CURTIS'S
BOTANICAL
MAGAZINE

15-16
1801

CURTIS'S
BOTANICAL MAGAZINE;
OR,
Flower-Garden Displayed:

IN WHICH

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

TO WHICH ARE ADDED,

Their Names, Class, Order, Generic and Specific Characters, according to the celebrated LINNÆUS; their Places of Growth, and Times of Flowering:

TOGETHER WITH

THE MOST APPROVED METHODS OF CULTURE.

A WORK

Intended for the Use of such LADIES, GENTLEMEN, and GARDENERS, as wish to become scientifically acquainted with the Plants they cultivate.

CONTINUED BY

JOHN SIMS, M. D.

FELLOW OF THE LINNEAN SOCIETY.

VOL. XV.

Ye vallies low,
Throw hither all your quaint enamell'd eyes,
That on the green turf suck the honied showers
And purple all the ground with vernal flowers.
Bring the rathe primrose that forsaken dies,
The tufted crow-toe, and pale jessamine,
The white pink, and the pansy freakt with jet;
The glowing violet,
The musk-rose and the well-attired woodbine,
With cowslips wan that hang the pensive head,
And every flower that sad embroidery wears:
Bid Amarantus all his beauty shed,
And daffadillies fill their cups with tears,
To strew the grave where CURTIS lies.

MILTON.

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MDCCCI.

PREFACE.

A Second volume of the Botanical Magazine having been brought to a conclusion since the death of Mr. Curtis, it seems proper that the very liberal encouragement this Work has continued to receive should be gratefully acknowledged, the demand for it being by no means diminished, notwithstanding the irreparable loss sustained by that melancholy event, and the increased price, which the pressure of the times has made necessary.

To a few readers it may not be totally uninteresting to learn how the Botanical Magazine came under the present direction. Long before his death Mr. Curtis, perceiving his dissolution gradually approaching, naturally became anxious to secure to his family the pecuniary benefits arising from the sale of the Work, their sole dependance. In order to lessen the impediments to carrying it on, he laboured, as much as his infirm state of health would permit, to arrange and increase the necessary materials. He applied to several of his most eminent botanical friends and obtained their promise of assistance. Finally, in the confidence of friendship, he subjected the future management to the controul of the present Editor, with whom he had many years lived in habits of intimacy. How far this confidence has been justified by the event, with respect to his family, cannot be a general concern, nor is it necessary to say any thing of the Work itself as far as it has hitherto proceeded: it is before a discerning public and it's merit will be fairly appreciated.

In the construction of these volumes, but little use has latterly been made of the materials left by Mr. Curtis for several reasons, principally from a desire to preserve them as entire as possible for the service of the proprietors, in case of emergency, and a wish to indulge our botanical readers with a representation and description of some of the novel and curious plants which are annually introduced, particularly from the Cape of Good Hope. In one natural order (the Ensatæ of Linnæus —Irides of Jussieu) such additions have been made to our former

former ſtock as to render the nomenclature a maſs of confuſion. No part of Europe contains ſo copious a collection of theſe plants as the neighbourhood of London, the botanical world have therefore ſome right to expect an elucidation of this ſubject in our Magazine, and the Editor thinks himſelf particularly fortunate in having met with ſo able and liberal a coadjutor in this difficult taſk.

What has been already done will ſhew how much is due to the induſtry and ability of JOHN BELLENDEN GAWLER, Eſq. with whoſe aſſiſtance we hope in a few numbers to complete ſo lucid an arrangement of the principal part of this order, that no Botaniſt will hereafter find any difficulty in reducing the individuals to their proper genera.

The ſame Artiſts are employed in every department of the Work as in Mr. CURTIS's time. This will, it is hoped, inſure the ſame excellence of execution, which is ſuch that the figures in the Botanical Magazine, for elegance as well as correctneſs, will in general ſuffer nothing by a compariſon with the moſt expenſive botanical works, a fact loudly atteſted by the circumſtance that a large proportion of the ornaments of our moſt expenſive porcelain and cabinet ware is copied from them. The Botanical Magazine will continue to be carried on as much as poſſible on the ſame plan as by Mr. CURTIS himſelf. If ſomewhat more of critical diſcuſſion ſhould have been introduced, our botanical friends will eaſily perceive that the ſubjects demanded it, and whilſt the price is not thereby increaſed, it is not apprehended that any one will complain.

For himſelf, the Editor ſolicits the indulgence of the learned Botaniſt, an indulgence he feels to be more than ordinarily neceſſary; for being engaged in a laborious and important profeſſion, and having ever made Botany his amuſement, never a ſerious ſtudy, he has greater dependance upon the continued aſſiſtance of his more learned friends than upon the exertion of his own abilities. But, with this aid, he flatters himſelf that the Botanical Magazine will continue in every reſpect to deſerve the public favour as well as it has heretofore done.

DIANELLA CÆRULEA. BLUE DIANELLA.

Clafs and Order.

HEXANDRIA MONOGYNIA.

Generic Character.

Cal. nullis. *Cor.* 6-petala. *Stam.* receptaculo inferta. *Per.* Bacca 8-locularis polyfperma.

Specific Character.

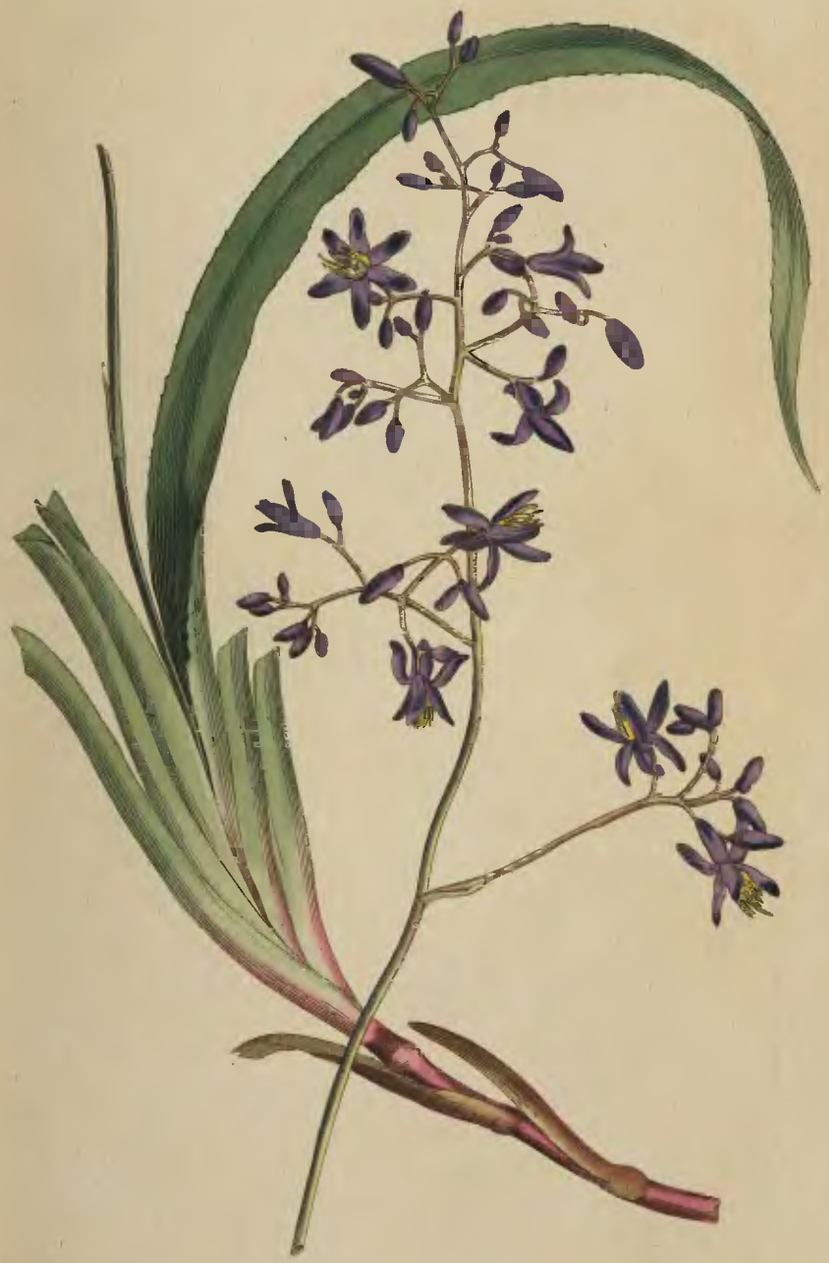
DIANELLA *cærulea;* caule adfcendente geniculato foliis diftichis lineari-lanceolatis carinatis margine fpinuloris, pedunculis rectis divaricatis.

This plant is a native of New Holland, and we believe was firft raifed in this country from feeds from Port Jackfon, about the year 1783, by our much refpected friend, the late Mr. CUFF, of Teddington, a gentleman of great zeal and affiduity in cultivating plants and promoting the fcience of Botany, to whofe liberality the *Brompton Botanic Garden* is indebted for this and many other fcarce and beautiful plants.

It fucceeds well in the greenhoufe, begins flowering about the month of May, and continues in bloffom during the greateft part of the fummer. Is readily increafed by parting its roots in the fpring, and fhould be planted in pots filled with loam and peat earth.

The Chevalier de la MARCK has given the name of *Dianella nemorofa* to the *Dracæna enfifolia* of LINNÆUS, with which this plant has confiderable affinity, but is certainly a diftinct fpecies. The *Dianella nemorofa* of JACQUIN, figured in his *Hort. Schoenb. t.* 94. appears to be different from both.

We have adopted the name by which it is known in thofe collections about town which poffefs it.—We hope to take another opportunity of faying fomething more on this genus as diftinguifhed from *Dracæna.*



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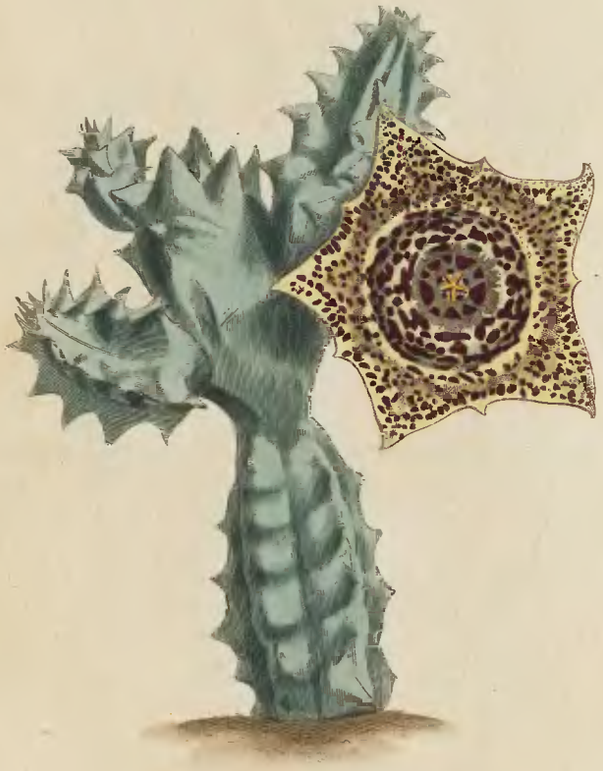

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Stapelia Lentiginosa. Freckled Stapelia.

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Class and Order.

Pentandria Digynia.

Generic Character.

Contorta. *Nectar.* duplici stellula 5-phylla tegente genitalia.

Specific Character.

STAPELIA *lentiginosa*, corollis decem-dentatis, laciniis alternis obsoletis, fundo concavo orbiculo elevato cincto; caulibus superne ramosis, ramis pentagonis patentibus tuberculosis: tuberculis uncinatis.

When the Hortus Kewensis of Mr. Ayton was published, there were only five species of Stapelia known in this country, and of these two had been newly introduced by Mr. Francis Masson. This laborious investigator of nature has since described and figured forty-one new species, the flowers of many of which are extremely beautiful as well as singular in their appearance. On carefully examining all these species, as well as those before known, we cannot find that our plant in every respect exactly corresponds with any one of them. In the colour and shape of the corolla, it agrees very well with the *guttata*, but in this the flowers sit on longer peduncles, which arise from the base of the stalk, the stalks are undivided, and the tubercles are not hooked; on which account we deem ourselves justified in considering it as a new species.

The specimen from which our figure was taken, flowered in the collection of E. D. Woodford, Esq. at Vauxhall, last summer, who received it from the royal garden at Kew, into which this species also was introduced by Mr. Francis Masson.

For the proper mode of culture, see our account of *Stapelia variegata.*

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SEMPERVIVUM GLOBIFERUM. GLOBULAR HOUSELEEK.

Class and Order.

DODECANDRIA DODECAGYNIA.

Generic Character.

Cal. 12-partitus. *Petal.* 12. *Caps.* 12. polysperm.

Specific Character and Synonyms.

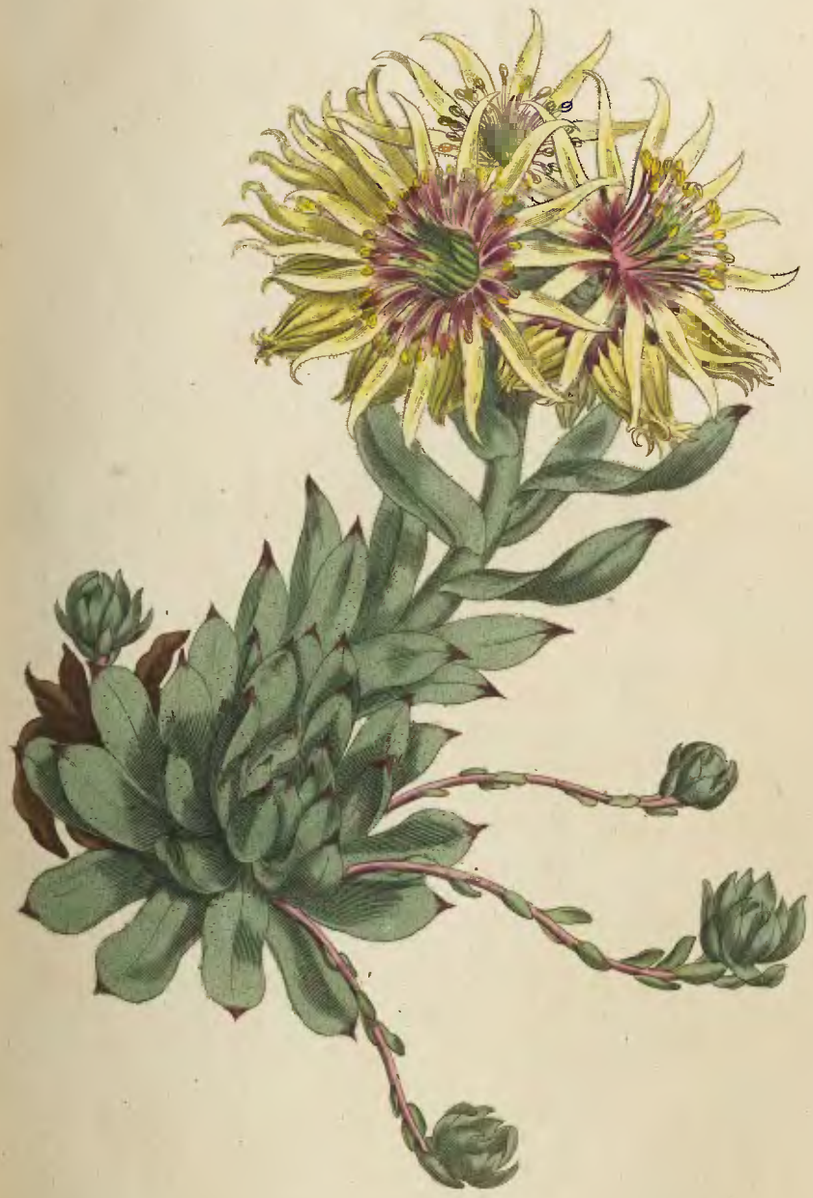
SEMPERVIVUM *globiferum*, foliis ciliatis, propaginibus globosis. *Spec. Plant.* 665. *Edit. Willdenow*, 952. *Jacquin Aust.* 5. *p.* 50. *tab. app.* 40.
SEDUM rosulis ciliatis, petalis, subulato-lanceolatis duodenis. *Haller Hist. n.* 950.
SEDUM majus vulgari simile, globulis decidentibus. *Morison*, 3. *p.* 472. *s.* 12. *t.* 7. *f.* 18.

This plant being a native of Russia and Germany, is perfectly hardy, easily bearing our winters in any dry situation.

Like most succulent plants, it grows best in a dry light soil, such as loam mixed with lime rubbish, &c.

We are told by Mr. AYTON, that it was cultivated by Mr. PHILIP MILLER in 1731, but was probably lost from our gardens till it was again introduced by the late Mr. CURTIS.

It flowered for the first time in the Brompton Botanic Garden last summer.



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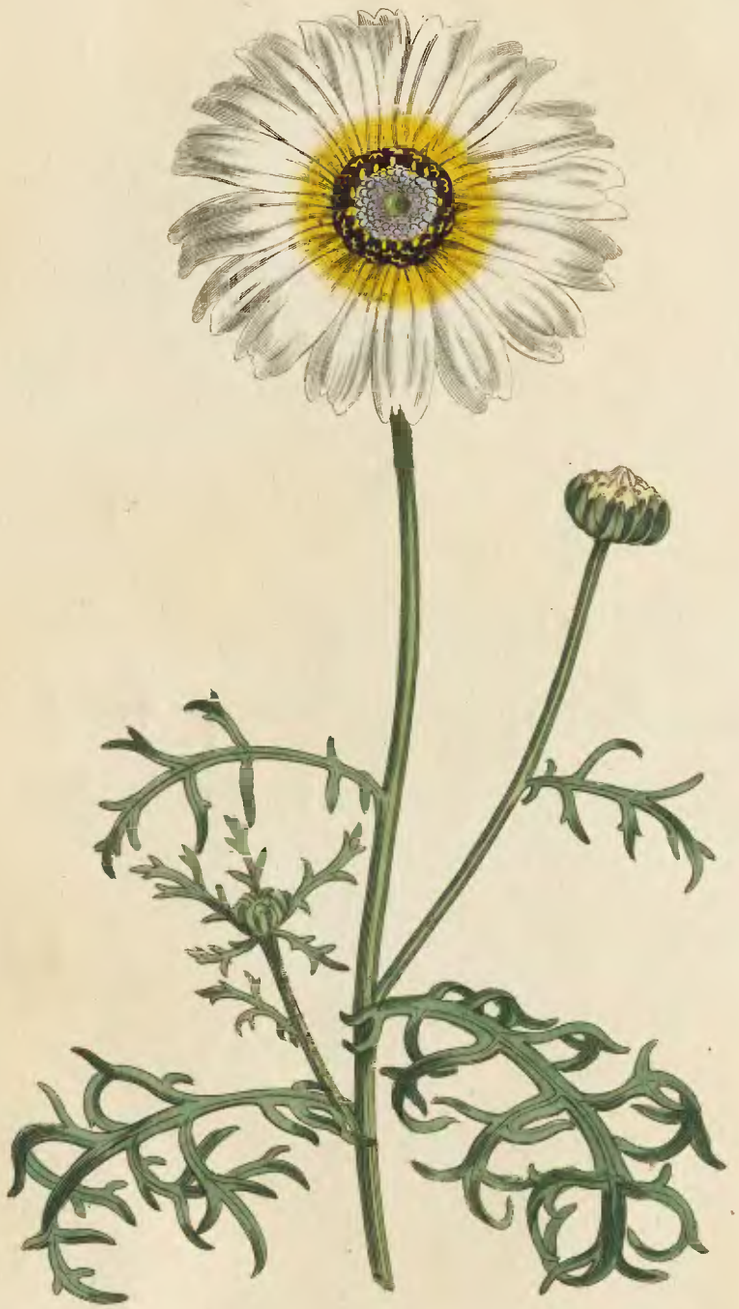

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Chrysanthemum Tricolor. Three-Coloured Chrysanthemum.

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Class and Order.

Syngenesia Polygamia Superflua.

Generic Character.

Recept. nudum. *Pappus* marginatus. *Cal.* hemisphæricus imbricatus, squamis marginalibus membranaceis.

Specific Character and Synonym.

CHRYSANTHEMUM *tricolor*, foliis duplicato-pinnatifidis, pinnulis linearibus distantibus recurvis, caule erecto ramoso.

CHRYSANTHEMUM *tricolor*. *Andrews's Botanical Repository, pl.* 109.

This beautiful *Chrysanthemum* was brought from Petersburgh by Mr. Fraser, of King's-Road, Chelsea, in 1798, by whom we are informed, that it is an annual of easy culture, growing readily from either seeds or cuttings; it has hitherto been confined to the greenhouse, but perhaps is an hardy plant.

It is probably a native of *Barbary* or *Morocco*, having been raised at the royal garden at Kew from seeds sent from that quarter by Mr. Broussonet, and has considerable affinity with the *trifurcatum* of M. Desfontaines, figured in his *Flora Atlantica, tom.* 1. *tab.* 335. *f.* 2.

A less pleasing variety occurs with perfectly yellow flowers.

SOPHORA AUSTRALIS. BLUE SOPHORA.

****

Class and Order.

DECANDRIA MONOGYNIA.

Generic Character.

Cal. 5-dentatus, superne gibbus. *Cor.* papilionacea; alis longitudine vexilli, *Legumen.*

Specific Character and Synonyms.

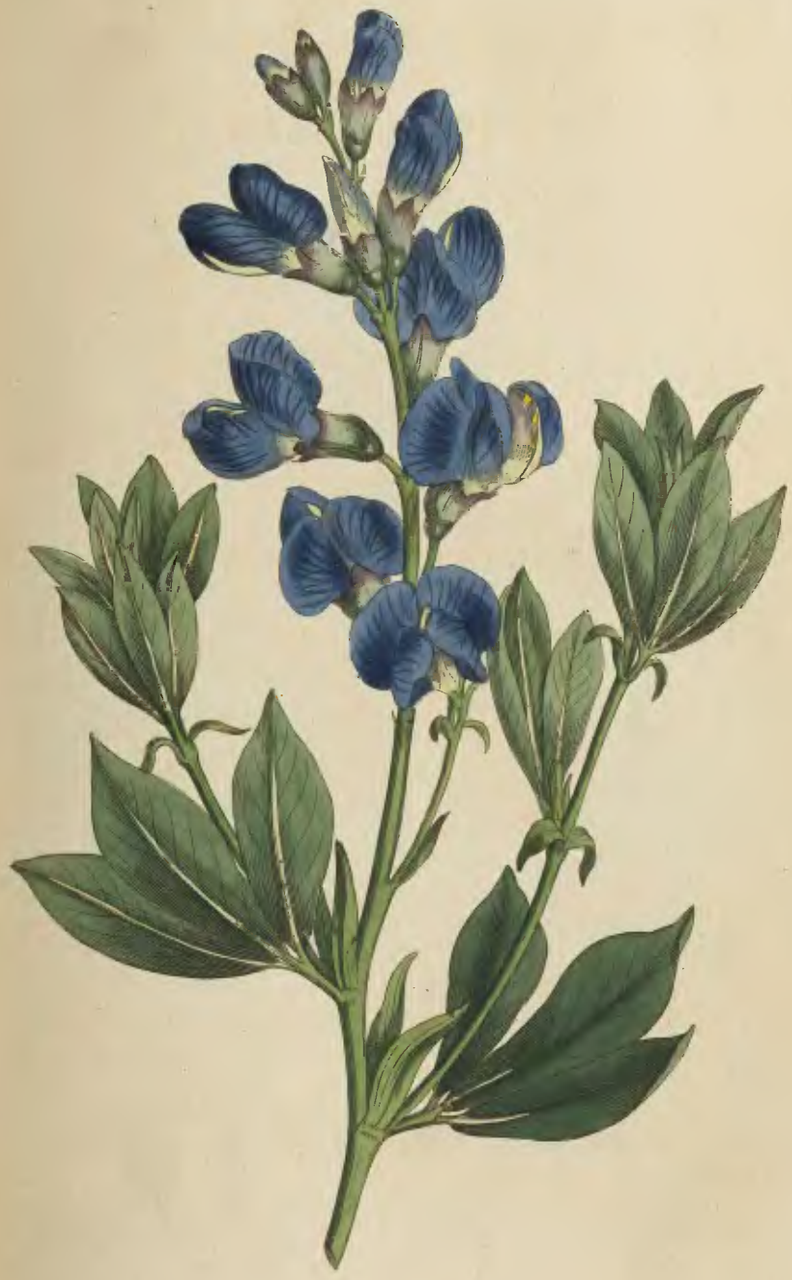
SOPHORA *australis*, foliis ternatis subsessilibus glabris, stipulis ensiformibus. *Syst. Vegetab.* 391. *Ait. Kew.* 2. *p.* 45.

PODALYRIA *australis*, foliis ternatis petiolatis, foliolis obovato-lanceolatis obtusis; stipulis lanceolatis acutis petiolo duplo longioribus. *Spec. Plant. Willdenow, p.* 503.

This is an hardy herbaceous perennial, growing well in a light soil and open situation, and flowering about the beginning of June.

It is a native of Carolina, and an old inhabitant of our gardens, having been cultivated by Mr. PHILIP MILLER in 1758.

Its near resemblance in habit to some of the Lupins, has occasioned it to be sometimes mistaken for the *Sophora lupinoides* of LINNÆUS, which has yellow flowers.



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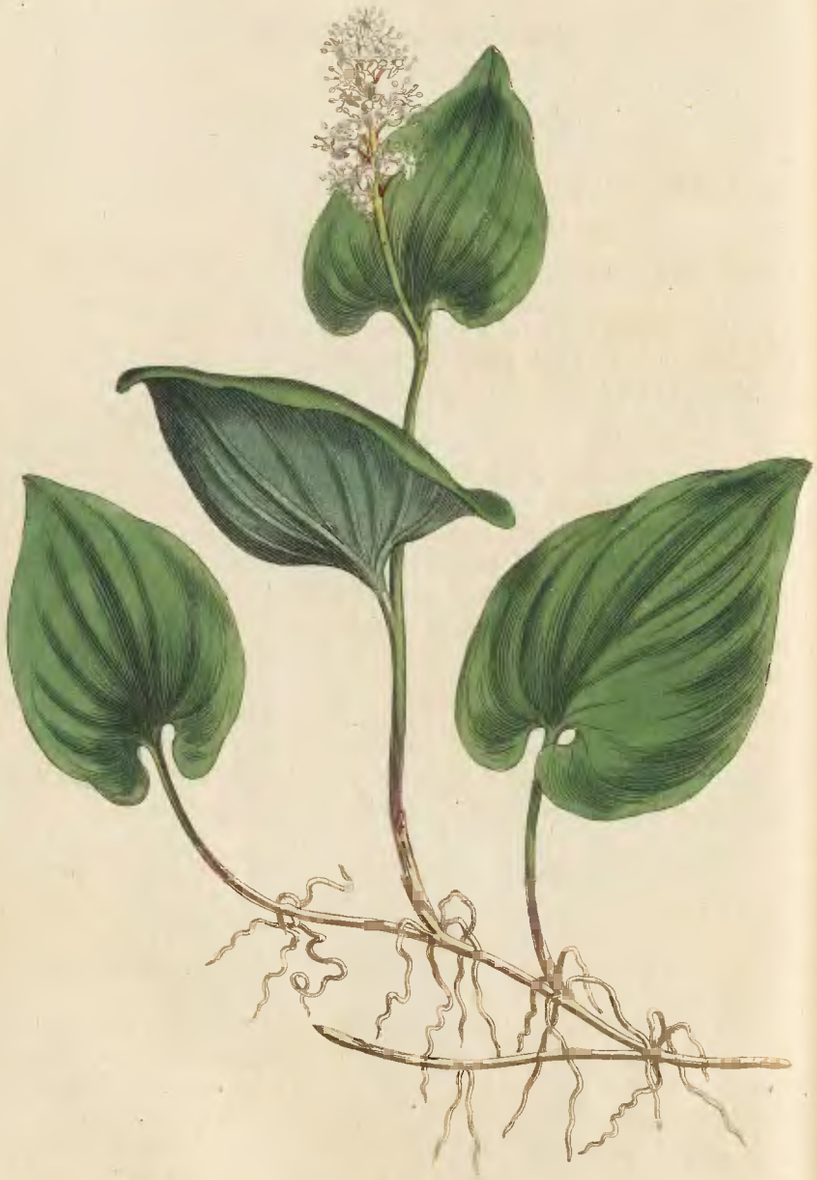

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CONVALLARIA BIFOLIA. LEAST SOLOMON'S SEAL.

Class and Order.

HEXANDRIA MONOGYNIA.

Generic Character.

Cor. sexfida. *Bacca* maculosa 3-locularis.

Specific Character and Synonyms.

CONVALLARIA *bifolia* foliis cordatis floribus tetrandris. *Syst. Vegetab.* 335. *Ait. Kew. p.* 456.
LILIUM CONVALLIUM minus. *Bauh. Pin.* 304.
UNIFOLIUM. *Hall. Helv. n.* 1240.
MONOPHYLLON. *Ger.* 330. *f.* 2. *emac.* 409.

There are few genera in which the parts of fructification vary so much, both in form and number, as in *Convallaria*; LINNÆUS makes three divisions of the species, first, such as have bell-shaped flowers, as Lily of the Valley; second, such as have funnel-shaped, as common Solomon's Seal; and third, such as have wheel-shaped, as the present plant; the unripe spotted berry is said to afford a mark of distinction common to the whole; but how few are there who have an opportunity of seeing this in all the different species?

Most of these plants are ornamental, and many of them have been long cultivated in our gardens for their fragrance, and the beauty of their foliage or flowers; the present small and delicate species was cultivated and figured by Mr. MILLER in 1739.

It seldom rises above the height of four or five inches; the flowering stem is usually furnished with two, sometimes only one leaf, and is terminated by a loose spike of white flowers, which appear in May, and with us are rarely succeeded by fruit.

" It is a native of the North of Europe, Holland, Germany, " Switzerland, and Carniola. Mr. MILLER gathered it near " Haerlem and the Hague, where Mr. RAY had gathered it " before on the 28th of May in flower." *Mart. Mill. Dict.*

Is a hardy perennial, increasing greatly by its creeping roots, on which and on other accounts, it is best kept in pots with the smaller alpines; plants which are regarded by me as so many beautiful cabinet pictures, to others they will not appear in the same light.

" Non omnes arbusta juvant, humilesque myricæ."

Chironia Linoides. Flax-Leaved Chironia.

Class and Order.

Pentandria Monogynia.

Generic Character.

Cor. rotata. *Pistillum* declinatum. *Stam.* tubo corollæ insidentia. *Antheræ* demum spirales. *Peric.* 2-loculare.

Specific Character and Synonyms.

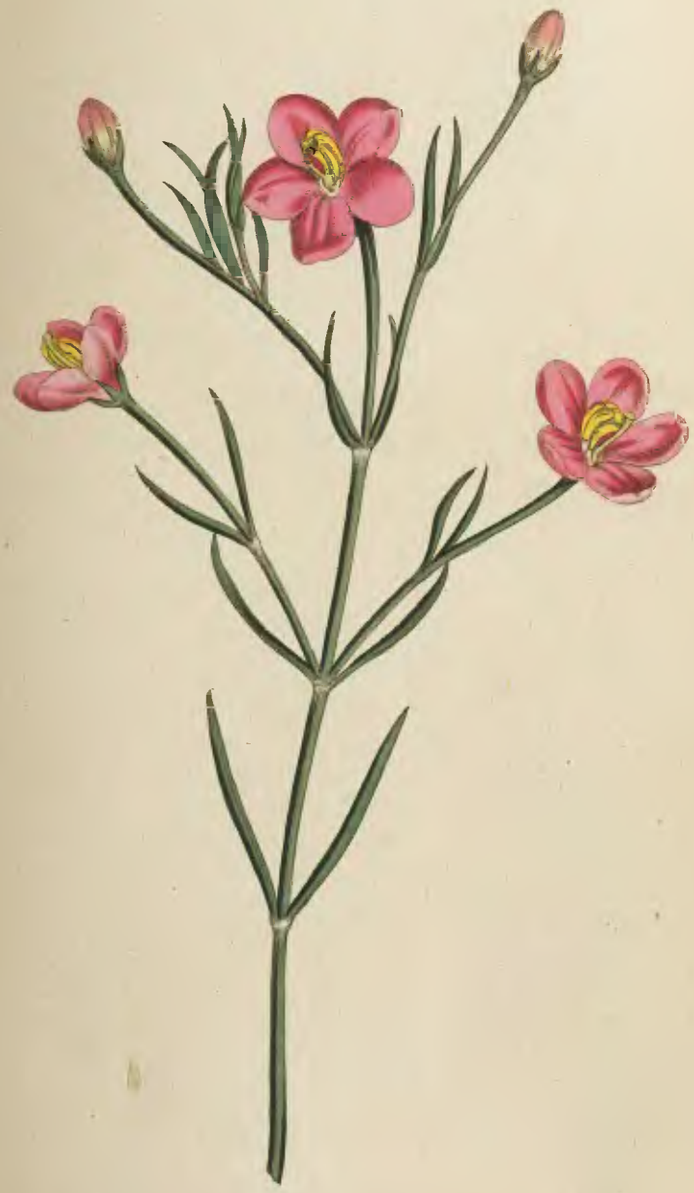
CHIRONIA *linoides* herbacea foliis linearibus. *Linn. Syst. Vegetab. ed.* 14. *Murr. p.* 229. *Ait. Kew. v.* 3. *p.* 487.

RAPUNTIO affinis lini facie capitis b. spei. *Breyn. Cent.* 175. *t.* 90.

The *Chironia baccifera* already figured, afforded a singular instance of variation from the generic character in its seed vessel; in the present species we have as remarkable a one in the antheræ, which do not finally assume the spiral appearance so peculiarly characteristic of the genus; yet in all other respects it is a perfect *Chironia*, and a very neat pretty greenhouse plant it is, occupying but little room, and enlivening the collection by its blossoms, plentifully produced during most of the year, and especially at the close of summer; it requires to be frequently renewed, which is easily done, as it strikes readily from cuttings; it requires also more warmth in the winter than most greenhouse plants, and as it is apt to go off in cold moist seasons, it will be prudent to keep a pot or two of it on the front shelf of the stove during such unfavourable weather.

Linnæus describes it as having an herbaceous stem, and Mr. Ayton marks it as an herbaceous plant; but surely it is not herbaceous, in the strict sense of the word, nor is it so regarded by cultivators.

It is a native of the Cape, and was introduced by Mr. Masson in 1787.



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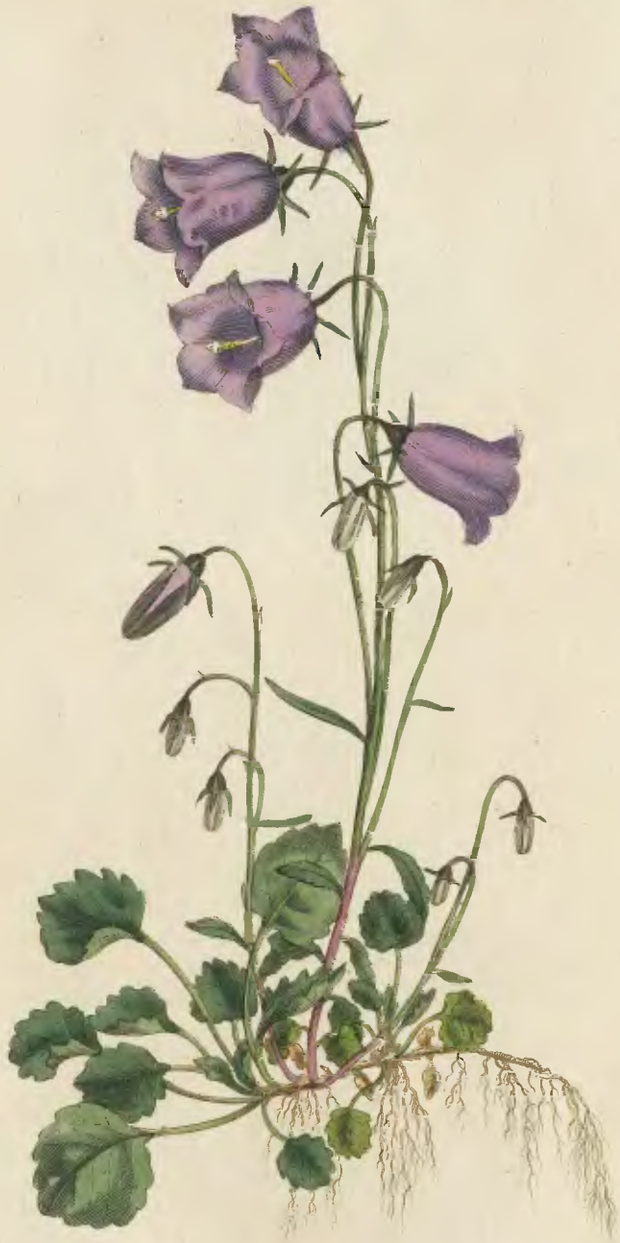

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CAMPANULA PUMILA. DWARF-CAMPANULA.

Clafs and Order.

PENTANDRIA MONOGYNIA.

Generic Character.

Cor. campanulata fundo claufo valvulis ftaminiferis. *Stigma* 3-fidum. *Capf.* infera, poris lateralibus dehifcens.

Specific Character and Synonyms.

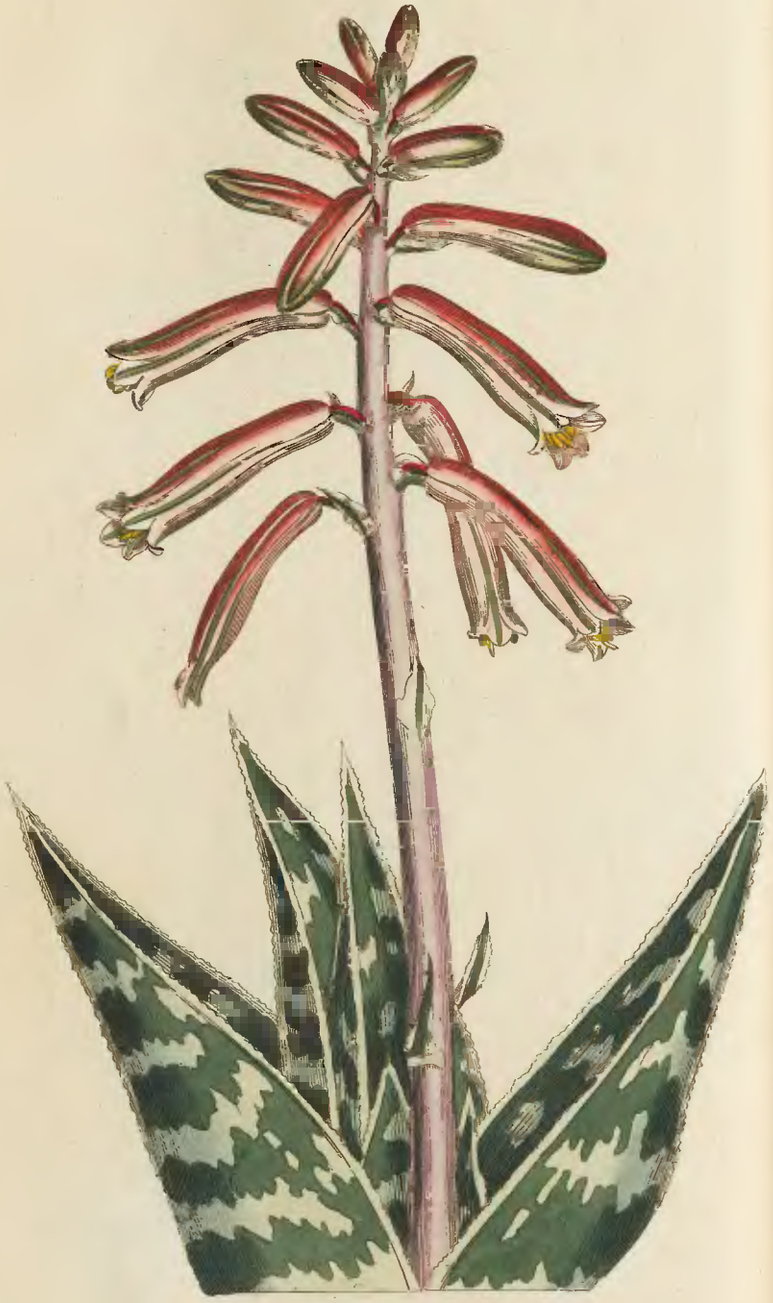
CAMPANULA *pumila*, foliis radicalibus ovatis crenatis, petiolis complanatis, floribus racemofis fecundis cernuis.

CAMPANULA *rotundifolia var.* β. *Spec. Plant.* 232. *Ait. Kew.* 1. *p.* 219.

CAMPANULA *minor rotundifolia alpina. Bauh. Prod.* 34.

CAMPANULA *pufilla*, foliis omnibus ferratis, radicalibus cordato-ovatis, firmis nitidis: caulinis linearibus alternis remotis. *Jacq. Collect.* 2. *p.* 79. ?

