarnofo, proftrato; foliis cordatis, lobatis, crenato-dentatis; calycibus pentaphyllis; floridns tetrandris, corollis irregularibus.

Geranium with the fem rather flefly, and prostrate; leave, heart-fhaped, lobed, betwcen fcolloped and toothed; rups with five leaves; flowers with four fcrtile chives; bloffoms irregular.

REFERENCE TO THE PLATE.

1. The Empalement.
2. The Chives fpread open, and magnified.
3. The Pointal, and Seed buds, magnified.

This pretty Geranium is rather a delicate plant, and muft be kept very dry in the winter; as, from the fituation of its branches, which are prefled to the earth, and rather flefhy, they will be very apt to rot, if too often waterd, or placed in a damp part of the green houfe. It was introduced in the the year 1 / 81 , by G. Hibbert, Eff. in whofe collection, only, we have as yct feen it. Mr. Alkn informs us, that it is to be propagated as well by cuttings, as from the feeds, which it does not prodnce plentifully. It has the appearance, if we may judge by analogy, to be but a bieunial, and not au abiding plant. It flowers in April and May, and thould be planted in light rich earth.

Here we have a botanical treat for the lamed, who have adopted the new arrangement of this very vagarious tribe; for in this one plant are united fome of the moft effential characters of the three L'Heritierian Genera, which, jufly, formed but divifions of Linnxus's original genus; agreeing with Geranium and Erodium in the nectariferous cup; with Pelargonium in the blorom and feed; bit differing from all three, in having but four fertile chives, with fix abortive ones. A fact afcertin'd by the examination of abore fifty flowers, taken from four different plants.


# MOR A A ORTHIANA. <br> Northian Moraa. 

## CLASS III. ORDER I.

## triandria monogYNiA. Three Chives. One Pointal.

## ESSENTIAL GENERIC CHARACTER.

Corolla hexapetala; petala tria interiora patentia, anguftiora. Stigma trifidum.

Blossomfix petals; the three inner petals fpreading, narrower. Summit three-cleft.
See Morea tricolor. Pl. LXXXifi. Vol. II.

## SPECIFIC CHARACTER.

Moræa fcapo foliifque falcatis, glaberrimis, diftichis; floribus terminalibus; petalis tribus exterioribus ovatis, concavis, pendulis, tribus interioribus fub-erectis, medio retrofractis, apicibus revolutis.

Moræa with the flower-ftem and leaves fcymi-tar-haped, very fmooth, pointing different ways; flowers terminal ; the three outer petals egg fhaped, concave, hanging down, the three inner ones nearly erect, broke back about the middle, and rolled back at the ends.

## REFERENCE TO THE PLATE.

1. The whole plant in miniature.
2. The outer valve of the fheath.
3. The inner valve of the fheath.
4. The Seed-bud, Cbives, and Pointal, as they ftand in the flower.
5. The Pointal only, the Chives being removed.

A sout the year 1789 this very fine fpecies of Moræa was introduced to our gardeus by the late, elegantly taffed Mrs. North, lady to the Right Hon. the Lord BiMhop of Winchefter; to whofe fervor and liberality in botanical purfuits we owe much of the prefent prevailing tafte for the fcience. The plant was brought to England by the Hon. Mr. F. North, on his return from Portugal; the only remnant of a number, which he had procured from the gardens of the late Queen of Portugal; inmediately on its arrival it was configned, in a very fickly ftate, to the care of Meffrs. Lee and Keunedy, Hammerfinith, who had the good fortune to recover it.

It is a native of the Brazils, flowers about July or Auguft, propagates itfclf by fuckers, which it makes from the root, thould be planted in light rich earth, and fhould be treated as a tender hot-houfe plant. The leaves grow frequently to the length of two feet, or more; forming the appearance of a large fan; the flower-ftem proceeding from nearly the centre. The flowers furpafs, in delicacy and beauty of pencilling, any of this very handfome tribe, and are as tranfitory as beautiful, their duration being but of fix hours, at moft. It feldom happens that more than one flower is open at a time; but the plant from which our drawing was made, in 1797, at the Right Hon. the Marquis of Blandford's, then refident at Bill Hill, Berks, was in the higheft perfection we have ever hitherto feen it.

# IXIA MACULATA. $\begin{gathered}\text { Var. minor, fore } \\ \text { purpureo. }\end{gathered}$ 

## Spotted-flowered Ixia. Small I'ar. with a purple

## CLASS III. ORDER I.

TriAndria monogynia. Three Chives. One Pointal.

## ESSENTIAL GENERIC CHARACTER.

Corolla 6-partita, patens, æqualis. Stigmata tria, erectiufculo-patula.

Blossom fix divifions, fpreading, equal. Summits three, between upright and fpreading.

## SPECIFIC CHARACTER.

Ixia foliis enfiformibus, glabris, fcapo duplo brevioribus; floribus alternis, fub-fpicatis, minoribus, purpureis; petalis bafi obfcuris, ovatis, concavis; ftigmatibus bifidis.

Ixia with fword-thaped leaves, fmooth, twice as fhort as the flower-ftem; flowers alternate, rather fpiked, fmaller, and purple; petals dark at the bafe, egg-fhaped, concave; fummits two-cleft.

## REFERENCE TO THE PLATE.

1. The Enipalement.
2. A Flower cut and fpread open.
3. The Seed-bud, Chives, and Summits, one fummit magnified.

This variety of Ixia bloffoms about June; and, like the reft of this fpecies, continues in flower near a month. It is one of the hardieft, and certaineft blowers, amongst the whole genus, and propagates freely; no particular treatment is neceffary for it, but what has been often repeated for the management of thefe plants.


## PLATE CCLVII.

## F A L K I A R E P E N S. Creeping Falkia.

## CLASS V. ORDER II. <br> PENTANDRIA DIGYNIA. Five Chives. Two Pointals. <br> GENERIC CHARACTER.

Calyx. Perianthium monophyllum, fub-inflatum, corolla duplo brevius, quinquangulatum, quinquepartitum; angulis medio dilatatis, compreffis extantibus; laciniis ovatis, acutis.
Corolla monopetala, campanulata, crenato-decem-partita; limbo patente.
Stamina Filamenta quinque, filiformia, tubo corollæ inferta, erecta, inæqualia, corolla breviora. Antheræ ovatæ, comprelfæ.

Pistilla. Germen quatuor, fupera, glabra. Styli duo, capillares, divaricati, longitudine corolle. Stigmata orbiculata, lanata.
Pericarpium nullum.
Semina quatuor, globofa, arillata, in fundo calycis.

Empalement. Cup one leaf, a little inflated, fhorter by half than the bloffom, five-cornered, five-parted; the angles widened in the middle, flattencd, ftanding out; fegments egg-fhaped, pointed.
Blossom one-petal, bell-fhaped, ten-parted by fcollops; border fpreading.
Chives. Threads five, hair like, inferted into the tube of the bloffom, erect, unequal, fhorter than the bloffom. Tips egg-flaped, flattened.
Pointals. Seed-buds four, above, fmooth. Shafts two, hair-like, ftraddling, the length of the bloftom. Summits orbicular, woolly.
Seed-vessel none.
Skeds four, globular, covered by a coat, at the bottom of the cup.

## SPECIFIC CHARACTER.

Falkia foliis cordatis, petiolis longiffimis; caule repente.

Falkia with heart-hhaped leaves, and very long foot-ftalks; creeping fem.

## REFERENCE TO THE PLATE.

1. The Cup.
2. A Bloffom fpread open, with the chives in their place.
3. A Chive magnified.
4. The Pointals, natural fize.
5. The fame, magnificd.

This pretty little plant was firft found by Maffon and Thunberg, when on their journey together in the interior of the country of the Cape of Good Hope, and was named by Thunberg after Protelfor Falk of Peterfburgh. It was introduced to the Kew gardens in the year 1774. Much as it refembles Convolvulus, it fill has a greater affinity to Nolana in all its outward parts, but efpecially in the cup of the flower, and the fituation and character of the feeds. Although the plant is not fhrubby, the ftems, which are wiry, do not die down in winter, but take root, if laid clofe to the earth. It is encreafed by parting the roots in May; thould be planted in fandy loam, and kept in the green-houfe, where it will bloffom in July or Auguft. Our figure is from a plant which flowered in the collection of J. Vere, Efq. Kenfington Gore.

It is rather fingular that the indefatigable, and generally accurate, Willdenow, fhould have continued this plant in the fixth clafs, when he had fuch authority, as may be found, page 325, Vol. I, in the Catalogue of the Kew Garden (where it unqueftionably has flowered) for the removal of it to its proper one, the fifth. It is true, he had reafon to fuppofe, that no man would be rafli enough to form a new Genus, without a due examination of the plant, on which he grounds his authority; and that, as Thunberg had discovered and named it, his authority was fufficient, and of greater weight than any other. But, unfurtunately, in this inftance, for the tranfcriber, the defcriber has been miftaken, and has led his followers into error. Indecd, the whole plant in its habit and character has fo little affinity to any hexandrous genus, that, although Thunberg might have found a fingle flower, or even a whole plant, whofe flowers had fix chives (a circumfance we have not been able to difcover, upon an examination of the flowers from four different plants), in fuch a cafe, as a botanift, he ought to have looked farther, before be made fo violent a decifion; and Willdenow ought to have taken it for granted the alteration would not have been made, but upon due confideration.


## PLATE CCLVIII.

## B A N K S A PR EMORSA.

## Bitton-ended-leaved Bankfia.

## CLASS IV. ORDER I.

tetrandria monogyita. Four Chives. One Pointal.

## ESSENTIAL GENERIC CHARACTER.

Receptaculum commune elongatum, fquamofum. Corolla tetra-petala. Stamina limbo inferta. Capfula bivalvis, difperma, interjecto feminibus diffepimento mobili. Semina alata.

Common Receptacle elongated, fcaly. Bloffom of four petals, Chives inferted into the limb of the blorrom. Capfule two valves, two feeds, and a moveable partition between them. Seeds winged.
See Banksia serrata, Pl. LXXXII. Vol.II.

## SPECIFIC CHARACTER.

Bankfia foliis cuneatis præmorfis, ferratis, fubtus albo-punctatis, fupra glabris; floribus externè purpureis.

Bankfia with wedge-fhaped leaves, appearing bitten at the ends, fawed, dotted with white on the under part, fmooth on the upper; flowers purple on the outfide.

## REFERENCE TO THE PLATE.

1. A Flower not yet expanded, with the germ at the bafe.
2. The fame open, the extremities of one of the petals magnified, to thew the fituation of the Chive in its place.
3. The Pointal complete, the fummit magnified.

The firf plants which were feen of this plant in England, were raifed from feeds, at the Royal Gardens, Kew, in 1785 . It is a handfome growing fhrub, and the plant from which our figure was made had grown to the height of feven feet; it having been planted in the confervatory of the Clapham collection, where it flowered, for the firft time, this year, in July, continuing in high beauty near two months. It is a plant of moft difficult increafe, rarely that it is to be propagated by cuttings; and the wood rots, if laid into the earth. A light foil, of fandy peat, and a fmall portion of fandy loam, appears moft congenial to its growth. There are loopes, from the perfect flate of the cones, that ripe feeds may be procured in this country.


PLATE CCLIX.

# GERANIUM PILOSUM. <br> Hairy Geranium. 

## CLASS XVI. ORDERIV.

AONADELPHIA DECANDRIA. Threads united. Ten Chives.

## ESSENTIAL GENERIC CHARACTER.

Monogyna. Stigmata 5. Fructus roftratus, One Pointal. Five fummits. Fruit furnifled 5-coccus. with long awns, five dry berries.
See Geranium grandiflorum. Pl. XII. Vol. I.

## SPECIFIC CHARACTER.

Geranium foliis pilofis, pinnatis; foliolis profundè laciniatis, acutis; umbella 4-6 flora; pedunculis calycibufque pilofis; floribus pentandris; radice tuberofa.

Geranium with hairy winged leaves; leaflets deeply torn, and tharp pointed; umbel from 4 to 6 flowers; foot-ftalks of the flowers and cups hairy; flowers with five fertile chives; root tuberous.

## REFERENCE TO THE PLATE.

1. The Empalement cut open, to flew its tubular character.
2. The Chives and Pointal.
3. The Clives cht open, and magnified.
4. The Pointal, with the five Glands, or Honey-cups, at the bafe.
5. The fame, magnified.

This very pretty Geranium was introduced to the Clapham collection, in the year 1801, by Mr. Niven, from the Cape of Good Hope. It is as hardy as any of the fanily, which have tuberous roots; may be increafed by cutting a portion off the old root, in fpring, and giving it the heat of the hot houfe, at that feafon of the year. It rarely produces ripe feed; fo fays Mr. Allen the manager of the collection; and be recommends the planting of it in fandy peat earth.


## PLATE CCLX.

## ORNITHOGALUM ODORATUM. <br> Sweet-fcented Star of Bethlehem.

CLASS VI. ORDER I.

hexandria monogynia. Six Chives. One Pointal.

## GENERIC CHARACTER.

Calyx nullus.
Corolla. Petala fex, lanceolata, infra medium erecta, fupra medium patentia, perfiftentia, colorem demittentia.
Stamina. Filamenta fex, erecta, alterna bafi dilatata, corolla breviora. Anthere fimplices.
Pistillum. Germen angulatum. Stylus fubulatus, perfiftens. Stigma obtufum.
Pericarpium. Capfula fubrotunda, angulata, trilocularis, trivalvis.
Semina plura, fubrotunda.
Obs. Filamenta in aliis plana, erecta, alterna apice trifido, media lacinia antherarum fuftinente; in aliis alterna, fimplicia.

## Empalement none.

Elossom. Petals fix, lance-fhaped, below the middle upright, above the middle fpreading, remaining, lofing their colour.
Chives. Six threads upright, each alternate one widening at the bafe, fhorter than the bloffom. Tips fimple.
Pointal. Seed-bud angular. Shaft awl-fhaped, remaining. Summit blunt.
Seed-vessel. Capfule roundif, angular, threecelled, three-valved.
Seeds many, roundifh.
Obs. The threads in fome are flat and upright, the alternate ones trifid at top, the middle fegment fupporting the tip; in others the alternate ones are fimple.

SPECIFIC CHARACTER.
Ornithogalum racemo elongato; filamentis fubulatis; petalis lanceolatis, obtufis, apice callofo-inflexis; foliis depreffis, linearibus, planis.

Star of Bethlehem with the bunch of flowers lengthened; threads awl-fhaped; petals lance-fhaped, blunt, thick, and turned inwards at the point ; leaves bent downward, linear, and fmooth.

## REFERENCE TO THE PLATE.

1. A Flower prop.
2. The Chives and Pointal, the petals being removed.
3. The Pointal.
4. The fame, magnified.

This fpecies of Star of Bethlehem, from the Cape of Good Hope, is a rival in fragrance to the greatflowered, or Arabian fpecies, to which it is much affined in every part but the colour of the bloffom; which, in this, is yellowifh, and in that, it is white with a dark eye. It is rather a delicate bulb; and to make it flower, fhould be kept in the hot-houfe, where, it will bloffom about May or June. Our drawing was made from a plant which had been received, from the Cape, by Mr. Hibbert, the preceding year, 18CO; and we much fear, what has been faid of the great-flowered fpecies, may be confidered as referential alfo to this; viz. that the bulbs never flower, but the firft year after importation. We have not been able to trace the appearance of a flower, from any of the bulbs, this year, which has led us to this conjecture; indeed, many of the fpecies of this genus bave this character; more particularly, thofe from Africa.

It has flowered at Vienna, and has been figured by Profeffor Jacguin in his Ic. Plant. rar. vol. ii. tab. 432.


# PLATE CCLXI. CAMERARIA LATIFOLIA. Baftard Mangeneel. 

## CLASS V. ORDER I.

## pentandria honogl'nia. Five Chives. One Pointal.

## GENERIC CHARACTER

Calyx. Perianthium quinquefidum, acutum, connivens, minimum.
Corolla monopetala, infundibuliformis; tubus cylindricus, longus, bafi apiceque ventricofus; limbus quinquepartitus, planus; laciniis lanceolatis, obliquis.
Stamina. Filamenta quinque, minima, e medio tubi. Antheræ conniventes, filo longo terminatæ.
Pistillum. Germina duo, cum appendicibus ad latera. Stylus cylindricus. Stigma capitatum, apice acutum, bifidum.
Pericarpium. Folliculi duo, horizontaliter reflexi, oblongi, juxta latera bafeos utrinque lobum emittentes, uniloculares, univalves.

Semina numerofa, ovata, membranæ majori ovatæ ad bafin infertæ, imbricata.

Empalement. Cup five-cleft, pointed, converging, very fmall.
Blossom one-petal, funnel-flaped; tube cylindrical, long, bellied out at the bafe and top, border five-parted, flat; fegments lancefhaped, oblique.
Chives. Threads five, very fmall from the middle of the tube. Tips converging, terminated by a long tliread.
Porntal. Seed-buds iwo, with lateral appendages. Shaft cylindrical. Summit headed, pointed at top, and two-cleft.
Seed-vessel. Secd-pods two, horizontally reflexed, oblong, fending forth a lobe each way near the fide of the bafe, one-celled, one-valved.
Seeds numerous, egg-fhaped, inferted on the larger egg-haped membrane at the bafe, tiled.

SPECIFIC CHARACTER.
Cameraria foliis ovatis, nitidis, acuminatis, parallelo coftatis; floribus corymbofis, terminalibus.

Baftard Mangeneel with egg-flaped leaves, fhining, tapered, and ribbed tranfverfely; flowers grow in broad-topped fpikes, terminal.

REFERENCE TO THE PLATE.

1. A Flower cut open, magnified, with the Chives in their place.
2. The Cup, magnified.
3. The Pointal and Cup, the fummit magnified.
4. One of the Seed-pods, natural fize.

T11e genus Camcraria, feems to have been rather haftily taken up by Plumier, as a diftinct genus from Nerium; for certainly, the fmall difference in the fhape of the feed-pod, in which confits the whole diftinctive character of this genus, can hardly be thought of fufficient moment to that end. As we have found it, we leave it ; but could not refrain from the foregoing remark, as it appears fo fingular, that amongft fo many who have publifhed the plant, not one thould have difcovered the furrounding neclary, or honey-cup, to the mouth of the bloffom, and the long threads at the end of the tips; two fuch very powerful features, which diftinguifh Neimm, from all the rett of this natural order.

It is a native of Jamaica, Cuba, and Domingo; grows to the heiglt of thirty feet, and is confidered as a timber tree in thofe iflands. The whole plant is full of a milky juice, fimilar to what is found in moft plants of this natural order. In England, it muft be treated as a hot-loufe plant ; may be increaled by cuttings; flowers in Auguit, and fhould be planted in rich carth.

Our figure was taken from a plant in the Stepney collection, belonging to Thos. Evans, Efq.


Cirminamarra viléáoleu
d

## PIATE CCLAIL

## XERANTHEMUM SPIRALE.

 Spiral-leajed Everlafiing-Flower.CILASS XIX GRDER IT.

## SVNG ENESLA. POLYGGAMI.-A SUPERFIUAA. TipS uritecl. Superfuous Pointals:

> ENSETVTAL GENERTC CTARAGTER.
> Receplaculum poleacem Pappozs felaceus, C2- Ifecepracle chaffy. Feathep biftly. Empaledyx imbrieazus, radiaius; mills colurato. ment tiled, rayed: the ray coloured

> S'eeX ERANEHENUM SPECIUCISSIMUM, VOI.T. P.L.T.

## SPECIFIC CHARACTER.

Xeranthemum fuliis spimliter-imbricatis carinaris, fut obliquis; floribusfolitariis, maxim

Everlaiting, Muwer with fpirally-tiled leaves, keeled, mather obliquef flowers folitary,
very large.

## REEERENGE TO THE PIATE.

1. An outer fcale of the Empalement.
2. An Hermaphradite Fluret, with the Feather of the reed.
3. A Female Floret, a little inaginified.
4. The Pointal, nragnified.

This fpecies of Everlafting Flower is very cominon near Cape Town; yez, 'till the year 1800, it has procure feeds of it, and it has flowelontague Burgoyne, Efq. of Mark Hall, Effex, was the firn to ont the flower lafts neop three months; it is the this year 3802 . Our drawing was made in July, one of the inof bequiful. All the fpecies, from angef of the genus we have as yet seen, and ceptainly winter; they fhould be kept on an airy, dey fhelf, as near she glofs as to not from dainps, in the months. They, in general, pipen feeds with kl , hut are with diffiulth as porfible, duping the foggy thould be made early in fpring, planted in pots of fand and kept antity incieafed ly cuctings; which are planted. The grown plants thrive beft in a very loncly pear eapth.

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## PLATE CCLXIII.

# VACCINIUM STAMINIUM. <br> Green-wooded Whortle-berry. 

## CLASS VIII. ORDER I.

## octandria monogynta. Eight Chives. One Pointal.

## ESSENTIAL GENERIC CHARACTER.

Calyx fupcrus. Corolla monopetala. Fila- Cupfuperior. Bloffom of one petal. Threads menta receptaculo inferta. Bacca quadrilocularis, polyfperma. fixed to the receptacle. A berry with four cells and many fecds.
SeeVaccinium aresostaphyllos,Vol.I. PI.XXX.

## SPECIFIC CHARACTER.

Yaccinium foliis oblongo-ovatis, acutis, integerrimis, fubtus fubglaucis; pedunculis nudis; antheris exfertis; floribus folitariis; ftamina decem.

Whortle berry with oblong-oval leaves, pointed, quite entire, and rather fea-green underneath; fruit-ftalks naked; tips without the bloflom; flowers folitary; tell chives.

## reference to the plate.

1. A Flower complete.
2. The Chives and Pointal.
3. The Chives, Pointal, and Seed-bud, magnified.

The fpecies here figured of Whortle-berry, according to the Kew cataloguc, was introduced, firft, from North America, to us, by Mr. William Young, in the year 1770. It is a hardy, deciduous fhrub; grows to the height of three feet; very buhhy, with the flowers but thinly fcattered over it; they are white, and deeply cut in the border, which is rather inclined to fpread. It is increafed by layers; the berries feldom ripening in England. A light, fandy peat foil, with a fmall portion of loam, is the fitteft for its growth; and it acquires a higher degree of beauty, when theltered from the fcorching rays of the fun, in fummer. Our figure was taken in June, 1801, at the nurfery of Meffrs Lee and Kennedy, from a plant which had been imported in February, the fame year, from Pcmnfylvania, North America.


## PLATE CCLXIV.

## PROTEA GLOMERATA.

Woolly-headed Protea.

## CLASS IV. ORDER I.

## tetrandria monogrnia. Four Chives. One Pointal.

## ESSENTIAL GENERIC CHARACTER.

Corolla 4 -fida feu 4 -petala. Antheræ line- Blossom 4 -cleft or 4 petals. Tips linear, inares, infertæ petalis infra apicem. Calyx proprius nullus. Scmina folitaria. ferted into the petals below the point. Cup proper, none. Seeds folitary.

See Protea formosa, Vol. I. Pl. XVII.

## SPECIFIC CHARACTEK.

Protea foliis bipinnatis, filiformibus; pedunculo comınuni elongato, nudo, pedicellis capitulis longioribus; corollis extus lanatis.

Protea with doubly winged leaves, threadfhaped; common foot-ftalk lengthened, naked, partial foot-ftalks longer than the heads of flowers; bloffoms woolly without.

## REFERENCETO THE PLATE.

1. A Floret, natural fize.
2. The Blolfom, magnified.
3. The Pointal, natural fize, with the fummit detached, magnified.
4. A Cone, after the flowers have all fallen off.

In the year 1759 , this fpecies of Protea was firft raifed from feeds; received at the Hammerfmith nurfery from Vienna; they having been collected for the Emperor's gardens at Schonbrun, and from thence tranfmitted to Meffrs. Lee and Kennedy. Many plants have fince been raifed, in different collections; and our prefent figure was made, from a fine fpecimen, in the Hibbertian collection. It is rather delicate when young, but not eafily deftroyed when grown to a foot in height. It will attain to five or fix feet, and makes a very pretty appearance, when in full flower. It may be propagated by cuttings, but with difficulty, and muft be planted in light yellow loam.

# PLATE CCLXV. <br> CYRTANTHUS OBLIQUUS. <br> Oblique-leaved Cyrtantlus. 

CLASS VI. ORDER 1.
hexandrid monogivia. Six Chives. One Pointal.

## GENERIC CHARACTER.

Calix. Involucrum polyphyllum; foliolis lanceolatis, perfiftentibus.
Corolla monopetala, clavata, curva, apice fexfida; laciniis oratoooblongis, incurvis, concavis, tribus alternis apice glandulofis.

Stamina. Filamenta fex, tubo corollæ inferta, erecta, fubulata, corolla dimidio breviora. Antheræ fagitatæ, erectæ, inclufæ.

Pistillua. Germen inferum, obtufe-trigonum. Stylus filiformis, longitudine floris. Stigma obfolete-trifidum.

Pericarpiun. Capfula fubovata, trilocularis, trivalvis.
Semina plura, plana, oblonga, incumbentia.