Having feen this *Campanula* cultivated in the Botanic Garden, both at Lambeth-Marfh and Brompton, for many years, during which time it has always preferved its diftinguifhing features. We cannot hefitate in confidering it as a diftinct fpecies from the *rotundifolia*, of which LINNÆUS has made it only a variety. It is a plant of much humbler growth, the radical leaves are never reniform, are frequently continued a confiderable way up the ftem, and grows upon fhorter footftalks, which are flattened, not filiform; they likewife continue during the flowering, forming a mat, whereas thofe of the *rotundifolia* for the moft part difappear at this feafon. The *cefpitofa* of SCOPOLI is probably a variety of this. JACQUIN having quoted SCHEUCHZER's *Campanula, fig.* 4. *It.* 4. as a fynonym of his *pufilla*, which appears very diffimilar to ours, makes it fomewhat uncertain whether his plant may be the fame, as he has not given us any figure; on which account we adopt the name of *pumila*, by which it has heen long known in the Botanic Garden. There is a white variety; both forts bear a profufion of flowers, and are very ornamental, particularly fuited to adorn rock-work, being hardy perennials.



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Aloe Variegata. Partridge-Breast Aloe.

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Class and Order.

Hexandria Monogynia.

Generic Character.

Cor. erecta, ore patulo fundo nectarifero. *Filam.* receptaculo inserta.

Specific Character and Synonyms.

ALOE *variegata* subacaulis, foliis trifariis pictis canaliculatis: angulis cartilagineis, floribus racemosis cylindricis. *Thunb. Aloe, n.* 12. *Ait. Kew. v.* 1. *p.* 470.

ALOE *variegata* floribus pedunculatis cernuis racemosis prismaticis: ore patulo æquali. *Linn. Sp. Pl. ed.* 3. *p.* 459.

ALOE africana humilis, foliis ex albo viridi variegatis. *Comm. præl.* 79. *t.* 28. *var.* 27. *t.* 27.

So many desirable points unite in this Aloe, that we are not to wonder at its being held in such very high esteem by all that have the least taste for plants, especially those of the succulent kind; we frequently see it nursed up with great care by those who have only the convenience of a parlour window, and succeed better with such than in the greenhouses of many: it grows readily and blows freely but irregularly, during most of the summer months; its foliage is beautiful both in its form and markings, and its flowers are no less handsome; it rarely exceeds a foot or a foot and a half in height, when in flower; is increased by offsets, and requires the same treatment as the Aloe tribe in general.

Is a native of the Cape, and was cultivated here by Mr. Fairchild in 1720, *Blair's Bot. Ess.*

Miller informs us, that he raised a variety of it from Cape seeds with broader and more spreading leaves and a taller flowering stem.

LOBELIA BICOLOR. SPOTTED LOBELIA.

Clafs and Order.

PENTANDRIA MONOGYNIA.

Generic Character.

Cal. 5-fidus. *Cor.* 1-petala irregularis. *Antheræ* fubcoalitæ. *Capf.* 2—5-locularis infera.

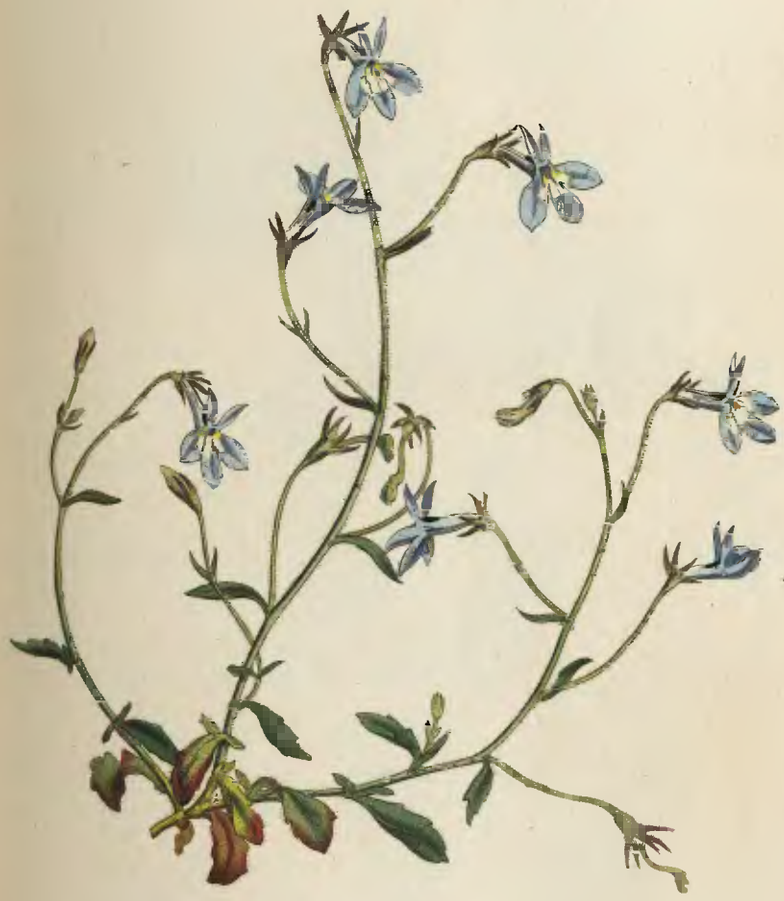
Specific Character and Synonyms.

LOBELIA *bicolor*, caulibus patulis foliis inferioribus oblongis dentatis pubefcentibus fubfeffilibus, corollis bilabiatis: labio fuperiori reflexo.

In fo extenfive a genus as the Lobelia, fo few of which have been accurately figured, or even fully defcribed, it is not to be wondered at if fome confufion fhould prevail. This is efpecially the cafe among the fmaller fpecies.

The pretty lively little plant which is here figured, flowered laft fummer in the Botanic Garden at Brompton, and in fome other collections about town; the bright blue corolla diftinguifhes it at firft fight from the *pubefcens*, which has white flowers; we were, however, inclined to confider it only as a variety, but from a confideration of the defcription and figure, by Mr. SALISBURY, in his *Icones plantarum rariorum*, it feems to differ in many material points, and poffibly it may be the very plant that he has diftinguifhed from his *alyffifolia*, the *pubefcens* of the Kew Catalogue, under the name of *Lobelia Erinoides*; but certainly is not the *erinoides* of LINNÆUS, a fmaller, more delicate, trailing plant with flower-ftalks fhorter than the leaves. It agrees fo well with the fpecific character of *Lobelia Erinus*, as given in the *Mantiffa Plantarum*, that we were once inclined fo to determine it; but upon a careful examination of the fpecimens in Sir JOSEPH BANKS's *Herbarium*, it appears to be certainly different from the one which is there marked, as having been compared with the Linnean *Herbarium*; nor does it appear perfectly to correfpond with any fpecimen in Sir JOSEPH's extenfive collection: we hope therefore to ftand excufed for having applied a new name and fpecific character. This we do always unwillingly, and never, when we can be tolerably fatisfied that our plant is the fame that has been previoufly defcribed.

It is an annual which readily perfects its feeds if brought forward by being fown in a hot-bed in the Spring, and treated the fame as other tender annuals.



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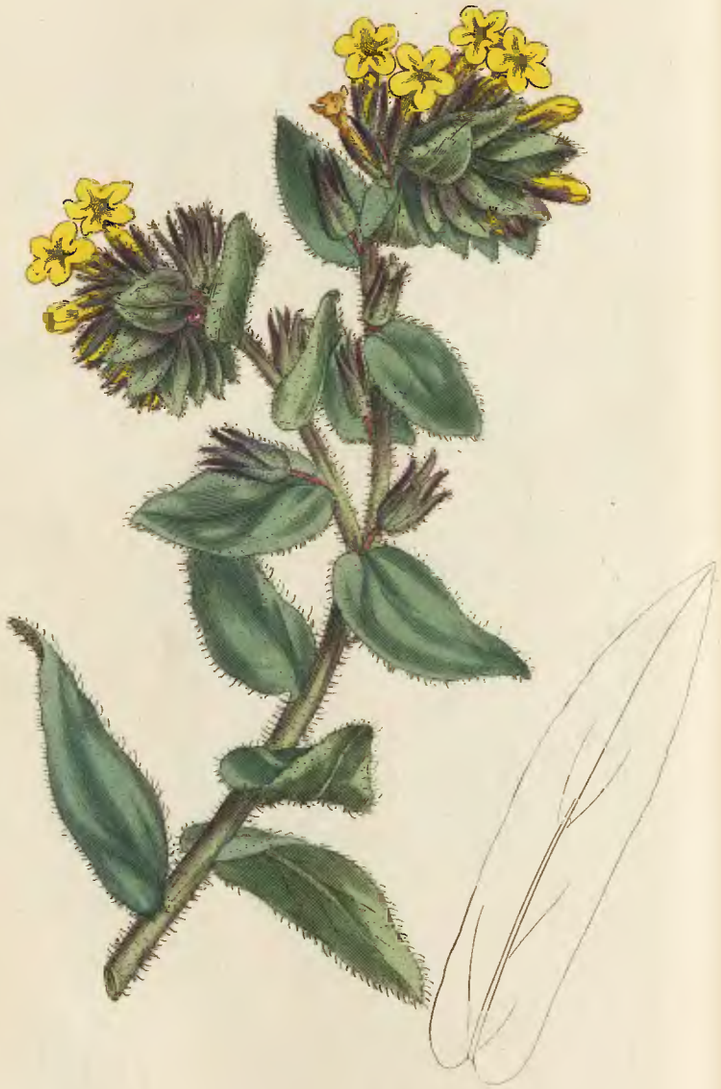

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LITHOSPERMUM ORIENTALE. YELLOW GROMWELL, or BUGLOSS.

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Clafs and Order.

PENTANDRIA MONOGYNIA.

Generic Character.

Cor. infundibuliformis, fauce perforatâ nuda. *Cal.* 5-partitus.

Specific Character and Synonyms.

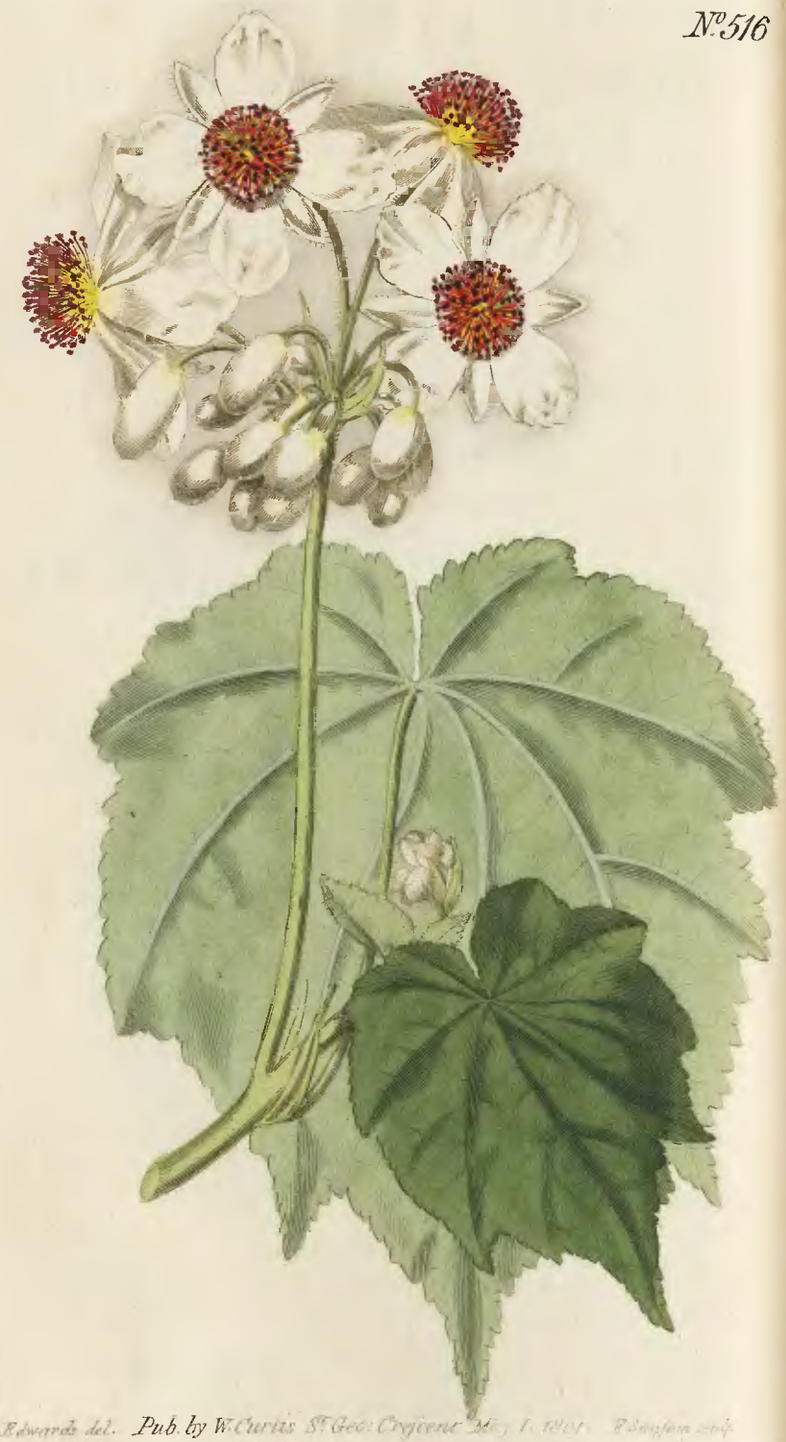
LITHOSPERMUM *orientale*, ramis floriferis lateralibus bracteis cordatis amplexicaulibus. *Linn. Syft. Vegetab. p.* 156.
ANCHUSA *orientalis. Sp. Pl.* 191.
BUGLOSSUM *orientale* flore luteo. *Tournef. cor.* 6. *Buxbaum, Cent.* 3. *p.* 17. *t.* 29. *Dill. Elth.* 60. *t.* 52. *f.* 60.
ASPERUGO *divaricat. Murr. in Comment. Gott.* 1771. *p.* 25. *t.* 2.

This is a hardy, perennial, herbaceous plant, a native of the Levant, of fome value on account of its early flowering and its long fucceffion; the firft may be ftill forwarded by placing it under a frame.

It is propagated by feeds, by cuttings, or by parting its roots in the Autumn, and will grow in almoft any fituation.

Though cultivated in the Botanic Garden at Chelfea, in the year 1713, it is by no means common.

It flowers in the open ground in May and June, and continues in bloffom the greateft part of the Summer.



S. Edwards del. Pub. by W. Curtis St. Geo. Crescent Mo. 1. 1801. B. Sanson sculp.

SPARMANNIA AFRICANA. AFRICAN SPARMANNIA.

Class and Order.

POLYANDRIA MONOGYNIA.

Generic Character.

Cor. 4-petala, reflexa. *Nectaria* plura torulosa *stamina cingentia. Cal.* 4-phyllus. *Caps.* angulata, echinata, 5-locularis.

Specific Character and Synonyms.

SPARMANNIA *africana. Linn. Suppl. Pl. p.* 266. *Retzii Observationes Botanicæ, f.* 5. *t.* 3.

This beautiful shrub is a native of the Cape of Good Hope, from whence it was introduced by the celebrated traveller whose name it bears. It grows to the height of six feet or more, is thickly divided into alternate branches, finely clothed with large cordate and lobed pendulous leaves upon erect footstalks, making a very handsome appearance even in foliage, in which state it much resembles a sida; its fine umbels of flowers are produced plentifully along the young branches opposite the leaves, in the same manner as in the common species of *Pelargonium*, which it is very like in its inflorescence, the flowers nodding before they are expanded, and becoming erect as they approach maturity. The petals, which are of a snowy white, remain but a short time expanded, being soon reflected with the calyx: this is white like the petals, but covered, as is the whole of the plant, the petals excepted, with fine hairs. The singular nectaries, the characteristic of the genus, surround the filaments, which they so nearly resemble, that a superficial observer might readily confound them; they are very numerous, are shorter than the purple filaments, of a yellow colour, torulose, or nobbed, at the upper part: they have no anthers, though they have purple tips not unlike them. The whole plant abounds with a tasteless mucilage.

The

The defcription of the *Sparmannia* in the *Supplementum Plantarum*, is in moft refpects very accurate; the petals are there faid to be yellow: whether the plant is fubject to vary in colour, or that an error has arifen from the examination of dried fpecimens, we are not at prefent able to determine.

It was firft introduced to the Royal Garden at Kew, from whence it has been diftributed to feveral collections about town, and though at prefent a fcarce plant, will not perhaps long remain fo, being readily propagated by cuttings, if treated in the fame manner as fome of the more tender *Pelargoniums*.

Our figure was drawn from a fpecimen which flowered in great perfection the laft month, at the Nurfery of Meffrs. WHITLEY and Co. at Old Brompton. Except at Kew, we have not heard of its having flowered elfewhere.

LAVATERA THURINGIACA. GREAT-FLOWERED LAVATERA.

Claſs and Order.

MONADELPHIA POLYANDRIA.

Generic Character.

Calyx duplex, exterior 3-fidus. *Arilli* plurimi monoſpermi.

Specific Character and Synonyms.

LAVATERA *thuringiaca* caule herbaceo, fructibus denudatis, calycibus inciſis. *Linn. Syſt. Vegetab. ed.* 14. *Murr. p.* 626. *Jacq. Fl. Auſtr. v.* 4. *t.* 311.

LAVATERA *thuringiaca* foliis inferioribus cordatis crenatis ſubrotundo-lobatis ſummis haſtatis, pedunculis longis, ſolitariis, unifloris. *Linn. Syſt. Nat. ed.* 13. *Gmel.* 1057.

ALTHÆA *thuringiaca* grandiflora. *Dill. Hort. Elth.* 9. *t.* 8. *f.* 8.

ALTHÆA flore majore. *Bauh. Pin.* 316.

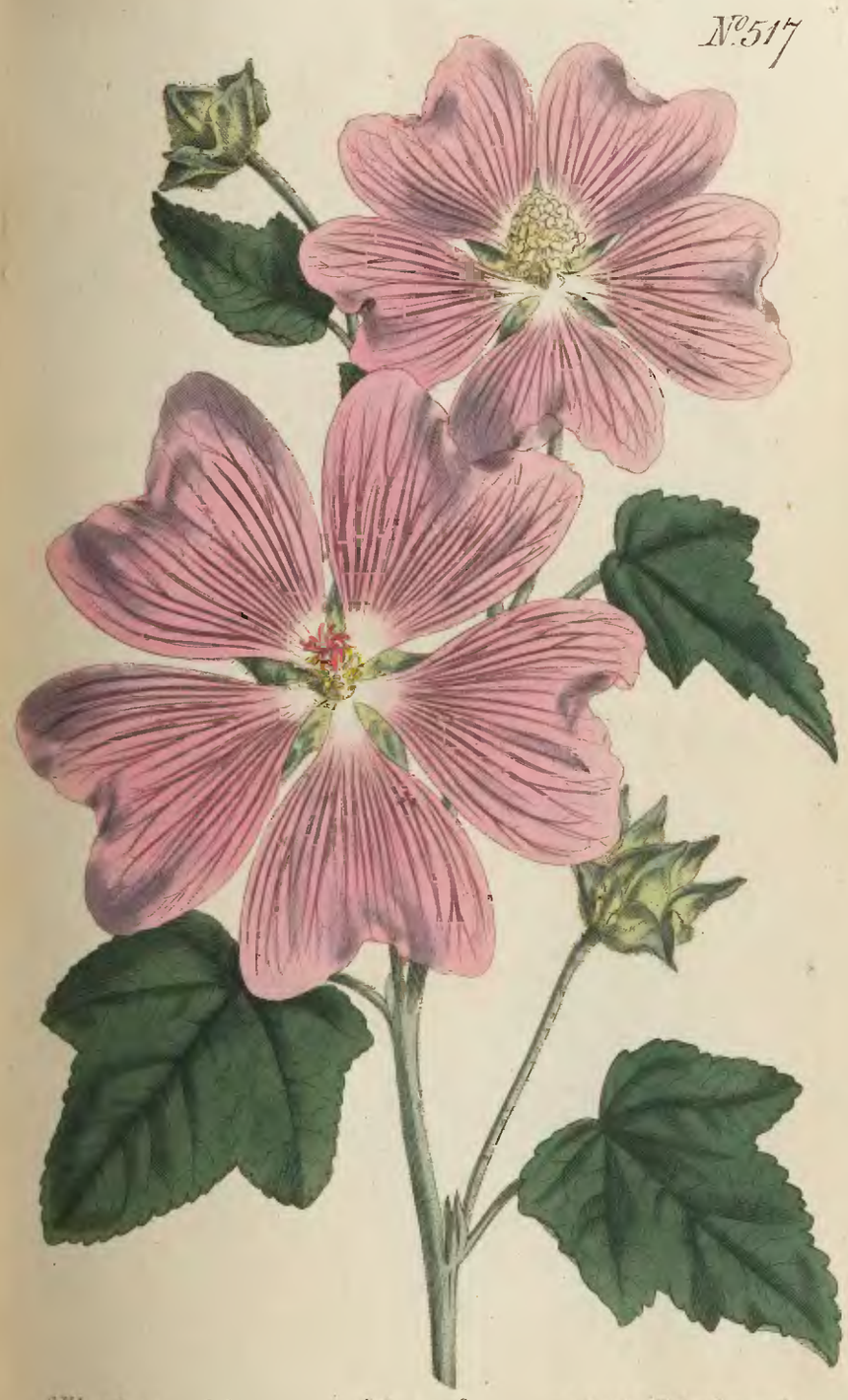
We have already figured in this work a ſpecies of Lavatera, the *trimeſtris*, the two varieties of which, the white and red, may vie with any of our annuals in contributing to the gaiety of the flower borders; the preſent ſpecies is a hardy perennial, and when it grows in perfection, produces flowers equally large.

Though cultivated by Mr. SHERARD in the year 1732, it is rarely met with in any of our collections; yet as an ornamental plant, it is certainly deſerving of culture, eſpecially by thoſe who have large gardens, and who aim at great variety.

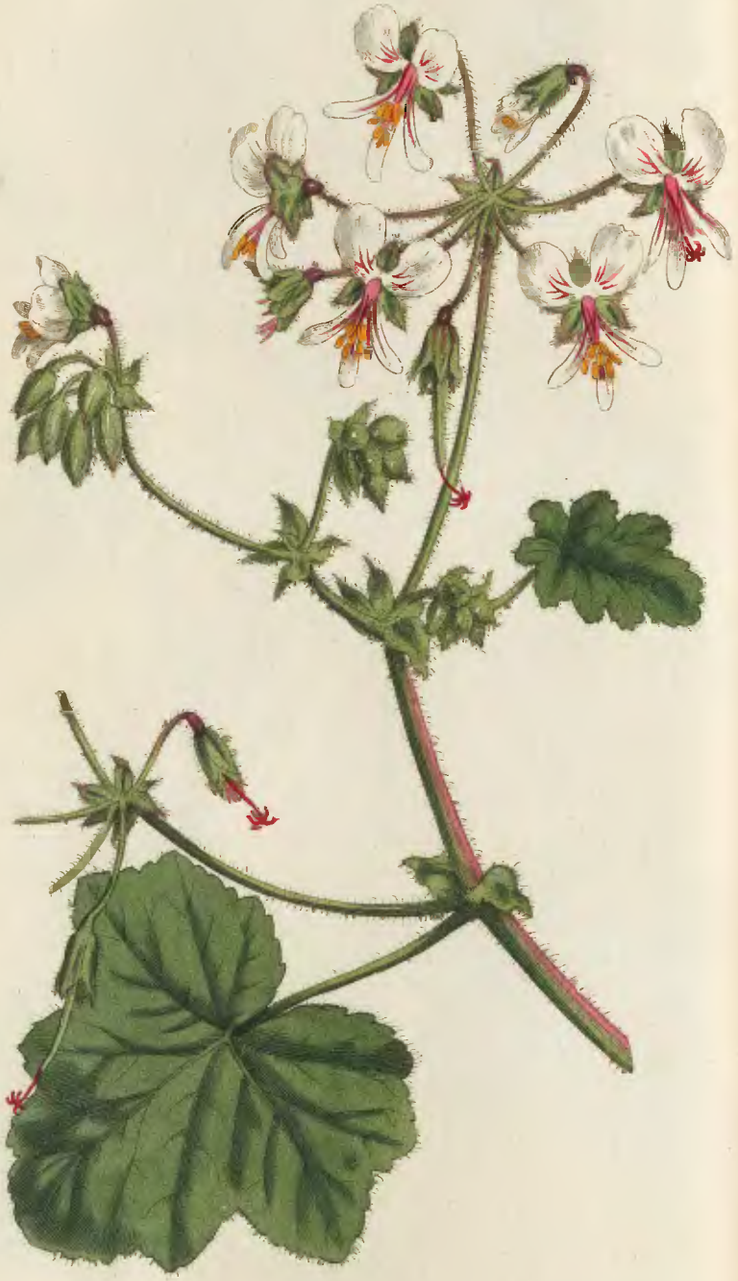
It is a native of Thuringia, as its name imports, and various parts of the North of Europe; flowers from July to September, and ripens its ſeeds in Autumn, by which the plant is eaſily raiſed, or it may be increaſed by parting its roots.

In the *Hortus Kewenſis* it is by miſtake marked as a ſhrub.

The baſe of the diviſion of each petal is ſingularly puckered, a character which authors do not appear to have ſufficiently noticed.



S. Edwards del. Pub. by W. Curtis, 5th Geo. Crescent. June 1. 1801. E. Sansom sculp.



PELARGONIUM TOMENTOSUM. PENNY-ROYAL CRANE'S-BILL.

****

Class and Order.

MONADELPHIA DECANDRIA.

Generic Character.

Cal. 5-partitus: lacinia suprema desinente in tubulum capillarem nectariferum secus pedunculum decurrentem. *Cor.* 5-petala, irregularis. *Fil.* 10 inæqualia, quorum 3 (raro 5) castrata. *Fruct.* 3-coccus, rostratus: rostra spiralia introrsum barbata.

Specific Character and Synonyms.

PELARGONIUM *tomentosum*, umbellis multifloris subpaniculatis foliis cordatis, hastato quinquelobis villosis mollissimis. *Spec. Pl. edit. Willdenow*, 677.

PELARGONIUM *tomentosum*, umbellis multifloris simplicibus compositisque, foliis cordatis subquinquelobis, serratis, tomentosis, mollissimis, caule carnoso. *Jacq. Icon. rar.* 3. *tab.* 537. *Collect.* 5. *p.* 240.

This species, although introduced since the publication of AITON's *Hortus Kewensis*, is now very common, being a quick grower, and very easily propagated by cuttings. It is generally known in the gardens by the trivial name of *piperitum*, and our gardeners usually understand by *tomentosum* a very different and a more rare and tender kind, the *blattarium* of JACQUIN, figured under the name of *Geranium tomentosum*, by Mr. ANDREWS, in his Botanist's Repository, pl. 115; but as our plant has been long ago described and figured by JACQUIN, in his *Icones plantarum rariorum*, who has called it PELARGONIUM *tomentosum*, and the same has been adopted by WILLDENOW, in his new edition of the *Species Plantarum*; it is become necessary to correct the vulgar appellation, in order to adhere to a name under which it has been already published.

It forms a large bushy shrub, but the branches being brittle and the tops heavy, is very apt to be broken and disfigured by the wind. It is not remarkable for the beauty of its flowers, and the odour is too strong to be pleasant to many persons, though to others it is very agreeable, much resembling Penny-Royal.

LILIUM PHILADELPHICUM. PHILADELPHIAN LILY.

****

Class and Order.

HEXANDRIA MONOGYNIA.

Generic Character.

Cor. 6-petala, campanulata: linea longitudinali nectarifera. *Caps.* valvulis pilo cancellato connexis.

Specific Character and Synonyms.

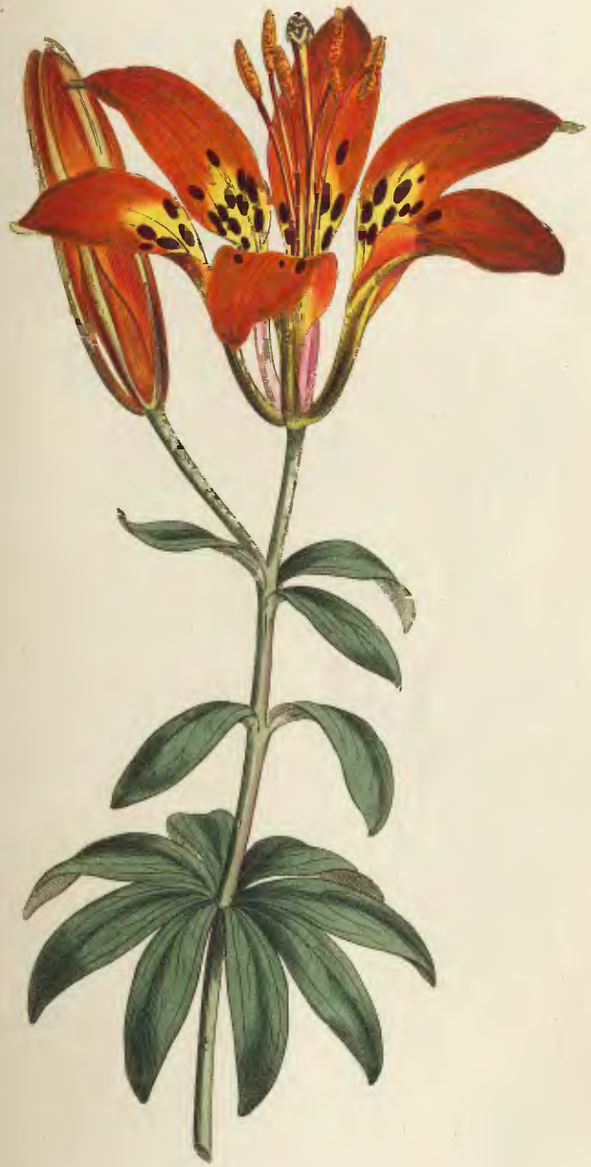
LILIUM *philadelphicum* foliis verticillatis floribus erectis, corolla campanulata: petalis unguiculatis. *Spec. Pl.* 435. *Ait. Hort. Kew.* 1. *p.* 431. *Miller Icon. Plant. t.* 165. *f.* 1.

The Philadelphian Lily was first cultivated in this country by Mr. PHILIP MILLER, in the year 1757, who received roots of it from Mr. JOHN BARTRAM of Philadelphia, its first discoverer. Its bulbs are small, white, and scaly, and produce each a single stem, somewhat more than a foot high, bearing at the summit two flowers, and clothed with a few whorls of entire lanceolate leaves, which in our specimen were longer and more reflexed than as described and figured by Mr. MILLER.

It flowers in July, but produces no ripe seed in this country.

The same treatment is proper for this Lily as for the *Lilium Catesbæi*, figured in the Botanical Magazine, pl. 259.

MILLER says, that both these are less hardy than some of the other sorts, and ought therefore to be protected in very severe winters by covering the beds with old tan or coal-ashes, to preserve them from the frost, and in the spring this covering may be removed before the bulbs shoot up.



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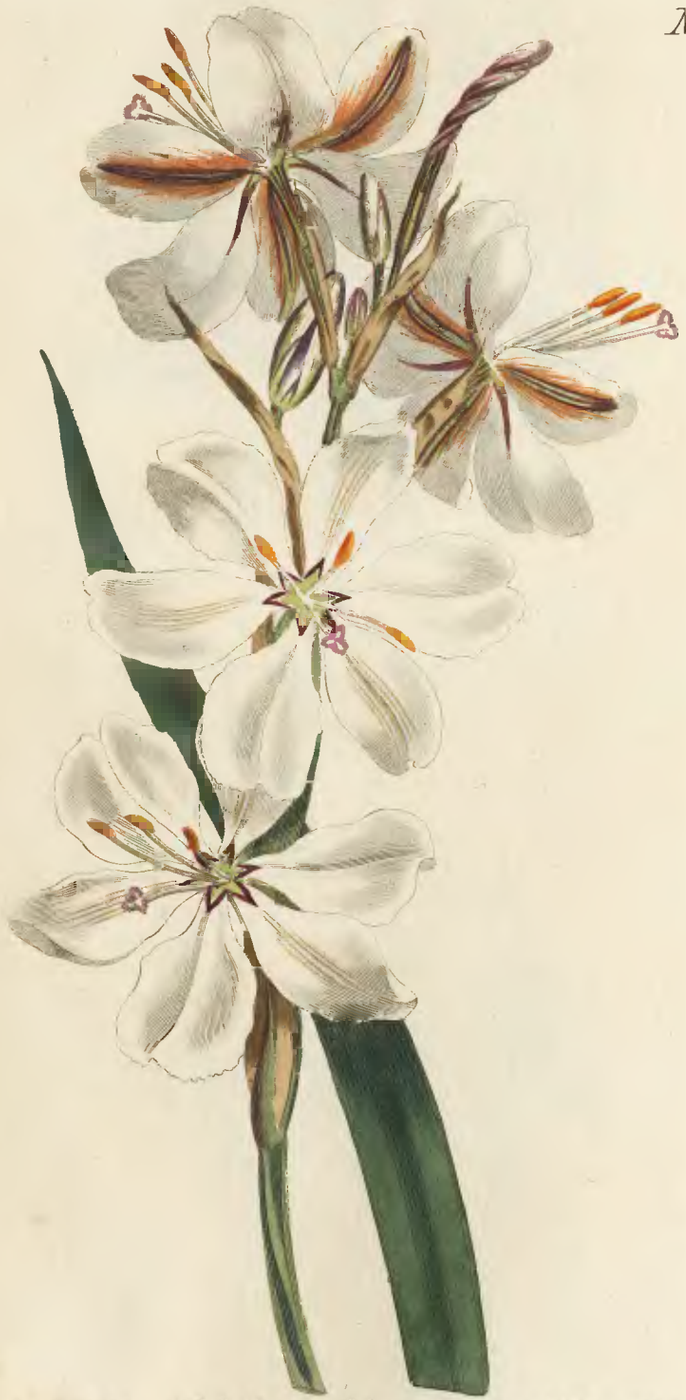


S. Edwards del. Pub. by W. Curtis St. Geo. Crescent June 1. 1801. F. Sansom sculp.

MORÆA SPIRALIS. SPIRAL-FLOWERED MORÆA.

Class and Order.

TRIANDRIA MONOGYNIA.

Generic Character.

Cor. submonopetala 6-partita inæqualis: laciniis erectis. *Stigmata* 3 petaliformia.

Specific Character and Synonyms.

MORÆA *spiralis* caule compresso articulato multifloro, foliis ensiformibus erectis, floribus axillaribus. *Linn. Suppl.* 99.

MORÆA *spiralis* scapo compresso articulato, foliis erectis, floribus alternis subsecundis. *Sp. Pl. edit. Willdenow,* 1. 240. *Thunberg. Diss. No.* 2. *Prod. p.* 10.

As this is undoubtedly the same plant which THUNBERG has called MORÆA *Spiralis,* we rather continue the name than attempt any innovation, which is at least much better deferred till the whole family shall undergo a revision. It certainly has but little affinity with several of the other species of *Moræa,* and WILLDENOW has questioned whether it should not be referred to *Aristea:* it seems however to differ in too many essential points from the ARISTEA *cyanea* to admit of their being united.

The root is stringy, the leaves ensiform and erect; the scape simple, erect, near a foot high, two-edged, jointed, slightly twisted; the spatha two-valved, entire; the flowers alternate, with short peduncles, and mostly directed one way; the corolla consists of six equal petals, which expand evenly, are white within with a purple base and become transparent between the veins as they decline; when they close, they twist round one another in a curious manner; the style is longer than the stamens, and terminates in three fringed stigmas of a bright purple colour. THUNBERG probably described the stigma as simple and villous, from examining it at too early a stage before it was expanded. Our figure was drawn from a specimen which flowered in April last at Mr. WOODFORD's, at Belmont-House, Vauxhall. It is a native of the Cape, and requires the same treatment as the ARISTEA *cyanea.*

Orobus Vernus. Early-Flowering Orobus or Bitter-Vetch.

Clafs and Order.

Diadelphia Decandria.

Generic Character.

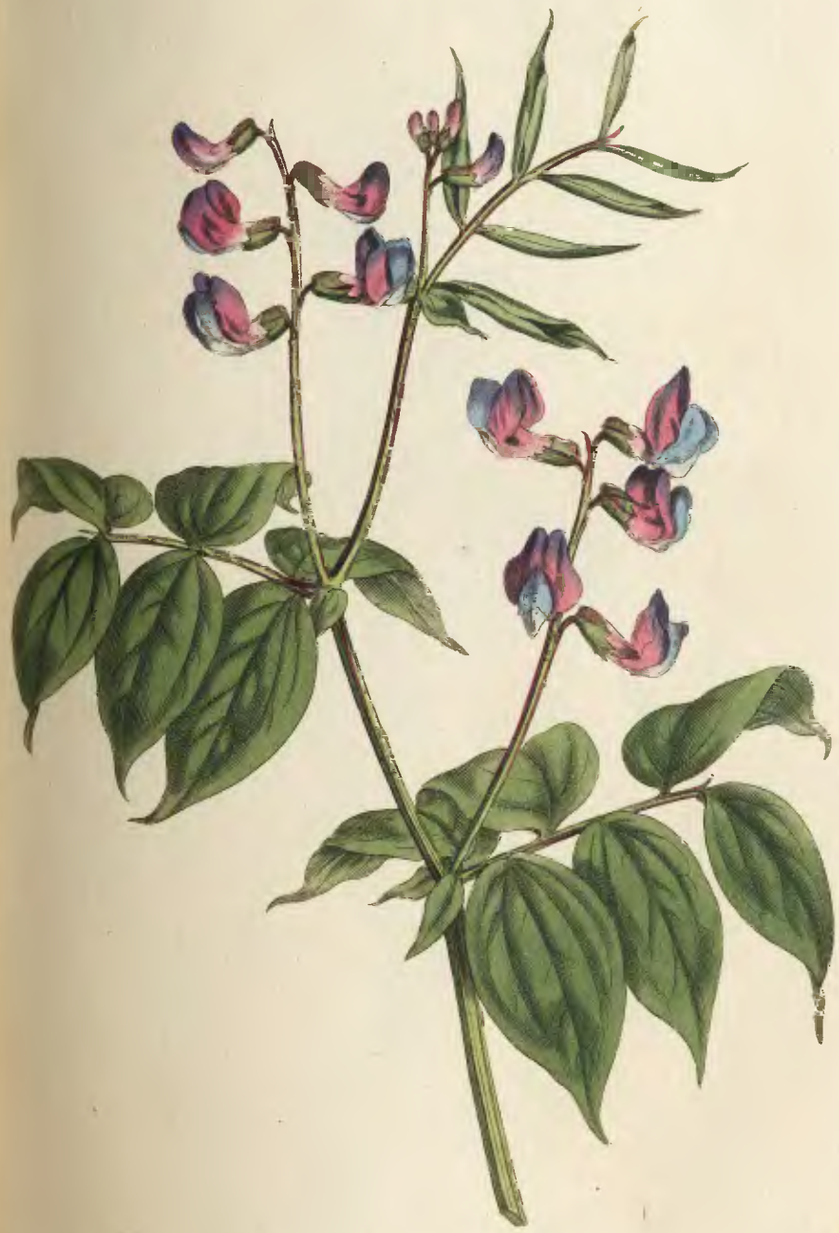
Stylus linearis. *Cal.* bafi obtufus: laciniis fuperioribus profundioribus brevioribus.

Specific Character and Synonyms.

OROBUS *vernus* foliis pinnatis ovatis, ftipulis femifagittatis integerrimis, caule fimplici. *Linn. Syft. Veget. ed.* 14. *Murr. p.* 661. *Ait. Kew. v.* 3. *p.* 38.
OROBUS fylvaticus purpureus vernus. *Bauh. Pin.* 351.
OROBUS venetus. Blue upright everlafting Peafe. *Park. Parad. p.* 337. *f.* 13.

The Orobus *vernus* is a hardy perennial, a native of Switzerland and Germany, growing to about the height of a foot, or a foot and a half, and producing numerous fhewy flowers in fpikes, at firft of a bright purple colour, afterwards blue, frequently, but not in all fituations, fucceeded by feed-veffels, fparingly productive of feeds; the fertility of the plant in this refpect depends as much on the favourablenefs of the feafon as on foil and fituation; for the cold Eafterly winds which frequently prevail in April, when this plant is in bloffom, not only mar its beauty, but render it unfruitful; hence it is often neceffary on thefe occafions, to cover it with a hand-glafs if growing in the open border, or to remove it into the greenhoufe if kept in a pot; but by gentle forcing we guard againft all accidents of weather, and may thus poffefs it in the greateft perfection.

It is ufually propagated by parting its roots in Autumn, or early in the Spring; may alfo be raifed from feeds, which we fhould be careful to gather in time; prefers a foil moderately ftiff and moift, and a fheltered fituation.