Empalement. Fence many-leaved; leaflet3 lance-thaped, remaining.
Blossom one petal, club-fhaped, bent, fix-cleft at top; fegments oblong egg-1haped, turned inwards and concare, the three outer ones glandular at the end.
Chives. Six threads inferted into the tube of the bloffom, upright, awl.thapal, half the length of the blolion. Tips arrow-hbaped, upright, within the blofiom.
Pointal. Seed-bud beneath, obtufely threecornered. Shaft thread-ihaped, the length of the flower. Summit obfcurely threecleft.
Seed-vessel. Capfule nearly egg-fhaped, threecelled, three-valved.
Seeds many, flat, oblong, lying upon one another.

SPECIFIC CHARACTER.

Cyrtanthus folits linearibus, obtufis planis, oblique flexis, floribus pendulis, tricoloratis.

Cyrtanthus with linear, obtufe leaves, flat, and bent obliquely; flowers hanging down and three-coloured.

## REFERENCE TO THE PLATE

1. Part of the Bulb, and the leaves of the plant in miniature.
2. A Flower, cut and fpread open, with the Chives in their place.
3. The Pointal and Seed-bud, natural fize, Summit magnified.

This moft beautiful, and rare plant, together with C. anguftifolius, (the other fpecies) were introduced, in the year 1774, to the Kew Gardens, by Mr. F. Maffon, from the Cape of Good Hope. Monf. L'Heritier, when in England, procured drawings of both fpecies, and figured them in his Sertum Anglicum, tab. 15 and 16, under the names of Amaryllis cylindracea, and A. umbrella: but, as we have had formerly occafion to mention our objections, in following that gentleman in his alterations of accepted Genera, in this country; we have, in the prefent inftauce, chofe rather the authority of Martyn, Curtis, Willdenow, \&c. in preference; who all have followed the Kew Catalogue in the name of this Genus. It is true, Thuuberg, in his Prodromus Plantarum Capenfium, P. 1. p.59, has it ftill under the Genus, Crinum; and, as Crinum pendulum, our prefent fubject, was known for many years. It is a very farce plant, and is to be found but in few collcetions; the increafe being only from the root, and the importation of the bulhs has been but feldom. The feeds do not come to maturity with us, of this fpecies; although thnfe of the C. angufifolius are conftantly perfected. It muft be treated as a dry fove plant, or kept on a thelf in the hot-houfe; fhould be planted in fandy loam, and have plenty of room in the pot. Flowers in July and Auguit.

From the choice collcction of Jofeph Cowper, Efq. of Clapton, we were obligingly favoured with the plant, from which this figure was taken.


C'iydenethus iflengeres

# PLATYLOBIUM OVATUM. <br> Oval-leaved Flat-Pea. 

## CLASS XVII. ORDER IV.

DIadelphia DECANDRIA. Chives in two Sets. Ten Chives.

## ESSENTIAL GENERIC CHARACTER.

Calyx campanulatus, quinquefidus; laciniis duabus fupremis maximis, obtufis. Stamina omnia coalita. Legumen pedicillatum, comprefum, dorfo alatum, polyfpermum.

Cur bell-fhaped, five-cleft; the two upper fegments very large and obtufe. The Chives all united. Pod on a foot-italk, compreffed, winged along the back, many feeded.
See Platylodiun scolopendrum. Pl.CXCI. Vol. III.

SPECIFIC ĆHARACTER.

Platylobium foliis ovatis, glaberrimis, diftichis; floribus folitariis, axillaribus; ramis teretibus.

Flat-Pea with egg-haped leaves, very fmooth and pointing oppofite ways; flowers grow folitary from the infertion of the leaves; branches cylinder-fhaped.

## REFERENCE TO THE PLATE.

1. The Empalement of the Flower.
2. The Standard, or upper petal of the bloffom.
3. One of the Wings, or fide petals of the fame.
4. The two lower Petals, or Keel of the bloffom.
5. The Chives, magnified.
6. The Seed-bud, magnified.

This fpecies of Flat-Pea was brought from New South Wales, at the fame time as I. fcolopendrum, and P. lanceolatum, to which laft it has much affinity; but, we think, poffeffes a fufficient number of differing characters to conftitute a diftinct fpecies. It has not as yet been increafed, we believe, in Britain; any attempt, to that end, has hitherto proved abortive; from which circumftance the plants are at prefent fcarce, and are to be found in few collections. The fame treatment to preferve, and render the plant flourifhing, is required for this, as for the other fpecies. Our Drawing was made in 1801, at the Nurfery of Meffrs. Lee and Kennedy, Hammerfmith, who firft introduced it.


# PLATE CCLXVII. JATROPHA PANDURAFOLIA. Fiddlc-leaved Plyyic-Nut. 

## CLASS XXI. ORDER VIII.

## MONOECIA MONADELPIIIA. Chives and Pointals feparate. Threads united.

## GENERIC CHARACTER.

Calyx. Perianthium vix manifefum.
Corolea monopetala infundibuliformis; tubus breviflimus; limbus quincpuepartitus, laciniis fubrotundis, patentibus, convexis, fubtus concavis.
Stamina. Filamenta decem, fubulata, in medio approximata, quinque alterna breviora, erecta, bafi connexa. Anthere fubrotundx, verfatiles.
Pistillum. Rudimentum debile in fundo floris latet.
Feninei flores in eadem umbella cum Mafculis.
Calyx nullus.
Corolla pentapetala, rofacea.
Pistillum. Germen fubrotundum, trifuleatnm. Styli tres, bifidi. Stigmata fimplicia.
Peficarpium. Capfula fubrotunda, tricocca, trilocularis; loculis bivalvibus.
Semina folitaria, fubrotunda.

## Male fowers.

Emparement. Cup farcely perceptible. Elossom one petal, funnel-flaped; tube very dhort; border fixe-patted: fegments roundifh, fpreading, convex, coneave bencath.

Chives. Ten threads awl-fhaped, clofe together in the middle, the five alternate ones fhorter, upright, connected at the bafe. Tips roundifh, verfatile.
Pointal. A weak rudiment lies hid in the bottom of the flower.
Female flowers in the fame umbel with the males.
Empalement none.
Blossom five-petalled, rofaccous.
Ponstal. Sced-bud roundifh, three furrowed. Three flafts, two-eleft. Summits fimple.
Seed-vessel. Capfule roundifh, three-feeded, three celled; cells with two valves.
Seeds folitary, roundifh.

## SPECIFIC CHARACTER.

Jatropha calyculata; foliis panduræformibus, apice acutis, bafi inequaliter acutè-lobatis; floribus atro coccineis.

Phyfic-Nut with a flower cup; fiddle-fhaped lcaves, fharp-pointed at the end, and unequally fharp-lobed at the bafe; flowers deep crimifon.

## REFERENCE TO THE PLATE.

1. The Cup and Pointal of a female flower.
2. The Cup and Chives of a male flower.
3. The Pointal and Seed-bud of a female flower, withont the ctp.

This plant, a native of the Ifland of Cuba, was imported from thence, by Mr. J. Frafer, King's Road, Chelfea, in the year $1 \mathrm{SO1}$. It is, unqueftionably, as handfome a plant as any at prefent cultivated in our hot-houfes, and its continting to produce frefh unbels of flowers, during at leaft nine months of the year, renders it, perhaps, the moit defirable. It grows to the height of near three feet, producing but few branches. The leaves are extremely irregular in their form, and, when the plant is in a fickly flate, the older ones are fubject to be flightly blotehed, on the under fide. Few tropical plants that thrive with folittle heat, or eare; neverthelefs, we lave not any hopes, of its ever becoming a proper fubject for the green-houfe; but as yet our experience on that point will not permit us to decide upon it. It fhould be planted in a mixture of lear mould, rotten dung, and loam; and may be propagated by enttings. From a plant at the Hammerfmith nurfery, ripe fecds have been procured this year; they have the exact appearance of the feeds of the leffer Palma Chrifi, but rather fimaller in fize and have the fame oily character. Indeed, there is fo little difference between fome fpecies of the Genus Ricinus, and Jatropha, that botanifts have been puzzled where to place them. Our drawing was made from a plant in the collection of the Right Hon. the Marquis of Blandford, White Kinghts, Berkfhire.


## PLATE CCLXVIII.

## GLADIOLUS PLICATUS. <br> Plaited-leaved Gladiolus.

## CLASS III. ORDER I.

## TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

## ESSENTIAL GENERIC CHARACTER.

Corolla fexpartita, ringens. Stamina adfcendentia.

Bloffom fixdivided, gaping. Chives afcending. See Gladiolus roseus, Pl.XI. Vol. I.

## SPECIFIC CHARACTER.

Gladiolus foliis enfiformibus, plicatis, villofis; corollis regularibus; fpatha trivalvi; fcapo laterali.

Gladiolus with fword-fhaped leaves, plaited and hairy; bloffoms regular; fheath threevalved; flower-ftem lateral.

## REFERENCE TO THE PLATE.

1. The three-valved Sheath.
2. A Bloffom fpread open, to fhew the fituation and direction of Tips.
3. The Pointal; and Seed-bud, one of the Summits magnified.

The varieties, generally comprehended as fuch, of this fpecies of Gladiolus, are extended, in number, beyond any others with which we are, as yet, acquainted, of this extenfive genus. Alrcady, we have drawings of 22 ; and many more, certainly, there are, even in this kingdom; but we flall content ourfelves with figuring, in the Bot. Rep. 3 or 4, of the moft curious. One of the varieties of this plant, has been in cultivation with us fince the year 1757, when it was raifed by Mr. Miller from Cape feeds. The one reprefented in our prefent figure, was received, from Holland, in the year 1794, by Meffrs. Lee and Kennedy, Hammerfmith; it is one of the hardieft, and fureft flowering varieties of the fpecies; for there are but few of them which bloffom freely. The bulbs fhould be planted in fandy peat, about October, and taken into the hot-houfe, or placed on a bot-bed, in January, to encourage a rapid and early growth; by which means, they are more frequently induced to throw out their flower ftems the begiming of April, which otherwife, often prove abortive. The roots fhould not be removed from the pots, till the leaves are fomewhat decayed.

This is the Glad. plicatus of Linn. Sp. Pl. p. 53; Thunb. Diff. de Glad. n. 24; Jac. Ic. Rar. 2. t. 237; of the Kew Cat. Vol. I. p. 63; Martyn's Miller, art. Glad. 5. and of Willdenow's Spe. Plant. T. 1. p. 220; yet, we cannot refrain from joining in opinion with the late Mr. Curtis that it approaches as near Ixia, as Gladiolus; for the Ixia rubro cyanea of the Bot. Mag. is but a variety of this fpecies. But we cannot fo readily laloonify our fenfes, with trifling changes, as to think, with a modern reforming author, that a new genus was neceffary, in this inftance, to rectify this part of the 6pecies Plantarum, of the incompetent! Linnaus.


## PLATE CCLXIX.

## GERANIUM LACINIATUM

Var. licolor.

## Ragged-leaved Geranium. <br> Two coloured-flower Var.

## CLASS XVI. ORDER IV.

MONADELPHIA DECCANDRIA. Threads united. Ten Chives.

## ESSENTIAL GENERIC CHARACTER.

Monogyna. Stigmata quinque.
Fructus roftratus; pentacoccus.

One Pointal, Five Summits.
Fruit furnithed with long awns; five dry berries.

## SPECIFIC CHARACTER.

Geranium foliis radicalibus integris laciniatifque; laciniis acutis; petiolis filiformibus; calycibus monophyllis; ftaminibus quinque fertilibus; radice tuberofa; floribus bicoloribus.

Geranium with the leaves growing from the root entire and jagged; fegments pointed; foot-ftalks thread-fhaped; cups one-leaved; five fertile chives; root tuberous; flowers two coloured.

## REFERENCE TO THE PLATE.

1. The Empalement, a little magnified.
2. Chives, natural fize.
3. The fame, magnified and fpread open.
4. The Pointal and feed-bud, magnified.

This very handfome variety of the ragged-leaved geranium, is but little different from the purpleflowered Var. figured No. CCIV. of this work, Vol. III, except in the colour of the flowers, and that the leaves are rather more cut. It was introduced the fame year to the Hibbertian collection, flowers in the fame month and requires the fame treatment, as the above variety.



# PROTEA PULCHELLA. <br> Waved-leaved Protea. 

## CLASS IV. ORDER 1 .

tetrandria monogrnia. Four Chives. One Pointal.

## ESSENTIAL GENERIC CHARACTER.

Corolla 4-fida feu 4-petala. Anthere lineares, infertæ petalis infra apicem. Calyx proprius nullus. Semina folitaria.

Blo ssom 4-cleft or four petalled. Tips linear, inferted into the petals below the point. Cup proper, none. Seeds folitary.

## SPECIFIC CHARACTER.

Protea foliis lanceolatis, undulatis, rubro marginatis, pilofis; fquamis calycis tricoloratis; capitulo erecto, terminali.

Protea with lance-flhapeć leaves, waved, margined with red and hairy; fcales of the cup three-coloured; flower head upright, and terminal.

## REFERENCE TO THE PLATE.

1. A Floret complete with the feed-bud.
2. The four Petals of the fame, with the Tips fhewn at their ends.
3. Pointal and Seed-bud.

This Protea, from the Cape of Good Hope, merits the attention of thofe who wih to beautify their collections, with diftinguifhed objects; as, it flowers the third year from the feed, and is equally handfome with Protea mellifera. The cone for two months before it opens is extremely beatitiful, and it is in flower nearly one more; and this, at a time when the plant has, fearcely, attained a foot in height. It is not inclined to branch till it has flowered, but from the lower part of the cone the branches begin to extend. The leaves from their hairinefs have a whitifh appearance, are finely edged with a light pink, and are flightly waved. It is propagated by cuttings, flould be planted in light fandy loam, and flowers in September. Our drawing was made from a plant in the Hibbertian collection; to which it was introduced by Mr. Niven, in the year 1799, amongft the firft feeds which were fent, by him, from the Cape.


# PLATE CCLXXI. <br> ASCLEPIAS GIGANTL」. <br> Gigantic Swallow-wort, or Auricula tree. 

## CLASS V. ORDER II.

## pentandria Digynid. Five Chives. Two Pointals.

GENERIC CHARACTER.

Calyx. Perianthium quinquefidum, acutnm, parvum, perfiftens.
Cokolla. Monopetala, plana vel reflexa, quinquepartita; laciniis ovato-acuminatis, levitèr cum fole flexis.
Nectaria quinque, tubo filamentorum infra antherds adnata, carnosi feu cucullata, e fundo corniculum acutum introrfum flexum esferentia.
Sramina. Filamenta quinque, in tubum, bafi ventricofum, connata. Anthere oblongæ, ercctx, biloculares, membrana inflexa, ftigmati incumbente terminatx, utrinque ala reverfa deorfum latefcente. Pollen connatus in corpuicula decem, obverfe-lanccolata, plani, in loculis anthere dependentia e filis brevibus, fæpe flexuofis; quæ per paria annexa funt tuberculis quinque, cartilagineis, didymis, angulis figmatis, inter antheras, adhacrentibus.

Pistilla. Germina duo, oblonga, acuminata. Styli duo, fubulati. Stigma utrifque commune, magnum, craffum, peitagonum, fupra apicibus antherarum tectum, medio umbilicatum.
Pentcarpium. Folliculiduo, magni, oblongi, acuminati, ventricofi, uniloculares, univalves.
Semina numerofa, imbricata, pappo coronata. Receptaculum membranaceum, liberum.

Empalement. Cup five clcft, fharp, fmall, remaining.
Blossom one petal flat or reflexed, five-parted; divifions pointedly egg-thaped, ilightly bending with the fun.
Honey-cups five, growing to the tube of the threads below the tips, flcthy or hooded, protruding a fharp horn from the botton which bends inwards.
Chives. Five threads collectcd into a tube fwellitig at the bafe. Tips oblong, upright, two-cellad, terminated by an inflex membrane laying on the fummit, having a reverfed wing on cach fide, growing broader downwards. The pollen is collected into ten fmall bodies inverfely lance-fhaped, flat, langing down into the cells of the tips by lhort threats, often flexible, which arc fixed by pairs to five flimy twin tubercules, adhering to the angles of the fummit, between he tips.
Fointals. Seed-buds two, oblong, tapered. Shafts two, awl-fhaped. Summit common to both, large, thick, five-cornered, covered at top by the ends of the tips, umbilicate in the middle.
Seed-vessel. Two pods, large, oblong, tapered, bellied, one celled, one valved.
Seeds numerous, tiled, crowned with a feather. Receptacle ikinny, free.
SPECIFIC
Asclepias foliis candidis, obovato-oblongis; petiolis brevifimis; laciniis corollæ rcflexis.

CHARACTER.
Swallow-wort with whitened leaves, between inverfely egg-flaped and oblong; foot-flalks very thort; fegments of the bloffon reflexed.

## REFERENCE TO THE PLATE。

1. The Empalement.
2. The Chives and Pointal, natural fize.
3. The Chives and Pointal, without the five outer feales or honey-cups, magnificd.
4. One of the outer fcales, magnified.
5. One of the inner, upright fcales, which furround the feed-buds, magnified.
6. The Seed-buds, Shafts and Summit, with the chives attached to the fummit, magnified.
rue Gigantic Swallow-wort, a native of the Eaft Indies, is a very tender hot-houfe plant; is very fubject to lofe its leaves in winter, and requires the affilance of the bark-bed to keep it in perfection. In the Kew Catalogue, it is faid to have been cultivated fo long ago as the year 10go, at the Royal Gardens, Hampton Court. To render it wigorous and flourifling, it thould be planted in rich earth; compofed of, one half rotten dung, aud the other leaf mould and loam; and watered but fparingly in winter. It is feldom propagated but from feeds, which are frequently procured from the Eaft, and as often from the Weft Indies. In the illand of Jamaica, it is known by the name of the Auricula tree, where it attains to the height of fix or feven feet. Our drawing was taken from a mof magnificent fpccimen, obligingly fent us by Mrs. Methuen, (of which our figure reprefents but a finall fide bunch), meafuring above a foot in diameter. The plant, we believe the fimelt in England, is in the collection of Paul Methuen, Efq. Corfham, Wilts.

Much as we are inclined to tread in the beaten path of our predeceffors, and, more particularly, that of the greateft luminary of this intricate fcience, Linneus, yet can we, but with regret, forbear an alteration we think fo necelfary, in the claflification of this genus. That the clafs Gynandria may, or ought to be excluded from the twenty-four, we fhall not be forward to give our fuffrage, in conjunction with fome nrodern reformers; and, as they terus themfelves, improvers upon the Linnaan fyftem; but, whilit it is retained, this genus has ftronger claims, in our opinion, upon it, than any which has hitiscrto been thrown to it. Indeed we had fo claffed it, upon fuch grounds had formed its generic character; and had hopes, no one wonld have difputed our pofition as juft, upon an infpection of the diffections annexed to the figure. Yet fcaring, by fome, it might be confidered as a perplexing imovation; for innovation in all cafes is certainly more or lefs fo, the genus having paffed the fcrutiniting ordeal of fo many botanifts; we have, reluctantly, for the prefent, given up what, neverthelefs, we thall confider as necelfary for fome bolder hand than ourfelves to undertake.

# EMBOTHRIUM LINEARE。 

Narrow-leaved Embothrium. CLASS IV. ORDER I.
tetrandria monoglinia. Four Chives. One Pointal.

## ESSENTIAL GENERIC CHARACTER.

Calyx nullus. Corolla tetrapetala. Stamina limbo petalorum inferta. Folliculus polyfpermus. Semina alata.

Empalement none. Bloffom four-petalled. Chives inferted into the limb of the petals. A one-cellcd pod many feedcd. Seeds winged.
See Embothrium sericeum, Il. C. Vol. II.

## SPECIFIC CHARACTER.

Embothrium foliis linearibus, fubtomentofis, uninerviis; florum racemis axillaribus; corollis albis. Semina nuda.

Embothrium with linear leaves rather downg, one-nerved; the fmall heads of flowers grow from the infertion of the leaves; the bloffoms white. Seeds naked.

## REFERENCE TO THE PLATE.

1. A Flower, complete.
2. One of the petals, with the chive at the end.
3. The Seed-bud, Shaft, and Summit, magnified.
4. A ripe Seed-pod burft and empty.
5. A ripe Seed.

This fpecies of Embothrium was introduced to Britain at the fame time as the Silky Embothrium, of our fecond volume, plate 100; and has been confidered but as a third variety of it, by Dr. Smith, in his Firft Number of New Holland Botany, page 23. But the total difference iu the habit of the plant, except in the fhape of the flowers, has induced us to give it a fpccific title. It grow's to the height of five or fix feet, not very bushy; abounding through the whole year in a fucceflion of flowers, which proceed from the young branches; ripe feed being produced upon the plant at the fame time. It fhould be planted in light fandy peat, and kept in a dry part of the green-houfe, as the younger branches are apt to fuffer from damps in the months of December and January. Our drawing was made at the Hammerfmith nurfury, in the year 1500, about the month of July.

cirmbirllurium lintarie

## PLATE CCLXXIII.

## LOBELIA PINIFOLIA. Pine-leaved Lobelia.

## CLASS XIX. ORDER VI.

SYNGENESIA MONOGAMIA. Tips united. Flowers fimple.

GENERIC CHARACTER.

Calyx. Perianthium monophyllum, quinquedentatum, mininum, gerauini circumnatum, marcefcens; denticulis fubæqualibus.
Corolla monopetala, irregularis; tubus cylindraceus, calyce longior, fuperne longitudinaliter divifus; limbus quinquepartitus; laciniis lanceolatis, quarum fuperiores dure minores, magis reflexæ, profundius diviæ, conftituentis labiun fuperius; tres reliquæ inferiores magis patentes, fæpius majores.
Stamina. Filamenta quinque, fubulata, longitudine tubi petali. Antheræ connata in cylindrum oblongum, bafi quinquefariam dehifcentem.
Pistillum. Germen acuminatum, inferum. Stylus cylindraceus, longitudine faminum. Stigma obrufum, hifpidum.
Pericarpium. Capfula ovata, biloculariis, apice dehifcens, cincta calyce.
Semina plurima, minima.

Empalfment. Cup one leaf, five-toothed, very fmall, growing round the feed-bud, withering; toothlets nearly equal.
Blossom one petal, irregular; tube cylindric longer than the cup, divided longitudinally above; border five-parted; fegments lanceflaped, of which the two upper ones are fmaller, more reflexed, deeper divided and form the upper lip; the three other lower ones fpread more, and often are larger.
Chives. Five threads, awl thaped, the length of the tube of the petal. Tips joined together forming an oblong cylinder, fplitting into five divifions at the bafe.
Pointal. Seed-bud tapered, beneath. Shaft cylindrical the length of the chives. Summit blunt, hairy.
Seed-vessel. Capfule egg-fhaped, two celled, fplitting at top, girt by the cup.
Seeds numerous, fmall.

## SPECIFIC CHARACTER.

Lobelia foliis lanceolato-linearibus, confertis, integerrimis; denticulis calycinis longiffimis; floribus cæruleis.

Lobelia with leaves between. lance and linearfhaped, crowded together, and quite entire; toothlets of the cup very long; flowers blue.

## REFERENCE TO THE PLATE.

1. The Empalement.
2. A Bloffom fpiead open, with the chives in their place.
3. A half ripe feed-pod.
4. The Pointal, with the fummit detached and magnified.
5. $\Lambda$ ipe feed-veffel, cut tranfverfely.

About the year $1 \% 86$, this plant was fent by Mr. F. Maffon, to the royal gardens at Kew; as we find it in the catalogue of that collection. Neverthelefs a fingle plant of it was not to be found in any of our botanic gardens, for there few years back; until the recent introduction of it, by Mr. Niven, to the Hibbertian Collection in 1759. It is a very delicate thrub; grows to the height of eighteen inches; branching but little, and producing moftly two flowers at the termination of each branch. It may be increafed by cuttings, or from the feed, which ripens in this country'; but, like moft of the fpecies of this genus, it is not a long lived plant. It approves moft of a light fandy peat, with a fimall mixture of loam; and to be kept in rather a fmall pot, in proportion to the general fize ufed for plants of the fame bignefs. Flowers in July.


Séticlia pirmíficia

CLASS VI. ORDERI.<br>HE.YANDRIA MONOGYNIA. Six Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

Corolla 6-petala, erecta, perfiftens, fupra medium patens. Filamenta bafi dilatata. Capfula 3-locularis. Semina fubrotunda, nuda.

Blossom 6-petals, upright, remaining, fpreading above the middle. Threads widened at the bafe. Capfule 3 -celled. Seeds roundifh, naked.
See Ornithogalum odoratum. Pl. CCLX. Vol. IV.

## SPECIFIC CHARACTER.

Ornithogalum racemo longo; filamentis fubulatis, alternis fub-lanceolatis; bracteis membranaceis, ovatis, pedunculo duplo brevioribus; foliis lanceolatis, acutis, ad oras villofis; floribus albidis.

Star of Bethlehem with a long flower fike; threads awl-fhaped, alternate ones nearly lance-fhaped; flower props ikinny, eggfhaped, twice as fhort as the fruit-fialk; leaves lance-fhaped, acute, finely haired at the edges; flowers white.

REFERENCE TO THE PLATE.