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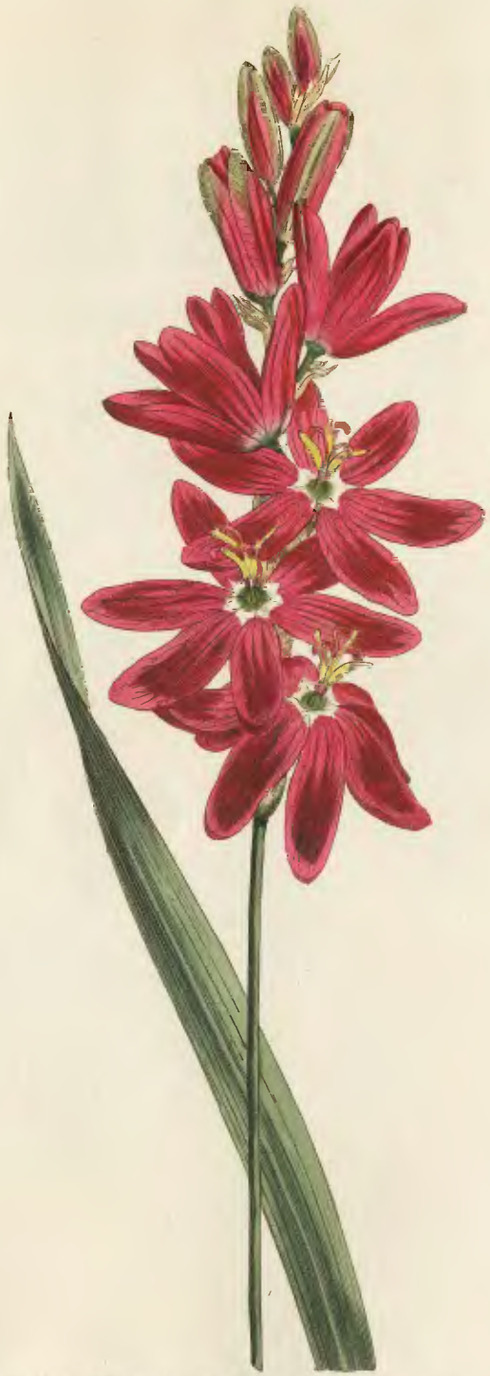


S. Edwards del. Pub. by W. Curtis St. Geo. Crescent July 1. 1801. F. Sansom

Ixia Patens. Spreading-Flowered or Crimson Ixia.

Class and Order.

Triandria Monogynia.

Generic Character.

Cor. 6-partita campanulata regularis. *Stigmata* 3.

Specific Character and Synonyms.

IXIA *patens;* tubo filiformi, limbo campanulato-patente: laciniis oblongis, filamentis coarctatis erectis, stigmatis laciniis antheras subæquantibus. *Gawler Ensat. African. inedit.*

IXIA *patens* foliis subensiformibus glabris, racemo terminali, corollis campanulatis patulis: laciniis alternis angustioribus, filamentis erectis. *Aiton Hort. Kew. t.* 1. *p.* 59.

IXIA *aristata.* *Schnev. Icon. tab.* 32.

IXIA *flaccida.* *Salisb. prodrom.* 35.

IXIA *concoler.* *Ibid.* 36. } an hujus varietates?

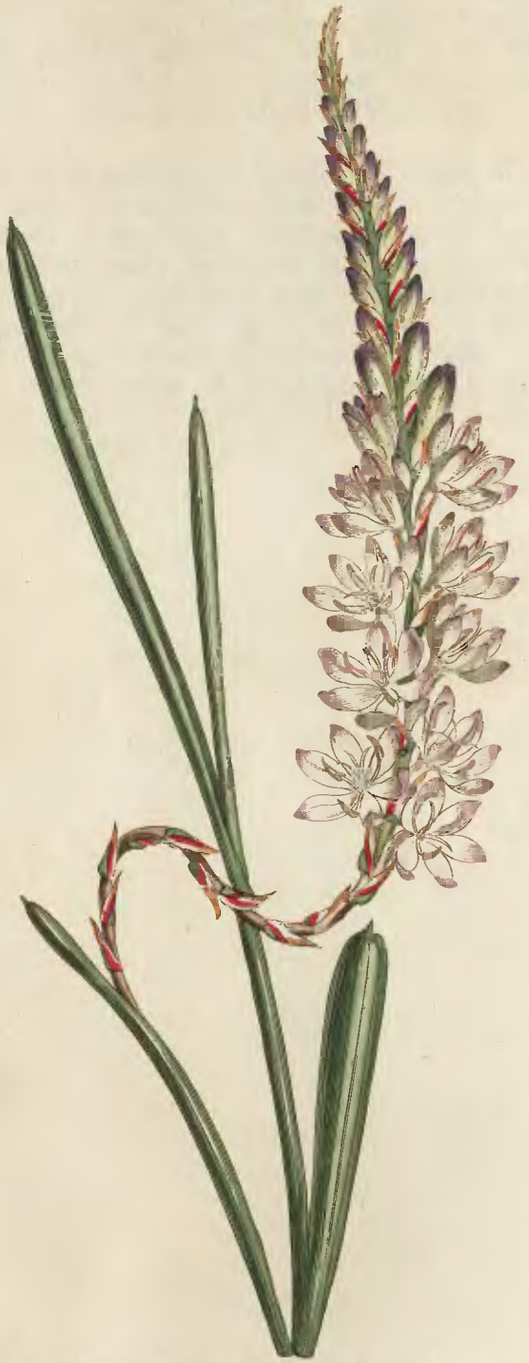
IXIA *conica.* *Ibid.* 36. }

In this very numerous family, in which even the limits of the genus are as yet far from being well ascertained, there is often great difficulty in tracing out the synonyms of preceding authors. In this instance we acknowledge ourselves entirely indebted to John Bellenden Gawler, Esq. from whose labours we may soon expect to see this difficult subject elucidated, as he is about to publish a new arrangement of the natural order of Ensatæ.

This

This very ſhewy Ixia, the brilliancy of whoſe flowers it is impoſſible to imitate by art, is a native of the Cape, and has been of late years frequently imported from Holland by the name of Ixia *kermeſina;* but was, as we are informed by Mr. Aiton, firſt introduced into this country by the late Dr. William Pitcairn in the year 1779.

It varies much in the breadth and length of the ſegments of the limb, and in colour from a deep crimſon to a light vermillion; in the length and breadth of the leaves, which are ſometimes nearly lanceolate, at others linear-enſiform, ſometimes nearly equal to the ſtem, ſometimes not half the length. Some varieties have, as in our figure, a ſmall greeniſh ſtar at the baſe, in others the colour is uniform. All are ſcentleſs and flower nearly at the ſame time. It varies alſo much in the number of flowers, and the ſcape is ſometimes ſimple, at others a little branched.



S. Edwards del. Pub. by W. Curtis, St. Geo. Crescent, July 1 1804 P. Sanson sculp.

Ixia Fistulosa. Hollow-Leaved Ixia.

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Class and Order.

Triandria Monocynia.

Generic Character.

Cor. 6-partita campanulata regularis. *Stigmata* 3.

Specific Character and Synonyms.

IXIA *fistulosa*; foliis teretibus fistulosis obtusissimis innocuè mucronatis, scapo flexuoso, floribus spicatis distichis.
IXIA *teretifolia*. *Herbar. Banks.*
GLADIOLUS *fistulosus* spica disticha foliis teretibus fistulosis. *Jacq. Hort. Schoenbr. tom.* 1. *tab.* 16.

The Ixia *fistulosa* of the Botanist's repository having been already figured by Jacquin, and called *radiata*, ought to retain that name*; we therefore feel ourselves at liberty to adopt this, although for a very different plant. We have rather ranked it with Ixia than Gladiolus, because of the near affinity it bears to the Ixia *spicata* and plantaginea of Willdenow, which is so great as to require seeing them all in a living state to determine whether the three are really distinct or merely varieties of each other. It agrees too with the character of this genus in the regularity of the corolla, and in not having the filaments and style bent down as in Gladiolus.

It grows from a small round bulb, which is covered with a brown fibrous coat; the leaves are perfectly smooth, round,

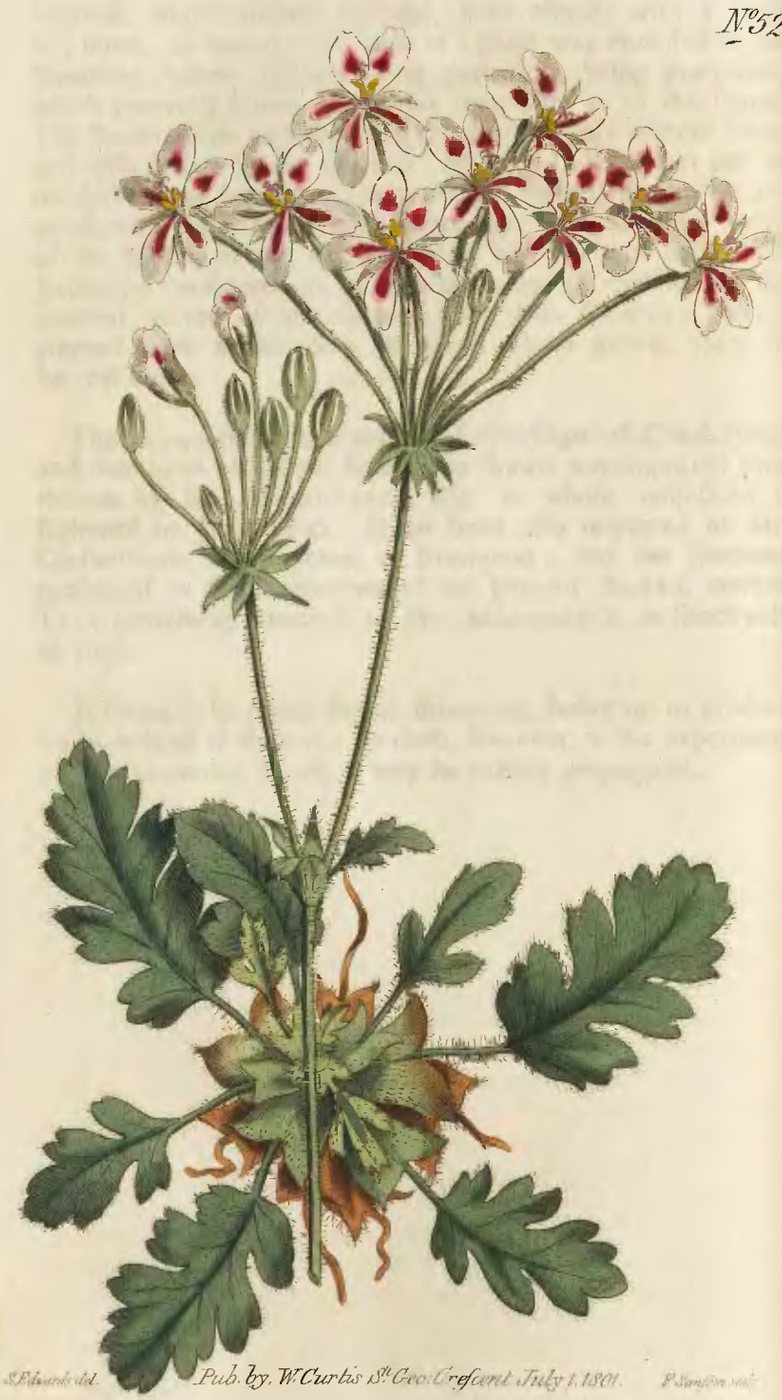
* Vide Recensio Plant. Reposit. Botanic. No. 4.

inflated,

inflated, larger towards the end, very obtuſe, with a ſmall ſoft point, or mucro; the ſcape is a great way encloſed in the ſheathing leaves, the flowering part only being protruded, which generally bends down and then riſes as in the figure. The flowers form an imbricated diſtich ſpike, are without ſcent, and ariſe from a ſpathe of three valves. In the lower part of the ſpike, and ſometimes for the whole length, no flowers are produced, but a ſmall bulb is contained in the outer valve of the ſpathe, of the ſize and form of a grain of oat, which Jacquin conſidered as an abortient flower encloſed in the internal valves of the ſpathe; but Mr. Gawler having planted theſe bodies they all grew, which proves them to be real bulbs.

The Ixia *fiſtuloſa* is a native of the Cape of Good-Hope, and that from which our figure was drawn was imported from thence by Ed. Woodford, Eſq. in whoſe collection it flowered in June 1800. It has been alſo imported by Mr. Grimwood, Nurſeryman, at Brompton; and the ſpecimen preſerved in the Herbarium of Sir Joseph Banks, marked Ixia *teretifolia*, flowered at Mr. Malcolm's, at Stockwell, in 1791.

It ſeems to be rather ſhy of flowering, being apt to produce bulbs inſtead of flowers; by theſe, however, as the experiment of Mr. Gawler ſhews, it may be readily propagated.



PELARGONIUM PULCHELLUM. NONESUCH PELARGONIUM OF CRANE'S-BILL.

****

Class and Order.

MONADELPHIA HEPTANDRIA.

Generic Character.

Cal. 5-partitus: lacinia suprema desinente in tubulum capillarem nectariferum secus pedunculum decurrentem. *Cor.* 5-petala irregularis. *Filamenta* 10 inæqualia: quorum 3 (raro 5) castrata. *Fructus* 5-coccus rostratus: rostra spiralia: introrsum barbata.

Specific Character.

PELARGONIUM *pulchellum*; subacaule, scapo diviso, foliis oblongis lobato-pinnatifidis, petiolis alatis.

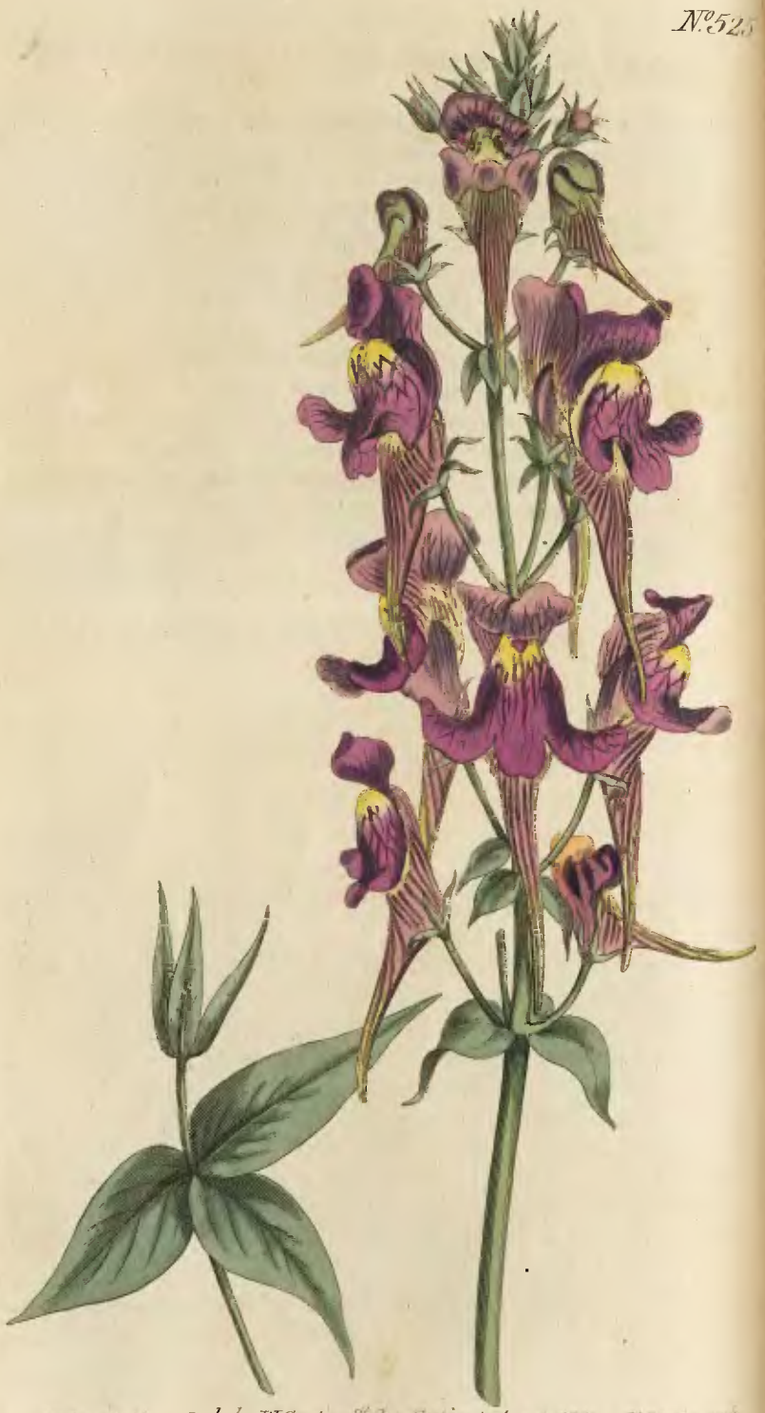
For this hitherto undescribed species of Pelargonium we are indebted to Mr. Alderman HIBBERT, in whose garden at Clapham-Common the choicest gifts of Flora are cultivated on a most magnificent scale. Not less with a view to the promotion of the science of Botany, than the gratification of his own taste and the insuring a supply of rare plants, this gentleman was induced, at his own expence, to send a collector to the Cape of Good Hope, who, amongst many others, sent home this beautiful one, which flowered in the stove at Clapham in April last. It is particularly distinguished from all its congeners by the winged footstalks; these wings are of a more firm and rigid texture than the rest of the leaf, and as this perishes they change to a brown colour, become more erect, and, like a bunch of small holly leaves, protect the crown of the root from being browsed, a circumstance we learned from the examination of a dried specimen sent by Mr. MASSON, and preserved in the Herbarium of Sir JOSEPH BANKS.

The

The whole plant is hairy and ſmells ſlightly of Tanſy.

It has only five fertile ſtamens, as is, we believe, common to moſt, if not all, the turnip and tuberous-rooted ſpecies. Theſe likewiſe differ from the cauleſcent ſpecies, in that the flower-buds do not nod, but riſe out of the involucrum ereſt before they open. Its ſeed-veſſels are deflected. It is a uſual circumſtance with moſt of the genus to have a joint at the baſe of the proper flower-ſtalk more remarkable in ſome ſpecies than in others. We were at firſt much ſtruck with obſerving this joint in our plant to be ſituated from one-third to nearly half the ſpace between the baſe and the flower; but in the native ſpecimen we find this is not the caſe, and are therefore inclined to impute it to the heat of the ſtove. In the ſame colleſtion we perceived another Pelargonium, in many reſpects reſembling this, with white flowers, but whether it be a diſtinct ſpecies or merely a variety we cannot at preſent determine.

It is to be treated as one of the tenderer ſorts.



ANTIRRHINUM TRIORNITHOPHORUM. THREE-BIRD-BEARING SNAP-DRAGON.

Clafs and Order.

DIDYNAMIA ANGIOSPERMIA.

Generic Character.

Cal. 5-phyllus. *Corollæ* bafis deorfum prominens, nectarifera. *Capf.* 2-locularis.

Specific Character and Synonyms.

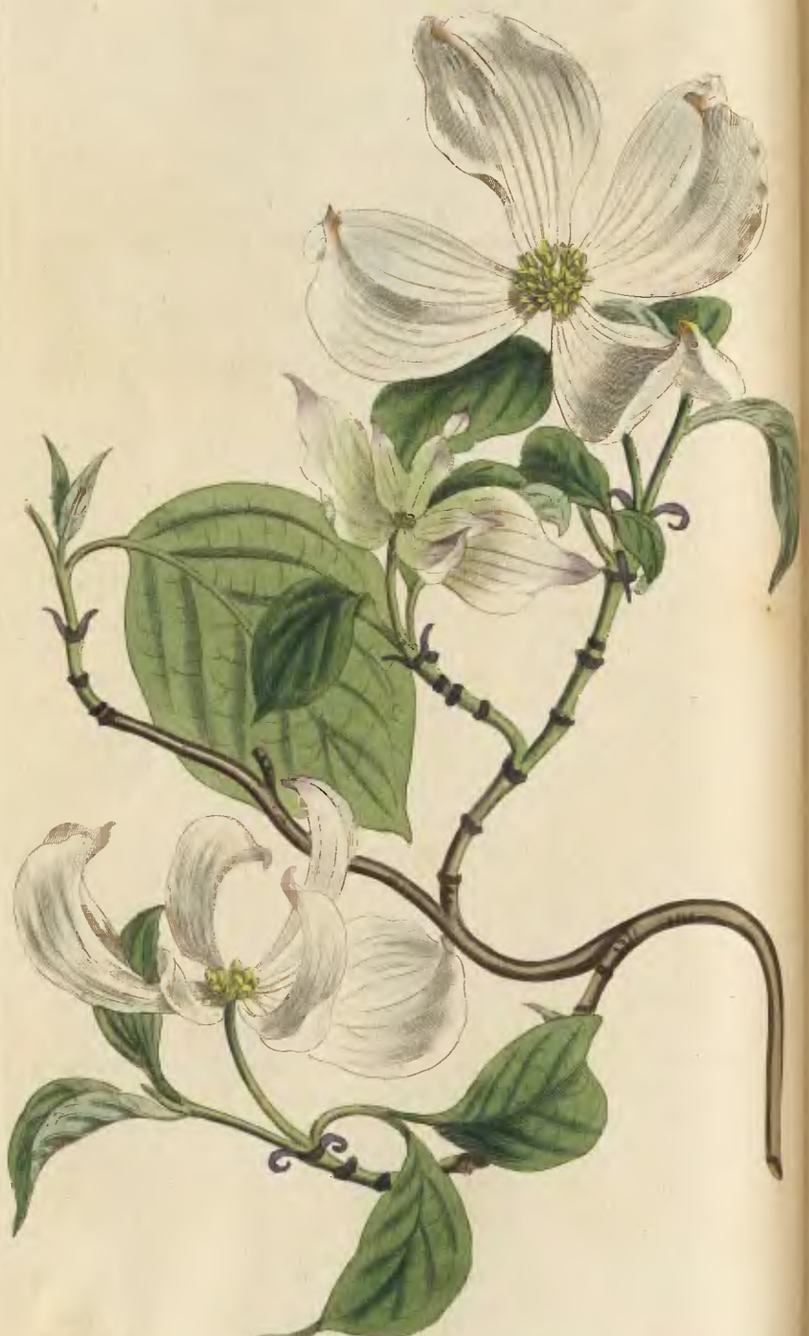
ANTIRRHINUM *triornithophorum*, foliis quaternis [ternifque] lanceolatis, caule erecto ramofo, floribus [ternis] pedunculatis. *Spec. Pl.* 853.
LINARIA Americana maxima, purpureo flore. *Herman. Lugdb.* 377.
LINARIA flore purpureo Americana. *Riv. mon. t.* 84. *fig. bona.*

It is rather furprifing that this ANTIRRHINUM, the moft fhewy perhaps of the whole genus, though apparently neither particularly tender nor difficult of propagation, fhould be almoft unknown in this country*; notwithftanding it was cultivated by Profeffor HERMAN, in the Botanic Garden at Leyden, more than a century fince. The Profeffor remarks, that it has a creeping root, by which it diffufes itfelf widely, and puts forth frefh fhoots every year, by which we may underftand, that it is fufficiently hardy to bear the Dutch winters; he tells us alfo, that it grows to the height of a man. Kept in a pot and treated

* It is not mentioned in the Kew Catalogue; we find, however, that it was in Dr. FOTHERGILL's Garden at Upton, in the year 1779.

as

as a greenhouſe plant, it riſes with ſeveral ſtems, three or four feet in length, and continues to flower during great part of the Summer, but produces no ſeed. The leaves grow in whorls of three, four, or five, but generally three at the upper part. The flowers conſtantly grow by threes upon erect peduncles, to which they are attached nearly horizontally with their mouths turned towards one another, ſo as to form a ſtriking reſemblance to three birds, from whence the name of *triornithophorum*, or *three-bird-bearing*. It has been for ſome years cultivated in the Royal Garden at Kew, but we do not know of its having yet found its way into any other collection except that of EDWARD WOODFORD, Eſq. at Vauxhall, from whence our drawing was made. It is a native of North-America, and of Portugal; and from what is remarked above, might probably be better treated as a hardy herbaceous perennial. It may be increaſed by cuttings or parting the roots.



Cornus Florida. Great-Flowered Cornel, or Dogwood.

Clafs and Order.

Tetrandria Monogynia.

Generic Character.

Involucrum 4-phyllum fæpius. *Petala* fupera 4. *Drupa* nucleo biloculari.

Specific Character and Synonyms.

CORNUS *florida*, arborea, involucro maximo: foliolis obcordatis potius apice indentatis.] *Spec. Pl.* 171. *Schmidt. Arb.* 2. *p.* 6. *t.* 62.

CORNUS mas Virginiana. *Catefb. Carolin. t.* 27.

In the temperate regions of North-America this tree is much fpoken of for its beauty, rifing from ten to twenty feet in height, agreeable in its foliage, and covered in the Spring and early part of the Summer with a profufion of white or fometimes rofe-coloured flowers; nor does it want beauty even in the gloomy months of Winter, from the quantity of red berries which it bears, and which at that feafon afford fuftenance to the finefl warbler of the woods of America, the celebrated mocking bird (Turdus Orpheus) emphatically called in the Indian language, the Hundred-Tongued Bird.

The flowers, which are not really fuch, but are in fact an involucrum, in the bofom of which lie the fmall and, in appearance, infignificant flowers, begin to come out before the leaves; but, as they expand or rather increafe flowly (for Catesby tells us, that they are fully formed when they firft come out not larger than a fixpence, but increafe gradually in fize to the breadth of the hand) the tree is in perfect foliage before they arrive at their full growth. The leaves of the involucrum would hardly have been called obcordate had Linnæus had an opportunity of feeing them in a living ftate; they approach to this fhape by an indentation at the very point of the leaf, as if the four points had been nipped together whilft in the bud, a form which the fkill of our draughtfman has enabled him to exprefs far better than has been done by any preceding artift.

It

It is a tree of ſlow growth, and in Europe has, we believe, rarely arrived to any very conſiderable ſize. That which afforded the ſubject of our preſent figure is, perhaps, almoſt the only one in this country that can be ſaid nearly to rival thoſe of its native ſoil. It grows in the Duke of MARLBOROUGH's garden at Sion-Hill, is about ſixteen feet high, and ſpreads at leaſt eighteen, has a ſtraight trunk about ſix feet in length before it branches, meaſuring two feet in circumference a yard from the ground; the bark much reſembles an elm of the ſame ſize. This beautiful tree has flowered freely for many years paſt, but unfortunately produces no fruit. Its age is unknown, but as we have evidence of its being cultivated at Chelſea by MILLER, in 1739, it is probable that its origin may not be of much later date. We are much obliged to Mr. WHITMAN, his Grace's Gardener, for ſending us notice of this tree, and favouring us with ſpecimens and with the above dimenſions.

" It is moſt certainly propagated by ſeeds ſent from Vir-
" ginia, which ſhould be ſown immediately after their arrival,
" in boxes or pans of ſandy garden mould, and covered with
" wet moſs, to prevent the earth from drying, and placed
" where they may be protected from froſt. Theſe precautions
" are the more neceſſary, as the ſeed will lie in the ground
" till the ſecond or third year before they germinate; and
" as the young plants generally come up the latter-end of
" Summer, they are then in too tender a ſtate to reſiſt the
" froſt without ſome covering. A ſhady and ſheltered ſitua-
" tion promotes its growth and ſecures its preſervation."
Schmidt Oſter Baumzucht.

ZINNIA ELEGANS. VIOLET-COLOURED ZINNIA.

****

Class and Order.

SYNGENESIA POLYGAMIA SUPERFLUA.

Generic Character.

Recept. paleaceum. *Pappus* aristis 2 erectis. *Cal.* ovato-cylindricus, imbricatus. *Flosculi* 5–10 radii persistentes integri.

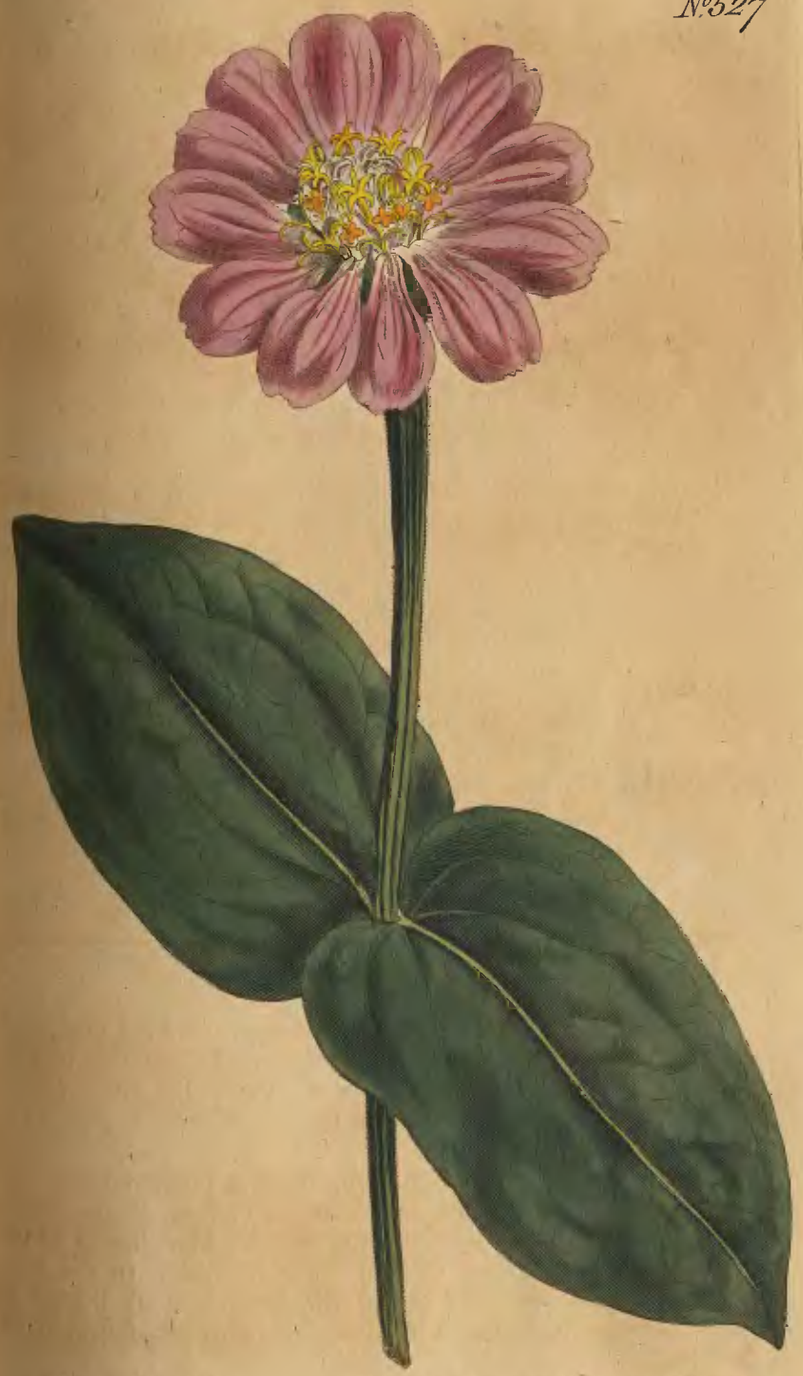
Specific Character and Synonyms.

ZINNIA *elegans*, foliis amplexicaulibus, floribus pedunculatis, hermaphroditorum seminibus brevissime mucronatis. *Jacq. Icon. rar.* 589. *Coll.* 5. 152.

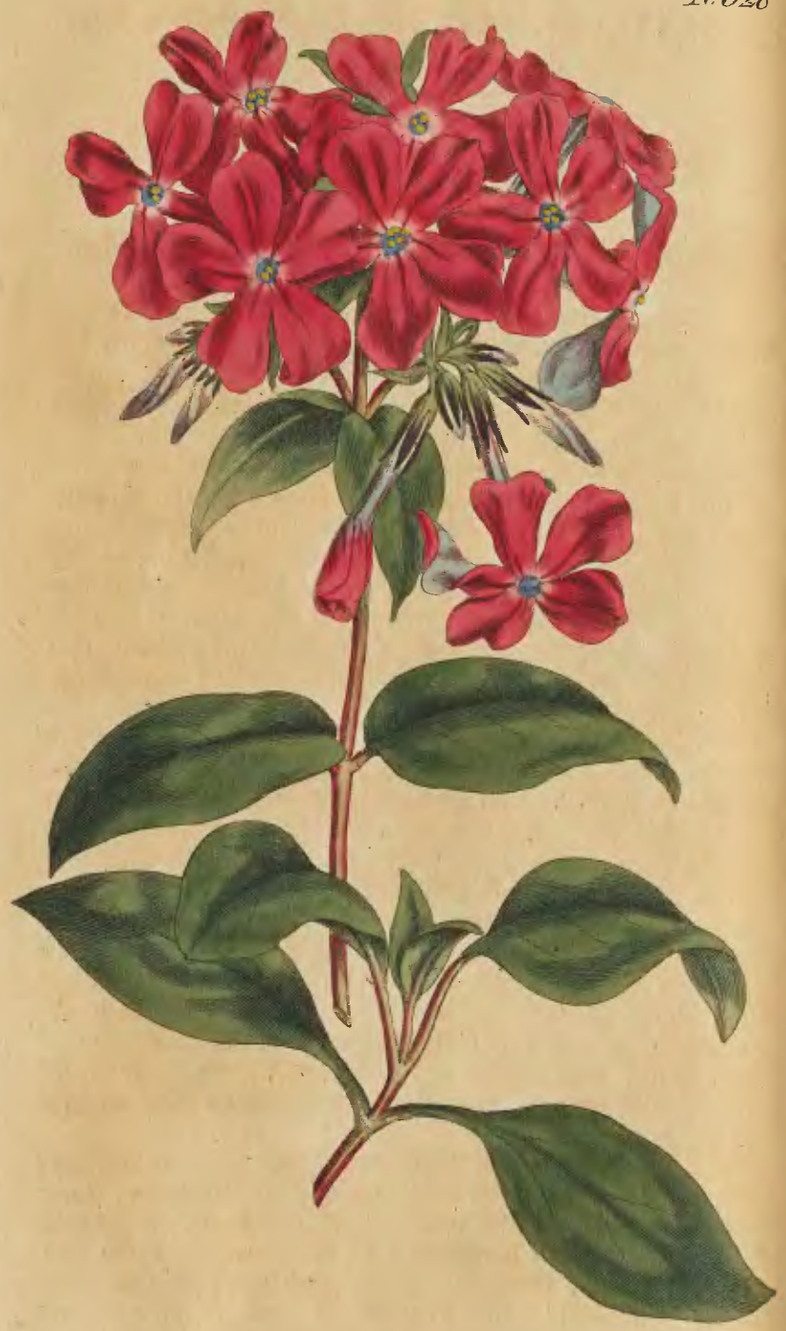
ZINNIA *violacea*, foliis ovato-acutis sessilibus subconnatis, palearum apicibus fimbriato-serratis. *Cavan. Hisp.* 1. 57. *t.* 81. *And. Bot. Rep. t.* 55.

JACQUIN having described this ZINNIA in his Collectanea, and published a figure of it in his Icones before that of CAVANILLES, his name of ZINNIA *elegans* has the right of priority, and we of course adopt it.

It is a native of Mexico, and, being a tender annual, can only be raised from seeds, which should be sown in the Spring on a hot-bed, and by the latter-end of May should be set abroad in large pots, or may be planted out in the open border, where from its size and the beauty of its flowers, it will continue to make a conspicuous figure till destroyed by the frost.



S.Edwards del. Pub. by W.Curtis 5 Geo. Crescent Aug. 1. 1801. E.Sansom sculp.



S. Edwards del. Pub. by W. Curtis, S. Gardens, Brompton, Aug. 1. 1801. F. Sansom sculp.

PHLOX OVATA. OVATE-LEAVED PHLOX, or LYCHNIDEA.

Class and Order.

PENTANDRIA MONOGYNIA.

Generic Character.

Cor. hypocrateriformis. *Filamenta* inæqualia. *Stigma* 3-fidum. *Cal.* prismaticus. *Caps.* 3-locularis, 1-sperma.

Specific Character and Synonyms.

PHLOX *ovata*, foliis radicalibus ovatis acutis subcarnosis, corymbis subsastigiatis, corollæ laciniis undulatis retusis.

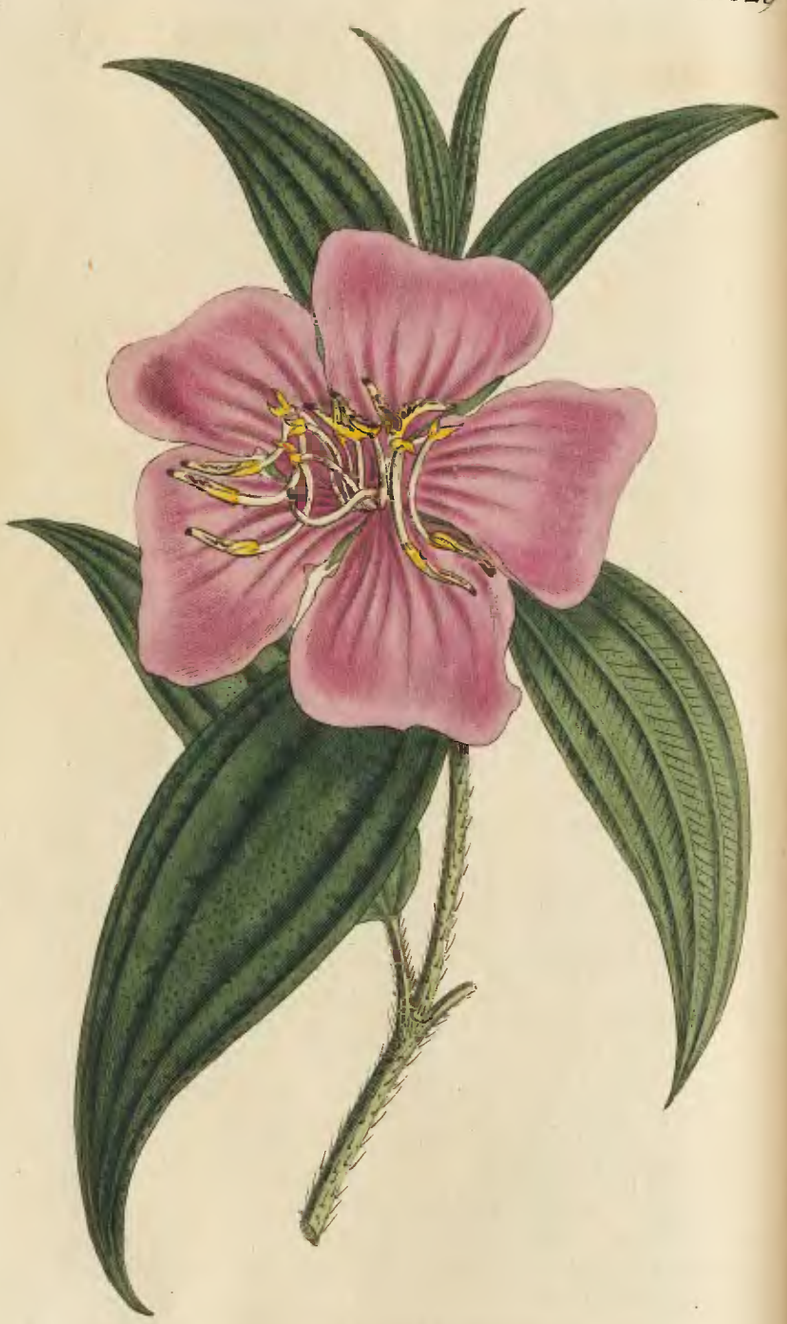
PHLOX *ovata*, foliis ovatis, floribus solitariis. *Linn. Spec. Plant.* 217. ?

As this species has been some years known in the English gardens under the name of PHLOX *ovata*, and corresponds with the specimen preserved under the same appellation in Sir JOSEPH BANKS's Herbarium, we do not hesitate to continue it, at least till we shall be certain that the Linnean *ovata* is really a different plant, although it hardly seems probable that culture should make such a change as to convert a naturally solitary flower into so large a panicle.

The leaves of the stalk vary very much in breadth, and are sometimes lanceolate rather than ovate, but the radical leaves, especially those of the young shoots which are pushed out from the root after the plant has done flowering, always preserve their character. The flowers nod on their first coming out. The whole plant is perfectly smooth.

It is a native of North-America, and, though generally considered as a greenhouse plant, appears to be a hardy herbaceous perennial, and we observed, that when treated as such at Messrs. WHITLEY's and Co. where it is planted in the open border in a soil consisting chiefly of a sandy loam, it thrives better than under any other management, the roots sending forth very vigorous shoots at a considerable distance from the parent plant.