1. One of the Flower-props.
2. The Chives and pointal, the petals being removed.
3. The Seed-bud, Shaft, and Summit.

This fine fpecies of Star of Bethlehem, from the Cape of Good Hope, was first introduced to Britain, from thence by Lady Miller, of Froyle Place near Alton, Hampfhire, in the year 1796 . It is a very hardy bulb, but does not flower every year, in this country. It will live with a very ilight protection from the fevereft frofts in winter; fhould be planted in fandy loam; kept rather dry after the decay of the leaves; and only removed from its pot to renew the earth. It propagates by the root, and flowers in July. Our drawing was made from a plant which had been received from the Cape, in the Hibbertian Collection.

# PLATE CCLXXV. <br> GLADIOLUS RINGENS. 

Var. undulatus.

> Gaping-flowered Gladiolus.
> Waved-flou'ered Far.

## CIA AS III. ORDER. I.

Tridndria MonoginIA. Three Chives. One Pointal.

## ESSENTIAL GENERIC CHARACTER.

Corolla sexpartita, ringens. Stamina adfcendentia.

Blossom fix divifions, gaping. Chives afcending.
See Gladiolus rosbus, PI. XI. Vol. I.

## SPECIFIC CHARACTER.

Gladiolus foliis linearibus, coftatis; floribus ringentibus, cineriis; petalis undulatis.

Gladiolus with linear leaves, ribbed; flowers gaping, ath coloured; petals waved.

## REFERENCE TO THE PLATE.

1. The two valves of the Empalement.
2. A Bloffom fpread open, with the chives in their place.
3. The Pointal, one of the divifions of the fummit magnified.

The Clapham collection we believe to be the only one which, at prefent, poffeffes this handfome variety of the Gaping Gladiolus. It was introduced, from the Cape, by Mr. Niven in 1800. Our drawing was made in Auguft of the above year, but its natural feafon of flowering, if we may judge by analogy, fhould be about May or June, at lateft. It increafes by the root, and fhould be treated as a tender Gladiolus. The flower is without fmell.


# CLASS XVIII. ORDER II. 

## POLYADELPIIA DODECANDRIA. Threads in many Scts. Twelve Chives.

## GENERIC CHARACTER.

Calyx. Perianthium pentaphyllum erectum; foliolis lanceolatis, fub apice mucronatis, æqualibus, perfiftentibus.
Corolla. Petala quinque, obovata xqualia, flaccida, plicata, margineinequaliter dentata,

Sramina. Filanienta quindecim, erecta, connata in quinque corpora, e 3 fingula. Antheræ oblongæ, verlatiles.
Pistillum. Germen pentagonum, breve. Stylus columnatis. Stigmata quinque, recurva, oblonga.
Pericarpium nullim. Fructus roftratus, pentacoccus.
Semina folitaria, arillata; arifta longiffima demunt firali.

Empalement. Cup five-leaved upright; leaflets lance-flaped, pointed at the end, equal, and remaining.
Blossom. Five petals, inverfely egg-fliaped, equal, flaccid, plaited, unequally tootbed at the margin.
Chives. Fifteen threads, upright, formed into five bodies, three to each. Tips oblong, verfatile.
Pointal. Seed-bud five-fided, fhort. Shaft columnar. Five fummits, recurved and oblong.
Seed-vessel none. Fruit furnifhed with long awns, five dry berries.
Seeds folitary, in a feed-coat with a very long awn, becoming fpiral.

SPECIFIC CHARACTER.
Monfonia foliis incifo-lobatis, hirfutis; lobis inequaliter dentatis.

Monfonia with deeply cut lobes, hairy; lobes unequally toothed.

## REFERENCE TO ' THEPLATE .

1. The Enpalement.
2. A Petal of the flower, hhewn from the backfide.
3. A Petal of the flower, thewn from the infide.
4. The Chives and Pointal divefted of the petals.
5. The Chives fpread open, to thew the number of diftinct bodies into which they are disided.
6. The Seed bud, Shaft, and Summits.
7. A Seed-bud cut tranfverfely.
8. One of the berries, taken from its coat, a litile advanced to maturity.

The Genus Monfonia was formed by Linnæus, in honour of the Right Hon. Lady Ann Monfon, whofe enthufiafm, in purfuing the ftudy of natural hiftory, knew no bounds; and whofe liberal and foftering hand contributed more, perhaps, than any of her cotemporaries, by her encouragement and example, to the then incipient, but now fo prevailing tafte for the ftudy of Botany.

The Monfonias are all natives of the Cape of Good Hope; are rather herbaceous plants than flrubs, at leaft, thofe gencrally denominated fuch; for although the Geranium fpinofum has been given to this genus, we have our doubts whether it ought not to remain with Geranium. They are hardy green-houfe plants, flower in the months of July and Auguft; are propagated by the cutting fimall portions from the roots; and ihould be planted in a mixture of fandy peat and loam. This fpecies was introduced by Meffrs. Lee and Kennedy in the year 1788. Our drawing was made from a plant in the Hibbertian collcetion.

It is rather ftrange that Thunberg in the fecond part of his Prod. Plant. Cap. publifhed in 1500; and Wildenow in his Spec. Plant. volume the third, part 1, publifhed the fame year, fhould both, in the claflification of this genus rather with to alter its clafs, as Schreber and Cavanilles had done before them, than give it, in their works, under the clafs and title where it was originally placed, by the founder of the genus; or take it up on the authority of the catalogue of the plants in the Kew gardens; where, unqueftionably, two fpecies, at leaft, had flowered antecedent to the publication of that work. But indeed both of them, have fo jumbled the different fynonims which they have adapted to the three fpecies known at prefent in our gardens under the names of M. fpeciofa, M. lobata, and M. filia, that it is nearly impofible to recognize in either publication the different plants under the charactered titles they bear with us. As for Thunberg, he has thrown them all to Geranium, under new fpecific names: and thus, has made his alteration complete. Wildenow indeed has but changed the clafs, and altered one fpecifictitle; but by new naming that which is our M. fpeciofa he has been obliged to give the name of fpeciofa to our prefent plant, and place the fpecificfilin, as given by Linnæus to this, as a fynonim to M. lobata, upon the authority of Cavanilles; who, we muf prefume, had never feen more than dried fpecimens of any fpecies of this genus. But however, we fhall not pretend to clear up the bewildcred ftate, in which we there find this tribe of plants; or attempt to throw any farther light on a fubject that feems to hase been, fhort as it is, a complete puzzle to two fuch eminent botanifts; but merely flate our ideas, that we think thefe plants were finfficiently well arranged nuder the firft affumed clafs, and equally readily to be known by their old fpecific titles.

## PLATE CCLXXVII.

PROTEASPECIOSA.
Var. foliis glalris.

## Smooth-leaved Shewey Protea.


#### Abstract

CLASS IV. ORDER I. tetrandria monogynit. Four Chives. One Pointal.


## ESSENTIAL GENERIC CHARACTER.

Corolla 4-fida feu 4-petala. Antheræ lineares, inferta petalis infra apicem. Calyx proprius nullus. Semina folitaria.

Blossom 4 -cleft or 4 petals. Tips linear, in ferted into the pctals below the point. Cup proper none. Seeds folitary.
See Protea formosa, Pl. XVII. Vol.I.

## SPECIFIC CHARACTER.

Protea foliis lanceolatis, glabris; fquamæ calycinæ interiores barbatæ, apice incurvatæ, fufce.

Protea with lance-fhaped fmooth leaves; the inner fcales of the empalement are bearded, turned inward at the point and brown.

## REFERENCE TO THE PLATE.

1. The Seed-bud and Pointal.
2. A Flower fpread open, with the tips in their places.

This fine variety of the Shewy Protea might, indeed, almoft pafs for a diflinct fpecies. It was introduced, to Britain, in the year 1794, by Mr. Williams, Nurferyman, of Turnham Green. The only living fecimen in Britain, we believe, of this plant, is at prefent in the Hammerfmith collection. As yet no increafc has been produced from it, either by cuttings, or fecds; for although the plant flowers every year, and the feeds in the cone, or rather flower-cup, fecm perfect, they never vegctate. It is a hardy, and handfome growing Protea, requiring little attention, and may be placed in any part of the green-houfe; grows about three feet high, very buthy, and flowers near the month of October.


## PLATE CCLXXYIII.

MELALEUCA CORONATA.

## Flax-leared Melaleuca.

## CLASS XVIII. ORDER IV.

POLYADELPIIIA POLYANDRIA. Threads in many Sets. Many Chives.

## ESSENTIAL GENERIC CHARACTER.

Calyx quinquefidus, femifuperus. Petala quinque. Filamenta multa longiffima, connata in quinque corposa. Piftillum unum. Capfula 3-locularis.

Cur five-cleft, half above. Petals five. Threads numerous, very long, united into five bodies. Pointal 1. Capfule 3-celled.
SceMelaleuca ericefolia, Pl.175. Vol.III.

## SPECIFIC CHARACTER.

Melalenca foliis oppofitis, lanceolatis, enerviis, glaberrimis; floribus feffilibus, ad bafin ramulorum confertis; filamentis pinnatis, in. curvatis, purpureis.

Melaleuca with oppofite, lance-fhaped leaves, without nerves and very fmooth; flowers grow clofe to the branches, and crowded together at their bafe; threads winged, turned inward, and purple.

## REFERENCE TO THE PLATE.

1. The Empalement and Seed-bud.
2. The fame, fhewn in a front view.
3. A Petal.
4. One of the five bundles of Chives, magnified.
5. The Seed-bud with the fhaft remaining, the cup cut off.

This fingularly delicate little plant, a native of Botany Bay, was fiff raifed from feeds in this country by Mr. I. Fairbairne of the Phyfic Gardens, Chelfea, in the year 1792. It is rather more tender than moft of the plants we havc, as yet, received from thence; requires to be kept in a dry and airy part of the green-houfe and watered but feldom, in the winter. It grows to the height of about two feet, perfects its feeds, and may be increafed by cuttings; fhould be planted in very fandy peat earth, and kept in a fmall pot proportionally to its fize. Our figure was taken from the branch of a plant, in the confervatory, at the Hammerfmith Nurfery, in the month of Auguft, 1800.


Itclativen sorvunala

## PLATE CCLXXIX.

## XERANTHEMUM FASCICULATUM.

Var, flore allo.

## Bundle-leaved Everlaffing-flower. White Var.

CLASS XIX. ORDERII.<br>SYNGENESIA POLIG AMIA SUPERFLUA. Tips united. SuperfluousPointals.

## ESSENTIAL GENERIC CHARACTER.

Receptaculum paleaceum. Pappus fetaceus. Calyx imbricatus, radiatus; radio colorato.

Receptacle chaffy. Feather briftly. Cuptiled, with a ray; the ray coloured.
See Xeranthemem speciosissimum, Pl. LI. Vol.I.

## SPECIFIC CHARACTER.

Xeranthemum foliis caulinis linearibus, fubteretibus, fafciculatis, longiflimis; floribus folitariis; fquamis calycis lanceolatis, albis.

Everlafting-flower with the ftem-leaves linear, roundifh, bundled, very long; flowers folitary; fcales of the cup lance-fhaped and white.

## REFERENCE TO THE PLATE.

1. An Hermaphrodite Floret, with its feed, magnified.
2. A Female Floret, with its feed, magnified.
3. The Pointal from a Female Floret, magnified.

As a fine variety of the Bundle-leaved Everlafting flower, figured in this work, Pl. 242 of this Vol.; we now prefent this plant to our friends. Tis true, it may be thought by fome, at firft fight, there is too confiderable a degree of fimilitude in the plants to deferve a particular plate for each; but, upon a nigh inveftigation, it will be found there exifts a ftronger marked difference, in the growth of the plants, than, at firft, meets the eye; not ccrtainly enough to conftitute a fpecific difference, but undoubtedly a frong variety. The flower ftems, in this, grow more ftraddling ; and the long ftem-leaves are more difperfed on the upper part of the plant; at the bafe they nearly refemble each other. We have our figure from the Clapham Collection, to which the plants were introduced at the fame time, and through the fame channel as the above cited fpecies; feeds of both having been fent from the Cape of Good Hope, by Mr. Niven, in the year 1799. For all that relates to the management of this, we muft reter our readers to the figure juft alluded to; as its habits, time of flowering, \&ic. in nothing differ.

## PLATE CCLXXX.

## PERSOONIA LATIFOLIA. <br> Broad leaved Perjoonia.

CLASS IV. ORDER I.

tetrandria monoglvia. Four Chives. One Pointal.

## ESSENTIAL GENERIC CHARACTER.

Calyx nullus. Petala 4, bafin verfus fiaminifera. Glandulx 4 ad bafin germinis. Stigma obtufum. Drupa monofperma.

Empalfment none. Petals four, fupporting the chives near the bafe. Four glands at the bafe of the feed bud. Summit blunt. A pulpy berry with one feed.
See Persoonia lanceolata, PI.LXXIV. Vol.II.

## SPECIFIC CHAPACTER.

Perfoonia foliis fubovatis, utrinque glabris, eraffiufculis, uninerviis; petiolis brevibus, tortis.

Perfoonia with leaves approaching to inverfely-egg-flaped, fmooth on both fides, thiekifh, one-nerved; foot-flalks fhort and twifted.

## REFERENCE TO TIIEPLATE.

1. A Flower.
2. One of the Petals, with its Chive.
3. The Pointal and Seed-bud.
4. The fame, magnified.
5. The receptaele, with the four glands at the bafe of the Seed-bud, magnified.

The very exact conformation of the flower in this, when compared with the other two fpecies of the genus, already figured in this work; is a cireumfance but feldom to be found, in plants, where the whole habit is fo totally different in each fpecies, as we here find it. This plant, until it flowered, was confidered as a fpecies of Conchium, (one of the Genera made by Dr. Smith from Bankfia,) as nigheft in appearance to fome feecies of that Genus. It has flowered, for the firt time in England, in the month of OAtober, 1802. The plant being fet in the confervatory at the Hammerfmith-Nurfery, the flowers have continued to fucceed eaeh other, progreffively, upon the young branehes, without intermiffion, as the thoot grows, from the bafe of cach leaf. It is with great diffieulty raifed by cuttings; but, from every appearance, feed will be proeured in this country; as the ficed-buds have already beeome pretty large, and feeds of the other fpecies have matured with us. It was firft raifed from feed, communicated by Colonel Paterson, from Port Jaekfon, New South Wales, in the year 1795. Sandy loam, or a mixture of fandy peat and loam, is the foil it moft approves.

# PLATE CCLXXXi. METROSIDERA HIRSUTA. 

## Hairy Metrofidera.

CLASS XII. ORDER I.<br>ICOSANDRIA MONOGYNTA. Twenty Chives. One Pointal.



## SPECIFIC CHARACTER.

Metrofidera foliis oppofitis, bafi cordatis, amplexieaulibus; ramulis, pedunculis, calycibufque pilis rubro-fufcis tectis.

Metrofidera with oppofite leaves, heart-fhaped at the bafe and embraeing the ftem; fmall branehes, flower-ftems, and flower-cups covered with reddilh-brown hairs.

## REFERENCE TO THE PLATE.

1. The Seed-bud and Cup, divefted of the Petals and Chives.
2. One of the fegments of the Cup, thewn from the under fide.
3. A Chive magnified.
4. A Seed-bud cut tranfierfely.

Althougn little can be faid in favour of the flowers of this plant, yet the fingularity of its foliage excites our attention, as very diftinct from all its congeners. It grows with us to the height of fix or feven feet; at which fize, it produees its blofoms. The firft plants were raifed from feeds in the year 1787 at the garden of the late Dr. Pitcairne at Illington. It is increafed by cuttings, after the ufual mode made ufe of for propagating Botany Bay plants; that is to fay, by placing the cuttings in the heat of a hot-houfe, or hot-bed, early in the month of Marcll, till they are rooted. It is a hardy green-houfe plant when old, but rather delicate when young. Our figure was began from a plant in the Hibbertian collection, which flowered in the month of Auguft, 1800; and finifhed from one at the Hammerfnith Nurfery, in November, 1802. A fhort apology may be thought neceffary for our retaining the original mode of terminating the uame of this Genus, rather than as it is given by moft authors at present. Our plea is that only of priurity, and the name under which the plants have been known, in our gardens, thefe 30 years; fince, indeed, Sir J. Banks's return from the South Seas. A night miftake we wifh likewife to notice, in the etymology of the word Metrofideros, as given by Dr. Martyn in his edition of Miller's Dictionary; it is there faid to be thus derived, M $\eta$ lo $\rho$, medulla, the heart or pith of a tree, and oinrpos iron; fuppofing the beart of the trees to poffefs the hardnefs, or colour of iron. Now the true idea on whiel the name of the Genus was founded, is the fhape and hardutfs of the fecd-veffel, thus; Msipov a meafures and $\sigma_{i} \delta$ rpos iron, as the appearance of the capfule, when ripe, will fully juftify.


## PLATE CCLXXXII.

# GERANIUM SPATHULATUM. <br> Var. curvỉlorum. 

Spatula-leaved Geranium.
Curled-flowered Var.

## CLASS XVI. ORDER IV.

MON ADELPHIA DECANDRIA. Threads united. Ten Chives.

## ESSENTIAL GENERIC CHARACTER.

Monogyna. Stigmata quinque. Fructus roftratus, penta-coccus.

One Pointal. Five Summits. Fruit furnifhed with long awns, five dry berries.
SeeGerantum grandiflorum, Pl. XiI. Vol.I.

SPECIFIC CHARACTER.

Geranium foliis integerrimis, fpathulatis, fubciliatis; calycibus monophyllis; petalis re-1 curvatis; ftaminibus quinque fertilibus; radice tuberofa.

Geranium with quite entire leaves, fpatula. fhaped, nlightly fringed; cups one-leaved; petals recurved; five fertile chives, root tuberous.

REFERENCE TO THE PLATE.

1. The Empalement magnified.
2. The Chives fpread open.
3. The Pointal natural fize.
4. The fame magnified.

This fine variety of the Spatula-leaved Geranium is, as yet, only to be found, in the Hibbertian collection. Its date in Britain is the fame as the G. fpathulatum, of this work, plate 152, Vol. III. We ihould not have confidered the curved character of the petals, alone, a fufficient groundwork to conftitute, even a variety; but the flight fringe which may be difcovered on the leaves of our prefent plant, and not in the fralleft degree to be traced in the other, determined this to be, in our opinion, deferving notice, at leaft as a variety. For the treatment and culture of the plant, fee G. punctatum of the Botanitt's Repofitory, plate 60, Vol. I. which may well ferve for this.


## PLATE CCLXXXIII.

## POGONIA GLABRA.

## Smooth-leaved Pogonia.

## CLASS V. ORDER I.

## PENTANDRIA MONOGYNIA. Two Chives. One Pointal.

## ESSENTIAL GENERIC CHARACTER.

Corolla monopetala; tubus ad faucem pilofus. Stamina fupra medium corollæ inferta. Stigma concavum, declinatum. Nux quadrilocularis.

Blossom one petal; tube hairy at the mouth. Chives inferted into the middle of the blorfom. Summit concave, declined. Nut four-celled.

## SPECIFIC CHARACTER.

Pogonia foliis eliptico-lanceolatis, glabris ; floribus pendulis, minutis, albis.

Pogonia with leaves eliptically lance-fhaped, fmooth; flowers hanging down, fmall and white.

1. The Empalement, magnified.
2. A Bloffom cut open, with the Chives in their place.
3. A Chive, magnified.
4. The Pointal and Seed-bud, natural fize.
5. The fame magnified.

Tuis plant from New Holland, is rather more delicate than moft of thofe we poffefs from that country; as it is apt to lofe its leaves if expofed either to damps, or much cold. It was first raifed in the year 1790, by the late Mr. Robertfon, of Stockwell; is ezfily propagated by cuttings, and flowers in January, or February. The other fpecies figured in this work, Plate 212, and our prefent plant, are the only two yet known of this genus. They require a very light fandy loam, or peat foil, to make them flourifl. The P. glabra does not grow more than three feet high and flowers the firft year from cuttings. Our figure was taken at the Hammerfmith Nurfery.


Sínonurer yludizu

## PLATE CCLXXXIV.

CHIOCOCCA RACEMOSA.

## Oppogite-leaved Snowberry-tree.

## CLASS V. ORDER 1 .

## PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

## GENERIC CHARACTER.

Calyx. Perianthium quinquedentatum, fuperuin, perfiftens.
Corolla monopetala, infundibuliformis; tubus longus, patens; limbus quinquepartitus; laciniis æqualibus, acutis, reflexis.
Stamina. Filamenta quinque, filiformia, longitudine corollx. Antheræoblongæ, erectæ.
Pistillum. Germen inferum, fubrotundum, compreffom. Stylus filiformis, longitudine faminum. Stigma fimplex, obtufum.
Pericarpium. Bacca fubrotunda, comprefta, coronata calyce, bilocularis.

Semina duo, fubrotunda, compreffa, diftantia.

Empalement. Cup five-toothed, above aud remaining.
Elossom one petal, funnel-flaped; tube long, fpreading; border five divided; fegments equal, pointed and reflexed.
Chives. Five threads, hair-like, the length of the bloffom. Tips oblong, upright.
Pointal. Seed bud beneath, roundifh, flattened. Shaft thread-fhaped, the length of the chives. Summit fimple, blunt.
Seed-vessel. A roundifh berry, flattened, crowned with the permanent cup, twocelled.
Seeds two, roundifh, flattened, and at a diftance from eacl other.

## SPECIFIC CHARACTER

Cbiococca foliis oppofitis, ovatis, acuminatis; ramis horizontalibus; floribus racemofis, pendulis.

Snowberry-tree with oppofite leaves, egg-thaped, tapered; branches grow horizontal; flowers grow in bunches hanging down.

## FEFERENCE TO THE PLATE.

1. The Empalement, natural fize.
2. The fame, magnified.
3. A Flower.
4. The Chives and Pointal, natural fize.
5. The fame magnified:

Tife Snowberry-tree is a native of Jamaica, and fome of the other Weft India inlands; requiring the temperature of the hothoufe to preferve it; growing to the height of four or five feet; but the fem being too weak to fupport itfelf, muft be affifted. It is propagated by cuttings, and delights in a rich foil. We are informed in Miller's Dictionary, treating of this plant, that it was introduced to us, in the year 1729 , by Mr. Warner, of London; and that it was cultivated, in the garden of Mr. Sherard, at Eltham, about that time. The root of this plant is ufed medicinally, and has a very bitter, acrid tafte. It is a very free blowing plant, flowering the firft year from the cuttings; but but never produces its fine white berries in this country, which conftitute its greateft beauty, and whence its gencric title. Our figure was made from a plant in the Hammerfmith Collection. Flowers in Sepiember.


Cliimur raccuruesa

## PLATE CCLXXXV.

# ferraria viridiflora. 

## Green-flowered Ferraria.

CLASS XYI. ORDER I.
MONADELPHIA TRIANDRIA. Threads united. Three Chives.

ESSENTIAL GENERIC CHARACTER.

Monogyna. Spathæ uniflore.
Petala fex, undulato-crifpata. Stigmata cu cullata. Capfula 3-locularis, infera.

One Pointal. Sheaths one-flowered.
Petals fix, waved and crifped. Summits cowled. Capfule three-celled beneath.
See Ferraria Pavonia, Pl. CLXXVIII.Vol.III.

## SPECIFIC CHARACTER.

Ferraria foliis diftichis, vaginantibus, coftatis; petalis lanceolatis æqualibus, interioribus immaculatis, anguftioribus, virefcentibus.

Ferraria with leaves pointing oppofite ways fheathing the ftem and ribbed; petals lancefhaped, equal, the inner ones without fpots, narrower and greenifh.

## REEERENCETOTHE PLATE.

1. The Seed bud, Chives and Pointal.
2. One of the Chives, a little magnified, as feen from the infide.
3. The fame feen from the outfide.
4. The Seed-bud, Shaft and Summits, the Chives removed.
5. One of the Summits magnified.

Our figure reprefents the Moræa Ferrariola of Jacquin's Collectanea 4. p. 141; but, as we conceive Ferraria a good, and diftinet genus, we have not followed either him, or Thunberg, who has likewife thrown thefe plants to Moræa. At firft fight we did not think this plant poffeffed of fufficient diftinctive character to be treated as a different fpecies from the F. undulata; but upon clofer infpection found it to vary nearly in every part; in the fhape of the flower, the leaves and the root. The fingular character of this, and the other Cape Ferrarias, of making but one growth in two, and fometimes three years; is hardly to be traced in any other plants, but conftantly fo in thefe. They produce their flowers about July, the feafon of their flowering; the flowers are as tranfitory as thofe of the F. pavonia; that is to fay, the duration of about fix hours. Our figure was taken from a plant in the Hibbertian Collection, which flowered in the month of July 1802. The Ferrarias all propagate by the root; and thould be planted in fandy peat mixed with a fmall portion of loam.


# HIBISCUS PATERSONIUS. 

## Norfolk I/land Hibijcus.

CLASS XVI. ORDER VI.<br>MONADELPHIA POLYANDRIA. Threads united. Many Chives.

## ESSENTIAL GENERIC CHARACTER.

Calyx duplex; exterior polyphyllus. Stigmata
5. Capfula 5 -locularis, polyfperma.