Our drawing was made some years ago from a specimen which flowered in the Botanic Garden at Brompton, since which time it is become much more common. It may be esteemed one of the handsomest of the genus; is easily propagated by parting the roots, thrives best in a sandy loam, and although sufficiently hardy to resist the cold of our ordinary winters, it may be safest to give some pots of it the shelter of a greenhouse or of a melon frame.



S. Edwards del. Pub. by W. Curtis, St. Geo. Crescent Sep. 1. 1800. E. Ransom sculp.

MELASTOMA MALABATHRICA. CINNAMON-LEAVED MELASTOMA, or BLACK STRAWBERRY-TREE.

Class and Order.

DECANDRIA MONOGYNIA.

Generic Character.

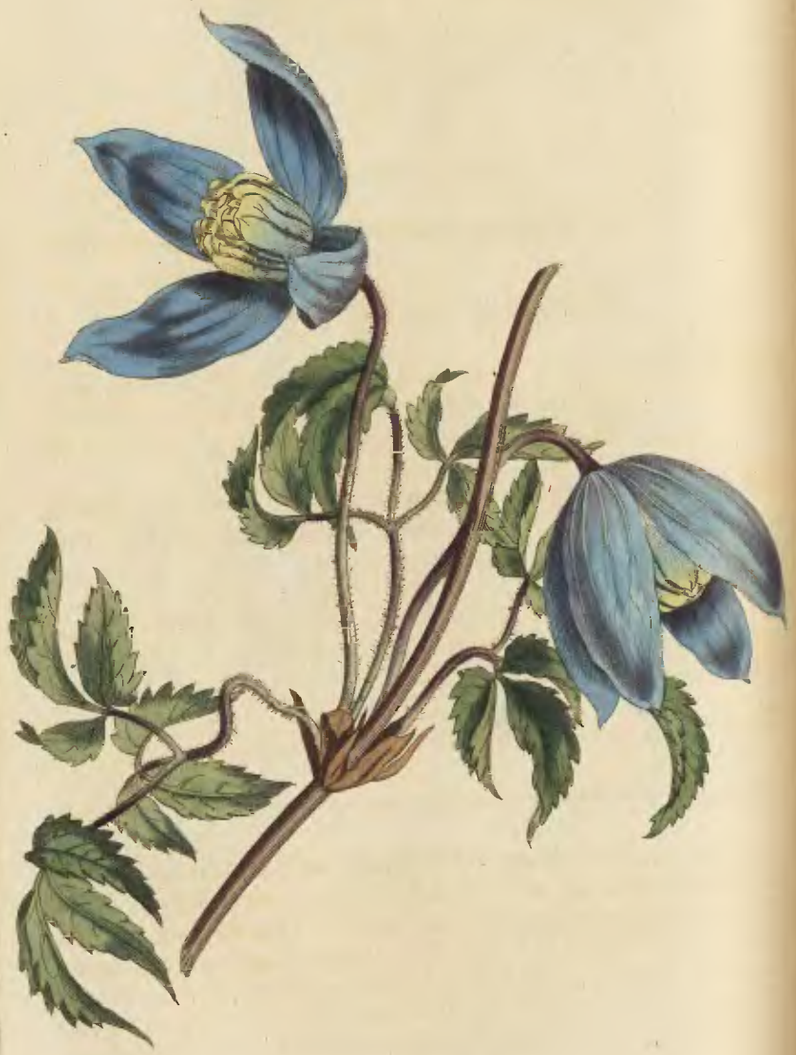
Cal. 5-fidus campanulatus. *Petal.* 5-calyci inserta. *Bacc.* 5-locularis, calyce obvoluta.

Specific Character and Synonyms.

MELASTOMA *malabathrica*; foliis integerrimis 5-nerviis lanceolato-ovatis scabris. *Spec. Plant. ed. Willdenow*, 2. 592. *Martin Miller's Dict. n.* 10. *Flor. Zeylan.* 171. *Burm. Zeyl.* 155. *t.* 73. *Ind.* 104.
KEDALI. *Rheed Malabar.* 4. 87. *t.* 42.
FRAGARIUS niger. *Rumph. Amboyn.* 4. *p.* 137. *t.* 72.

It is singular, that of this very numerous genus, of which eighty-five species are enumerated by WILLDENOW, not one should be found in the Kew Catalogue. Several of them have been introduced of late years; but, of all that we have seen, this is the handsomest, and is otherwise interesting, as being the one from which the name of the genus was framed by Professor BURMAN. This signifies black mouth, a name given to it by the vulgar, from its effect on the mouths of the children who ate of the fruit, which is filled with a black pulp. Being a native of Ceylon and other parts of the East-Indies, it must with us, always require to be kept in a stove, where it forms a handsome shrub.

Our figure was taken from a fine plant which flowered this Summer at Mr. Alderman HIBBERT's, at Clapham-Common.



S. Edwards del. Pub. by W. Curtis S. Geo. Crescent Sep. 1. 1801. Eliauson sc.

ATRAGENE ALPINA, *var.* AUSTRIACA.

****

Class and Order.

POLYANDRIA POLYGYNIA.

Generic Character.

Cal. 0. *Cor.* duplex petalis numerosis exterioribus majoribus.

Specific Character and Synonyms.

ATRAGENE *alpina*; scandens, foliis biternatis serratis acuminatis, petalis exterioribus quaternis interioribus spathulatis. *Spec. Pl. edit. Willdenow*, 2. 1285.

ATRAGENE *alpina* foliis duplicato-ternatis serratis, petalis exterioribus quaternis. *Spec. Pl.* 764. *Jacq. Austr. t.* 241.

ATRAGENE *clematides. Crantz. Fasc.* 2. *t.* 5.

ATRAGENE *austriaca* foliis duplicato-ternatis serratis; caule fruticoso scandente. *Scop. Carn.* 1. 387.

CLEMATIS alpina geranifolia. *Pluk. Phyt. t.* 84. *f.* 7. *Moris. Hist.* 3. *f.* 15. *t.* 2. *f. ult.*

CLEMATIS cruciata alpina. *Ponce Bald.* 335.

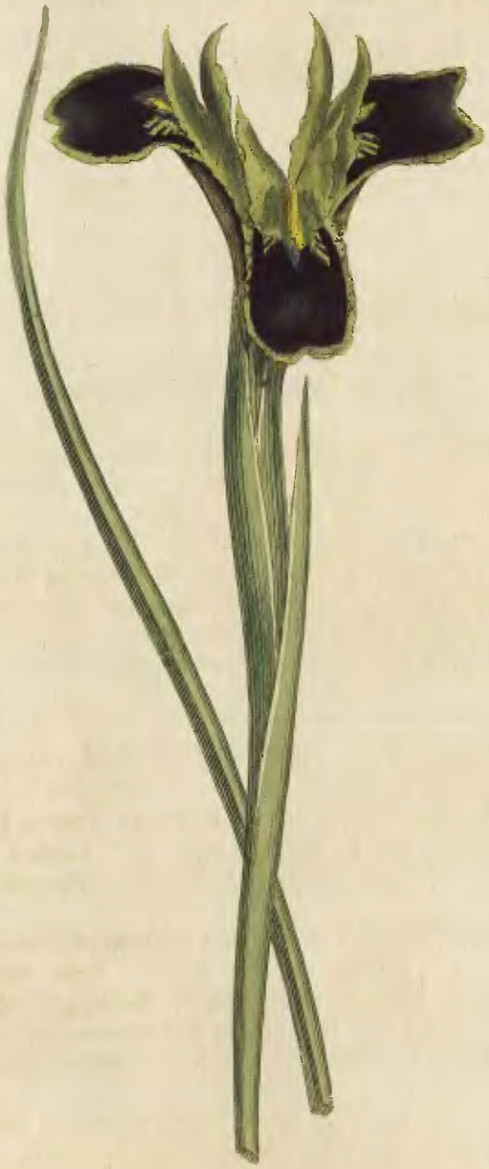
The ATRAGENE *alpina* from Siberia and that from Austria, if not distinct species, are certainly permanent varieties. Our plant is undoubtedly the Austrian kind, and was first introduced to this country by Mr. LODDIGES, Nurseryman at Hackney, who raised it from seeds sent from Crane above fourteen years ago, and in his garden it has flowered freely for several years past, as also in some others to which it has been extended. Our figure was taken this Summer from a plant in the possession of Mrs. WRIGHT.

The above synonyms appear to us to belong to this variety, although it is possible they may refer to more than one sort, as the authors do not in every respect agree.

It

It branches from the very bottom into ſeveral ſlender ſtalks ſeveral feet in length, which entwine round one another and whatever ſupport comes in their way, where they are held faſt by the footſtalks of the leaves, which, after theſe decay, become woody, and continue to perform the office of claſpers. The ſtalks are truly ſarmentous, the internodes being perfectly naked. At equal diſtances of about four inches, the leaves and flowers ſpring from the ſame bud. Theſe gemmæ are generally oppoſite, conſiſt of ſeveral imbricated perſiſtent ſquamæ, the centre ones larger, membranous, and of a brown colour. It may be conſidered as an involucrum, from the boſom of which grow uſually two petioles and a peduncle bearing a ſolitary nodding flower. The petioles are an inch and half long, ſmooth, or, if examined with a lens, ſlightly pubeſcent, and divide into three branches, of which the centre one is the longeſt, each bearing a ternate leaf. The leaflets, as in moſt of the genus, are ſubject to vary conſiderably in ſhape, but in general the three terminal ones are diſtinct, ovate, acute, and more or leſs deeply ſerrated, the lateral leaflets frequently run all three into one; all are ſmooth, but veiny on the under ſide. The peduncle is longer than the leaves and ſtraight, bearing the flower nodding and the ſeeds erect. In the axillæ of the petioles the new gemmæ are formed. By this arrangement, and the perſiſtent petioles, the old knots become very large and intricate. The outer corolla conſiſts of four large petals of a fine blue colour with a white edge, are ovate, acute, and covered on the outſide, eſpecially at the margins, with a fine down. The inner petals are in fact nothing more than enlarged barren filaments; and therefore the ſeparation of this genus from CLEMATIS, appears to us, in this inſtance at leaſt, to be neither natural nor neceſſary. The plume of the ſeed is a buſhy tail of long white hairs, but is neither ſecund, as repreſented in JACQUIN's figure, nor diſtich, as deſcribed by WILLDENOW.

It is propagated by ſeeds only, at leaſt the experienced cultivator who introduced it, has not yet been able to ſucceed by any other mode. Is perfectly hardy, bearing the ſevereſt froſts of our climate without injury.



Pub. by W. Curtis, S.t Geo. Crescent Sep. 1. 1801.

Iris Tuberosa. Snake's-Head Iris, or Velvet Flower-de-Luce.

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Class and Order.

Triandria Monogynia.

Generic Character.

Cor. 6-partita: laciniis alternis reflexis. *Stigmata* petaliformia.

Specific Character and Synonyms.

IRIS *tuberosa;* imberbis foliis tetragonis. *Thunb. Diss. n.* 43. *Spec. Plant. edit. Willdenow,* 1. 240. *Martin Miller's Dict. n.* 47. *Swert Floril. t.* 36.

IRIS *tuberosa,* folio angulosо. *Bauh. Pin.* 40. *Morif. Hist.* 2. *p.* 348. *f.* 4. *t.* 5. *f.* 1. *Lobel. Hist.* 51. *figura melior. Dod. Stirp.* 249. *fig. eadem. Gerard. emac.* 103. *eadem. Park. Parad. p.* 188. *t.* 185. *f.* 6.

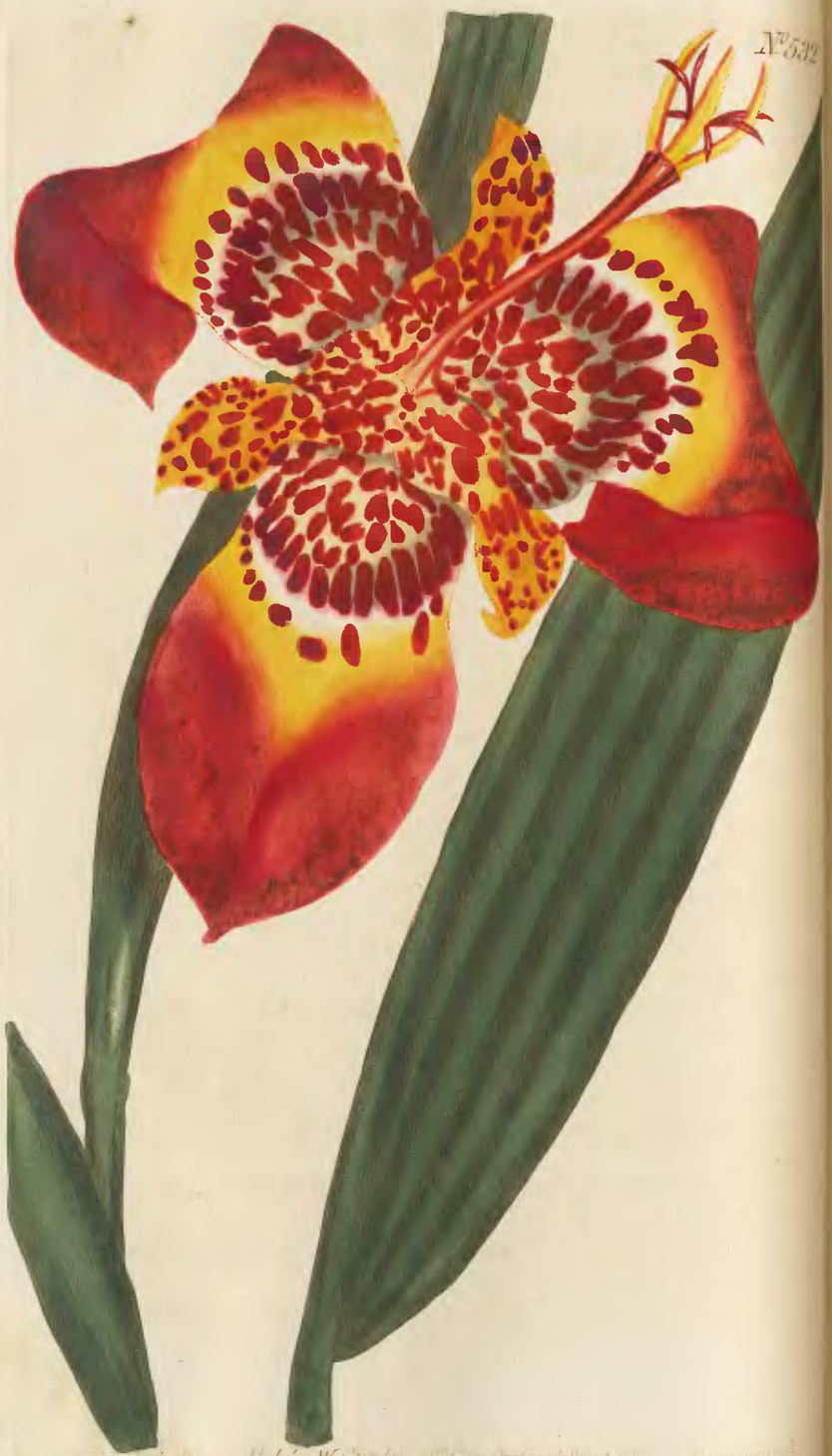
HERMODACTYLUS folio quadrangulo. *Tourn. Cor.* 50.

This species of Iris, readily distinguished from every other by its quadrangular leaves, is more remarkable for the singularity than for the beauty of its flowers; yet, to some minds not apt to be caught by gaudy attire, these sombre tints have their charms. In this respect it strongly contrasts with our next figure.

It is a native of the Levant, and with respect to the cold of our climate is perfectly hardy, flowers best, according to Miller, in an eastern aspect, and if the soil be light it will be proper to put some rubbish at the bottom to prevent the roots descending too deep, in which case they seldom produce flowers.

It blossoms in April or May, rarely produces seed with us, but is easily propagated by offsets from the roots, which may be taken up when the leaves decay, but should not be kept long out of the ground*.

* Martin Miller's Dict.



FERRARIA TIGRIDIA. MEXICAN FERRARIA, or TIGER-FLOWER.

Class and Order.

MONADELPHIA TRIANDRIA.

Generic Character.

Spatha 2-phylla. *Cal.* 0. *Petala* 6. 3-externis latioribus. *Stylus* 1. *Caps.* 3-loculari infera.

Specific Character and Synonyms.

FERRARIA *Tigridia;* foliis plicatis, corollis lato-urceolatis: laciniis interioribus depresso-intersectis.

FERRARIA *pavonia;* caule simplici flexuoso, foliis equitantibus ensiformibus nervosis, petalis planis: interioribus duplo brevioribus panduriformibus. *Spec. Pl. edit. Willdenow, v.* 3. *p.* 581.

FERRARIA *pavonia. Linn. Suppl.* 407. *Cav. Diss. p.* 343. *t.* 189. *Larmarck Encyclop. v.* 2. *p.* 453. 2.

TIGRIDIA *Jussieu. Gen. p.* 57.

MORÆA pavonia. *Thunb. Moræa,* 14, 20.

OCOLOXOCHITL seu flore tigris. *Hern. nov. Pl. Amer. Hist. tab.* 276. *Gerard. emac.* 122. 2. *Encyclop. Brit. t.* 350.

TIGRIDIS flos an Dracunculi species? *Lob. Obs.* 59. *Icon.* 111. *Dod. pempt.* 3. *p.* 421. *Swertii Floril.* 2. *t.* 31. *fig.* 2. *J. Bauh.* 2. *p.* 684. *Raii Hist.* 1165. *J. Theod. de Bry, Florileg. nov. t.* 111.

Of all the above authors, no one had seen the living plant except HERNANDEZ, who was sent to Mexico as a Physician, by PHILIP II. King of Spain; and his figure, though only a small wooden cut, is more botanically correct than any of the others, not excepting that of CAVANILLES. We are informed by

by him that it grew wild about Mexico, and was much cultivated for its excessive beauty and for the medicinal virtues of its root; being, as he terms it, "a frigefacient in fevers, and "also a promoter of fecundity in women." Both HERNANDEZ and M. DE BRANCION, from whom LOBEL derived his knowledge of the plant, observe that the root is esculent. All the other old authors appear to have borrowed what they have said from these two sources, except perhaps DE BRY, who says he received it (probably meaning the drawing) from CASPAR BAUHIN. The author of this figure, though it was published before the Rome edition of the Mexican history, appears to have had access to the drawing of HERNANDEZ, as the form of the flower is the same, only four roots are crowded together. The more modern authors seem to have made their descriptions and figures from no other authority except a dried specimen in the possession of JUSSIEU. That of MUTIS, cited by the younger LINNÆUS, we have not seen, and has not, we believe, been as yet published.

For the possession of this superb flower, this country, and perhaps Europe, is indebted to ELLIS HODGSON, Esq. of Everton, near Liverpool, with whom it flowered and produced ripe seeds about five years ago. From this gentleman, seeds were communicated to Messrs. GRIMWOOD and WYKES, and by them it has been dispersed among other Nurserymen. There is little fear but that it will soon become very common, as it flowers freely, produces seeds in abundance, and may be likewise increased by offsets from the roots. It has no scent, but in splendid beauty it appears to us, at least when assisted by rarity and singularity, to surpass every competitor; we lament that this too affords our fair countrywomen another lesson, how extremely fugacious is this loveliness of form; born to display its glory but for a few hours, it literally melts away.

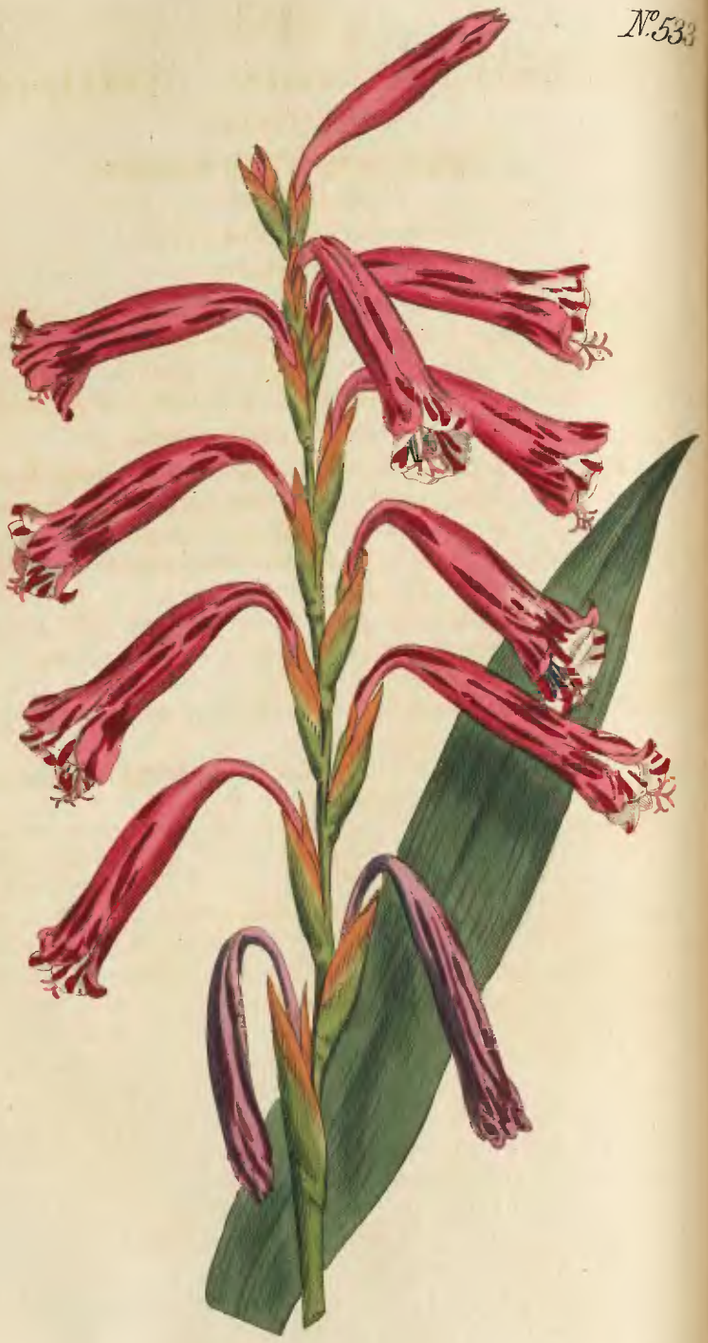
By the alteration made by WILLDENOW in the generic character of FERRARIA, this may be included; but the trivial name of *pavonia*, injudiciously adopted from a supposed resemblance to the IRIS *pavonia*, figured by JACQUIN (not the IRIS *pavonia* of the Botanical Magazine) is totally inadmissible, the colours being in no respect similar to those of the peacock; we have, therefore, as nearly as could be done in one word, restored the original name. We have an additional motive to do so from the consideration, that should it be hereafter thought necessary to make it a distinct genus from FERRARIA, the name of TIGRIDIA, already applied by JUSSIEU, would undoubtedly be given it.

DESC.

DESC. *Root*, a tunicated bulb, producing from one to four stems about a foot and half high, somewhat flexuose, round, jointed, smooth, bearing at each joint a plicated oblong-lanceolate leaf from a sheathing petiole the length of the internode, and at the summit an involucrum, apparently consisting of two lanceolate, ancipital, conduplicate, nearly equal valves, of which the exterior is in fact the common spathe or involucre, and embraces the interior with its contents; the interior valve, which is exactly opposed to the outer one, is the proper spathe of the first flower and embraces it, together with the spathes and flowers that are to come in succession; the spathe of the second flower is opposed to that of the first, and placed between it and the pedicel of the first flower; and so of the rest, every spathe being opposed to the one of the preceding flower and embraced by it. These spathes are similar in shape, but diminish progressively and become more membranaceous. *Corolla*, broad-urceolate (but this could not be expressed by the drawing in a front-view of the flower) divided into six segments, of which the three outer are urceolate at the base, expanded above, and reflected at the point; the three inner ones smaller by half, biformed, singularly divided into a lower hastate and an upper ovate division by a depressed intersection; the upper division is of the richest scarlet imaginable, variegated by a bright golden yellow. *Filament*, a cuniculated or piped triquetral column. *Anthers*, sessile, erect, bearing their pollen on the outside, conniving at the point, diverging below to admit the exit of the stigmas. *Germen*, obtusely trigonal, three-celled. *Style*, the length of the filamental column, through the hollow of which it passes. *Stigmas*, three, filiform, bifid. *Capsule*, oblong, obtusely trigonal, three-celled. *Seeds*, in double rows in each cell and round.

It is a native of Mexico and Peru, is properly a greenhouse plant, and succeeds best in light mould. Seedlings will flower the second year. It is best to take up the bulbs the latter-end of September or October, and to keep them out of the ground till the Spring*.

* In every part of this paper, we have been very much assisted by the liberal communications of JOHN BELLENDEN GAWLER, Esq.



S. Edwards del. Pub. by W. Curtis St. Geo. Crescent Oct. 1. 1801 F. Sansom sc.

WATSONIA ALETROIDES. ALETRIS-LIKE WATSONIA.

Class and Order.

TRIANDRIA MONOGYNIA.

Generic Character.

Spatha adpressa. *Corollæ* tubus gracilis: faux cyathiformi-cylindrica: limbus sexpartitus subæqualis vel æqualis. *Filamenta* tubo adnata à fauce libera. *Stigm.* 3. gracilia bifida. *Caps.* rigido-coriacea. *Sem.* oblongiuscula plurima. *Gawler inedit.*

Specific Character and Synonyms.

WATSONIA *aletroides;* corollis subcernuis: tubo spatham subæquante: fauce limbi laciniis brevibus ovatis æqualibus fere quadruplo longiore. *G.*

ANTHOLYZA *alethroides, Burman. Flor. Cap. Prod.* 1. *Houtt. Linn. Pfl. Syst.* 11. 77.

GLADIOLUS *tubulosus. Jacq. Ic. rar.* 2. 229 *Coll.* 4. 153.

GLADIOLUS *merianus. Thunb. Diss. de Glad. p.* 14. *n.* 12. *Prod.* 7.

ANTHOLYZA *merianella. Ait. Kew.* 1. *p.* 67. *Curtis's Bot. Mag.* 441.

ANTHOLYZA *tubulosa,* varietas flore variegato. *Andrews's Bot. Repos.* 174.

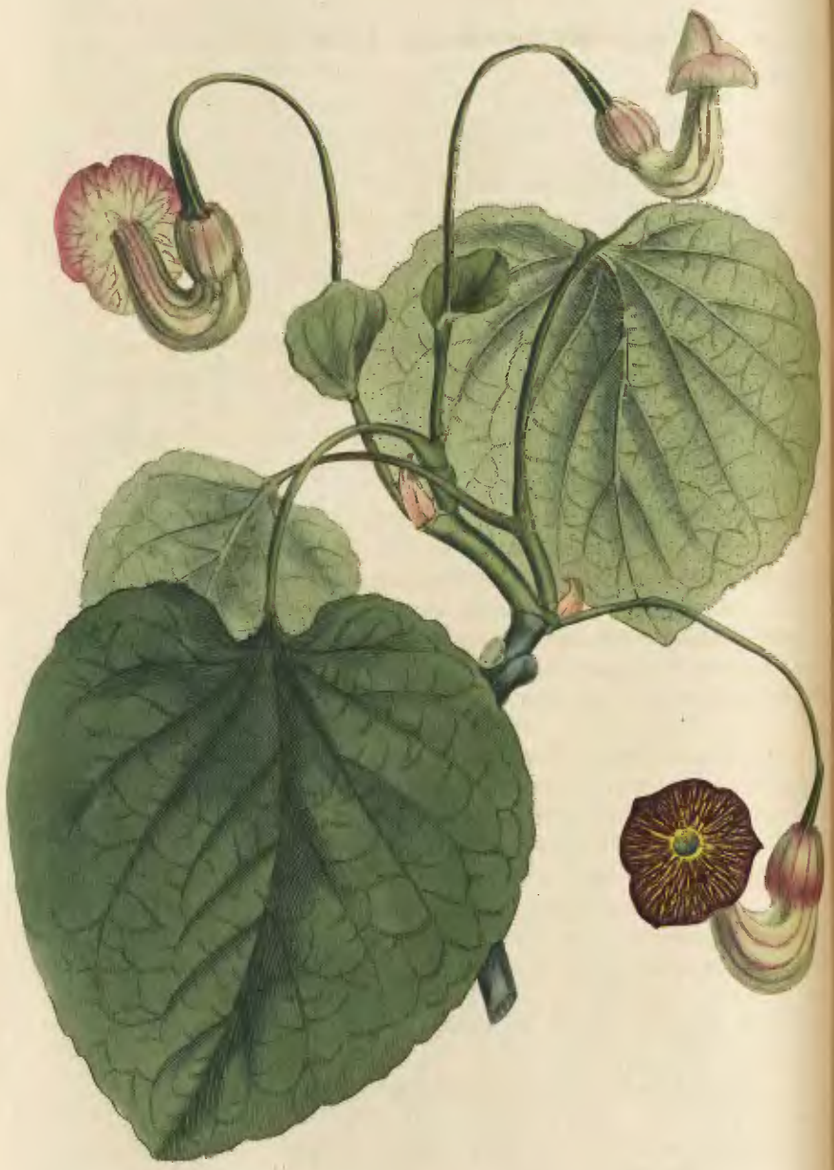
The name of Watsonia was first given by MILLER, in honour of our friend, the late Sir WILLIAM WATSON, and was adopted by JUSSIEU in that invaluable work his *Genera plantarum,* and will be found to form a very natural genus, sufficiently distinct from Antholyza. This very elegant species, which does not appear to have been noticed by WILLDENOW, is readily distinguished from every other by the distinct form of the corolla, which strongly resembles some species of *Aletris, Lachenalia,* and *Aloe.* The alternate segments are interior; the bulb is compressed and tunicated. It is very subject to vary, having in one instance a single scape six or eight inches high, with three or four distant, sometimes one-ranked, flowers; in another, a three or four-branched stem two feet high, with a terminal spike of from twenty to thirty closely imbricated distich flowers, and adpressed spikelets in proportion. The same bulb will one year produce pale pink, the next deep crimson, and the following variegated or striped corollas, as in the figure, always scentless. One of these varieties has been already figured in the

the Botanical Magazine, under the name of ANTHOLYZA *merianella*, vid. pl. 441. but the real ANTHOLYZA *merianella* of LINNÆUS, or GLADIOLUS *merianellus* of THUNBERG, is a different plant, having pubescent leaves, fewer in number, nearly sheathing the whole stem, flowers differently formed, with larger and rounder segments, stigmas entire and complicate; and is in fact a *Gladiolus* nearly allied to GLADIOLUS *hirsutus* by leaf, and to GLADIOLUS *Watsonius* by the tubular throat.

As there is a specimen of our plant preserved in Sir JOSEPH BANKS's Herbarium from Kew-Garden, under the name of ANTHOLYZA *merianella*, it is not improbable that this circumstance led Mr. CURTIS into an error, which is no disparagement to his judgment; for such is the confusion prevailing with respect to these plants, that the most learned Botanists acknowledge their inability to determine many of them. This confusion has partly arisen from the difficulty of the subject itself, owing to the great number of new species that have been introduced, which were unknown to LINNÆUS or described by him from dried specimens only, and to the proneness of these plants to vary; but more especially from the carelessness of authors, quoting false synonyms, in the first instance, and heaping blunder upon blunder by copying each other's errors, without sufficiently scrutinizing the descriptions. The fear of adding to this confusion has frequently deterred us from presenting our readers with more of this beautiful tribe, and but for the assistance of Mr. GAWLER, who with infinite labour and skill, has been able to make out all LINNÆUS's and even THUNBERG's species, we should have been tempted to have passed them by in despair.

The description of THUNBERG above quoted is excellent when applied to our plant, but how he came to mistake it for LINNÆUS's ANTHOLYZA *meriana* is not for us to unravel. JACQUIN has given a good figure of one of the varieties, but has erroneously described it as having a three-valved spathe; had he known that it had been already described by BURMAN, he would of course have adopted his name of *aletroides*, which possessing the right of priority, as well as being more descriptive, we consider it a mere act of justice to restore.

Our figure was taken this Summer from a plant which flowered at Messrs. GRIMWOOD and WYKES's, Kensington. It is of much later introduction than the date assigned to ANTHOLYZA *merianella* in Hort. Kew. which rested upon the supposition of its being the same with WATSONIA *humilis* of MILLER, which it is not. The specimen above mentioned in Sir JOSEPH BANKS's Herbarium bears the date of 1778, which may perhaps be considered as nearly that of its first introduction into this country.



Aristolochia Sipho. Broad-Leaved Birthwort.

Clafs and Order.

Gynandria Hexandria.

Generic Character.

Hexagyna. *Cal.* 0. *Cor.* 1-petala, lingulata, integra. *Capf.* 6-locularis infera.

Specific Character and Synonyms.

ARISTOLOCHIA *Sipho;* foliis cordatis petiolatis, floribus folitariis: limbo trifido æquali, bractea ovata, caule volubili frutefcente. *Ait. Kew.* 3. 311. *L'Herit. Stirp. nov. p.* 13. *t.* 7. *Martin's Mill. Dict. a.* 11.

This tree, being a native of North-America, is perfectly hardy, and will grow to a very great height if properly fupported; but, as a climber, is not able to fupport itfelf. The large cordate leaves, which are of a fine dark green, make a very handfome appearance, and if the branches were trained over an arbour or trellis-work, for which purpofe the plant feems peculiarly adapted, would form a canopy impenetrable to the rays of the fun, or moderate rain.

The fineft tree of this fort we remember to have feen, is in the garden of the late Dr. Pitcairn, at Iflington, now in the poffeffion of Mr. Wilson, where it is planted gainft the front of the greenhoufe, to the top of which it afcends, and clothes the pier from bottom to top in a very beautiful manner. The flowers are curioufly formed, but, being concealed below the leaves, are not confpicuous. The root and bark have an aromatic flavour. It was firft fent over to this country by Mr. John Bartram, of Philadelphia, about the year 1763*.

It rarely ripens its feeds with us, but may be propagated by fuckers.

Our figure was drawn from a tree which flowered with Mr. Willis, at Batterfea-Rife, in June laft.

* Ait. Kew.

VIOLA PALMATA. PALMATED VIOLET.

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Clafs and Order.

PENTANDRIA MONOGYNIA. *Willd.*
SYNGENESIA MONOGAMIA. *Linn.*

Generic Character.

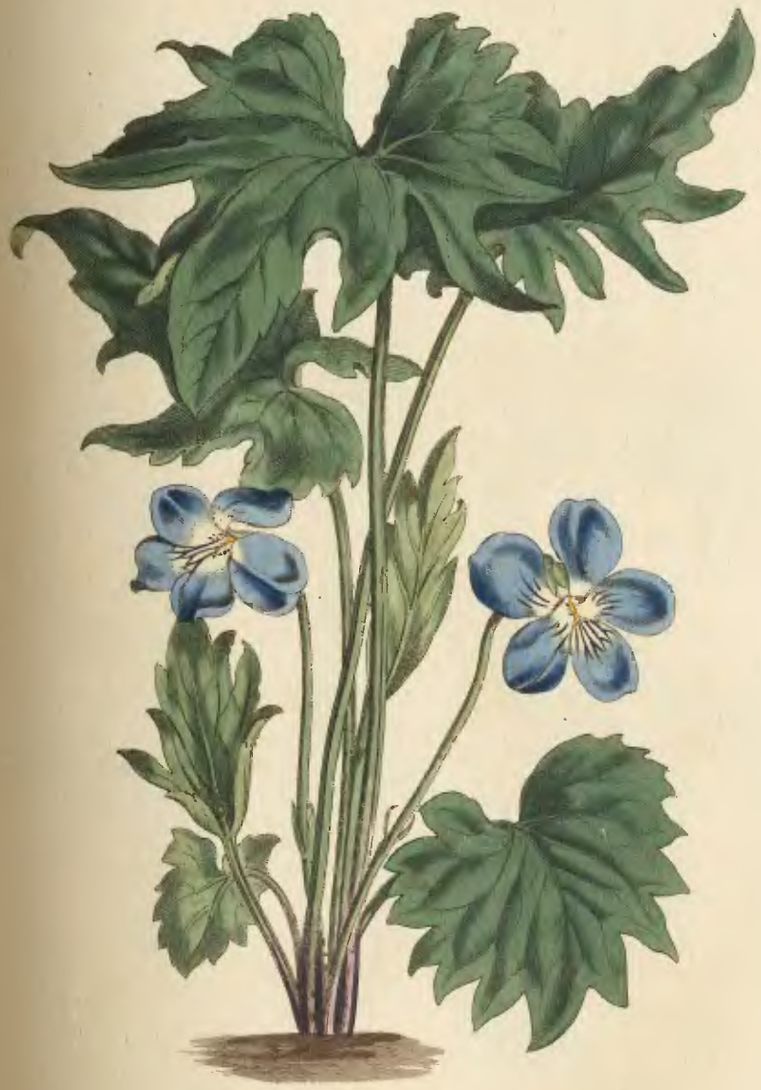
Cal. 5-phyllus. *Cor.* 5-petala irregularis poftice cornuta. *Antheræ* cohærentes. *Capf.* fupera 3-valvis 1-locularis.

Specific Character and Synonyms.

VIOLA *palmata;* acaulis, foliis palmatis quinquelobis dentatis indivififque. *Gron. Virg.* 135. *Spec. Plant. edit. Willd.* 1. *p.* 1159. *Ait. Kew.* 3. 286.
VIOLA foliis palmatis finuatis, ftolonum reniformibus. *Gron. Virg.* 1. *p.* 182.
VIOLA alba foliis fecuris amazoniæ effigie Floridana. *Plok. Amalth.* 208. *t.* 447. *f.* 9.
VIOLA virginiana platani fere foliis parvis et incanis. *Ejufdem Mant.* 187.

This very fingular fpecies of Violet may be confidered as ftill very rare in this country, although cultivated fo long ago as the year 1739, by PHIL. MILLER, in the Botanic Garden at Chelfea. It is a native of Virginia, and bears the winters of our climate very well. It has no fweet fcent to recommend it, and is therefore not likely to be in great requeft, but by fuch as are curious in collecting rare plants.

Our figure was taken from a plant fent us by Mr. LODDIDGES, Nurferyman at Hackney. Its culture is the fame as for VIOLA *pedata* (fee Bot. Mag. pl. 89).



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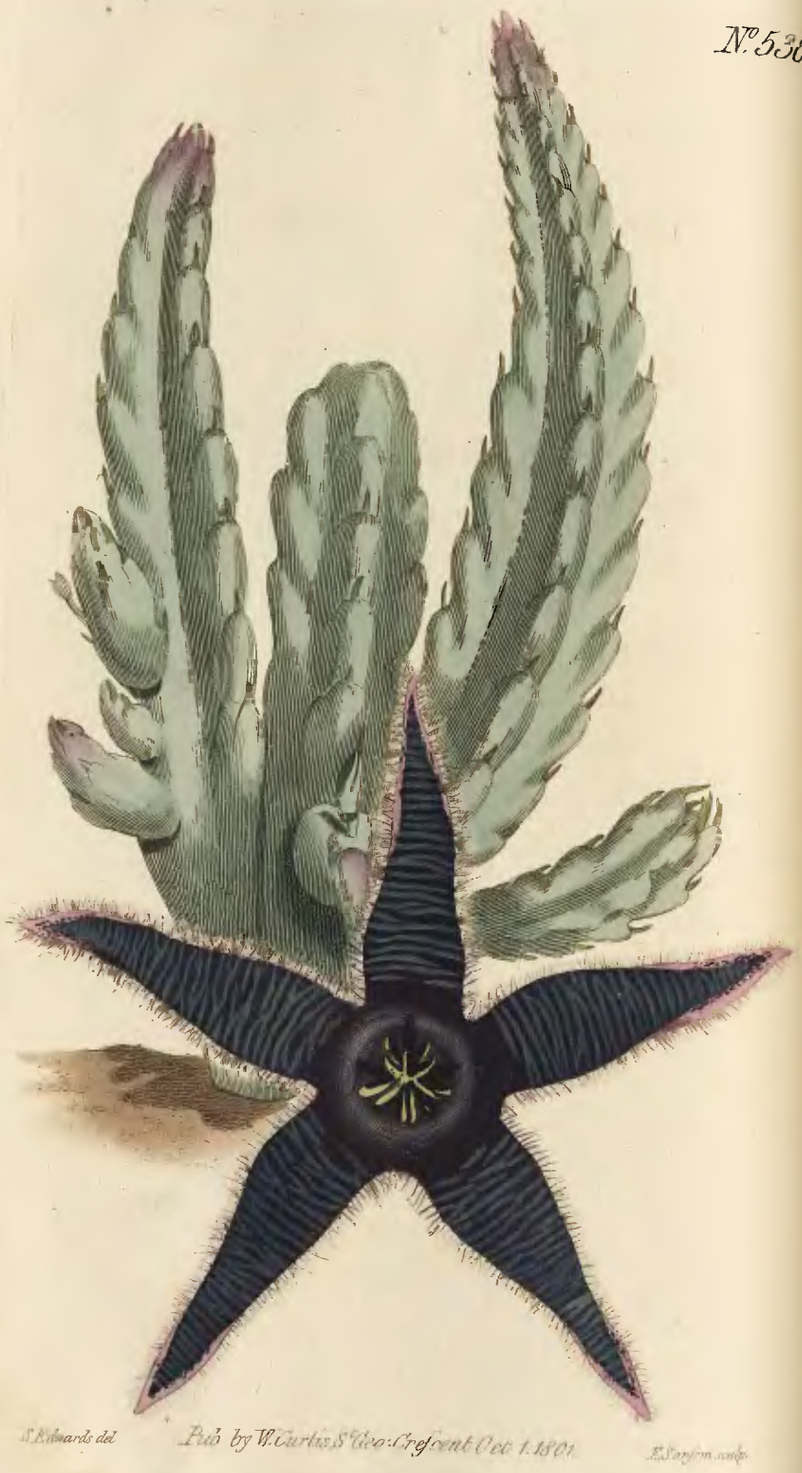


Stapelia Asterias. Star-Fish Stapelia.