Empalfment double; outer one many-leaved. Five Summits. Capfule five-celled, manyfeeded.
See Hibliscus mutabilis, Pl.CCXXVIlJ. Vol.IV.

## SPECIFIC CHARACTER.

Hibifcus foliis acuminato-lanceolatis, coriaceis, fupra punctatis, fubtus tomentofis; floribus axillaribus; calycibus monophyllis, quinquedentatis.

Hibifcus with tapering lance-flaped leaves, leathery, dotted above and downy underneath; flowers grow from the infertion of the leaves; cups one-leaved, five-toothed.

## REFERENCE TO THE PLATE.

1. The Cup with its foot-ftalk.
2. The columnar part of the Chives cut open, the pointal taken away.
3. The Pointal.
4. A tkinny membrane, which furrounds the feed-bud at the bafe,
5. A ripe capfule, with the enlarged cup attached.
6. The fame, cut through the middle horizontally.
7. A ripe feed.

The Norfolk Ifland Hibifcus is a tender greenhoufe plant; was introduced to Britain, in the year 1792, having been raifed from feeds communicated by Col. Paterfon, then ftationed on that Ifland. It attains the height of 12 feet, or more, becoming a fmall tree; may be increafed readily from cuttings, and fhould be planted in a mixture of loam and fandy peat. Our figure is from a fpecimen received from the Right Hon. Lord Vifcount Courtenay, in whofe collection at Powderham, near Exeter, it flowered for the firft time in the year 1800; and where alfo the feeds ripened.

We have no doubt but this plant belongs to the Genus Lagunæa, of Schreber; but as he propofes himfelf, and as LHeritier as juftly obferves, the fimplicity of the cup is not a fufficient ground, on which to found a new genus; fo we have rather given our prefent fubject, the name under which it is in general known, than adopt a title for it which is acknowledged by the author, as rather unwarrantable.


## PLATE CCLXXXVII.

## STYPHELIA PARVIFLORA.

## Small-flowered Styphelia.

CLASS V. ORDER I.<br>pentandria monogynta. Five Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

Calyx imbricatus. Corolla tubulofa.
Stamina fauci inferta. Drupa quinquelocularis. Semina bina.

Empalement tiled. Bloffom tubular.
Chives inferted into the mouth of the bloffom.
A five celled berry. Seeds by twos.
See Styphella triflora, PI. LXXII. Vol.I.

SPECIFIC CHARACTER.

Styphelia foliis lanceolatis, oppofitis; floribus capitatis terminalibus; corollis minutis, albis.

Styphelia with lance-fhaped, oppofite leaves; flowers terminate the branches in heads; bloffom fmall and white.

## reference to the plate.

1. The Empalement magnified.
2. A Flower, natural fize.
3. The fame, magnified.
4. A Bloffom, cut open, with the Chives attached.
5. The Pointal, natural fize.
6. The fame, magnified.

This Styphelin, as are all the known fpecies of the genus, is a native of New Holland, and was amongft the firft plants which were raifed from feeds from that country. It is a hardy greenhoufe plant; grows very bufhy, handfome in its foliage, and feldom exceeds two feet in height. It is propagated by cuttings, made from the tender fhoots, about the month of April; and treated as directed for other plants natives of the fame clime. Should be planted in fandy peat earth.

Our figure was taken from a fpecimen communicated by Mr. Cuff, from his felect collection at Teddington, Middlefex; where it flowered, we believe, for the firf time in England, laft year, in the month of Auguft, 1802.


## PLATE CCLXXXVIII.

## PROTEA CYNAROIDES.

Artichoke-like-flowered Protea.

## CLASS IV. ORDER I.

## tetrandria monogynia. Four Chives. One Pointal.

## ESSENTIAL GENERIC CHARACTER.

Corolla quadrifida feu quadripetala. Antheræ lineares, infertæ petalis infra a picem. Calyx proprius nullus.
Semina folitaria.

Brossom four-cleft or four petals. Tips linear, inferted into the petals below the point. Empalement proper none.
Seeds folitary.
See Protea formosa, Pl. XVII. Vol.I.

## SPECIFIC CHARACTER.

Protea foliis fuborbiculatis, glaberrimis ; petiolis longiffimis; fquamulis calycinis lanceolatis, apice carinatis.

Protea with nearly orbicular leaves, and very fmooth; footftalks very long; fcales of the cup lance-fhaped, keeled at the point.

תEFERENCE TO THE PLATE.

1. A Floret fpread open, with the Chives in their places.
2. The Pointal and Seed-bud.

To the Right Hon. the Earl of Coventry we are indebted for the figure of this fuperb plant; it having flowered in his Lordfhip's rich, and extenfive collection at Croome, Worcefterfhire, this prefent February, 1803, for the firft time, in England; his Lordihip did us the favour to order the flower to be cut, and fent to London; where it arrived, without the leaft injury, and continued in perfection many days.

The magnificence of this fecies of Protea, can be but poorly expreffed within the limited bounds of our publication; we have, neverthelefs, endeavoured to do it all the juftice within our grafp. A confiderable part of the luftre of the flower is loft, from the fmall portion of the leaves which could be introduced; as the contrafted beauty of the fine broad fhining leaves, which form, as it were, a nidus, or ground wood for the bloffom, contribute, fo much, to heighten the beauty of the whole.

The Protea cynaroides is a hardy greenhoufe piant, was introduced to Britain, in 1792 , by Meffrs. Lee and Kennedy, Hammerfmith, from the Cape of Good Hope. May be increafed by cuttings, taken off the lower part of the plant; where they fhoot out in clufters to the length of an inch or more, and muft be treated as has already been directed for Proteas in general. The plant, even at the Cape, feldom grows higher than 18 inches, or two feet.


## I N D E X

TO THE PLANTS CONTAINED IN VOL. III.

| Plate 145 | Hillia longiflora . Pforalea aculeata. |
| :---: | :---: |
| $147-$ | Gladiolus cufpidatu |
| ${ }^{1}+8$ | Lachenalia quadricolor |
| 149 | Struthiola ciliata. |
| 150 | Geranium premorsum |
| 151 | Pittofporum coriaceum |
| 152 | Geranium Ipathulatum |
| 153 | Viola pedata. |
| 154 | Echium argenteu |
| 155 | Ixia polyftachia. |
| 156 | Bankfia ericæfo |
| 157 | Cordia Sebeftena |
| 158 | Geranium echina |
| 159 | Ixia capitata, $\vdash$ ar. flo.allo, fundo ni |
| 160 | Ariftea major |
| 161 | Hermannia pulverata |
| 162 | Verbafcum ferrugineu |
| 163 | Amaryllis Fothergillia |
| 164 | Galaxia grandiflora . . |
| 165 | Echium glaucophyllum |
| 166 | Cladiolus abreviatus |
| 167 | Brunsfelfia undulat |
| 168 | Geranium pictum |
| 169 | Crinum giganteum. |
| 170 | Ixia Bulbocodium Var. f. fpeciofilim |
| 171 | Hypoxis linearis. |
| 172 | Anemone palmata |
| 173 | Geranium rofeum |
| 174 | Antholyza tubulofa |
| 175 | Melaleuca ericafolia |
| 176 | Crateva Capparoides |
| 177 | Ixia punctata. |
| 178 | Ferraria pavonia, |
| 179 | Amaryllis reticulata |
| 180 | Atragene auftriaca |
| 181 | Vaccinium virgatum |
| 182 | Malva divaricata |
| 183 | G ardenia tubillora |
| 184 | Pergularia minor |
| 185 | Pergularia odoratiff |
| 186 | Ixia fpeciofa |
| 187 | Echites fuberecta |
| 188 | Gladiolus campanulatus. |
| 189 | Zinnia verricillsta |
| 190 | Geranium aftragalifolium |
| 191 | Platylobium feolopendrum |
|  | Antholyza fulgens |
| 193 | Geranium lineare. |
| 194 | Hemerocallis alba. |
|  | Hypoxis obliqua. |
| 196 | Ixia maculata. |
|  | Nymphra carulea |
| 198 | Bauera rubi xides. . . . |
| 199 | Camellia, japonica. Var. f. rut. pleno |
| 200 | Melaleuca hypericifolia |
| 201 | Aizoon canarienfe |
| 202 | Samyda ferrulata |
| 203 | Ixia columnaris. |
| $20+$ | Geranium laciniatum. Var. fl \% purp. |
|  | Platylobium la ceolatum. |
| 206 | Dracæna borcalis . |
|  | Mi nofa longifolia |
| 208 | Lafiopetalum ferrugineum |
| 2 c 9 | Geranium melananthum |
| 210 | Antholyza Exhiopica |
| 211 | Ixia columnaris. Var. verficulo |
| 212 | Pozonia debilis. |
| 3 | Ixia columnaris. Vur. latifolid |
| 214 | Weit-ringia rofmarinacea. |
|  | Embothryum falignum |
| 216 |  |


| Long-flowered Billia. | H. H. | Shrub. | Fcbruary. |
| :---: | :---: | :---: | :---: |
| Prickly Pforalea | G. H. | Shrub | Augua. |
| Spear-fpotted Gladiolus. | G. H. | Eulb. | May. |
| Four-coloured Lachenalia | G. H. | Bulb. | Dicember. |
| Fringed-leaved Struthiola | G. H. | Slub. | Auguf. |
| Bitten-leaved Geranium, | H. H. | Shrub. | March. |
| Thick-leaved Pittofporum | G. H. | Shrub. | M2y. |
| Spathula-leaved Geraniu | G. H. | Shrub. | April. |
| Bird's-foot-leaved Violet | Har | Herb. | May. |
| Silvery-leaved Viper's Bu | G. H. | Shrub. | July. |
| Many-fpiked Ixia | G. H- | Bulb. | May. |
| Heath-leaved Bank | G. H. | Shrub. | Marcl |
| Rough-leaved Cordia | H. H. | Shrub. | April. |
| Prickly-ftalked Geraniu | H. H. | Shr | March. |
| Bunch-flowering I xia. Far. white $\AA$, Hack lottom. | G. H. | Bulb. | May. |
| Spike-flowered Arifea | G. H. | Herb. | July. |
| Powdered Hermannia | G. H. | Shrub. | A;ril. |
| Rufy - fowered Mullein | Har. | Herb. | April. |
| Fothergillian Lily-Daffo | H. H. | Bulb. | May. |
| Large-flowered Galaxia | G. H. | Eulb. | Februa |
| Sea-green-leaved Viper's-Buglo | G. H. | Shrub | May. |
| Shortened-petalled Gladiolus | G. H. | Bulb. | March. |
| Waved-flowered Brunsfelfia | H. H. | Shrub | Marc |
| Painted-flowered Geranium | G. H. | Shr | April. |
| Gigantic Afphodell-Lily | H. H. | Bulb. | Auguf. |
| Crocus-leaved Ixia. Var. mofl leautifulforcer | G. H. | Bulb. | March. |
| Linear-leaved Hypoxis | G. H . | Bulb. | March |
| Cyclamen-leaved Portuga | Har. | Herb. | May. |
| Rofy Geranium | H. H. | Shrub | Marc |
| Tubular Antholyz | G. H. | Bulb. | June. |
| Heath-leaved Melaleu | G. H. | Shrub. | July. |
| Caper-like Cratzva, | H. H. | Shirub. | June. |
| Dotted-flowered Ix | G. H. | Bulb. | May. |
| Mexican Ferrarıa | H. H. | Bulb. | July, |
| Netted-flowered Lily | H. H. | Bulb. | May. |
| Auftrian Atragene | Har. | Herb. | May. |
| Green-wwigged Whortle-bery | Har. | Shrub. | June. |
| Straddling-branched Mallo | G. H. | Shrub. | June. |
| Tube-flowered Gardenia. | H. H. | Shrub. |  |
| Snaaller Weft-Coaft Creeper | H. H. | Shrub. | Auguf. |
| Sweet Pergularia, or Chinefe Creep | H. H. | Shrub. | August. |
| Deep Crimfon Ixia. | G. H. | Bulb | May. |
| Oval-teaved Echites, | H. H . | Slirub. | May. |
| Bell-flowered Gladio | G. H. | Bulb. | May. |
| Double Zinnia. | Har. | Ann. | Auguft. |
| Aftragalus-leaved Geran | H. H. | Shrub. | July. |
| Scolopendra-like-ftemmed Platy | G. H. | Shrub. | May. |
| Refulgent-Rowered Antholyza. | G. H. | Bulb. | May. |
| Linear-pat | H. H. | Shrub. |  |
| White Day-Lily | G. H. | Herb. | Auguf. |
| Obique-leaved Hypox | G. H. | Herb. |  |
| Spotted-flowered Ixia | G. H. | Bulb, | May. |
| Blue Water-Lily. | G. H. | Aqua, |  |
| Three-leaved Baue | G. H. | Slirub. | Auпuft. |
| Double Red Camelli | G. H. | Slirub. | January. |
| St. J hlhn's-wort-leaved M | G. H. | Shrub. | Septeniber. |
| Purfane-lcaved Aizoon | H. H. | Herb. |  |
| Sawed-leaved Samyda | H. H. | Shrub. | july. |
| Columnar-chived Ixia | G. H. | Bulb. | Junc. |
| Ragged-leaved Geranium. Purp. f. Var | H. H. | Shrub. | June. |
| Lance-fhaped-leaved Flat-- P a | G. H. | Shrub | November. |
| Oval-leaved Dracrena. | Har. | Herb, |  |
| Long-leaved Mimofa. | G. H. | Slirub | March |
| Rufty Woully-blufiom | G. II. | Shrub. | Narch. |
| Black-flowered Geraniu | H. H. | Shrub. | June. |
| Rroad-leaved Antholyza | G. H. | Bulb. |  |
| Columnar-chived 1xis. Changeableft. Far. | G. II. | Bulb. | June. |
| Twining Pogonia | G. H. | Shrub. | September. |
| Columnar-chived Ixia. Broad.leaved V'ur. | G. H . | Bulb. | June. |
| Rofemary-like Wefteringia. | G. H. | Shr | September. |
| Willow-like Emboth | G. H | Shrut |  |
| Chincre Epidendrum. | H. H. | Shrub | Septem |

## ERRATA.

Flate 153, Order, dele polygamia. $163, \mathrm{Sp}$. Ch. lin. 2, fenetalibus, lege, genitafibus. $171, \mathrm{Sp} . \mathrm{Ch}$. lin. 2, longiore, lege, longior.
$175, \mathrm{Sp}$. Ch. lin. 2, enerviis, lege, enervis.
Ref. lin. 1, for, one which, read, one of wwbicb.
184, Gen. Ch. Nect. lin. I, exterium, lege, exterius. Lin, 4, interium, lege, interiw. $188, \mathrm{Sp}$. Ch. lin. 2, longior, lege, longiore.
$189, \mathrm{Sp} . \mathrm{Ch} . \operatorname{lin} .1$, for, without, read, zuitb.
191, Gen. Ch. Stam. lin. 3, affurentia, lege affurgentia.
197, Gen. Ch. Corol. lin. r, quindecem, lege, quindecin.
$200, \mathrm{Sp} . \mathrm{Ch} . \operatorname{lin}$ 2, uninerviis, lege, wninervis.
202, Gen. Ch. Stam. lin. 2, oftodecem, lege, oEfodecim.
206, Order, for Pointals, read, Pointal. Gen. Cb. Pift. lin. 2, ftaminium, lege, faminum.
207, Sp. Ch. lin. 1, poft, integris, inf. (,)
${ }^{310}, \mathrm{Sp}$. Ch. lin. 2, corolla, lege, corolla.

## I N D E X

TO THE PLANTS CONTAINED IN VOL. IV

| Plate 217 | Paffifora maliformis. | Apple-fruited Pafion | I1. H. Shrub. | July. |
| :---: | :---: | :---: | :---: | :---: |
| 218 | Embothrium buxifoli | Box-Jeaved Embothrium | G. II. Shrub. | Seprember. |
| 219 | Gladiolus cufpidatus, Vur.petaliscrispis | Spear-fpotted Gladiolus, V.wilh crifpedpelals | G. II. Bulb. | May. |
| 220 | Mafforia fcabra | Rough-Icaved Maffonia . . . . . . . . . . . . . . | G. II. Butb. | Varch. |
| 221 | Wurmbea capenfis, Jar. 6. | Cape Wurmbea, Jar. 2 | G. II. Bulb. | Mav: |
| 222 | Geranium radiatum . | Rayed-leaved Gcranium | G. 11. Ilerb. | July. |
| 223 | Clufia flava | Yellow-flowered Balfam-tr | II. H. Shrub. | Scpiemiba. |
| 224 | Geranium reflexum | Reflexed-lcaved Geraniun | G. II. Herb. | July. |
| 225 | Gnidia oppofitifolia | Oppolitc-leaved Gmdia | G. 11. Shrub. | ipmi. |
| 226 | Magnolia pumila | Dwarf Magnolia | G. II. Shrub. | September. |
| 227 | Gladiolus ringens, Var. multifiorus | Gaping Gladiolns, many fowered Var. | G. H. Bulb. | May. |
| 228 | Hibifcus mutabilis, Vur. flore pleno. | Changeable-rofe 1 libifcus, Doalle flou. Vur. | II. 11. Shrub. | November. |
| 229 | Magnolia fufcata . . . . . . . . . . | Brown-ftemed Magnolia . . . . . . . | G. H. Shrub. | Aprit. |
| 230 | Dodonea triquetra | Three-fided Dodonza | G. II. Shrub. | March. |
| 231 | Cerbera Ahouai | Oval-leaved Cerbera | 11. I1. Shrub. | July. |
| 232 | Ixia capitata, Ver. steliata | Bunch-flowering I xia, Star-flowered I'ar. | G 11. Bulb. | May. |
| 233 | Melanthium viride | Green-flowered Melanthium .. | G. H. Bulb | July. |
| 234 | Protea ficata | Spike-flowered Protea | G. 11. Shıub. | May. |
| 235 | Mimofa difcolor | Two-coloused-leaved Min | G. 11. Shrul. | Scpitember. |
| 236 | Hypoxis fellata, Vi | Star-fowered Hypoxis, ${ }^{\prime \prime}$ hile | G, 11. Bulb. | Apil. |
| 237 | Cytifus tomentolus | Downy-leaved Cytifus . . . . . | G. II. Shrub. | Auguf. |
| 238 | Roëlla decurrens | Decursent-leaved Roella | G. II. Ann. | Angurt. |
| 239 | Gcranium felinun | Rock-parney-leaved Gcr | G. H. Herb. | Junc. |
| 240 | Gladiolus carneus | Flefh-coloured Gladiolus | G. 11. Bulb. | May. |
| 2.11 | Gladiolus orchidifiorus | Orchis-like-flowered Gladiolu | G. II. Bulb. | March. |
| 242 | Xeranthemum fafcicula | Bundled-leaved Everlafting-fo | G. H. Shrub | May. |
| 243 | Protea lagopus. | Woolly-leaved Protea | G. H. Shrub. | Junc. |
| 24.4 | Hcmerocallis gra | Grafs-leaved Day-Lity | Har. Iterb. | June. |
| 245 | Ixia pufilla | Dwarf-blue Ixia | G. H. Bulb. | April. |
| 246 | Geranium inc | Flemy-leaved Ge | G. H. llerb. | July. |
| 247 | Geranium celiat | Fringed-leaved Ge | G. H. Herh. | July. |
| 248 | Protea umbellata | Umbellated IProtea | G. H. Shrub. | Auguti. |
| 249 | Pitcaimia fulphurea | Sulphur-coioure! Pitcair | 11. 18. Iletb. | April. |
| 250 | Ixia colnmnaris, lär. grandij | Columnar-chived Ixia, Large-flozered Vur. | G. H. Bulb. | June. |
| 251 | Laternalia purpurco-cærulea | Sweet violet-coloured lachen | G. 1I. Bulb. | April. |
| 252 | Helenftreitia aurea | Golden-flowered Ilebenf | G. 11. Shrub. | Auguft. |
| 253 | Talinum patens | Panicled Purlan | 11.11. Amil. | Auguft |
| 254 | Geranium procumhens | Procumbent Gera | G. II. Shrub. | May. |
| 255 | Morea Northiana | Northian Morea | H. II. Herb. | July. |
| 256 | Ixiamaculata, Var.minor, fo. purpareo | Spotted-fiowered Jxia, Small Iar. purp. po. | G. 11. Bulb. | Junc. |
| 257 | Falkia repens. . | Creeping Falkia | G. 11. Herb. | Auguft. |
| 258 | Bankfia præmorfa | Bitten-entled-lea | G. 11. Shrub. | July. |
| 259 | Geranium pilofum | Hairy Geranium | G. II. IIerb. | July. |
| 260 | Ornithngalum odora | Sweet-feented Sta | G. 11. Bulh. |  |
| 201 | Cameraria latifolia. | Baftard Mangeneal | 11. 11. Slirub. | Nuguft. |
| 262 | Xeranthemum firale | Spiral-lcaved Evcrlafting-flow | G.11. Shrub. | July. |
| 263 | Vaccinium faminiu | Green-wooded Whortle-beriy | llar. Shub. | Junc. |
| 264 | Prutea glomerata | Woolly-headed Protea | G. Hi. Slirub. | Augurt. |
| 265 | Cyrtanthus obliqua | Oblique-leaved Crrtan | G. 11. Bulb. |  |
| 266 | Platylobium ovatu | Oval-leaved Flat- Pea | G. II. Shrub. | July. |
| 267 | Jatropha panduræfolia | Fiddlc-leaved Phyfic Nut | H.11. Shrub. | July. |
| 268 | Gladiolus plicatus | Plaited-leaved Gladiolus | G. 11. Bulb. | Alay. |
| 269 | Geranium laciniatum, Vor. Viculor . . | Ragged-leaved Gerinium, 'Two-colouredflower Var. . . . . . . . . . . . . . . . . . . . . . . | G. II. Ileib. | July. |
| 270 | Protea pulchella | Waved-leaved Pr | G. II. Sluub. | Septemilar |
| 271 | Afclepias gigantea | Gigantic Swallow-w | 11. H. Shrub. | Ancuft. |
| 272 | Embothrium linea | Narrow-leaved Emibot | G. 11. Shrub. | July. |
| 273 | Lobelia pinifolia | Pine-leaved lobelia | G. 11. Shrub. | Juty. |
| 274 | Ornithogalum Jacteun | Large White-flow red Star of Bethlehem | G.11. Bulb. | July. |
| 275 | Giardiolus ringens, Var. undulatus . | Gaping-fowerel Gladiolns, Il aved-flouered Var. | G. 11. Bulb, | Junc. |
| 276 | Monforia filia | 1 lairy-leaved Monfunia . . . . . . . . . . . . . . | G. H. Herb. | July. |
| 277 | Protea fpeciola, Vur. foliis glalris | Smonth-lcaved thewy Protea | (\%. II. Shrub. | October. |
| 278 | Melalcuca coronata | Flax-leaved Mclalenca | (.) 11. Shrub. | Angut. |
| 279 | Xerau'hemum fafciculatum, l'ar. $2 . a l$. | Bundle-lavedliverlaftug-luwer /Vhits'ar | (\%, 11. Shrul. | Aucuf. |
| 250 | Perfoonia Iatifolia | Broad-leaved Pertoonia | C, 11. Shrul. | November |
| 251 | Metrofideras hirfuta | Itairy Metroticlera | (\%, 11. Sirmb. | Doveniber |
| 282 | Geranium fpathulaturn, Var. curnylo. | Spreula-leated Coramim, Curled-fo. Var. | G. II. J ferls. |  |
| 283 | Pogonia glabra.. | Smpoth-leaved Pogonia . . . . . . . | (i. 11. Shrul. | March. |
| 284 | Chiococea racemofa |  | II. II. Slirub. | luly. |
| 285 | Jerraria uridifiora | Green-flowered Ferraria | (;.11. Julls. | July. |
| 246 | llibifeut l'aterfoniux | Noilolk Illand IItbifeus | (i. 11. Slirut). | Augurt. |
| 287 | Styphelia parviflora | sinall-llowerel Styplidia | (3. 11 Shruh. | M19. |
| 248 |  | Attichoke-like flowered | (i, II. Slsub. | January. |

## ERRATA.

Plate 217, Paffiflora maliformis. For Plate CCVII, put, CCXVII.
218, To No. 1 and 2 of the reference to the plate, add, magnified.
226, Gen. Char. Chives, line 4, for, fixed on fide, read, fired on each fide.
233, For, Order I, read, Order III, for monygynia, read, trigynia, and for One Pointal,
read, Three Pointals. Bloffon, after claws put a comma.
235, Englifh name. For, two coloured leaved, read, tuv-coloured-leaved.
245, Char. Spec. line 2, dele (,) poft longitudine.
257, Gen. Char. Pift. Pro Germen, lege, Germina.
270, Specific Char. line 3, for flower head, read, fower-head.
276, Gen, Char. Corolla. Poft obovata pone comma.
282, Geranium fpathulatum, for, Plate CCLXX, put, CCLXXXII
觬
Kx
in

## $(192$

(10 cos




 $+$
$\qquad$ $5+6$


[^0]:    

[^1]:    Vlargurrier pinucrenla