Class and Order.

Pentandria Digynia.

Generic Character.

Contorta. *Nectarium* duplici stellulâ tegente genitalia.

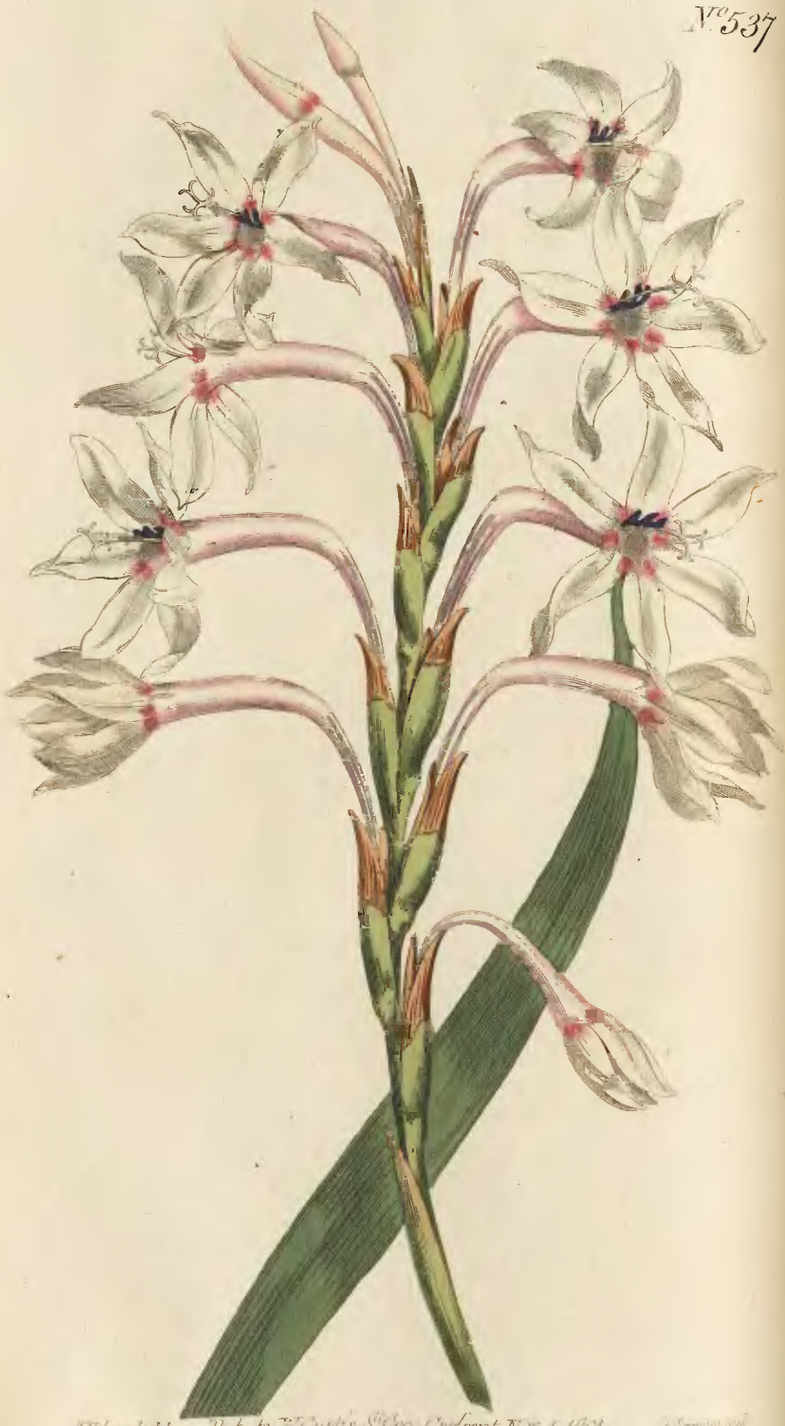
Specific Character and Synonyms.

STAPELIA *Asterias;* ramis pluribus erectis tetragonis dentatis, dentibus brevibus erectis, corolla magna quinquefida; laciniis lanceolatis margine revolutis ciliatis. *Masson. Stap. n.* 14. *t.* 14.

STAPELIA *Asterias;* corollis quinquefidis: laciniis ovato-acuminatis, margine revolutis, villosis, pedunculis longitudine corollæ, ramis erectis tetragonis attenuatis basi floriferis. *Spec. Plant. edit. Willdenow,* 1. *p.* 1280.

The flower of this very distinct species of Stapelia has a highly offensive smell, appearing to us, although we are not certain that the eye might not impose on the imagination, to approach to the stink of a putrid star-fish, as well as to resemble it in form. The specific character given by Willdenow is not so accurate as that of Masson. In many respects it agrees with *hirsuta*, but differs in the shape of the corolla, in the want of hairs in the centre of the flower, and in the colours, which, though nearly the same, are reversed, the ground of the petal in the *hirsuta* being a pale yellow, and the transverse veins a dull purple.

We are obliged to Mr. Loddiges, of Hackney, for the specimen from which our drawing was made, who imported it from the Cape of Good Hope, as he did likewise the one we before published, from Mr. Woodford's collection, under the name of Stapelia *lentiginosa*, and which we by mistake derived from the Royal Garden at Kew. All the Stapeliæ are proper inhabitants of the dry stove, but succeed very well in the bark stove when placed on a shelf very near the window.



WATSONIA ROSEO-ALBA. LONG-TUBED WATSONIA.

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Class and Order.

TRIANDRIA MONOGYNIA.

Generic Character.

Spatha adpressa. *Corolla* recurva: tubus fauce cyathiformi-cylindrica gracilior, limbus sexpartitus subæqualis vel æqualis. *Filam.* tubo adnata à fauce libera. *Stigmata* 3, gracilia, bifida. *Capsula* rigido-coriacea. *Sem.* plurima oblongiuscula. *Gawler.*

OBS. *Ex alis foliorum sæpissime bulbifera.* Radix *tuber fibroso-tunicatum.* Scapus *strictissimus, nec raro subligneus.* Folia *ensiformia, utrinque attenuata, glabra, sæpe lucida.* Spathæ *sursum sphacelatæ et sæpissime coloratæ.* Faux *limbo modo pluries brevior, modo pluries longior, modo æqualis.* Limbi *laciniæ regulari-patentes vel subbilabiato-patentes, latitudine æquales vel paulo inæquales, longitudine semper æquales.* Capsula *ex trigono cylindrica, utrinque attenuata, coriacea, rigida.* Seminis *integumentum nucleo multo majus, albescens, opacum, in marginem inæqualem compressum.* Semina *haud raro Pini sylvestris semina aliquantulo referentia.* Gawler.

In speciebus quibus faux brevissima margo seminis obsoleta, nucleus quam in Gladiolo major. G.

Specific Character and Synonyms.

WATSONIA *roseo-alba*; corolla regulari: tubo spatha fauce limbove duplo longiore: laciniis æqualibus explanatis acuminatis, antheris faucem æquantibus. *G.*

GLADIOLUS roseo-albus. *Hort. Schoenb.* 1. *p.* 7. *t.* 13.

The leaves of this species are linear-ensiform, smooth, shorter than the stem, and somewhat twisted at the base. Scape rather flexuose, with two or three ancipital spathe-like leaves and, as far as we have hitherto seen, simple; but, as Mr. GAWLER observes

obſerves that all the plants of this order which have ſpathaceous cauline leaves are ſubject to branch, it may probably be ſometimes polyſtachious. Spathes green, ſphacelate towards the point, keeled, and much ſhorter than the tube. Corolla about three inches long. Tube twice as long as the throat, into which it gradually widens, and is joined by a geniculate curvature. Segments horizontally ſpreading, equal, acuminate, as long as the throat, margins of the alternate ones ſlightly revolute. Stamens cloſely accumbent, equal to the throat. Anthers deep blue. Style projecting nearly equal to the ſegments. The bulb is ſmaller than in many of its congeners and roundiſh.

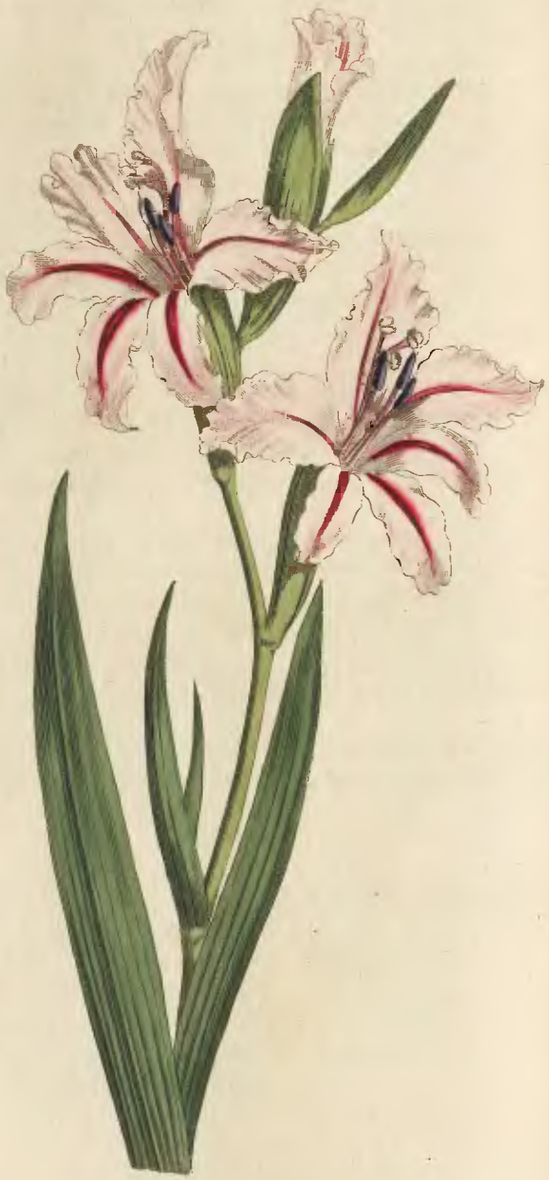
The length of the tube, relative to the faux, is the permanent ſpecific diſtinction; for although JACQUIN deſcribes the ſegments, tube, and faux, as of equal length, his own figure ſhews his miſtake. As ſome authors ſpeak of theſe flowers having a double tube, it may not be amiſs to mention here, that, in Mr. GAWLER's deſcriptions, that part only to which the filaments are joined, is called tube, where theſe become free the faux begins, and extends to the baſe of the ſegments of the limb.

Our figure was drawn laſt July from a plant at Meſſrs. GRIMWOOD and WYKES's, who imported it ſome time ſince from the Cape. Mr. Alderman HIBBERT poſſeſſes a variety with deep purple flowers, but with the mouth always of a deeper colour in the inſide.

All the WATSONIAS flower late in the Summer, or in Autumn.

Beſides the WATSONIA *aletroides* and *roſeo-alba*, the following liſt, with others not yet deſcribed, will rank under this genus, as above defined:

IXIA *marginata. Ait. Kew.*
GLADIOLUS *iridifolius. Willd.* but not his ſynonym of GLADIOLUS *cardinalis. Schneeve.*
GLADIOLI *iridifolii varietas. Jacq. Ic. rar.*
GLADIOLUS *laccatus. Id.*
ANTHOLYZA *meriana. Linn.*
ANTHOLYZÆ *merianæ varietas.*
WATSONIA *humilis. Miller.*



GLADIOLUS UNDULATUS, *var.* β. WAVED-FLOWERED GLADIOLUS, or CORN-FLAG.

Class and Order.

TRIANDRIA MONOGYNIA.

Generic Character.

Spathæ valvula exterior lanceolata, concava, integerrima. *Cor* tubulosa: limbus 6-partitus. *Stamina* adscendentia: antheræ parallelæ. *Stigmata* 3, sursum dilatata, complicata, demum canaliculato-explicata. *Capsula* ovata, oblonga, subtrigona, lenta. *Sem.* numerosa. *Gawler inedit.*

OBS. Radix *tuber fibroso-tunicatum subrotundum.* Folia *multimodis ensiformia.* Scapus *laxulus, teres, modo triqueter et alatus.* Tubus *filiformis cylindricus, modo brevissimus, modo longior, vel etiam in faucem cyandricam productus.* Limbus *sæpissime inæqualis, modo subæqualis, raro æqualis, infundibuliformi—vel campanulato—vel divaricato-ringens, rarius hypocrateriformi-regularis.* Capsula *ovato-oblonga, obsoletè triquetra, membranacea, tenuissima.* Seminis *integumentum exterius maximum, membranaceum, tenue, pellucidum, spadiceum, in marginem subæqualem latissimam compresso-ampliatam.* Nucleus *parvus, subrotundus.* G.

In GLAD. communi *(nec in* G. byzantino *etsi pro varietate habito) semina pauciora, nucleus major integumentum implens, margo obsoleta. In* GLAD. Cunonia *scapus strictus, crassus, tuber nudum.* G.

Specific Character and Synonyms.

GLADIOLUS *undulatus;* corolla erecta infundibuliformi: laciniis undulatis obtusis, superioribus ovato-oblongis, summa majore: inferioribus duplo minoribus æqualibus subrecurvis. *Gawler.*

GLADIOLUS *augustus (angustus ?). Thunb. Diss.* 19. 21. *prod.* 8.

(α) GLADIOLUS *undulatus. Jacq. coll.* 256. *Ic. rar. t.* 251. *Willd. Sp. Pl. v.* 1. *p.* 218. *Nec Linnæi.*

GLADIOLUS *striatus. Andr. Bot. Rep.* 91. *ejusque Recens. Gladiolus undulatus.*

(β) GLADIOLUS *undulatus,* corolla roseo-alba, lucida: laciniis infimis fascia atrosanguinea percursis. *G.*

GLADIOLUS, foliis ensiformibus floribus alternis patentibus. *Mill. ic.* 198. *t.* 292. *f.* 2.

GLADIOLUS *undulatus. Schneev. & Geuns. Ic.* 19.

This beautiful GLADIOLUS is without scent. Stem from eight inches to a foot high, sometimes simple, sometimes branched.

branched. Outer leaf longeſt, ſubfalcate, ſtrongly nerved. The tube ſhorter, equal to, or longer than the ſpathe.

This is not the GLADIOLUS *undulatus* of LINNÆUS, as any one may be ſatisfied who will attend to the obſervations on this and GLADIOLUS *recurvus* in the Mantiſſa, where the tube is deſcribed to be filiform, lax, and pendulous; the ſegments of the corolla ſomewhat equal and acuminate; the ſtem a foot and half high. This deſcription, which, by no means applies to our plant, correſponds very well with GLADIOLUS *cuſpidatus* of JACQUIN, the ſegments of which are alſo more decidedly and conſtantly undulated. However, as it has been already three times figured, and is known to Botaniſts in general by the preſent title, which agrees well enough with it, as does the name of *cuſpidatus* with the real *undulatus*, we retain it, as moſt likely to prevent confuſion. GLADIOLUS *undulatus* of LOUREIRO *Cochin*, 36. having a "four-parted laciniate nectary," can ſcarcely be of this genus, although made a variety of LINNÆUS's plant by him and Profeſſor MARTIN. MILLER received a bulb of our plant from the Gardener VANHAZEN of Leyden, who had raiſed it from Cape ſeeds. For its culture, ſee 539.

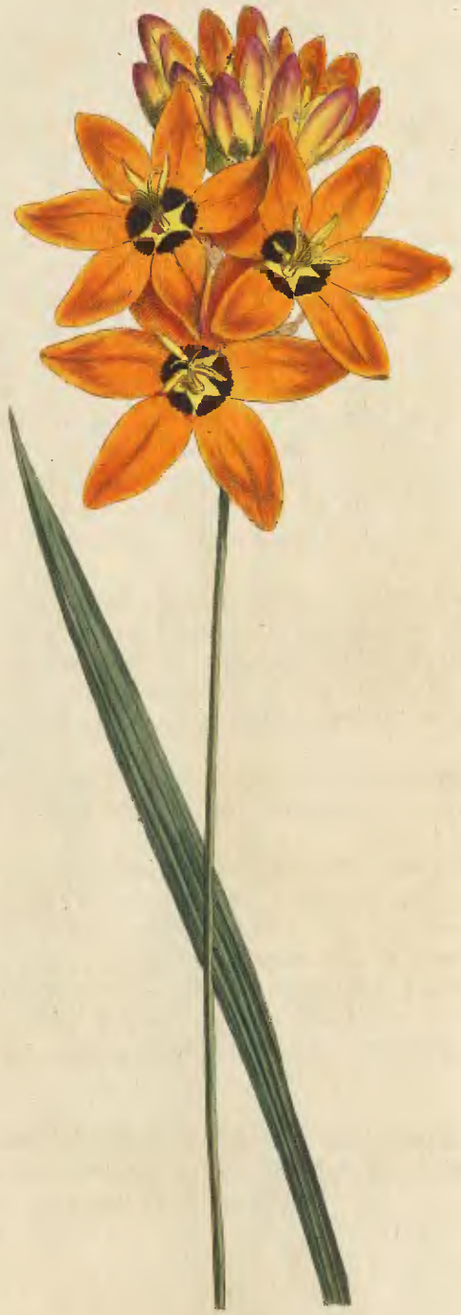
The generic eſſential character above given will be found to contain a very natural family, excluding none of the ſpecies already known, but ſuch as will rank under *Watſonia*, *Antholyza*, *Babiana**, or one or other of the ſubdiviſions of IXIA, excepting only GLADIOLUS *gramineus*, which is a completely diſtinct genus.

The following are the ſpecies already deſcribed, and many others are to be met with in our gardens:

GLADIOLUS *watſonius; abbreviatus*, And. Bot. rep. 166.—— *triſtis; verſicolor;*——*gracilis; hyalinus; carinatus;*—— *brevifolius; flexuoſus;*——*merianellus; hirſutus;*——*communis; byzantinus*, Miller: *cardinalis*, Schneev. Curtis:——*floribundus; undulatus; anguſtus;*——*blandus (albidus*, Jacq.); *carneus; cuſpidatus;*——*alatus; alatus*, Andrews, t. 8. *galeatus*, Andrews, 122; *viridis*, Hort. Kew. add.——*tenellus;*—— *ſetifolius*.

In the above liſt, thoſe which are not ſeparated by a line, are nearly allied: ſuch as are not followed by a citation, are in WILLDENOW's edition of *Spec. Plant.*

* See 589.



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Ixia Conica. Orange-Coloured Ixia.

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Class and Order.

Triandria Monogynia.

Generic Character.

Cor. 6-partita patens æqualis. *Stigma* 3, erectiuscula patula. *Sem.* subrotunda plurima.

Specific Character and Synonyms.

IXIA *conica*, scapo simplici, limbo patentissimo, filamentis coarctato-erectis antheris patentibus triplo brevioribus, stigmatibus non ultra basin antherarum divisis. *Gawler.*
IXIA *conica. Salisb. prod. Hort.* 36. *Martin Mill. Dict. a.* 47.
IXIA *maculata*, var. flava apicibus purpureis. *Thunb. Diss.* 19. *Willd. Sp. Pl.* 1. 205.
IXIA *maculata. L. Mant.* 20? *Burman, fl. Capens. Ait. Kew.* 1. 60.
IXIA *Milleri. Berg. fl. Cap.* 8. quoad descriptionem sed *fig.* 1. non *fig.* 2. *Milleri.*
IXIA *capitata. Andr. Bot. Repos.* 50. Ejusque Recensionis. Ixia *maculata.*
IXIA foliis gladiolatis glabris, floribus corymbosis terminalibus. *Mill. Icon.* 156. *f.* 1.
SISYRINCHIUM *africanum*, majus flore luteo macula notato. *Oldenland. Afr.* 32.

Descr. Spike broad-thyrsiform; rachis flexuose, 1—8 flowered; spathe membranaceous; outer valve broad-ovate, inner one narrower, bifid, both shorter than the tube, and this 1—3 times shorter than the limb, which is horizontally patent; segments oblong-oval, firm, the outer ones somewhat broadest and more obtuse, generally suffused on the outside towards the points with crimson, when folded up (which they are upon every slight obnubilation of the sun) they form a narrow-pointed and

and ſomewhat angular cone with a hypocrateriform baſe, in which ſtate this ſpecies is very diſtinguiſhable from its congeners. It varies with deep orange and with ſtraw-coloured flowers from one to two inches in diameter, ſtain more or leſs variegated by its ſix-rayed ſtar. Leaves four or five, graſs-like, about half the length of the ſcape, which is from ſix inches to two feet high; ſcentleſs; expands only when the weather is clear, warm, and ſtill. Dried, it preſerves its brilliancy unimpaired, and is a great ornament to the herbarium. Flowers in May.

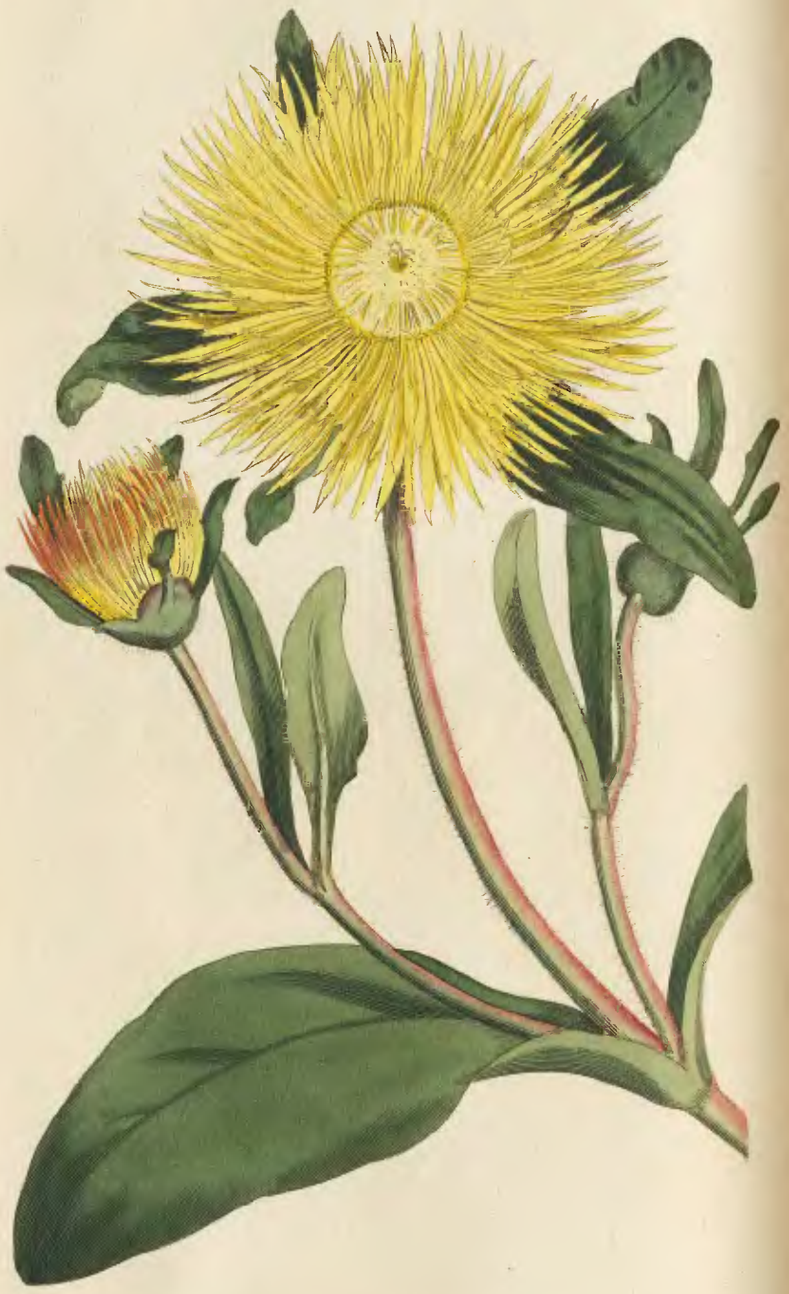
This appears to be a very common plant at the Cape, and every importation of bulbs from thence contains a conſiderable proportion of it, and ſome arrivals have conſiſted of little elſe. Perhaps it may be the plant firſt deſcribed by LINNÆUS in the Mantiſſa, by the name of IXIA *maculata*; but as that is ſaid to differ from IXIA *erecta* only in having a ſtain at the baſis of the corolla, we reſerve this name for the ſpecies anſwering beſt to this deſcription, eſpecially as we cannot trace our plant in any one of the thirty-eight varieties of *maculata* figured in Hortus Schoenbrunnenſis, among which ſeveral diſtinct ſpecies appear to us to have been blended.

Mr. SALISBURY gave it the name of *conica*, from the above-mentioned peculiar appearance of the flower when cloſed. Profeſſor MARTIN, as we judge by his calling the colour a deep red, did not underſtand the ſpecies this author was deſcribing, being miſled probably by the word *miniata*, as we confeſs ourſelves to have been, when we propoſed this as a doubtful ſynonym of IXIA *patens*.

It was cultivated from Cape ſeeds, by MILLER, in 1757; but his figure is full of botanical errors.

Our acquaintance with that portion of the vegetable kingdom included in JUSSIEU's natural order of *Irides* (the *Enſatæ* of LINNÆUS) has of late advanced with rapid ſtrides, and new ſubjects continually offering themſelves for proper arrangement, the neceſſity of a reform in the preſent conſtituent genera of this order is felt by every Botaniſt. We had entertained hopes of being no longer under the neceſſity of adopting an eſſential character ſo vague and indeterminate as the one annexed; but unfortunately this reform is attended with much difficulty; the regularity or irregularity, the curvature or ſtraightneſs, the equality or inequality of the corolla in this tribe, although hitherto uſed as the foundation of genera, being never to be depended upon for ſolid, eſſential (and ſometimes ſcarcely for ſpecific) diſtinctions: ſo that, notwithſtanding the pains he has taken, our friend, Mr. GAWLER, has not been as yet able to reduce this genus to its proper ſtandard, and thinks it beſt for the preſent only to divide it into ſeveral ſections, diſtinguiſhed from each other by characteriſtical marks, with notices of ſuch as appear to him moſt likely to become the foundations of future ſeparate genera. With theſe obſervations we hope ſoon to have an opportunity of treating our botanical readers. In the mean time, there is one diviſion, the ſpecies compoſing which are at preſent diſperſed in the three genera of IXIA, GLADIOLUS, and ANTHOLYZA, ſo very diſtinct at firſt ſight from the reſt, by their ſmooth ſheathing petioles, terminated in general by a plicate and villoſe leaf, with their bulbs ſituated unuſually deep in the earth, that Mr. GAWLER has with the greateſt propriety united theſe into a ſeparate genus, with the name of BABIANA. They are called by the Dutch at the Cape, *Babianer*, from the circumſtance of their bulbs being a favourite food of the baboons. This genus will contain, beſides ſeveral hitherto undeſcribed ſpecies, IXIA *villoſa*, Hort. Kew. IXIA *villoſa*, Jacq. IXIA *punicea*, Jacq. IXIA *rubro-cyanea*, Jacq. et Bot. Mag. GLADIOLUS *ſtrictus*, Hort. Kew. GLADIOLUS *plicatus*, Thunb. et Linn. GLADIOLUS *ſulphureus*, Jacq. GLADIOLUS *ſambucinus*, Hort. Schoenb. GLADIOLUS *fragrans*, Hort. Schoenb. GLADIOLUS *mucronatus*, Jacq. GLADIOLUS *ſpathaceus*, Thunb. GLADIOLUS *tubiflorus*, Linn. GLADIOLUS *tubatus*, Jacq. GLADIOLUS *criſpus*, Thunb. ANTHOLYZA *ringens*, Linn. ANTHOLYZA *plicata*, Thunb.

IXIA, GLADIOLUS, ANTHOLYZA, WATSONIA, and BABIANA, all require a ſimilar treatment; that is, merely to be kept from being frozen, or too much chilled, as they frequently are in a pit, in a roomy light greenhouſe, into which plenty of air can be admitted, and to be planted in ſmalliſh pots with the black mould taken from the ſurface of heaths, well rotted and thoroughly mixed with a ſmall quantity of loam. No artificial heat muſt be uſed, except in very hard weather. Little water muſt be given in the Winter for fear of rotting the bulbs, but abundance in the Spring and Summer. Upon the decay of the leaves the bulbs ſhould be taken up, carefully dried, and replanted in September or October.



S. Edward del. Pub by W. Curtis, St Geo. Crescent Nov. 1. 1801. F. Sansom sculp.

MESEMBRYANTHEMUM POMERIDIANUM. GREAT YELLOW-FLOWERED FIG-MARIGOLD.

Class and Order.

ICOSANDRIA PENTAGYNIA.

Generic Character.

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

Specific Character and Synonyms.

MESEMBRYANTHEMUM *pomeridianum;* foliis planiusculis lato-lanceolatis lævibus subciliatis distinctis, caule pedunculis germinibusque hirtis. *Sp. Pl.* 698. *Jacquin Icon. rar. v.* 2. 489. *Ait. Hort. Kew.* 2. 194. *Martin Miller's Dict. n.* 66. *Linn. Dec.* 1. *tab.* 13.

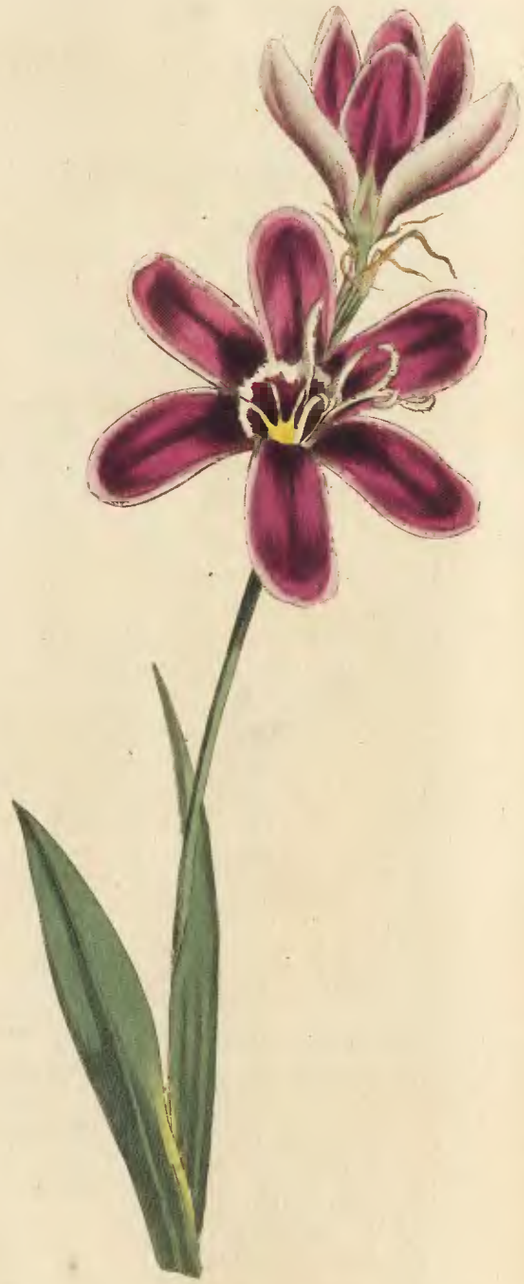
MESEMBRYANTHEMUM *glabrum; And.* 57. an hujus varietas nana?

This is certainly the MESEMBRYANTHEMUM *pomeridianum* of LINNÆUS, both accurately described and figured by the younger LINNÆUS. The MESEMBRYANTHEMUM *helianthoides* of the Kew Catalogue we should be tempted to put down as a mere variety of this; but observing that both sorts were introduced by Mr. MASSON from the Cape the same year, we are unwilling to suppose that, in so accurate a work, two species should be made of one when both could be compared together.

It has usually twelve stigmas and as many cells in the capsule; the peduncles and base of the calyx are always hairy; the segments of the calyx irregular, three of them flat and usually longer than the petals, and two rounded in the middle with membranaceous appendages at the base.

It is a tender annual; but if raised in a hot bed in April or May, the young plants may be set out in the open border by the middle of June, where they will thrive much better than when confined in a pot. They produce a great number of flowers, which when expanded, as they always are in the afternoon if the sun shine, are very shewy; and as they seed freely, they are easily propagated.

Our figure was taken in the Botanic Garden at Brompton early in July last.—Introduced to the Royal Garden at Kew, by Mr. MASSON, 1774. *Ait. Kew.*



Ixia Grandiflora. Velvet-Flowered Ixia.

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Class and Order.

Triandria Monogynia.

Generic Character.

Cor. 6-partita patens æqualis. *Stigm.* 3 erectiuscula patula. *Sem.* subrotunda plurima.

Specific Character and Synonyms.

IXIA *grandiflora;* foliis subtiliter striatis, spathis aristato-laceris, tubo brevi: laciniis stellato-patentibus oblongo-cuneatis apice rotundatis, staminibus lateralibus. *Gawl.*
IXIA grandiflora. *De la Roche Diss. p.* 23. *Houtt. Nat. Hist. p.* 17. *pl.* 77. *f.* 3. *Linn. Pfl. Syst.* 11. 37. *t.* 77. *f.* 3. *Salisb. Prod. Hort.* 37. 26.
IXIA bulbifera (α) flore purpureo. *Thunb. Diss.* 16, 17.
IXIA aristata. *Hort. Kew.* 1. *p.* 57. *Willd. Sp. Pl.* 1. 203. *And. Bot. Rep. t.* 87. *ejusque Recens.*—(nec vero Thunb.)
IXIA uniflora. *Mant.* 27. *Herb. Linn. Jacq. Coll.* 4. *p.* 181. *ic. rar.* 2. *t.* 283.
IXIA holosericea. *Jacq. Hort. Schoenb. v.* 1. *cum* 3 *var.*
IXIA foliis gladiatis glabris, caule uniflora. *Mill. ic.* 237. *fig* 3. *cum* 2 *aliis var.*
SISYRINCHIUM æthiopicum majus. *Comm. Hort. Am. v.* 1. *t.* 42. *p.* 83. Anne species distincta?

Descr. *Bulb* ovate, about the size of a hazel nut, covered with a white silky fibrous tunic, base umbilicated. *Leaves* from five to eight, ensiform, shorter than the scape, distich, outer ones gradually shorter. *Scape* from six inches to a foot long, thickish, stiff, and nearly of equal thickness. *Rachis* very flexuose. *Spathe* membranous, light brown with dark edges, more or less torn into irregular awn-like jags, according to the time it has been in flower (for, if not at first, it is sure to be so sooner or later). *Flowers* from one to five, never more, large, shewy. *Tube* short, nearly the length of the

the ſpathe. *Segments* ſeveral times longer than the tube, ſome times ending with a ſmall point more or leſs obſolete. *Branches*, when any, one or two flowered. *Parts of Fructification* lateral (i. e. inclined to one ſide without being aſcendent). *Stamens* diverging, whitiſh. *Stigmas* large, exceeding the anthers, re curved, complicate, ciliate. *Stem-Bulbs* one or two, ſlender, oblong, from the axils of the inner root-leaves.

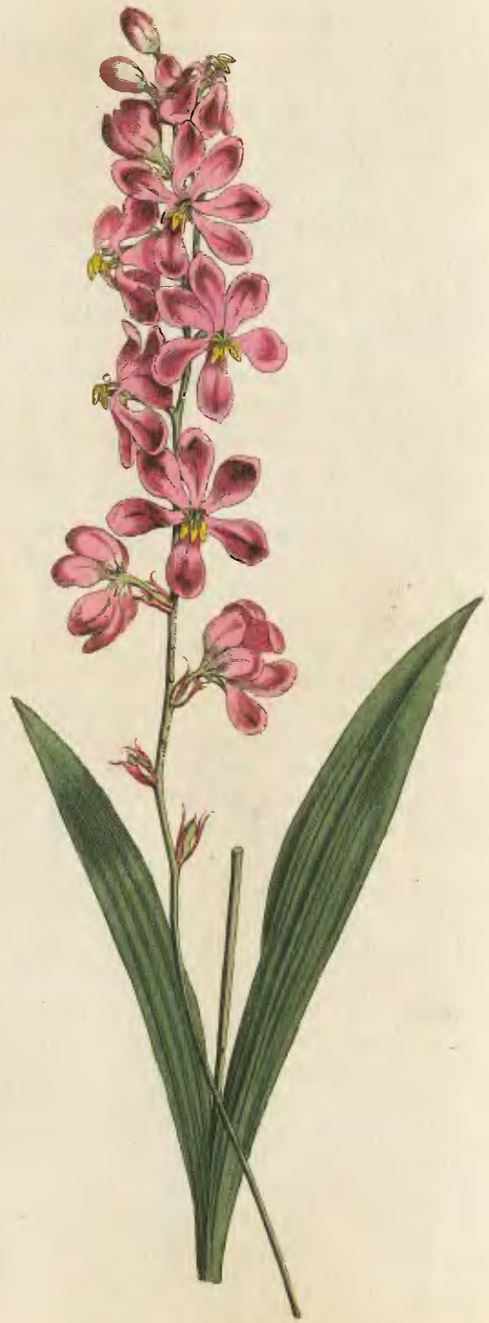
It varies with violet, white, blueiſh, purple, and ſtriped flowers, alſo with flowers white on the inſide and purple without, with a ſtar at the baſe. This laſt is the SISYRINCHIUM of COMMELIN, above quoted, and being much taller, with longer ſlenderer leaves, may be a diſtinct ſpecies; but this with *grandiflora*, *bulbifera*, and what is, perhaps, a variety of this, *lacera* of the Linnean Herbarium, are ſo nearly allied, that it is difficult to define their differences. All of them are ſcentleſs.

This being the IXIA *ariſtata* of *Hort. Kew.* it was deſirable to have retained a name eſtabliſhed upon ſuch authority; but as it was ſo called, under the ſuppoſition of being the *ariſtata* of THUNBERG, which it is not, we ſhould by ſo doing, only perpetuate a miſtake; and when we come to give a figure of the true *ariſtata* of THUNBERG, as we hope to do, we ſhould be obliged to find a new name for that, and thus increaſe the confuſion we wiſh to diſpel; we feel ourſelves, therefore, at liberty to adopt one of the names by which it has been already deſcribed: the one we have choſen has the right of priority, and is at the ſame time ſufficiently characteriſtic. DE LA ROCHE publiſhed his deſcription of it at Leyden in 1766, and it has been ſince figured under the name of IXIA *grandiflora*, by HOUTTUYN, in two works.

The IXIA *ariſtata* of THUNBERG has a reticulated bulb, linear five-nerved leaves, with a prominent mid-rib and thickened margin; from five to nine flowers of a pale fleſh colour, one-ranked, on a rachis ſcarcely flexuoſe; ſpathe ſub-membranous, awn-toothed *(not torn). Vide Thunb. Diff.*

Our plant is the purple variety of THUNBERG'S IXIA *bulbifera* (α) but his yellow variety (γ) which is now deemed a diſtinct ſpecies, is more conſtantly and conſpicuouſly bulbiferous, having frequently ſeveral bulbs at the joint of the ſtem as well as in the axils of the lower leaves; for this, therefore, the trivial name of *bulbifera* is properly reſerved.

For the proper culture, ſee p. 539. It is propagated eaſily by ſeeds and bulbs. Flowers in May. Was introduced into the Kew Garden in 1758.



S.Edwards del. Pub. by W.Curtis, St. Geo. Crescent Dec. 1 1801. T.Sanders sc.

Ixia Scillaris, *var.* Latifolia (α). Squill-Flowered Ixia.—*Broad-Leaved Variety.*

****

Class and Order.

Triandria Monogynia.

Generic Character.

Cor. 6-partita patens æqualis. *Stigma* 3 erectiuscula patula. *Sem.* subrotunda plurima.

Specific Character and Synonyms.

IXIA *scillaris;* corollæ laciniis obtusissimis, antheris brevissimis sulcato-didymis capitato-conniventibus, stigmatibus infundibuliformibus hiantibus infra antheras recurvatis. *Gawler.*

IXIA scillaris. *Linn. Sp. Pl.* 52, *ejusque Herbarii. Hort. Kew.* 1. 59. *Burm. Prod.* 1. *Houtt. Nat. Hist. v.* 12. *t.* 77. *Houtt. Linn. Pfl. Syst. v.* 11. *p.* 33. *t.* 77. *f.* 2. Nec vero Thunbergii.

IXIA pentandra. *Linn. Fil. Suppl.* 92. *Thunb. Diss.* 18. 22. *Prod.* 10. *Syst. Veg. Murr.* 85. *Willd. Sp. Pl. v.* 1. *p.* 207.

IXIA retusa. *Salisb. Prod. Hort.* 35. 11. *Mart. Mill. Dict. n.* 44.

(α) *latifolia.* Spica elongata, corollæ tubo spatham brevem subæquante: laciniis reflexis, foliis latere excisis *(sæpissime subundulatis)* scapo 3-4-plo brevioribus. *G.*

IXIÆ polystachiæ var. *Jacq. Coll. Suppl.* 159. *tab.* 2. *f.* 1.

IXIA reflexa. *And. Bot. Rep. t.* 14, *ejusque Recens.* IXIA rotata—*Calyx herbacea* 5-*fida, flores pedicellati, folia integerrima sunt pictoris errores.*

(β) *angustifolia.* Floribus minoribus, tubo capillari spatha duplo longiore laciniis patentibus *(modo retusis)* æquali, foliis subexcisis longioribus. *G.*

IXIA polystachia, *Jacq. Coll.* 3. 269. *Ic. Rar.* 2. *t.* 275. *Gmel. Syst. Nat. p.* 110. *And. Bot. Rep. t.* 128. *ejusque Recens.*

Descr. *Bulb* scarcely bigger than a pea, round, covered with a dark brown smooth tunic. *Stem* from a foot to a foot and a half high, simple or with one or two branches. The spike of this variety has from ten to twenty flowers, somewhat remote, especially towards its base. *Leaves* 3-4.

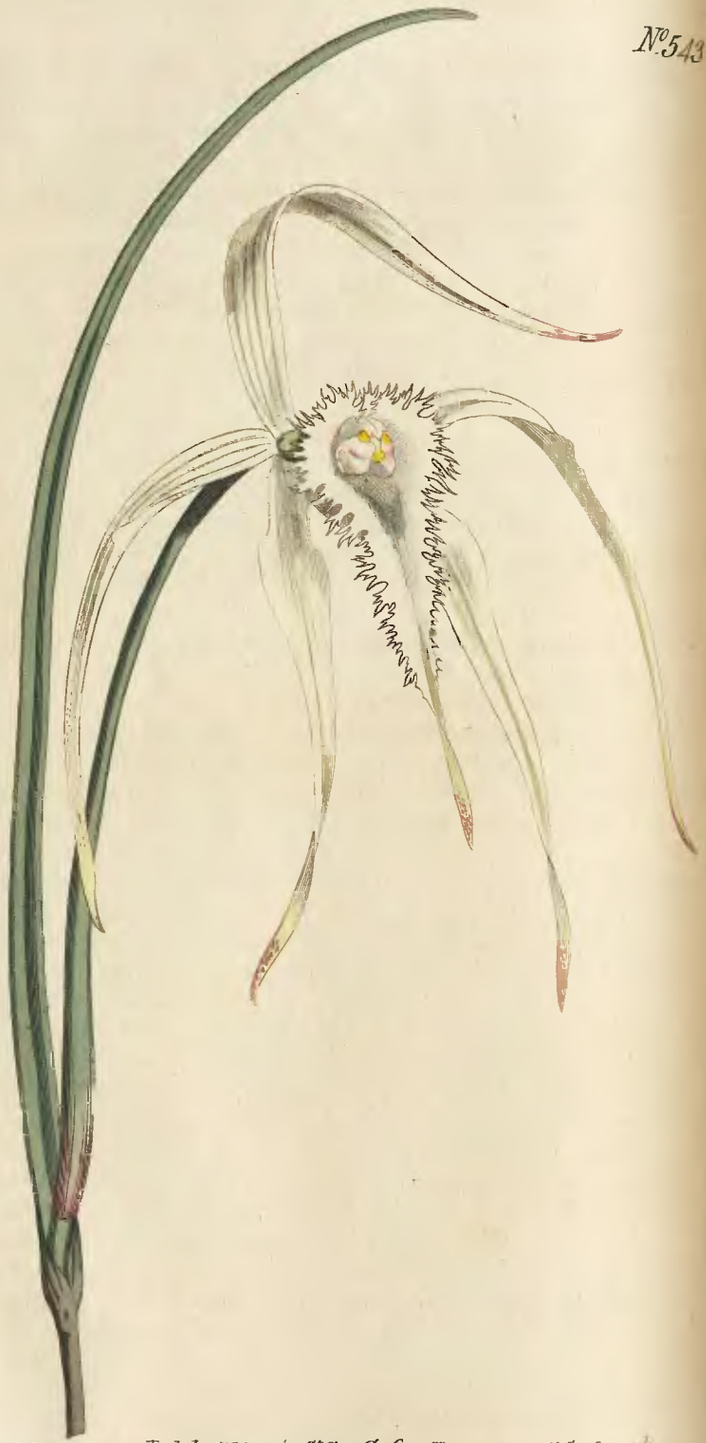
Calyx

Calyx ſhort, outer valve three, inner two-toothed. *Corollas* ſometimes with ſo ſhort a tube that they appear to be *rotate: Segments* ſomewhat unguiculate, obovate, concave, and ultimately reflexed to the very ſtem, though previouſly only partially ſo, perhaps one, then two, which at that time gives it the appearance of having irregular corollas. *Stamens* ſhort, upright. *Piſtil* ſhorter. *Anthers* very ſmall, oblong, or ovate, approaching each other ſo as to form a kind of head. *Stigmas* ciliate.—It is very apt to have the tops of its leaves withered before it flowers. Varies with purple, roſe, pink, and whitiſh corollas. All ſcentleſs, though JACQUIN deſcribes the narrow-leaved one as ſweet; this blows much later and is probably a diſtinct ſpecies.

This is certainly LINNÆUS's plant, and received its trivial name from a ſuppoſed reſemblance to SCILLA *amæna*, a proof that he deſcribed from a dried ſubject, in which ſtate it certainly affords different ideas of reſemblance, than when ſeen in a living one, eſpecially in colour, which then becomes nearly violet; but is diſtinct from the I. *ſcillaris* of THUNBERG, that being nearly allied to I. *ſecunda*. What is uſually called *ſcillaris* by the Nurſerymen is IXIA *exciſa*, which reſembles our plant in the leaf, but is a completely different ſpecies.

This article, for which, as well as the preceding, we are entirely indebted to Mr. GAWLER, will, we hope, be the means of putting an end to the errors and confuſion this ſpecies has cauſed among Botaniſts. The Synonyms are ſo arranged as to ſhew its hiſtory and clear up the blunders. THUNBERG ſuſpected LINNÆUS's *ſcillaris* was his *ſecunda*, a ſpecies, perhaps, the moſt diſtant from it of the whole genus. He obſerves of our plant, that it now and then, though rarely, has four ſtamens and four ſtigmas, and ſometimes five, to which he might have alſo added ſix; but this is a luxuriancy well known to all cultivators of this genus not to be at all uncommon in moſt of the ſpecies; to which redundancy of the parts of fructification, a proportionate one of the ſegments of the corolla is often added; but ſurely this cannot juſtify his adopting the trivial name of *pentandra*, eſpecially as he allows its having five ſtamens to happen very rarely. IXIA *crocata* ſometimes occurs with twelve ſegments, ſix ſtamens, ſix ſtigmas, and IXIA *falcata* with nine ſegments, ſix ſtamens, ſtyles, and ſtigmas.

It is eaſily propagated by ſeeds and offsets; flowers as early as January. Was introduced into the Kew Garden by Mr. MASSON in 1787.



S. Edwards del. Pub. by W. Curtis St. Geo. Crescent Dec 1. 1801. F. Sansom sculp.

EPIDENDRUM CUCULLATUM. HOODED EPIDENDRUM.

****

Class and Order.

GYNANDRIA DIANDRIA.

Generic Character.

Nectarium turbinatum, obliquum reflexum.

Specific Character and Synonyms.

EPIDENDRUM *cucullatum*; foliis subulatis, scapo unifloro, nectarii labio ovato ciliato acuminato, petalis elongatis. *Spec. Pl.* 1350.

HELLEBORINE floribus albis cucullatis. *Plum. Spec.* 9. *Icon.* 179. *f.* 1.

This very curious species of EPIDENDRUM, which we believe flowered for the first time in this country* in the bark stove of EDWARD WOODFORD, Esq. Vauxhall, in September last, rises with a single stem, clothed with two or three alternate ash-coloured scale-like spathes, so closely adpressed as to be scarcely discernible. From the top of the stem issues one leaf (perhaps, as in the figure of PLUMIER, sometimes more) fleshy, linear, acute, convex at the back, and slightly grooved in front. From the bosom of this leaf rises a round scape, at first swelling, then attenuated upwards, bearing a solitary flower, perfectly white when newly opened, but becoming tinged with a yellowish green, consisting of three external and two internal petals, of similar length and shape, linear, somewhat undulated, the two inner ones exactly opposite, and a nectary surrounding the parts of fructification shaped like a friar's cowl, far-acuminate, fringed, continuing of a snow white after the petals have changed their tint. Nearly scentless.

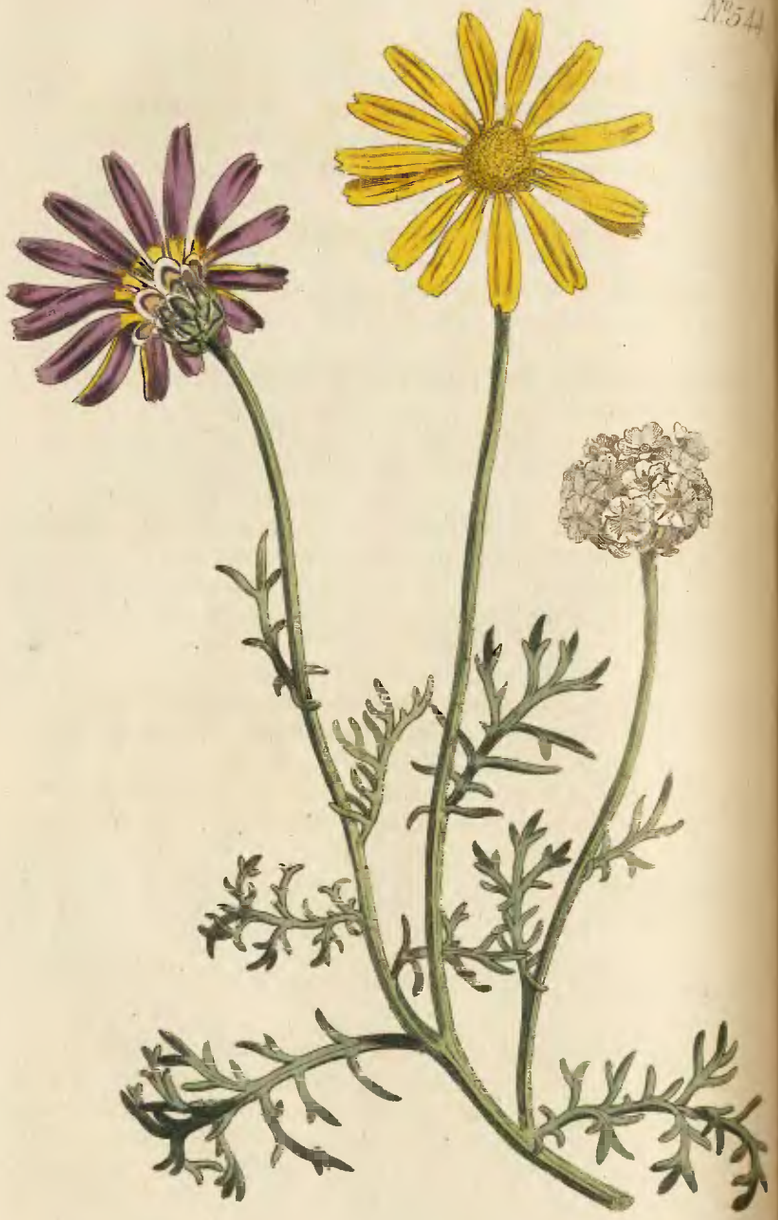
* It was in the royal collection at Kew in 1794. *Mart. Mill. Dict.*

In

In the ſame ſuperb collection, we had the pleaſure of ſeeing in flower, at the ſame time, the EPIDENDRUM *fragrans* of SWARTZ, ſo called from the very fine odour it diffuſes far around, a plant formerly figured in the Botanical Magazine, and there called by miſtake EPIDENDRUM *cochleatum*. Who can avoid occaſional error, eſpecially where the ſpecies are ſo numerous? Profeſſor MARTYN, in his edition of MILLER's Dictionary, enumerates one hundred and twenty-four kinds, of which but thirty were known to LINNÆUS, and only four appear in the Kew Catalogue.

Being a native of the Weſt-Indies, and naturally a paraſitical plant, its culture is difficult, and it is of neceſſity a conſtant inhabitant of the bark ſtove in our climate.

Mr. WOODFORD's head gardener, Mr. WATSON, who is a very ſucceſsful cultivator and pays great attention to the natural propenſities of plants, recommends in the management of EPIDENDRUM to protect the roots by knobs of old tan, and obſerves that, in general, they love ſhade and a hot damp air, but do not bear much water to the roots.



S. Edwards del. Pub. by W. Curtis St. Geo. Crescent. Dec. 1. 1800. F. Sansom sculp.

ARCTOTIS ANTHEMOIDES. CHAMOMILE ARCTOTIS.

Class and Order.

SYNGENESIA POLYGAMIA NECESSARIA.

Generic Character.

Recept. villosum seu paleaceum. *Pappus* corona 5-phylla. *Cal.* imbricatus: squamis apice scariosis.

Specific Character and Synonyms.

ARCTOTIS *anthemoides*; radio sterili, paleis flosculos subæquantibus, seminibus basi penicillatis, foliis duplicato-pinnatifidis linearibus.

ARCTOTIS *anthemoides*; paleis flosculo brevioribus, foliis supra decompositis linearibus. *Sp. Pl.* 307. *Martyn's Miller's Dict.* 13.

CHAMÆMELUM. *Burman. Afr.* 174. *t.* 63. *f.* 2.

URSINIÆ SPEC. *Gært. fruct.* 2. 462.

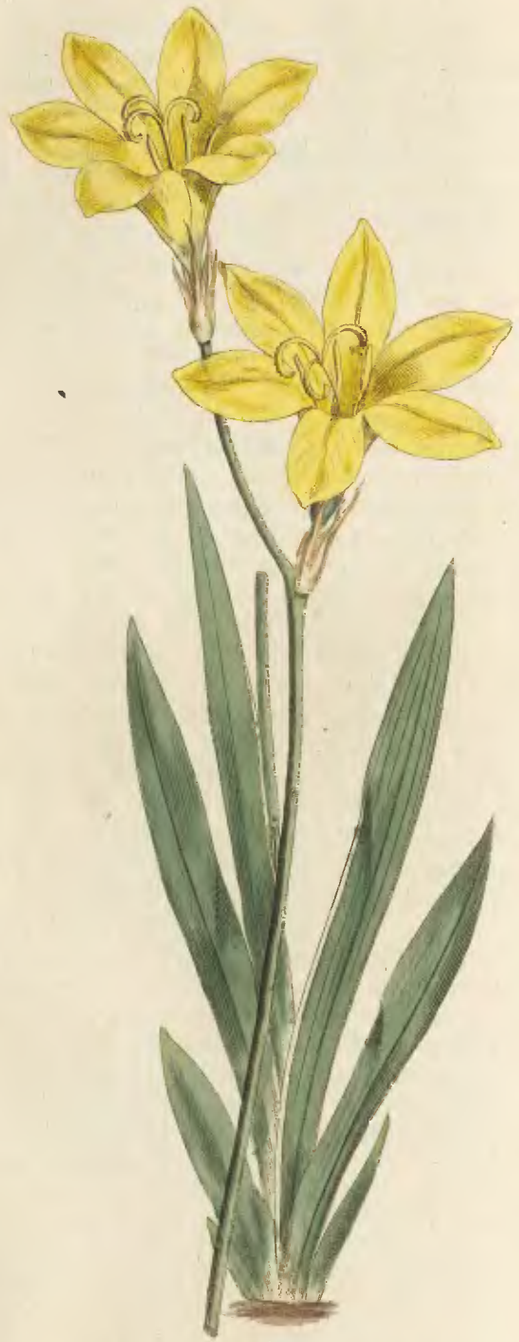
DESCR. *Root* annual, fibrous. *Stem* much branched at the base; *leaves* smooth, alternate, doubly pinnatifid: *leaflets* linear, somewhat reflexed. *Peduncles* terminal, long, obsoletely channelled. *Calyx* subovate, imbricate; scales ovate, marginated, the internal ones largest. *Receptacle* chaffy and hairy, the hairs coming off attached to the seed. *Chaffs* involving the floret and nearly equal to it, persistent. *Radius* about twelve-rayed, neuter, sterile, yellow within, and purple without. *Disk* yellow, florets crowded, a little exceeding the chaffs. *Seeds* striated, incurved, with a membranous crown of five leaflets, which are white with a brown streak in the middle, and have a tuft of cottony hairs at the lower extremity.

The

The genus ARCTOTIS, as at present constituted, contains species which do not well accord with one another, nor even come under the same order in the Linnean system, the present plant properly belonging to the order of POLYGAMIA FRUSTRANEA. ARCTOTIS *anthemoides*, *paradoxa*, and *dentata*, are, however, certainly congeners, and GÆRTNER has made an attempt to form them into a distinct genus, under the name of URSINIA, in which we might have been led to have followed him, but unluckily our plant wants his essential character of a double pappus on the crown of the seed. It frequently, though not generally, happens that the floret remains attached to the seed after this is ripe; is it possible that, in the examination of a dried specimen, such a circumstance could have deceived this accurate Botanist? However this may be, our plant has certainly no such double pappus, one within the other, as he has described and figured, although it has, which is very unusual, a sort of pappus at both ends, a membranous crown at one end, and a pencil of hairs at the other. By this last, the seed attaches itself to whatever it happens to touch, and by this means may be conveyed to a greater distance than by the help of the wind.

Though possessing no particular beauty, it is, in several respects, curious to the eye of a common observer. All the inside of the flower is of a lively yellow colour, the outside purple. The buds nod, but the flowers when expanded stand erect; as the flower decays, it again nods till the seeds are ripe, when it rises upright, and the crown of the seed expanding at the same time, it very much resembles some flower of another family, having a corolla of five white segments and a brown star in the middle, not very unlike a *statice*. The whole plant smells like Chamomile.

It is an annual, a native of the Cape of Good Hope, and thrives very well in the open border, and if brought forward by being sown on a hot-bed in the Spring, will produce plenty of seeds. If kept within doors, the flowers diminish in size and lose their purple colour. It has been cultivated at the Botanic Garden at Brompton since the year 1795, at which time it was first raised there from seeds obtained from the Cape of Good Hope.



J. Edwards del. Pub. by W. Curtis St. Geo. Crescent Jan. 1. 1799 E. Sens.

Ixia Bulbifera. Sulphur-Coloured Ixia.

Class and Order.

Triandria Monogynia.

Generic Character.

Cor. 6-partita patens æqualis. *Stigm.* 3 erectiuscula patula. *Sem.* subrotunda plurima.

Specific Character and Synonyms.

IXIA *bulbifera;* foliis multistriatulis, spatha lacera, corolla infundibuliformi superne patente: tubo brevi: laciniis ovato-oblongis, staminibus lateralibus divergentibus. *Gawler.*

IXIA bulbifera. *Linn. Sp. Pl.* 51. *Syst Veg.* 85. *Reichard.* 1. 99. *Amæn. Acad.* 4. 300. *Hort. Kew.* 1. 57. *Willd. Sp Pl.* 1. 204. *Bot. Repos.* 48. *Ejusq. recens.* 8. *Burman. prod. fl. cap.* 1.

IXIA bulbifera, *var.* γ. flava. *Thunb. Diss.* 16.

IXIA bulbifera. *Mill. Dict. ibi enim flores sistit sulphureos; ejus specimen vero apud* Herb. Banks. *æque ac icon picta floribus gaudent albo-purpureis!*

IXIA monanthos. *De la Roche, Diss.* 21?

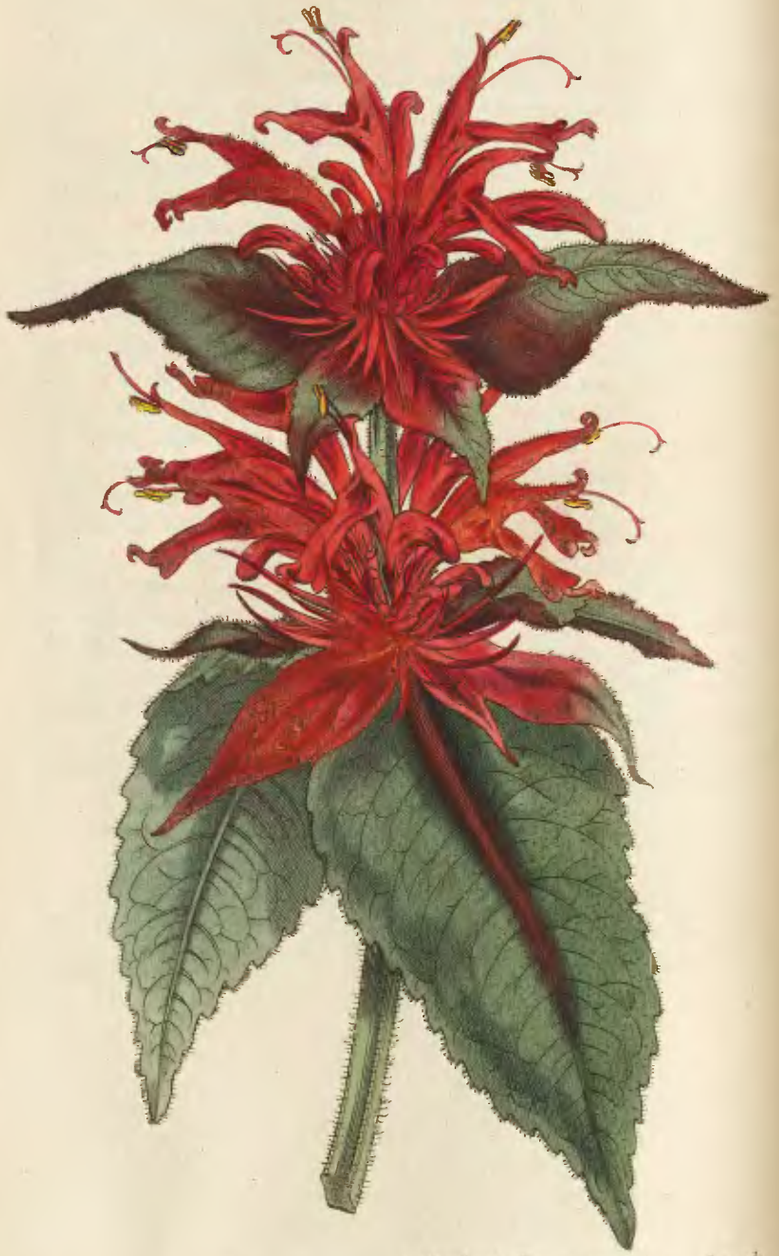
This is also termed by the Dutch *Vluweel Bloemje*, or *Velvet-flower*, as well as Ixia *grandiflora* of the last number, to which it is very closely allied, but generally taller, leaves paler or more tinged with yellow; stem bearing from one to four bulbs at each joint, which fall off when mature; corolla likened to Hemerocallis in the *Amænitat. Academicæ*, somewhat smaller and narrower than in *grandiflora*; segments with the sides curved

curved not ſtraight, approaching an oval not a cuneate form, points though obtuſe not ſo broadly rounded; colour light yellow. Strong plants from old bulbs generally have two branches; flowers, three to five, ſcentleſs, or, according to Mr. CURTIS, ſlightly fragrant; leaves, as in its relatives, more numerous than is general in IXIA, ſix to ten, outer ones gradually ſhorter, outermoſt ſcarcely half an inch long. DE LA ROCHE's variety is blotted and ſtreaked with brown; but if IXIA *lacera*, which we have not yet met with, be a diſtinct ſpecies, this would rather be a variety of that.

Propagates faſt by ſeeds, ſtem-bulbs, and root-bulbs, and is become one of the commoneſt ſpecies in our gardens, yet has never before been figured, except in the Botaniſt's Repoſitory. Preſerves its colour, when dried, unimpaired. Cultivated by MILLER in 1758.

It has been ſuppoſed that many remarkable varieties in this genus have been produced by the induſtry of Dutch gardeners, but this is very doubtful, for certain it is that ſcarcely a variety, or what is ſuppoſed to be ſuch, has been imported from Holland, that has not been produced alſo from bulbs that were undoubtedly gathered wild or diſcovered in ſpecimens collected at the Cape. Whenever therefore a plant affords marks of diſtinction from its congeners, exceeding thoſe alloted to variety by LINNÆUS, and is not known to have been raiſed from the ſeeds of the identical ſpecies of which it is pretended to be a variety, we, without heſitation, record it a diſtinct ſpecies: as ſtudiouſly avoiding, on the other hand, to enumerate as ſuch, thoſe that merely differ within the rules preſcribed by our great maſter. When, as in this inſtance, we are but ſlightly acquainted with the local economy and preciſe habitat, this rule requires to be ſtrictly attended to.

N. B. In the enumeration of the ſpecies of WATSONIA (ſee 537) we omitted IXIA *ſpicata (fiſtuloſa*, Bot. Mag.) and IXIA *plantaginea*, which we now propoſe for inſertion.—WATSONIA *plantaginea* will be ſhortly given.



S. Edwards del. Pub. by W. Curtis St. Geo. Crescent. Jan. 1. 1802. J. Sansom sculp.

MONARDA DIDYMA. SCARLET MONARDA, or OSWEGO-TEA.

****

Class and Order.

DIANDRIA MONOGYNIA.

Generic Character.

Cor. inæqualis: labio superiore lineari filamenta insolvente. *Semina* 4.

Specific Character and Synonyms.

MONARDA *didyma*, floribus capitatis subdidynamis, caule acutangulo. *Linn. Sp. Pl. ed.* 3. *p.* 32. *Ait. Kew. v.* 1. *p.* 36. *Mill. ic.* 183. *f.* 1.

MONARDA floribus capitatis verticillatisque, caule acute angulato, foliis lanceolato-serratis glabris. *Buttn. cun.* 226. *Trew. Plant. Select.* 3. *t.* 64. *Zorn. icon.* 249.

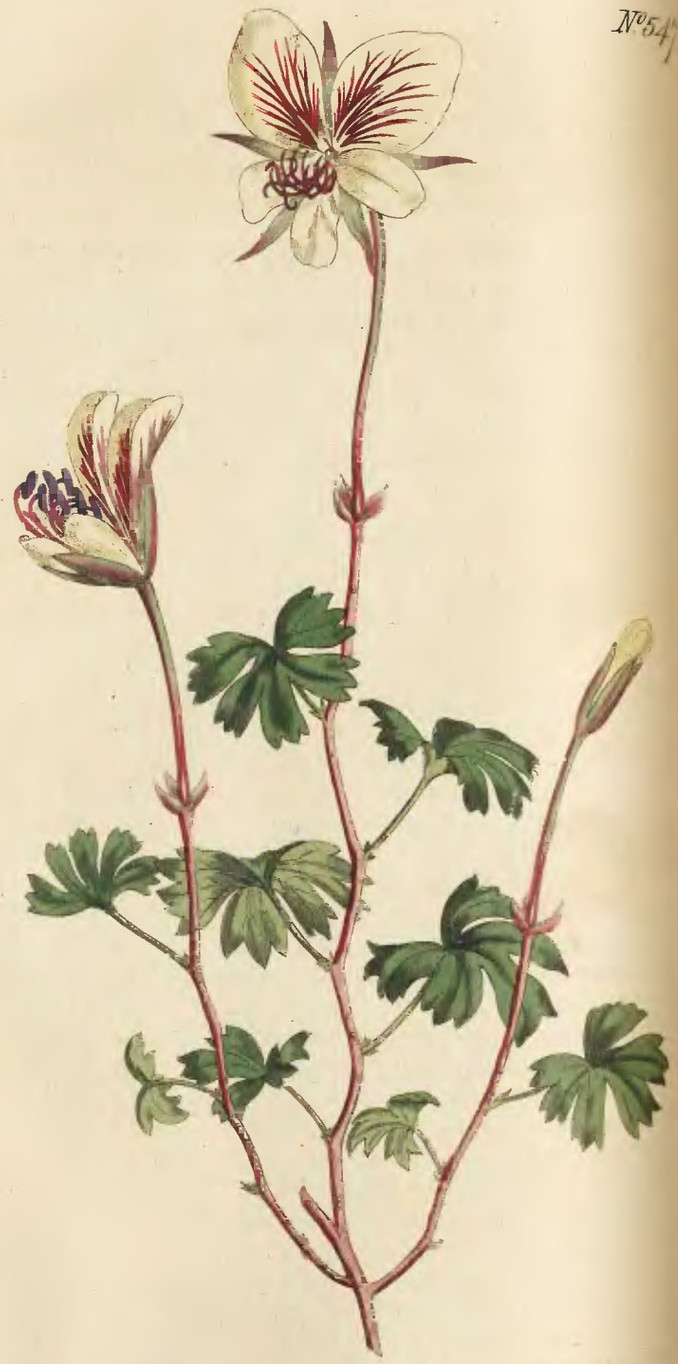
Betwixt the variety of *Monarda fistulosa*, figured pl. 145, of this work, and the present species, there is a great similarity, especially as that plant is coloured, the blossoms not inclining so much as they ought to the crimson hue; for, in regard to colour, the two plants differ very materially, the flowers of the *didyma* being of a rich scarlet, and those of the *fistulosæ var.* of a fine crimson; but the great specific difference between the two consists in the angles of the stalk, which are sharp in the one and obtuse in the other; the variety of the *fistulosa* grows to a greater height also; there are many other differences which it is needless to particularise, suffice it to say, that they are both very desirable plants, of the hardy herbaceous kind, and worthy a place in all collections.

The *didyma* seldom rises to above the height of two feet, it throws out numerous stalks, whence it becomes bushy; its foliage when bruised gives out a most delightful fragrance, which alone would entitle the plant to a place in every garden.

It

It is a native of North-America, from whence it was introduced by PETER COLLINSON, Esq. in 1755, flowers from June to August; prefers a moist soil, where, like some of the mints, it increases greatly by throwing out numerous shoots from its roots, by dividing and transplanting of which it is readily propagated, as well as by seeds, which it produces, though not abundantly.

The name of MONARDA was given to this genus in honour of NICHOLAS MONARDES, a Spanish Physician, of the sixteenth century, and its trivial name from this species having subdidynamous flowers, *i. e.* with four stamens, but two of them without anthers.



PELARGONIUM QUINATUM. FIVE-FINGERED PELARGONIUM, or CRANE'S-BILL.

****

Clafs and Order.

MONADELPHIA HEPTANDRIA.

Generic Character.

Cal. 5-partitus: lacinio fuprema definente in tubulum capillarem nectariferum fecus pedunculum decurrentem. *Cor.* 5-petala irregularis. *Fil.* 10 inæqualia: quorum 3 (raro 5) caftrata. *Fructus* 5-coccus roftratus: roftra fpiralia introrfum barbata.

Specific Character and Synonyms.

PELARGONIUM *quinatum*; caule fruticofo angulato, foliis alternis quinque-partitis: foliolis cuneatis apice tridentatis, pedunculis unifloris erectis terminalibus, calyce maximo ftellato-patente.

GERANIUM *præmorfum. Bot. Repof.* 150.

This very rare and diftinct fpecies is but of low ftature, at leaft we have not yet feen it reach a foot in height. The ftalk is woody at the lower part and angular; branches few, fleshy, flexuofe, with leaves growing alternate on footftalks the length of the leaf, with two very fmall green fubulate ftipulæ; leaves foft, kidney-fhaped, divided almoft to the footftalk into five cuneate three-toothed fegments, the two outer ones, as is ufual, broader than the reft, confifting as it were of two united. From the very extremity of the branch grows one erect peduncle, jointed at the bafe, and having juft below the joint generally three concave ovate bracteæ. The fimilarity of the peduncle and bracteæ to thofe of the umbellate fpecies, leads to a fufpicion that the flower may not always be folitary; however,

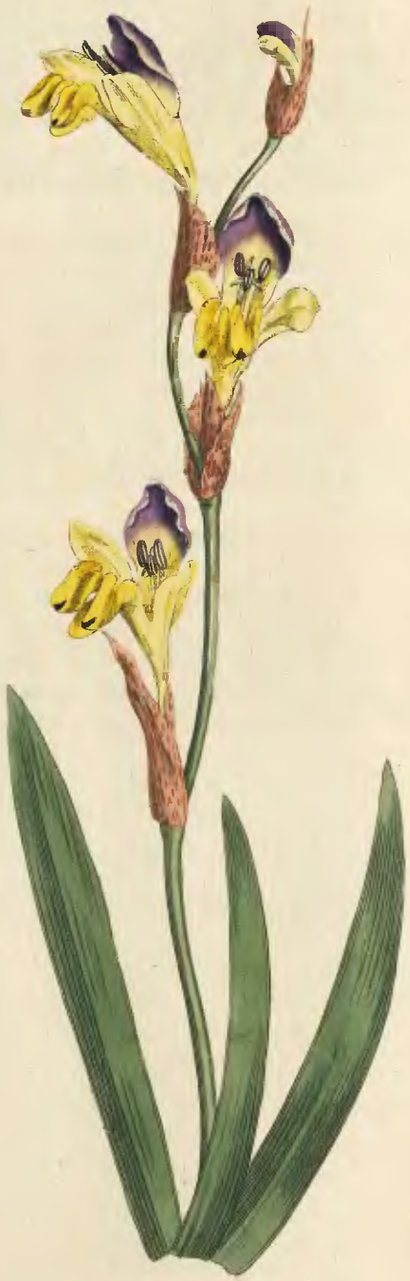
ever, we have never as yet ſeen it bear more than one to each branch. The ſegments of the calyx are very long, ſpreading, linear-lanceolate. Corolla large, ſhewy, the two ſuperior petals erect, obovate, cream-coloured, beautifully ſtreaked from the centre with red veins, and more than double the ſize of the three lower paler veinleſs petals. Fertile ſtamens ſeven, aſcendent, with purple anthers. Stigmas five, rotate, incurved.

When a plant has obtained an eſtabliſhed name, we hold it better to retain this than to change it even for a better; but this ſpecies never having been, to our knowledge, deſcribed by any author of authority, we feel ourſelves at liberty to adopt the name of *quinatum*, which was with great propriety propoſed by Mr. GAWLER, from its leaves being divided into five ſegments or leaflets, much in the ſame manner as thoſe of *ternatum* are divided into three; the nurſeryman's name *præmorſum*, which gives a falſe idea, appearing to us totally inadmiſſible.

It is eaſily propagated by cuttings, but the tender branches ſeem very apt to periſh.

Was firſt raiſed from ſeeds procured from the Cape by Mr. QUARRELL, at the nurſery of Mr. COLVILLE, King's-Road, Chelſea, where it has been plentifully increaſed.

Our figure was taken from a ſpecimen which flowered at EDWARD WOODFORD'S, Eſq. the latter-end of May 1801.



Ixia Bicolor. Ringent Ixia.

Clafs and Order.

Triandria Monogynia.

Generic Character.

Cor. 6-partita patens æqualis. *Stigma* 3 erectiufcula patula. *Sem.* fubrotunda plurima.

Specific Character and Synonyms.

IXIA *bicolor;* fpatha lacera, corolla-bilabiata angufta: limbo tubum fubæquante: laciniis lateralibus inferioribus minoribus convolutis ab intermediâ minus profunde partitis. *Gawler.*

GLADIOLUS bicolor. *Thunb. Diff.* 16. *t.* 2. *f.* 1. *prod.* 8. *Jacq. Coll. Sup.* 25. *ic. rar.* 2. *t.* 240. *Hort. Kew. add.* 481. *Willd. Sp. Pl.* 1. 216.

GLADIOLUS latifolius floribus claufis obfoletis ad caulem villofis. *Breyn. prod. fl. rar. p.* 2. *p.* 21. *t.* 8. *f.* 2.

GLADIOLUS villofus. *Burm. prod. fl. cap.* 2.

Many of our readers will doubtlefs be furprifed to fee this plant ranked under Ixia, where indeed, as the effential character has hitherto ftood, it can claim no admiffion; but, while *grandiflora* and its relatives are fuffered to remain, this cannot be excluded without giving a fhock to natural affinity, as violent to that as ufelefs to artificial fyftem, for fo completely do this and Ixia *grandiflora* of the laft number agree in habit, in capfule, in feed, and in fpathe, that before the corolla is expanded, or after it is wafted away, they cannot be diftinguifhed from each other. From the irregularity of its corolla alone it has been univerfally confidered to be a Gladiolus, from which genus it is however entirely excluded by the corrected effential character, as given by Mr. Gawler (*vid.* 538). As this agrees with Ixia *grandiflora, bulbifera,* &c. fo does Gladiolus *fecurigera* of the Bot. Mag. with

Ixia

IXIA *crocata* and its relatives, and differs nearly in the ſame manner, and both muſt belong to genera, of the eſſential character of which the regularity or irregularity of the corolla can form no part. Mr. CURTIS appears to have been ſenſible of the natural affinity of theſe plants, and under this impreſſion had marked the drawing of IXIA *bulbifera*, given this month, GLADIOLUS *ſulphureus*, and noted it as one of thoſe ſpecies which it is difficult to determine whether it belongs to that genus or to IXIA. When ſuch men as he are at a loſs to arrange the ſpecies under the genera as now conſtituted, it ſhews the neceſſity of a reform*.

For an opportunity of preſenting our readers with a figure of this very rare ſpecies, we are indebted to EDWARD WOODFORD, Eſq. of Vauxhall, from whoſe rich mine our work is adorned with many a gem.

It is omitted by GMELIN, in *Syſt. Nat.* and by MARTYN, in *Mill. Dict.* Was introduced to the Kew Garden by Mr. MASSON, in 1786. Flowers in March. Scentleſs. May it be a hybrid plant?

---

* Convinced of theſe imperfections in the preſent arrangement, Mr. GAWLER has been led to propoſe the forming a new genus, under the name of SPARAXIS (σπαραξις *laceratio*) but ſenſible that "in ſo "natural an order of plants, nothing is more difficult than to find "generic characters that ſhall be ſtable and not ſet aſide by every new "ſpecies that comes in our way †:" he does not venture further at preſent than to propoſe, leaving the rejection or adoption of it to the future determination of the Botanical world.

ESS. CHAR. Spatha *ſcarioſo-membranacea ante defloreſcentiam lacera.* Cor. 6-*partita baſi infundibuliformi-tubuloſa.* Stigm. 3 *recurvo-patentia.* Capſ. *ſubrotunda.* Sem. *plurima rotunda.* Gawler.

OBS. *Radix tuber fibroſo-tunicatum. Caulis ſæpiſſime ex axillis foliorum bulbifera. Folia* 6—10, *enſiformia ſubtiliter multiſtriata glabra. Rachis flexuoſa. Flores pauci remoti. Genitalia erecta lateralia vel etiam adſcendentia. Tubus ſpatham ſubæquans: limbus regularis vel bilabiato-irregularis patentiſſimus vel angulatus.* IXIA pendula; *elata, ſpica elongata, multiflora, diſticha, ramis gaudet capillaribus rigidis plurimis pendulis.* G.

Under this genus will rank,
IXIA fragrans, *Willd.* IXIA bulbifera, *Willd.* & *Bot. Mag.* [IXIA grandiflora, *Bot. Mag.* IXIA lacera, *Herb. Linn.* SISYRINCHIUM majus latifolium, *Comm. Hort.* ſpecies ſi diſtinctæ]. IXIA tricolor, *Bot. Mag.* IXIA bicolor, *Bot. Mag.* IXIA pendula, *Willd.* ?

† *Smith icon. pict.*

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CONTINUED BY

JOHN SIMS, M. D.

FELLOW OF THE LINNEAN SOCIETY.

VOL. XVI.

Quelque elegante, quelque admirable, quelque diverſe que ſoit la ſtructure des Vegetaux, elle ne frappe pas aſſez un oeil ignorant pour l'intereſſer. Cette conſtante analogie, et pourtant cette variété prodigieuſe, qui regne dans leur organiſation, ne tranſport que ceux qui ont deja quelque idée du ſyſtême végétal. Les autres n'ont a l'aſpect de tous ces tréſors de la nature, q'une admiration ſtupide et monotone. Ils ne voient rien en detail, parce qu'ils ne ſavent pas même ce qu'il faut regarder, et ils ne voient pas non plus l'enſemble, parce qu'ils n'ont aucune idée de cette chaine de rapports et de combinaiſons qui accable de ſes merveilles l'eſprit de l'obſervateur.

ROUSSEAU.

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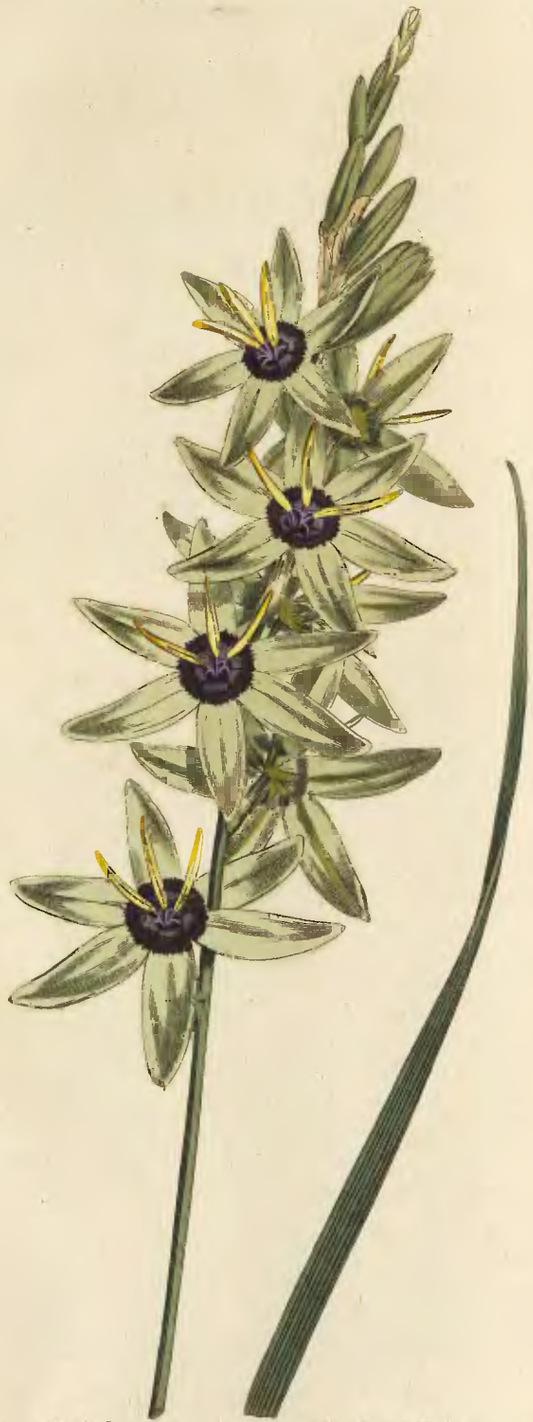
MDCCC III.



Pub. by W. Curtis, St. Geo. Crescent Feb. 1. 1802.

IXIA MACULATA, *var.* VIRIDIS (γ). GREEN-STAINED IXIA.

Class and Order.

TRIANDRIA MONOGYNIA.

Generic Character.

Spatha bivalvis. *Cor.* basi tubulosa tubus gracilis, limbus regularis *(rarissime subirregularis)* subæqualis patens. *Filam.* limbo pluries breviora erecto-patentia, vel coarctato-erecta. *Stigm.* 3, patentia. *Semina* numerosa, globosa. *Gawler.*

OBS. *Corolla regularis quoad figuram et situm partium quoad magnitudinem modo (sed rarissime) subirregularis.* G.

Specific Character and Synonyms.

IXIA *maculata* tubo capillari, limbo ex campanulato patentissimo basi maculato, laciniis oblongiusculis, stigmatibus usque tubum divisis infra antheras recurvatis. *G.*

IXIA maculata. *Murr. Syst.* 85. *Thunb. Diss.* 19. *prod.* 10. *Burm. pr. fl. cap.* 1. *Schneev. & Geuns.* 25. *t.* 6. *Jacq. Hort. Schoenb. v.* 1. *perplurimæ varietates. Willd. Sp. Pl.* 1. 205.

IXIA spectabilis (*var. hæc.*) IXIA amæna. *Salisb. prod. hort. p.* 33, 35. *n.* 10, 12. *Mart. Mill. Dict.*

IXIÆ. *Bot. Rep. tab.* 23, 29, 159, 196. *Ejusque Recens.* IXIA amæna, maculata 2, 5. 2, 6.

IXIA *abbreviata;* floribus racemosis pistillo brevissimo. *Houtt. Linn. pfl. Syst.* 11. 48. *tab.* 78. *Nat. Hist. p.* 2. *sect.* 12. *p.* 41.

IXIA *maculata* cor. viridi spicis sæpe pedalibus. *Thunb. Diss. loc. cit. Travels, Engl. ed. v.* 2. *p.* 34. *var. hæc, ita Schneev.* 6. *Jacq. loc. cit.* 33. *Bot. Rep.* 29.

DESCR. Bulb round, compressed. Leaves ensiform and ensiformly-linear, nearly equalling or three times shorter than the scape, which is from

from a foot to four feet high, branched or ſimple, with from ſix to thirty flowers in a ſpike. Spathe membranous, three times ſhorter or nearly equalling the tube on the ſame plant, outer valve acute and entire, or blunt and toothed. Tube capillary, one to three times ſhorter than the limb, which is from campanulate patent. Segments oblong, more or leſs inclined to oval or lanceolate, inner ones narrower and more acute. Filaments from upright patent, ſhorter than the anthers, which are linear, with a ſubſagittate baſe. Scentleſs.

Found by THUNBERG flowering in October by the ſides of rivers and brooks in the Roode-Zand Valley, many days journey from Cape-Town. Had we ſeen none but the large ſub-variety (if we may ſo call it) common in our gardens, we might poſſibly have been led to have conſidered our plant as a ſeparate ſpecies; but during the inſpection of ſome hundreds of ſpontaneous and garden ſpecimens, we have ſeen it in all the phaſes uſual to this changeable ſpecies; as alſo without the ſtain, which, as *erecta* differs only from *maculata* by the large ſtain at the baſe, muſt be referred to the former. It propagates freely both by ſeeds and offsets, is not very tender, never expands but in clear weather and when protected from the wind. Preſerves its beauty if carefully dried.

Although the eſſential character of IXIA, as above given, conſiderably reduces the heterogeneous maſs that has hitherto incumbered this genus, as will be ſeen by the following ſynoptic view of the ſpecies which will rank under it, we ſtill ſuſpect that ſome of the ſections muſt be hereafter ſeparated into diſtinct genera, before a completely determinate eſſential character is formed. Undeſcribed ſpecies, which are numerous in our gardens, are not inſerted. Thoſe for which no authority is cited, are as they ſtand in WILLDENOW's edition of the *Species Plantarum*.

IXIÆ SYNOPSIS. GAWLER *inedit.*

Sect. 1. *Antheris breviſſimis conniventibus; ſtigmatibus infundibuliformibus, hiantibus.*

IXIA ſcillaris α. β. (ſpecieſne diſtinctæ?)

Sect. 2. *Uni-biflora; limbo ſubgloboſo-campanulato, tubo fere nullo; bulbo carnoſo tunica tenui veſtito.*

IXIA crateroides, *Bot. Repoſ. t.* 186.

Sect. 3. *Rachide in multifloris flexuoſa flexubus de flore in florem valde arcuatis; valvula exteriore ſpathæ integerrima obtuſa tubum brevem ſubæquante vel longiore; floribus ex ortu fecundis; piſtillo ſtamina ſæpius ſuperante; bulbo oblongo-ovato tunica nigra putaminea margine dentato-fiſſa veſtito, in annoſis tunicis plurimis baſi imbricatis.*

IXIA ciliaris, *Saliſb. inedit.*—IXIA hirta.—IXIA rochenſis (ſecunda *de la Roche*).—IXIA ſecunda.—IXIA ramoſa (ſcillaris *Thunberg*).—IXIA obtuſata, *Herb. Banks.*—IXIA ſetacea, *Thunb.*

Sect. 4. *Spica compoſita ex floribus ſeſſilibus ſpiculiſque 1—2 floris alternis capillaribus; bulbo ovato tunica fibroſa.*

IXIA capillaris (erecta *Jacq. collect.* nec *Hort. Schoenb.*).—IXIA lancea, *Jacq. ic. rar. et coll.* nec *Thunberg.*—IXIA aulica.—*Meræ varietates?*

Sect. 5. *Floribus paucis remotis; antheris inflexis?*

IXIA criſpa.

Anne cum Gladiolo criſpo, Gladiolo ſtriato, Gladiolo pectinato, *Herb. Bankſ. novum fundaturum genus?*

Sect. 6. *Stigmatibus hirtis revolutis; bulbo tunica lucida putaminea ſuperne dentata (valvuloideé ſulcata?)*

IXIA exciſa.

Sect. 7. *Floribus interdiu clauſis veſpere expandentibus per totam noctem vigilantibus; ſtigmatibus longioribus, capillaribus, laxis, effuſis os tubi uſque vel ultra; bulbo campaniformi baſi truncato-plano, in annoſis tunicis plurimis nigris deorſum imbricatis veſtito.*

IXIA falcata.—IXIA cinnamomea.—IXIA radiata (GLADIOLUS recurvus, *Thunb. et Suppl.* nec vero *Linn.*).—IXIA anguſta.—IXIA piloſa.

Sect. 8. *Flore magno-ſolitario; tubo brevi ſpathæ æquali; laciniis limbi obovatis; piſtillo ſtaminibus longiore.*

IXIA anemonæflora.

Sect. 9.

Sect. 9. *Tubo gracillimo spatha saltem duplo longiore; limbi laciniis patentissimis, oblongis, lanceolato-ovalibus, alternis paulo angustioribus acutioribus; bulbo superne compresso, tunica lenta fibrosa vestito.*

IXIA patens (leucantha v. *alba*).—IXIA flexuosa.—IXIA conica, *Bot. Mag.*—IXIA erecta.—IXIA maculata.—IXIA columellaris, *indescr.*—IXIA incarnata.

Sect. 10. *Cor. hypocrateriformi; tubo limbo pluries longiore; laciniis subæqualibus vel unico fere duplo majore; staminibus sæpius accumbentibus; bulbo fibras exserente bulbillos vel tubera apicibus gerentes. Genusne distinctum?*

IXIA longiflora.—GLADIOLUS roseus (HOUTTYNIA capensis, *Houtt.*).

N. B. IXIÆ aristatæ et linearis, *specimina viva vel siccata satis integra nondum vidi. Descriptiones nimis mancæ.*

SPARAXIDIS genus (vide 548) excluditur.

Errata in last Number.

In 546, l. antipenult, *for* this species having, &c. *read* from the juxta-position or twin-like appearance of the anthers in this species.

In 548, note, l. 16, *for* angulatus *read* angustatus.

SAMYDA ROSEA. ROSE-COLOURED SAMYDA.

Clafs and Order.

DECANDRIA MONOGYNIA.

Generic Character.

Cal. 5-partitus coloratus. *Cor* o. *Nect.* campanulatum ftaminiferum. *Capf.* intus baccata, 4-valvis, 1-locularis. *Sem.* nidulantia.

Specific Character and Synonyms.

SAMYDA *rofea;* floribus dodecandris aggregatis, foliis oblongis obtufiffimis fubferratis utrinque pubefcentibus.

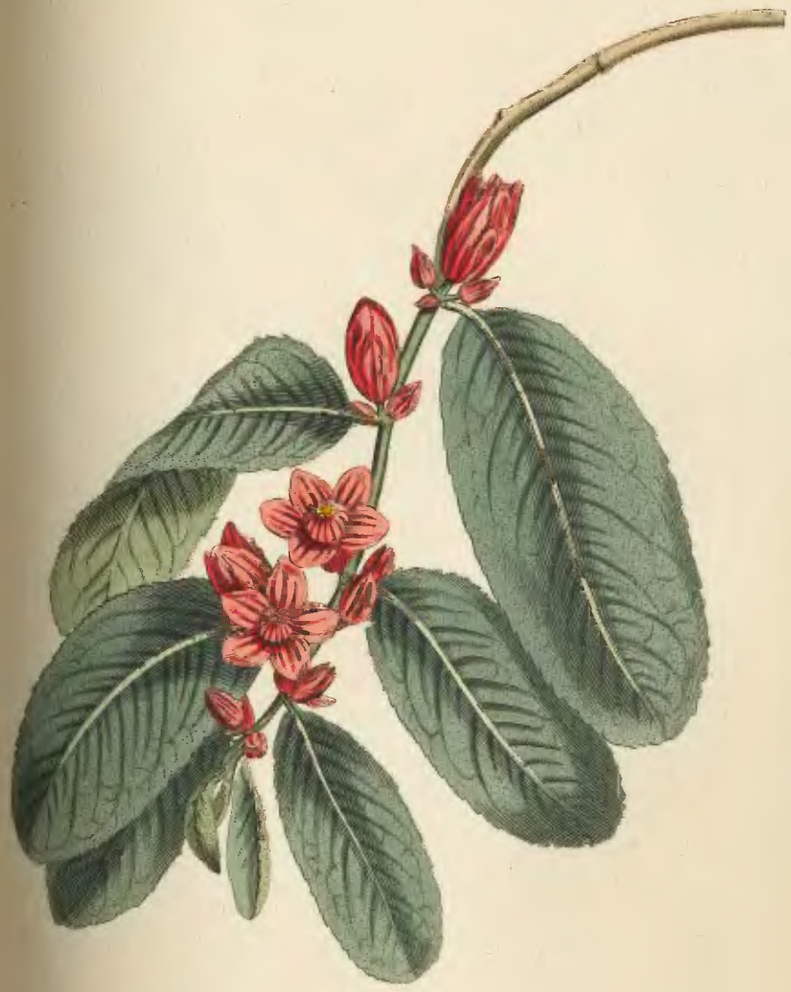
SAMYDA *ferrulata. Bot. Repof. pl.* 202.

GUIDONIA ulmifolio flore rofeo. *Plum. Gen.* 4. ?

This beautiful flowering fhrub is a native of the Weft-Indies, and confequently requires the heat of the bark ftove to bring it to any perfection in this country, where it is very ornamental, producing its fine red flowers in abundance along the flexile pendent branches.

It is certainly a very diftinct fpecies from the SAMYDA *ferrulata* defcribed and figured by JACQUIN, in the fecond volume of his Collectanea, which has acute leaves finely ferrated, and folitary flowers different in fhape as well as colour. It was fent to this country by Dr. ANDERSON, from the Botanic Garden at St. Vincent's, and has been fome years in the very fine collection of rare exotics poffeffed by Mr. EVANS, at Crombie-Row, Stepney, where our drawing was taken.

By Dr. ANDERSON it was called SAMYDA *pubefcens*, a plant apparently unknown to Botanifts of our day, and as the fynonyms quoted by LINNÆUS (which certainly have no affinity with this) are referred to other plants by Profeffor SWARTZ; we were inclined to fuppofe that he might be right, but Dr. J. E. SMITH having kindly examined the Linnean Herbarium, informs us, that there is no fpecimen fimilar to our drawing there, and, from a critical examination of the whole genus, is inclined to believe that it is the GUIDONIA *ulmi folio flore rofeo* of PLUMIER, which LINNÆUS appears to have confounded with the GUIDONIA *ulmi folio flore niveo* of the fame author, his SAMYDA *ferrulata.*



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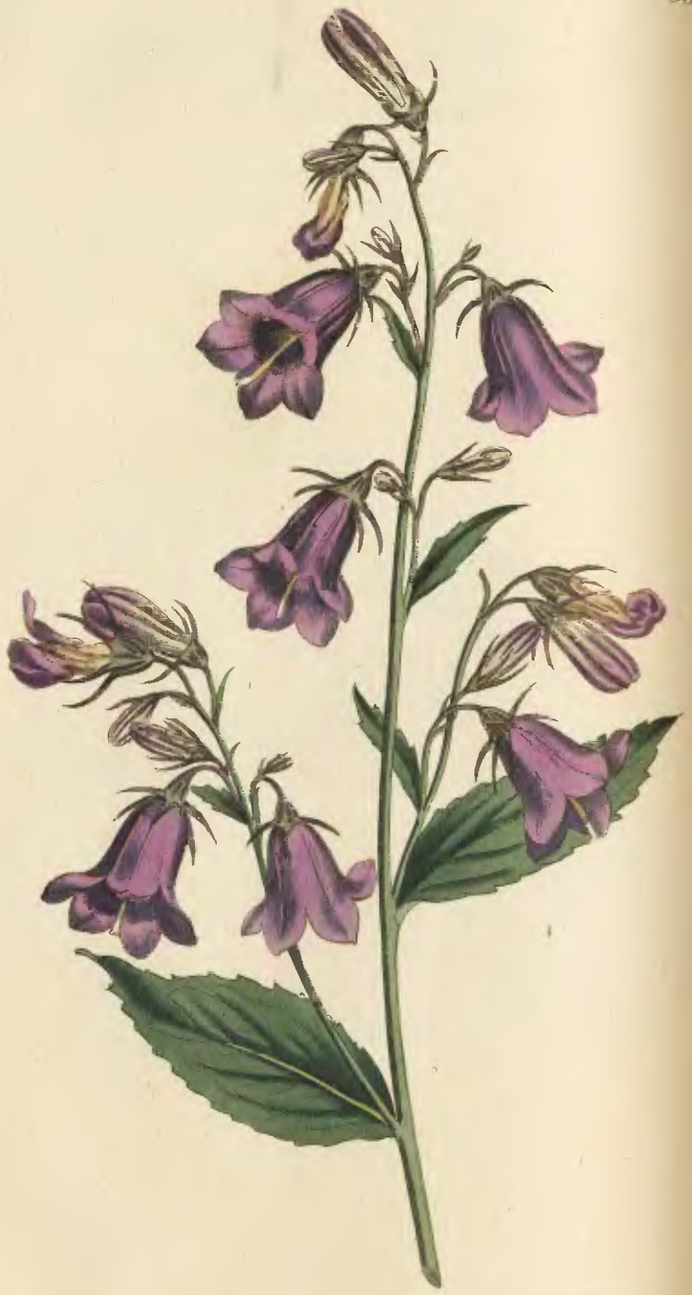


CAMPANULA AZUREA. AZURE CAMPANULA.

Clafs and Order.

PENTANDRIA MONOGYNIA.

Generic Character.

Cor. campanulata, fundo claufo valvis ftaminiferis. *Stigm.* 3-fidum. *Capf.* infera poris lateralibus dehifcens.

Specific Character.

CAMPANULA *azurea;* foliis ovato-oblongis feffilibus ferratis [utrinque pilofis] caule fimplici angulato floribus paniculatis. *Banks Mff.*

DESCR. Stalk erect, fimple, quadrangular, with raifed fubcartilagineous angles. Radical leaves few, petiolated, cordate-ovate, ferrated, fomewhat hairy underneath, hairs few, thinly fcattered, more about the margin than elfewhere. Cauline leaves alternate, feffile, oblong-ovate, acute, ferrate, thinly haired. Peduncles panicled, long, filiform alternate, axillary, and once or twice divided; pedicels nodding with linear bractes. Calyx pentagonal. Segments fubulate-filiform, more than half the length of the corolla. Segments of the corolla femiovate, acute.

We found confiderable difficulty in determining this fpecies, till we fortunately found in the Bankfian Herbarium a fpecimen in every refpect correfponding with the one from which our drawing was made, by which we found that it had been regarded by the late Dr. SOLANDER as a nondefcript fpecies, and had been named by him CAMPANULA *azurea*, and diftinguifhed by the fpecific character above given. In both fpecimens the leaves are fmooth on the upper fide, and have very thinly fcattered hairs on the under fide; on which account we have enclofed the words *utrinque pilofis* between crotchets. In many refpects it refembles lilifolia, but differs in its angular ftalk, in the length of its calyx, and, as we believe, has very diffimilar roots. Was fent with other plants from Switzerland to Mr. SWAINSON, by whom it was communicated to Mr. SALISBURY at the Botanic Garden, Brompton, where our drawing was made laft. The fpecimen in the Herbarium flowered in the Botanic Garden at Chelfea in 1778, and is marked as a native of Switzerland. It is a hardy perennial, and, as an ornamental flower, worthy of culture.

NYMPHÆA CÆRULEA. BLUE WATER-LILY.

Class and Order.

POLYANDRIA MONOGYNIA.

Generic Character.

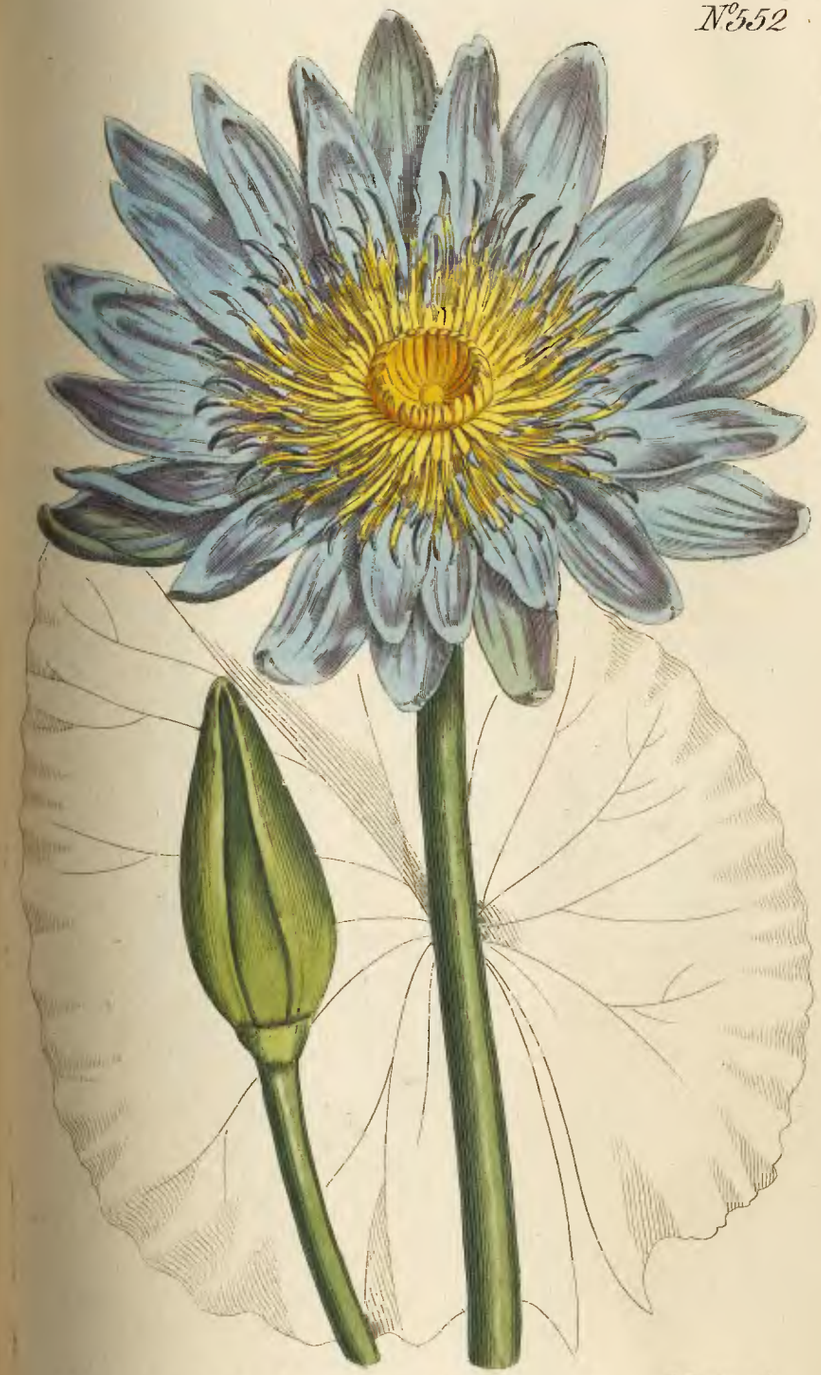
Cor. polypetala. *Cal.* 4—5-phyllus. *Bacca* multilocularis, loculis polyspermis.

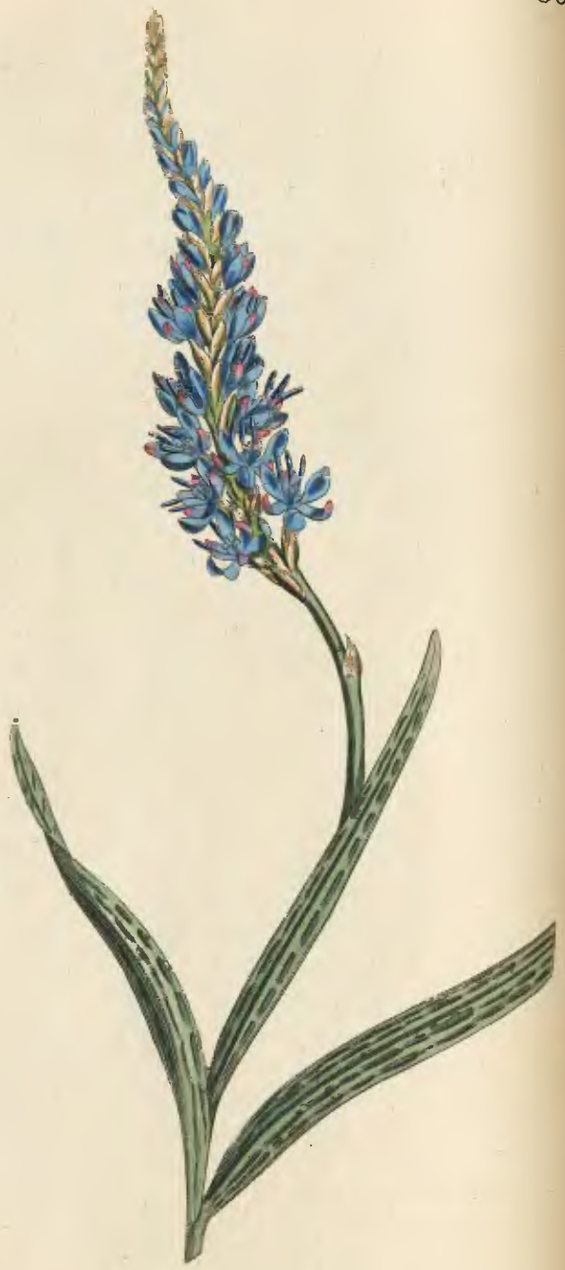
Specific Character and Synonyms.

NYMPHÆA *cærulea*; foliis peltatis inferne bilobis obtuse dentato-sinuatis utrinque glabris. *Dryand. ineedit.*
NYMPHÆA *cærulea. Bot. Repos.* 197.

" A native of the Cape of Good Hope. Calyx four-leaved. " Petals twenty in three ranks. Stigmas twenty. I do not " know if the blue-flowered East-India one be the same; " the leaves seem to be entire, and the flowers smaller with " acute petals.—N. B. I have since had it with entire leaves." *Dryand. Mss.*

We are proud to have it in our power to offer any thing not before communicated from such a source as Dr. DRYANDER. The sketches of a master's hand are of more value than the finished labours of other men. The leaves are truly peltate, though divided to within half an inch of the footstalk into two lobes, which terminate in a curved point a little divaricate, so as to give it a somewhat sagittate appearance. In this form of the lobes it differs from NYMPHÆA *lotus*, as well as that in the latter the margin of the leaf is acutely dentated and tomentose on the under side. But there are probably several species as yet undescribed. This is certainly one of the most beautiful of aquatic plants, and appears to be more easily cultivated than most of them, flowering readily, and continuing to blossom through great part of the Summer. It has the additional recommendation of being very fragrant. Is usually kept in the stove planted in a pot of loamy earth, and immersed under water in the cistern, but would perhaps succeed as well in a good greenhouse. Our drawing was made from a specimen that flowered last May in the collection of the Right Hon. CHARLES GREVILLE, at Paddington, and is to be met with in several collections in the neighbourhood of the metropolis.





Published by W. Curtis, St. Geo. Crescent, Mar. 1, 1802.

WATSONIA PLANTAGINEA. SMALL-FLOWERED WATSONIA.

Class and Order.

TRIANDRIA MONOGYNIA.

Generic Character.

Vide No. 537.

OBS. ULTER. *Subinde vivipara. Caulis rarissime anceps. Stamina sæpius adscendentia antheris parallelis (æqua fronte digestis) in nonnullis vero erecta stylum supra trifariam stipantibus his quoque foliorum margines cartilaginei, faux brevior turbinato-contracta, semina vix alata, nec inde genere eliminandis, cæteris prorsus consentaneis. Bulbus intra tunicam geminos consimiles, unicum e scapo pertranseunte dississum simulantes, quotannis enititur, hisque jam adoletis perit. Radicationis habitum in Ixia et Gladiolo, ab eodem in Watsonia aliquantulum discrepantem, alibi proferemus.* Gawler.

Specific Character and Synonyms.

WATSONIA *plantaginea*; foliis lineari-ensiformibus strictis infimo falcato, compresso-fistuloso: cæteris plano-solidis, caule alato-ancipiti, spica disticha subamentiformi, limbo æquali campanulato-patente. *G.*

IXIA plantaginea. *Hort. Kew.* 159. *Willd. Sp. Pl.* 1. 200.

IXIA triticea. *Burm. prod. fl. cap.* 1.

GLADIOLUS alopecuroides. *Thunb. Diss.* 14. *prod.* 8. *Sp. Pl.* 54. *Amæn. Acad.* 4. 301. *Syst. Veg. Murr.* 86. *Gmel. Syst. Nat.* 111.

PHALANGIUM spicatum. *Linn. Pfl. Syst. II. p.* 129. *t.* 8. *f.* 2.

PLANTA æthiopica, alato caule fructum capsularem grani tritici æmulum in longa spadicea proferens. *Pluk. Am.* 173. *t.* 439. *f.* 3.

DESCR. Scape ancipital, 1—2 feet high. Leaves three, alternate, ensiform, somewhat falcate acute, lower one compressedly fistulose, chambered, upper ones solid, flat, stiffish, far-sheathing, and beyond the sheaths shorter than the lowest.

loweſt. Rachis flexuoſe, when ſtripped of its flowers, like that of wheat. Spike (ſometimes two, the lower confluently adpreſſed) linear, diſtich with from fifty to one hundred cloſely imbricated ſmall flowers, blueiſh with a tinge of purple at the tips of the inner ſegments. Outer valve of ſpathe ovate, with a broad pellucid membranous edge, ſhorter than the faux, which is compreſſed and ſlightly recurved. Limb bell-ſhaped (in the upper flowers ſometimes ſubbilabiately arranged) ſegments equal, narrowly oval-lanceolate, alternate ones interior. Stamens adſcendent parallel nearly the length of the piſtil. Anthers incumbent, dark blue with a ſagittate baſe. Said to vary with white flowers. Scentleſs. Like WATSONIA *ſpicata*, ſometimes produces ſmall oblong bulbs, 1—3, in each ſpathe inſtead of flowers, theſe germinate when fallen off.

Found by THUNBERG near the town, at Swellendam, in Carro, and ſometimes in the high-roads. Our figure was taken from a plant received ſome time ſince from the Cape, with many others, by Meſſrs. GRIMWOOD and WYKES, at Kenſington. Introduced into the royal gardens at Kew in 1774, by Mr. MASSON. This is the ſmalleſt of the tribe yet known. We have ſeen WATSONIA *aletroides* with as many flowers, as cloſely imbricate, and permanently diſtich.

No. 523. alter as follows:

WATSONIA SPICATA. HOLLOW-LEAVED WATSONIA.

WATSONIA *ſpicata;* foliis linearibus teretibus: imo breviore verticali molliter mucronulato, ſpica diſticha ſubamentiformi, limbo æquali campanulato-patente. *G.*

IXIA ſpicata. *Soland. Herb. Bankſ. Willd. Sp. Pl.* 1. 200.

IXIA alopecuroidea. *Linn. Suppl.* 92.

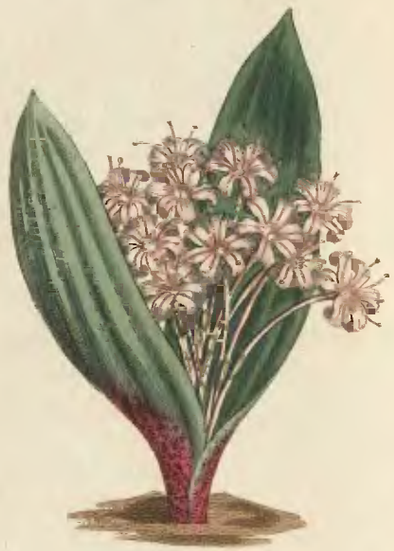
GLADIOLUS ſpicatus. *Roy. Lugdb.* 19. *Sp. Pl.* 53. *Thunb. Diſſ.* 13. *Prod.* 8. *Syſt. Veget. Murr.* 86. *Syſt. Nat. Gmel.* 111.

GLADIOLUS ſiſtuloſus. *Jacq. Hort. Schoenb. v.* 1. *tab.* 6.

GLADIOLUS tubuloſus, foliis cylindraceis, nervoſis, glaberrimis, florum ſpica diſticha. *Burm. Prod. fl. cap.* 2.

GLADIOLUS. *Herb. Hermann. (ex quo Linnæus floram Zeylanicam confecit) apud Biblioth. Bankſ. vol.* 4. *pag.* 21. *inter plantas Zeylanicas agglutinatus, Linnæi manu ſubſcriptus.*—GLADIOLUS *ſpicatus. Herb. Linn.* 8. *eſt* GLADIOLUS communis. *G.*

Spathe 2-valved, ſtigmas bifid, leaves 4. ſtem ſimple.



S. Edwards del. Pub. by W. Curtis St. Geo. Crescent Mart. 1802 T. Bonsfield sc.

MASSONIA ENSIFOLIA. TRUMPET-FLOWERED MASSONIA.

****

Class and Order.

HEXANDRIA MONOGYNIA.

Generic Character.

Cor. infera limbo sexpartito. *Filamenta* collo tubi imposita. *Caps.* 3-alata, 3-locularis polysperma.

Specific Character and Synonyms.

MASSONIA *ensifolia;* bracteis pedicellis brevioribus, corollæ laciniis revoluto-patentibus tubo pluries brevioribus, filamentis sessilibus capillaribus: alterniis longioribus, foliis lanceolatis. *Gawler.*

MAUHLIA ensifolia. *Thunb. nov. gen.* 111. *Nov. gen. char. ess. apud Prodrom. iterum, p.* 60. *t.* 1.

AGAPANTHUS ensifolius. *Willd. Sp. Pl.* 2. 48.

POLYANTHES pygmæa. *Jacq. ic. rar.* 2. *t.* 380. *Collect. supp.* 56. *Willd. Sp. Pl.* 2. 165. *iterum!*

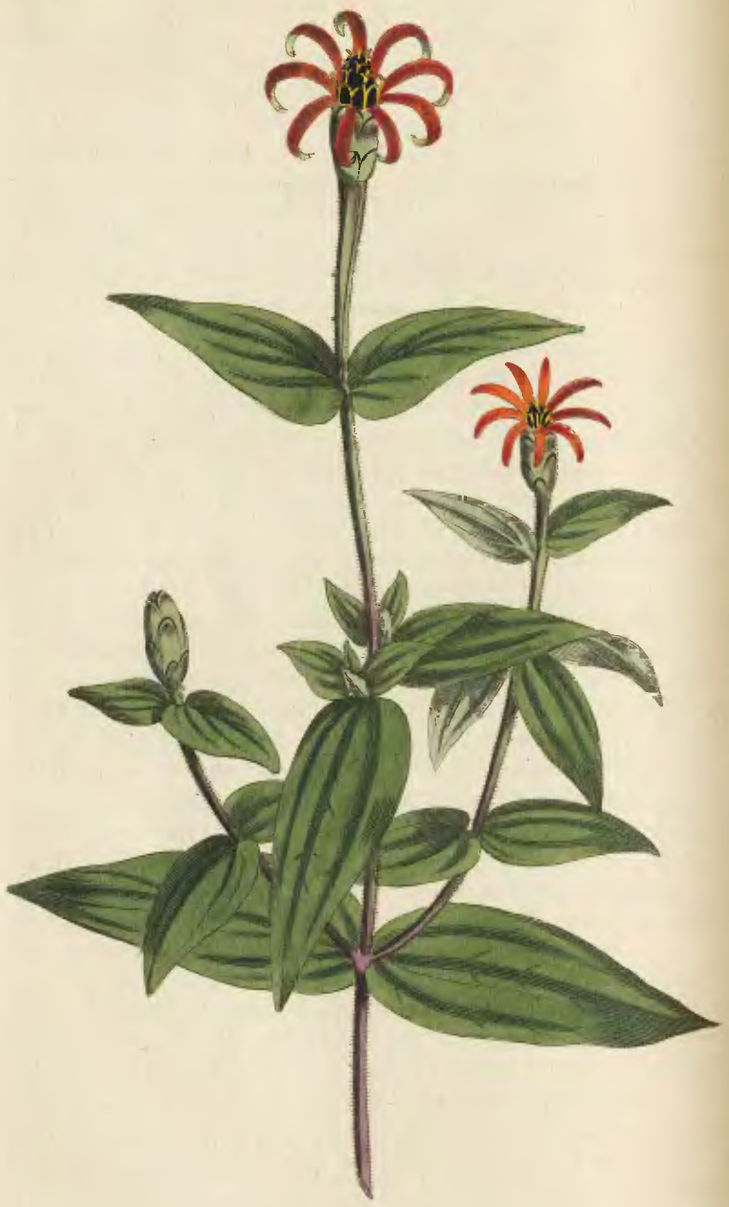
MASSONIA violacea. *Bot. Repos. tab.* 46. *Ejusque recens.* AGAPANTHUS *ensifolius.*

DESC. *Bulb* tunicated. *Leaves* two, opposite, from two to four inches long, lanceolate, contracted at the base into a sort of petiole, firm, smooth, shining underneath with a subtle cartilaginous acute-crenulate margin, scarcely visible to the naked eye. *Scape* central from the bosom of the leaves, round, but slightly sulcate-angulate from the decurrent bractes, whitish, from two to three inches long. *Pedicels* scarcely half an inch long, filiform, whitish. *Bractes* ovate-subulate, subdecurrent, whitish, one at the base of each pedicel, than which it is shorter by half. *Flowers* in a compact corymb, rarely lengthened out into a lax thyrse. *Cor.* subpersistent, narrow-tubed, club-shaped when not expanded, from one inch to an inch and half long, pale violet coloured, very shining. *Tube* nearly straight, somewhat recurved, several times longer than the limb, with a honey-bearing base. *Segments of the limb* equal, rather oblong, acute, revolute-patent. *Filaments* sessile (i. e. inserted immediately

immediately into the mouth of the tube, not upon a raised neck of the tube, as in some species of MASSONIA) capillary, not dilated at the base, the alternate ones longer (as in HYACINTHUS *corymbosus*) nearly equalling the limb. *Anthers* very small roundish-oval. *Germ* upper, oblong, sulcate. *Style* erect, subulate-filiform, nearly equalling the corolla. *Stigma* simple (covered with stalked glands, according to JACQUIN, perhaps as in SCILLA *non-scripta?*). *Capsule* scarious, ovate, acutish, three-cornered with compressed-acute dehiscent angles, three-celled, three-valved with ovate valves longer than the bractes.—JACQUIN says it is fragrant, which we have never observed.—It was found at the Cape, by THUNBERG, in a district between Soendag and Visch Rivers, flowering about December.

MASSONIA is very nearly allied to HYACINTHUS, particularly to the Cape species, and had we followed our own ideas of natural affinity, we should have rather placed this species under the latter genus: in doing as we have, we merely yield to the essential characters as they at present stand. Perhaps it will be hereafter found unnecessary to separate these genera at all, or, if they are distinguished, a considerable transfer of the species must be made. JUSSIEU has hinted, that it would be more natural to take the character of HYACINTHUS from the corolla than from the germ. For not continuing it as a congener of AGAPANTHUS *umbellatus* or of POLYANTHES *tuberosa*, we believe no apology is necessary; but to such as think differently, or that it is a distinct genus, we offer the above description from Mr. GAWLER, as its natural character. *Ensifolia* is a very bad name, but better than a new one.—THUNBERG's figure was certainly taken from a dried specimen, and in the Banksian Herbarium is one, so precisely resembling it, as to induce a suspicion that it is the very one from which his drawing was made. The same collection contains a very closely allied species, under the name of MASSONIA *uniflora*, with a larger flower and a single narrow linear leaf.

With us it flowers in October or November; requires the same treatment as other Cape bulbs, but the roots should not be taken up, preservation from wet in their inactive state being sufficient. The Rev. Mr. BALE informs us, that with him it produces abundance of offsets, while others complain of its slow propagation in this way; it produces seed however with all. Was introduced by Mr. WILLIAMS, Nurseryman at Turnham-Green, who raised it from Cape seeds, together with a very pretty purple variety, about the year 1791. Our drawing was made at EDWARD WOODFORD's, Esq. last November.



S.Edwards del. Pub by W. Curtis St. Geo. Crescent Mart. 1802 F.S. sculp.

ZINNIA TENUIFLORA. SLENDER-FLOWERED ZINNIA.

Class and Order.

SYNGENESIA POLYGAMIA SUPERFLUA.

Generic Character.

Recept. paleaceum. *Pappus* aristis 2 erectis. *Cal.* ovato-cylindricus, imbricatus. *Flosculi* radii pauci persistentes, integri.

Specific Character and Synonyms.

ZINNIA *tenuiflora;* floribus pedunculatis: radio lineari revoluto-patenti scabro, seminibus disci uni-aristatis.

ZINNIA *tenuiflora;* foliis sessilibus; floribus pedunculatis, seminibus hermaphroditarum hinc donatis arista longissima, illinc gemino mucrone brevissimo. *Jacq. Collect.* 5. *p.* 159. *Icon. tom.* 3. 590.

This lively annual, which grows to the height of two or three feet and divides into several branches, is most probably a native of South-America. It was, we believe, first raised in this country, in the garden of EDWARD WOODFORD, Esq. at Vauxhall, from seed sent to him by Mons. THOUIN, national Gardener in Paris. Should be sown in the Spring upon a common hot-bed, with balsams and other tender annuals, and planted out into the open border the latter-end of May, where it will continue to blossom for some months and produce ripe seeds in favourable weather.

It has been well figured by JACQUIN, in his *Icones plantarum rariorum*, and described in his *collectanea;* to which description we have nothing to add, but that the florets of the radius, in the specimens we have seen, are sharp-pointed, very rough to the touch, and of a lively pale green colour underneath, not a dingy white, as he describes them.

Published by W. Curtis, St. Geo. Crescent, Mar. 1. 1802.

GLADIOLUS VERSICOLOR, *var.* TENUIOR (γ).
SMALL CHANGEABLE CORN-FLAG.

Class and Order.

TRIANDRIA MONOGYNIA.

Generic Character.

Vide No. 538.

Specific Character and Synonyms.

GLADIOLUS *versicolor*; foliis ensiformi-linearibus utrinque tricostatis, valvula spathæ extima faucem ex superante, laciniis extimis ellipticis: lateralibus inferioribus angustioribus unguiculatis. *Gawler.*

(α) MAJOR foliis lineari-ensiformibus, costis laminato-elevatis, faciebus laterum paginulatis sulcato-planis, valvula extima culpidata spirali-convoluta corolla adequata. *G.—Noctu odorus.*

GLADIOLUS *versicolor. Bot. Rep. tab.* 19. *ejus Recens. n.* 12.

(β) INÆQUALIS; foliis trinerviis striatis ultra vaginam brevioribus: lateribus non paginatis, laciniis supremis brevioribus: intermedia brevissima: infima reliquis longiore. *G.*

GLADIOLUS floribus e spadiceo et flavo variegatis, suprema lacinia brevissima. *Breyn. prod. pl. afr. p.* 2. *p.* 20. *t.* 7. *f.* 1.

GLADIOLUS tristis minor. *Soland. flor. cap. ined. et Herb. Banks.*

(γ) TENUIOR; foliis antecedentis, laciniis externis ellipticis longioribus, obtusulis emarginatis apice convolutis undulatis, laciniis imis macula informi notatis. *G.—Interdiu odorus.*

GLADIOLUS tristis (α) *odorus. Thunb. Diss. de Glad.* 8.

(δ) LONGIFOLIUS; corollis minoribus subviolaceis punctatis, folio exteriore varietatis (α) pluries vero angustiore scapoque longiore. *G.*

GLADIOLUS tristis prioris var. *Jacq. ic. rar. v.* 2. *t.* 245. *Coll.* 4. *p.* 458.

OBS. *Folia in* (α) *omnino* GLADIOLI *Watsonii, retro* 450. *edit. G.*

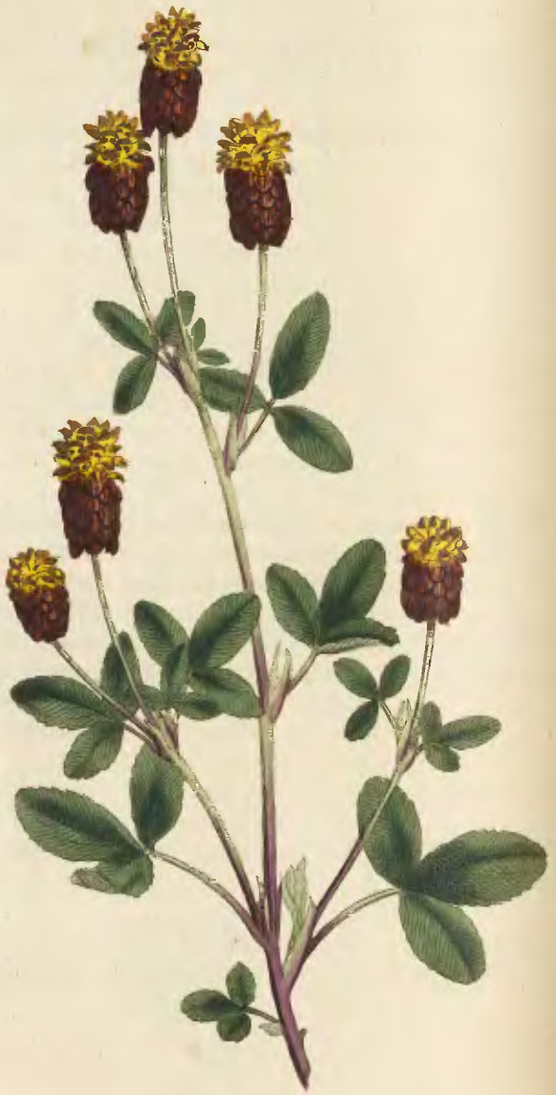
This seems to be the intermediate species of GLADIOLUS *tristis* and GLADIOLUS *recurvus* of LINNÆUS (the latter of which

which is GLADIOLUS *carinatus* of *Hort. Kew.* and *punctatus* of JACQUIN); from the first it differs in not having quadrangular leaves, from the last in not having ribless ones, from both in the proportionately longer outer valve, besides slighter distinctions.

The name of *versicolor* was probably given to variety (α) from a slight change perceptible in its colour after sun-set, proceeding from the difference of light: in our variety this is not at all observable. Our figure was taken from a plant at Messrs. GRIMWOOD and WYKES's, who are pretty certain they raised it some time ago from Cape seeds, but it never flowered till this year; perhaps when the bulb is stronger and older it may approach nearer to *var.* (α) or may prove a permanent variety; scarcely a distinct species? (α) smells precisely like the common red pink, but very powerfully so, and only in the evening; the present plant in the day-time, but we are at a loss to say what the scent resembles, though very fragrant. THUNBERG (we presume from his completing his descriptions at his Herbarium, where the leaves of all the tall single-stemmed ones, which are much of the same breadth, are pressed into nearly an uniform appearance) has collected sixteen varieties, under GLADIOLUS *tristis*, most of which we shall be enabled to shew to be perfectly distinct species, at least possessing sufficient specific distinction, the only rule we can go by where experience fails.

Erratum in last Number.

IXIÆ *Syn.* Sect. 7.—*for* effusis os tubi usque vel ultra, *read* effusis, os tubi usque vel ultra excisis.



J. Edwards del. Pub. by J. Curtis & Geo. Crofcent Apr 1 1802 P. Sandom

TRIFOLIUM SPADICEUM. BAY-COLOURED TREFOIL.

****

Clafs and Order.

DIADELPHIA DECANDRIA.

Generic Character.

Flores fubcapitati. *Legumen* vix calyce longius, non dehifcens, deciduum.

Specific Character and Synonyms.

TRIFOLIUM *fpadiceum*; fpicis ovalibus imbricatis, vexillis deflexis perfiftentibus, calycibus pilofis, caule erecto. *Sp. Pl.* 1087. *Ait. Hort. Kew. v.* 3. *p.* 90.

TRIFOLIUM caule erecto, fpicis ftrepentibus ovatis. *Hall. Helv. n.* 365.

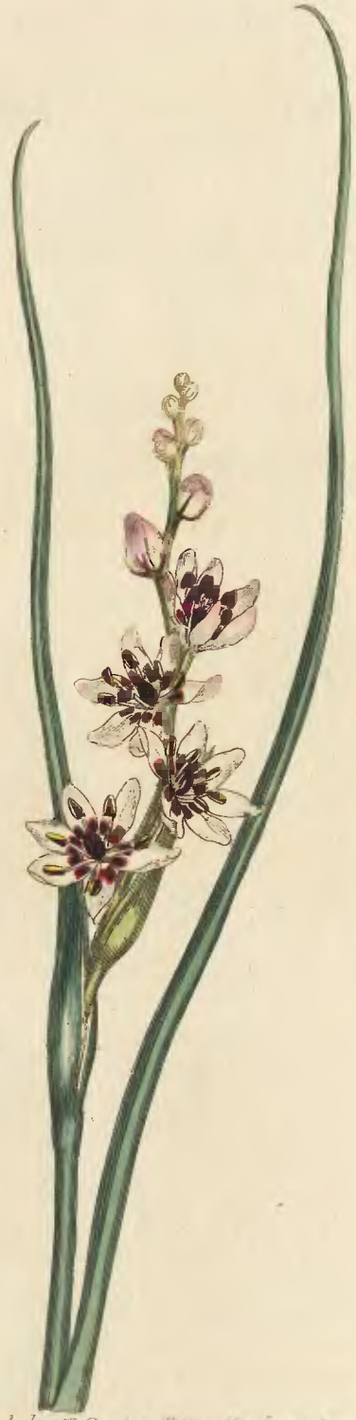
TRIFOLIUM montanum lupulinum. *Bauh. Pin.* 328. *Prod.* 140. *Park. Theat.* 1105.

LUPULINUM montanum capitulis fpadiceis. *Rupp. Jen.* 207.

LOTUS montanus aureus amplo lupuli capite, annuus. *Barr. Plant.* 812. *Ic.* 1024.

A native of moft parts of Europe, but not of Great-Britain. Has been cultivated for fome years in the Botanic Garden at Brompton, where it has been the practice to raife it under a frame, and then plant it out in the open border; but moft probably would fucceed as well if fown with other hardy annuals in the places where it is intended to remain, being indigenous as far north as Sweden. It is a pretty little plant, both from its delicate foliage and fine chefnut-brown fpikes crowned with golden-coloured flowers. How it came to be called in the Hortus Kewenfis *pale-flowered*, we are at a lofs to guefs, except by an accidental error for *bay-flowered*.

We obferve, as remarked by LINNÆUS, that the two upper teeth of the calyx are obfolete or entirely wanting.



MELANTHIUM JUNCEUM. RUSH-LIKE MELANTHIUM.

****

Clafs and Order.

HEXANDRIA TRIGYNIA.

Generic Character.

Cor. 6-petala. *Filamenta* ex elongatis unguibus corollæ.

Specific Character and Synonyms.

MELANTHIUM foliis fubulatis, radicali unica, fcapo ad fummitatem diphyllo, floribus fpicatis. *Jacq. Icon. rar.* 2. *t.* 451. *Collect. Supp.* 105.

MELANTHIUM *junceum*; foliis lineari-fubulatis: fuperioribus bafi dilatatis, fpica flexuofa, petalis unguiculatis. *Willd. Spec. Pl. t.* 2. *p.* 268.

PHALANGIUM. *Houtt. Linn. pfl. Syft. t.* 80. *f.* 3.

MELANTHIUM triquetrum. *Linn. Sup.* 213. *Thunb. Prod.* 67. *Willd. Sp. Pl.* 2. *p.* 267.?

DESC. *Bulb* roundifh. *Root-leaf* folid at the bafe perfectly round and fmooth, burfting at a fmall diftance from the ground for the exit of the fcape, from whence it becomes femicylindrical, attenuate, grooved on the innerfide. *Scape* round, one-leafed: *leaf* fimilar to the root one but not grooved. *Spike* lateral, involucred, fhorter than the cauline leaf. *Rachis* fomewhat triangular with alternate feffile flowers. *Corolla* fix-petaled, three of them outer, ovate with a fhort grooved claw, whitifh with two dark crimfon fpots containing clear drops of honied liquid when the flower firft opens. *Filaments* fix, a little longer than the claw, into the bafe of which they are inferted, patent but rifing up one at a time to difcharge the pollen over the ftyles, and then falling back to their

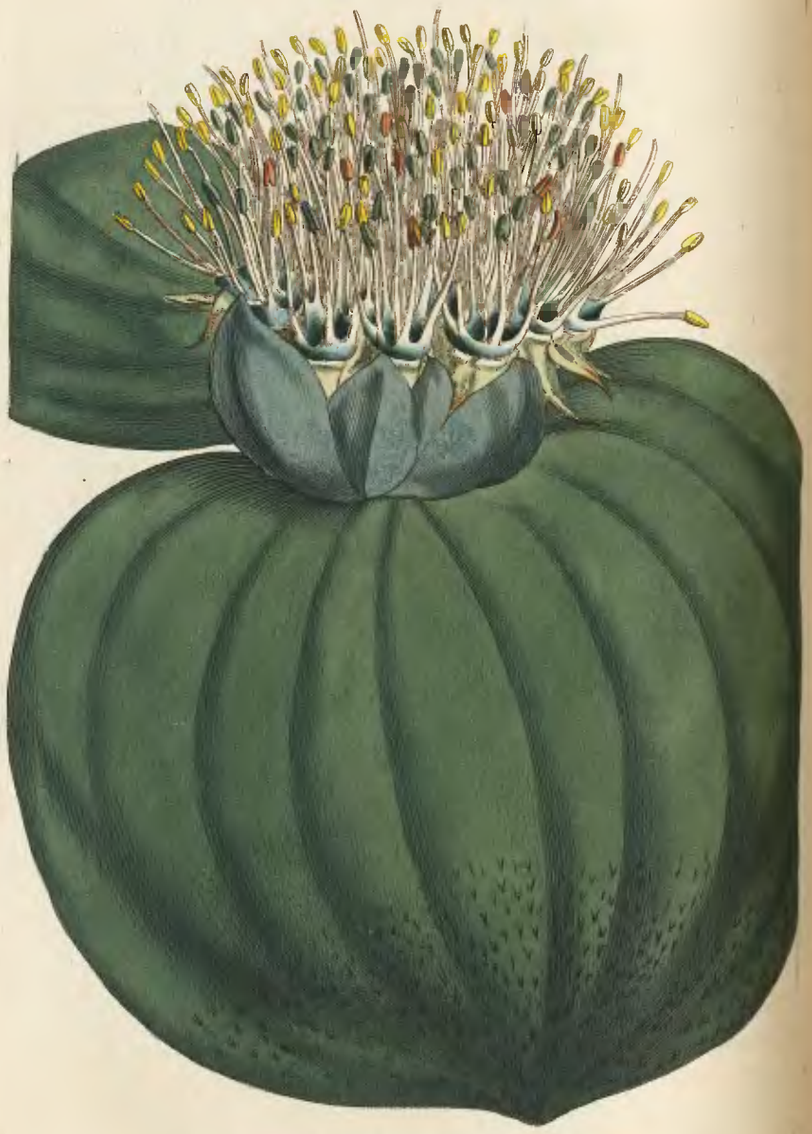
their former ſtation. *Anthers* purple, with greeniſh pollen. *Germen* obtuſely three-cornered, three-celled, ſtyles three. *Capſule* the ſame: ſeeds many, roundiſh.

The MELANTHIUM *junceum*, at firſt ſight, has much the habit and appearance of an IXIA, but the moſt ſuperficial examination immediately ſhews it to belong, not only to a different claſs in the ſexual ſyſtem, but alſo to a different natural order. Still, however, there is a real affinity, and it may be conſidered in ſome meaſure as a connecting link between the IRIDES and JUNCI of JUSSIEU; for it is only to unite the claws of the petals into a tube and to join the ſtyles at the baſe and take away half the ſtamens and we have a complete flower of an IXIA, naked indeed, the MELANTHIUM having only one ſpathe or involucre to the ſpike and none to the ſeparate flowers.

From a careful examination of the ſpecimens in the Bankſian Herbarium, we are convinced that the MELANTHIUM *triquetrum* of THUNBERG and *junceum* of JACQUIN are one and the ſame; the former, having made his deſcription from dried plants only, might be eaſily led into this error; but as, in a growing ſtate, there is nothing triquetrous in the form of the leaves, we have given the preference to JACQUIN's name, although THUNBERG's has the right of priority.

Our drawing was taken from a plant ſent us by Mr. SALISBURY of the Botanic Garden, Brompton, in January laſt, ſome weeks earlier perhaps than it would have flowered had it not been forced by the heat of the ſtove. Mr. SALISBURY received it with ſeveral other curious bulbs from the Cape, the latter end of laſt Summer.

The treatment ſhould be the ſame as for other Cape bulbs.



Massonia Muricata. Prickly-Leaved Massonia.

Clafs and Order.

Hexandria Monogynia.

Generic Character.

Cor. infera limbo fexpartito. *Filamenta* collo tubi impofita. *Capf.* 3-alata, 3-locularis, polyfperma.

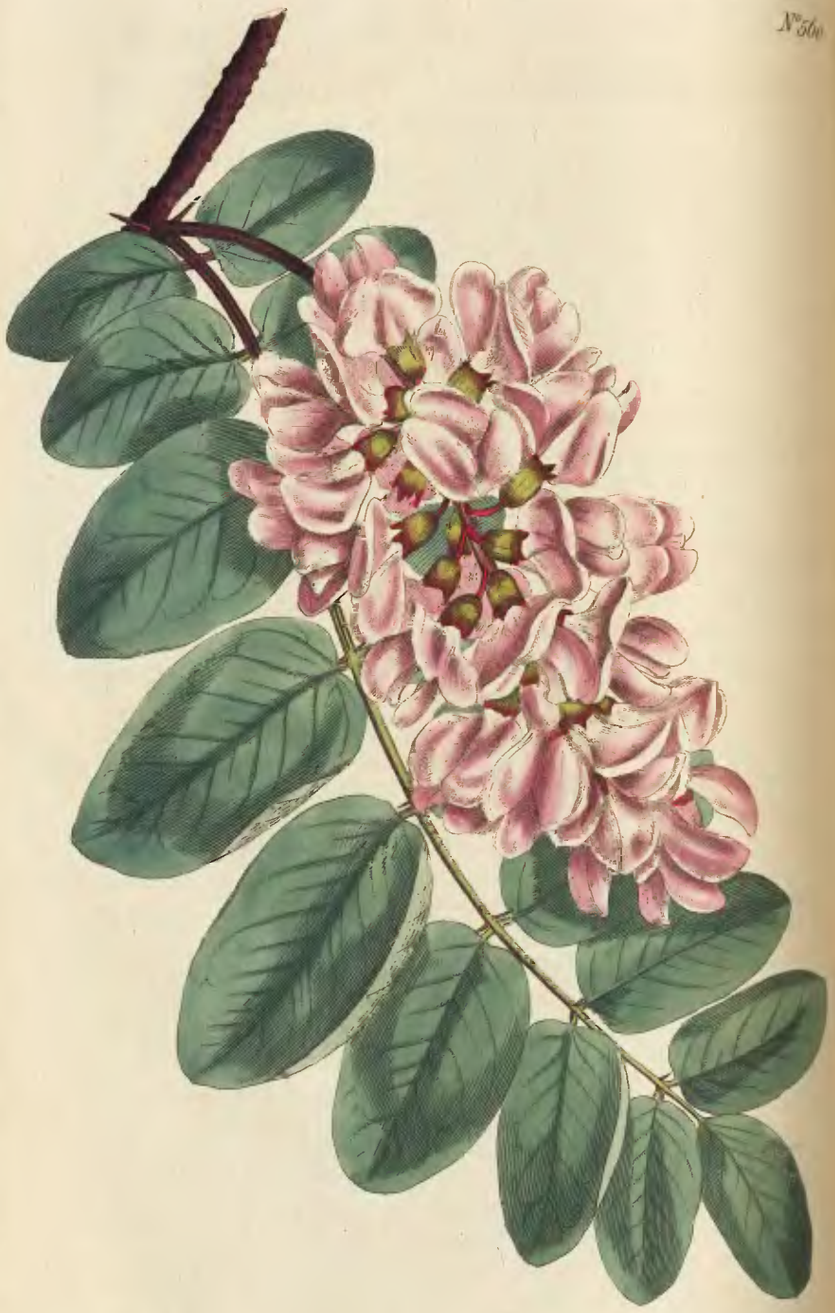
Specific Character and Synonyms.

MASSONIA *muricata;* foliis fubrotundis verfus apicem fuperne muricatis nudis, corymbo compafto bracteato, ftaminibus fauce elevata infidentibus. *G.*

Desc. *Stem* fcarcely above the ground. *Leaves* fmooth, lucid, thinly befet with thorn-like excrefcencies on the upper furface towards the point, with parallel furrows converging at each end. *Pedicels* thick, fcarce half an inch long. *Bractes* elliptic, nearly the length or longer than the flowers, outer largeft, entirely furrounding the corymb. *Tube* about equal to the ftamens, nearly twice the length of the fegments, which laft are flaccid with a tranfverfe plait at their bafe, opaque yellowifh white, faux fomewhat cupped, pellucid, tinged with bluifh-green, brimful of nectareous liquid; *ftamens* upright, arranged in a campanulate circumference, white, with tumid azure bafes. The infertion of the filaments may be here called mediate, in Massonia *enfifolia* immediate.

The corolla of this genus feems to have afforded as many diftinct conceptions of its ftructure as it has been defcribed by different Botanifts. Thunberg confiders it as hexapetalous, the fegments as petals attached to the tube, his nectary (hence moft probably his ejection of Massonia *enfifolia*). Jacquin terms only the naked part on which the filaments are feated the nectary, and defcribes it as a fhort marginal crown

crown placed on the neck of the corolla uniting the bases of the stamens, thus making it a distinct appendage. SOLANDER *Bankf. Mss.* speaks of it as a small nectariform ringlet, created by a slight cohesion of the dilated bases of the filaments. JUSSIEU, on the other hand, calls the part we allude to, "*faux* "*prominens*," and says it is formed by the reflex curvature of the base of the segments, which afterwards becomes upright, and adds, that it is THUNBERG's nectary; but here he is wrong.—From all the above Botanists we in some measure dissent. The corolla we hold to be completely monopetalous, and that there is no nectary considered as a distinct appendage; but in many species (of which the present is the most remarkable instance known to us) the outer cuticle detaches itself from the inner and is rolled back for a greater or less distance; of this the six flaccid segments are the distinct and immediate continuation, shrivelling almost as soon as expanded in our species; the upper part of the inner cuticle thus bared affords the nectary-like appearance authors allude to, and is (as are also most probably the filaments) the separate and uninterrupted continuation of that membrane, the whole is firmer, of a distinct colour, and remains in vigour until the usual process of impregnation is completed.—However wide the chasm may appear between this and MASSONIA *ensifolia*, it is naturally enough filled up by a series of species, in which the denudation of the faux gradually diminishes till it disappears in *ensifolia*, where the bases of the filaments are even below the bases of the segments: as the faux decreases so the elongation of the tube increases, and the nectareous liquid sinks deeper and deeper till it is quite out of sight in *ensifolia* and *uniflora*. The whole of this natural class is, according to JUSSIEU's system, corollaless; but as it consists of herbaceous thin-rinded plants and somewhat succulent, we suspect the outer cuticle above mentioned is the continuation of the exterior rind *(cortex)* too fine to produce a more substantial covering, and that it corresponds with his *Calyx*; that the inner one, on the other hand, is the continuation of the interior rind *(liber)* and that it may be his *Corolla*, both being thus united to afford a sufficiently substantial protection to the parts of fructification; if so, the same will apply to the whole class; it is evident in this genus the two coats are spontaneously separable, of different degrees of duration, the inner one shifting the process of impregnation, then withering. We merely offer this hint for the present, nor do the limits of the work permit the insertion of some further observations we have made on this subject. Our drawing was made in the garden of ED. WOODFORD, Esq. *Gawler.*



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ROBINIA GLUTINOSA. CLAMMY ROBINIA.

Class and Order.

DIADELPHIA DECANDRIA.

Generic Character.

Cal. 4-fidus. *Legumen* gibbum elongatum.

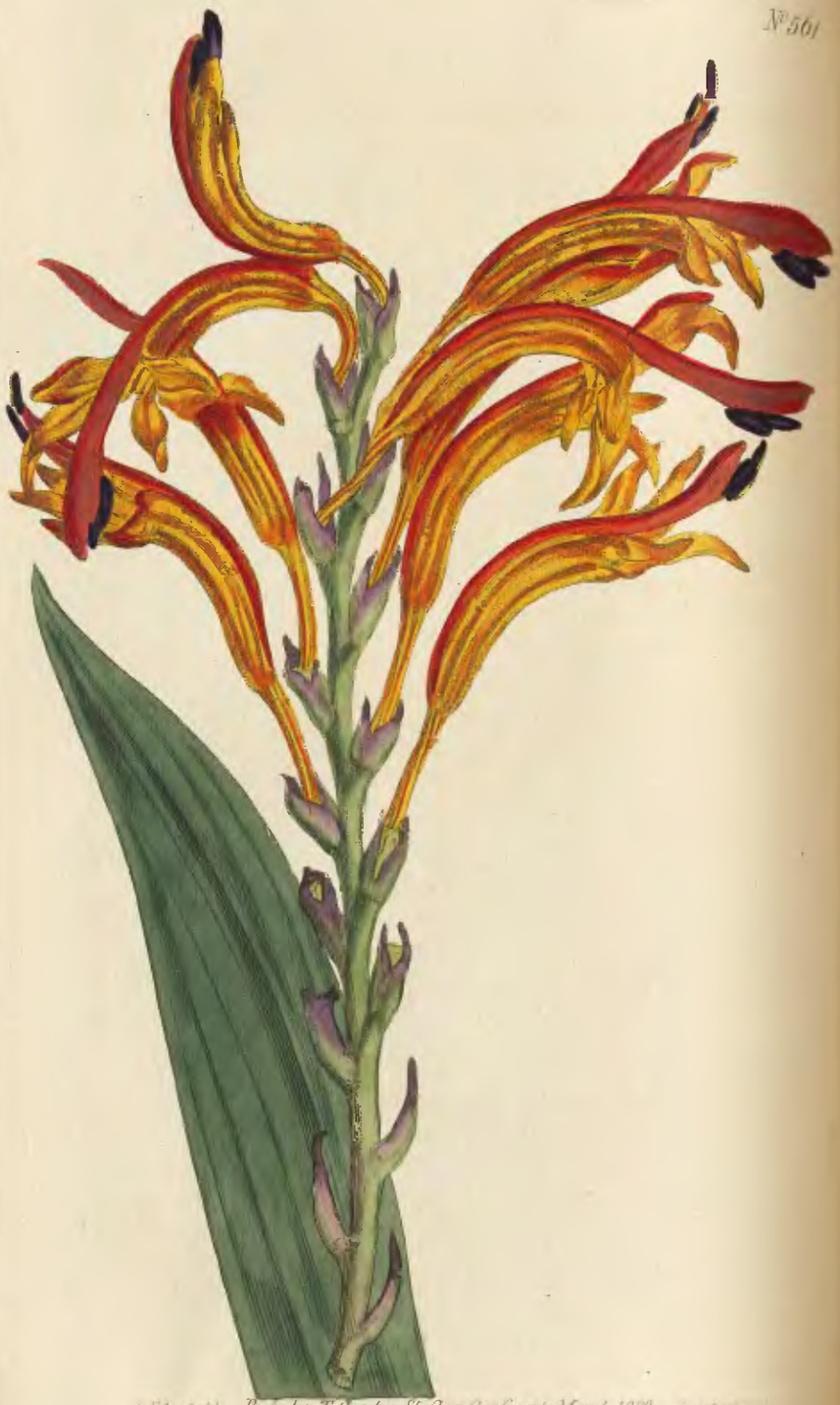
Specific Character and Synonyms.

ROBINIA *glutinosa*; racemis axillaribus pedicellis unifloris, foliis impari-pinnatis, ramis glutinosis.

The ROBINIA *glutinosa* is a beautiful tree, a native of North-America, and perfectly hardy in our climate. It appears to be of smaller size than the ROBINIA *Pseud-acacia*, which it much resembles in habit, but when in blossom is readily distinguished by its rose-coloured flowers, and at all times by its glutinous branches and shorter straight spines. The leaves are deciduous, consist of from eight to ten pairs of leaflets with an odd one, ovate, entire, glaucous underneath, and in the older leaves obtuse. Stipulæ, two short straight spines at the base of every petiole very weak, but persistent and becoming hard spines in the old wood. There are also very minute ones at every pair of leaflets. The young branches are covered with glands of a dark red colour which exude a clammy juice.

It is a free-growing tree, handsomer in its form than the *Pseud-acacia*, and, from the wood being less brittle, is not so apt to be disfigured by the high winds. Flowers in June and July.

Introduced into this country by Mr. WHITLEY, in whose nursery at Old Brompton it flowered sparingly in the Summer of 1800, and plentifully last year. Is usually increased by engrafting on the *Pseud-acacia*, but may be readily propagated by planting cuttings of the roots, as we are informed by Mr. LODDIDGES, of Hackney, who also imported it from America some years since.



ANTHOLYZA ÆTHIOPICA. FLAG-LEAVED ANTHOLYZA.

Class and Order.

TRIANDRIA MONOGYNIA.

Generic Character.

Spatha bivalvis ovata: *Cor.* irregularis, recurva: tubus gracilis: limbus sexpartitus. *Stam.* adscendentia. *Stigm.* 3, recurvo patentia. *Caps.* rotunda, coriacea. *Sem.* plura subrotunda. G.

OBS. *A* Watsonia *stigmatibus non bifidis; a* Gladiolo, *cui conjunctissima, seminibus paucioribus neque alatis; ab* Ixiæ *fauce magis elongata staminibusque adscendentibus dignoscenda.* G.

Specific Character and Synonyms.

ANTHOLYZA *æthiopica* foliis ensiformibus striatis, fauce e tubo pedicelli-formi, quo duplo longiore, abrupte cylindrico-ampliata; lacinia suprema maxima porrecta, cæteris recurvis. G.

ANTHOLYZA *æthiopica. Sp. Pl.* 54. *Reich.* 103. *Thunb. prod.* 7. *Murr. Syst. Veg.* 87. *Gmel. Syst. Nat.* 113. *Hort. Kew.* 1. 67. *J. F. Mill. Ic. Plant. & Anim. t.* 9. *Willd. Sp. Pl.* 1. 222.

GLADIOLUS pyramidalis. *Burm. fl. cap.* ?

GLADIOLUS æthiopicus. *Corn. canad. t.* 79. *Mor. Hist.* 2. *p.* 421. *f.* 4. *t.* 23. *f.* 1. *Rudb. elys.* 2. *p.* 235. *f.* 2.

HYACINTHUS africanus. *Pluk. Phyt.* 195. *f.* 2.

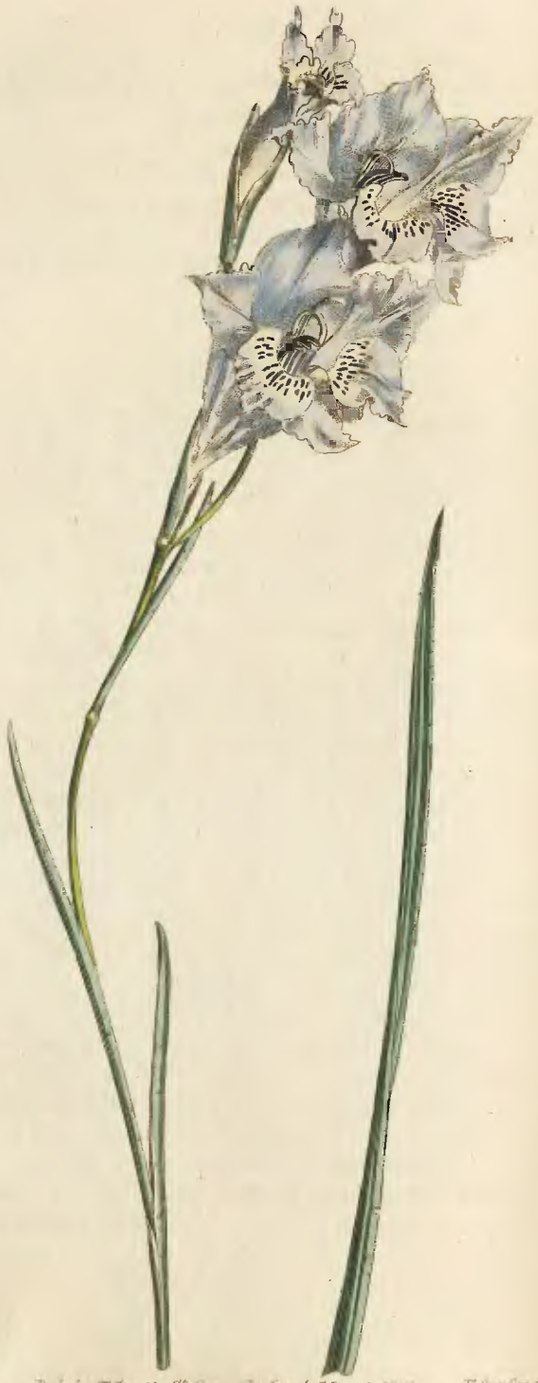
ANTHOLYZA *ringens. Bot. Rep. t.* 32. *iterum (emendato nomine triviali) t.* 210. *ejus Recens.* ANTHOLYZA *æthiopica, n.* 21.

Bulb large, compressed, convex, concave beneath, covered with a fibrous tunic. Leaves many, limber, striated, equitant downwards, upper ones gradually longer, midrib stiff. Stem roundish, strict, upright, scarcely flexuose at the rachis, 3—4 feet high, about a third longer than the leaves. Spike pyramidal-oblong; flowers 10—40, distich, almost imbricate, scentless.

leſs. Tube 6-ſulcate, generally twiſted. Faux cylindric, bluntly keeled underneath. Upper ſegment concave, blunter, about the length of the parts of fructification, which are accumbent to it, the others acute, flat, much ſmaller, three alternate ones leaſt, two lower lateral ones larger than theſe, but far leſs than the uppermoſt one. Anthers ſubſagittate-linear, dark purple. Capſule the ſize of a ſmall cherry, burſting when the ſeeds are ripe; ſeeds deep yellow, roundiſh, preſſed nearly into angles from mutual juxta-poſition.

We are far from offering the above eſſential character as a permanent one, or with confidence, ſo few ſpecies having yet fallen in our way; but we hope ſoon to give ſomething more definite. The capſule and ſeeds are preciſely thoſe of GLADIOLUS *communis*, which in thoſe parts differs from all other GLADIOLI, in ſo much that, could this be ſeparated from the other ſpecies and added to ANTHOLYZA, the characters of the two would be eaſy and preciſe; the one with round capſule and ſeeds, the other with an oblong capſule and numerous lenticular-ſhaped winged ſeeds.

For the means of preſenting this beautiful plant to the public, we are indebted to the Rev. SACKVILLE BALE, who, aware of the rareneſs of its flowering, moſt kindly remitted it to us from his collection at Withyham, near Tunbridge, where it flowered by the help of the ſtove in February. It flowered ſtill earlier at Meſſrs. RUSSELL and WILMOT's Nurſery, at Lewiſham, who have had the goodneſs to ſend us the ſpike with ripe ſeeds, and is at this time coming into flower in the greenhouſe of EDWARD WOODFORD, Eſq. Vauxhall. Had our drawing been fortunately taken before the upper flowers were expanded, the pyramidal form would have been an advantage to our figure. Cultivated by MILLER in 1759. Flowers in May and June, according to *Hort. Kew.* The trivial name (given it by CORNUTI) of *Æthiopian*, is not a very eligible one for a plant peculiar to the Cape and adjacent country; he mentions its flowering at Paris in 1633, his figure excellent. In habit of corollæ it approaches GLADIOLUS *Watſonius* and GLADIOLUS *quadrangularis*, which laſt we ſhall give in our next number.



Gladiolus Gracilis. Slender Corn-Flag.

Class and Order.

Triandria Monogynia.

Generic Character.

Spathæ valvula exterior lanceolata. *Cor.* basi tubulosa; limbus 6-partitus irregularis vel subirregularis. *Stam.* adscendentia. *Antheræ* parallelæ. *Stigm.* 3 sursum dilatata ex complicato explicata. *Caps.* trigono-oblonga, lenta. *Sem.* numerosa. *G.*

Obs. *Retro* (n. 538.) "*limbum interdum sed rarius hypocrateriformi-regularem*" *diximus; iterato vero sedulo examine idem omnino regularis nusquam prodit; unde irregularitatem in caracterem resumpsimus.* G.

Specific Character and Synonyms.

GLADIOLUS *gracilis;* corolla subnutante campanulato-bilabiata; foliis linearibus marginibus utrinque laminato-costatis, nervo medio costis valde depressiore, lateribus sulcato-paginatis. *G.*

GLADIOLUS *gracilis. Jacq. ic. rar.* 2. *t.* 246. *Coll.* 4. *p.* 159. *Willd. Sp. Pl. v.* 1. *p.* 211.

GLADIOLUS punctatus. β. *Soland. ined. Herb. Banks.*

The leaves of this species have the appearance of being thick and flat, with a deep square groove on both sides, owing to the midrib being nearly obsolete and the marginal ones projecting far forwards; 3—4, about a line broad, far sheathing, and short beyond; stem very slender, straight, simple, geniculately-flexuose upwards, 1—3 feet high, generally longer than the leaves, with two brownish root-sheaths at the base, not spotted, as in Gladiolus *recurvus.* Flowers 3—4, scentless. It approaches Gladiolus *Watsonius* in the leaf, which is however in this more linear with a depressed midrib; in the flower it comes near to Gladiolus *recurvus,* but has a different leaf. Bulb very small in proportion to the height of the stem. A native of the Cape, and is said by Jacquin to vary with white flowers. Our figure was taken at Messrs. Grimwood and Wykes's nursery at Kensington, who have been long in possession of the plant. It flowers freely about March and April, and is by no means one of the tenderer species.

PHLOX STOLONIFERA. CREEPING PHLOX.

Clafs and Order.

PENTANDRIA MONOGYNIA.

Generic Character.

Cor. hypocrateriformis. *Filamenta* inæqualia. *Stigma* 3-fidum. *Cal.* prifmaticus. *Capf.* 3-locularis 1-fperma.

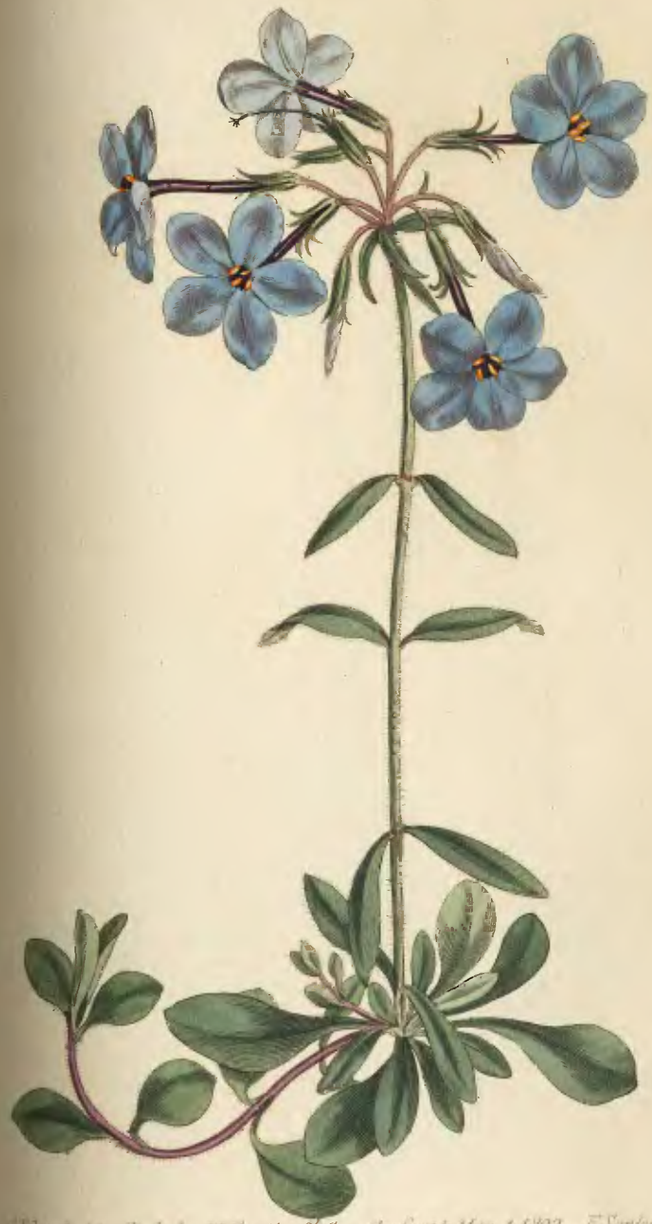
Specific Character.

PHLOX *ftolonifera*; ftolonibus repentibus, foliis fpatulato-obovatis.

Twelve fpecies of PHLOX are enumerated in WILLDENOW's edition of the Species Plantarum of LINNÆUS, of which four have been already figured in the Botanical Magazine. From all thefe this is totally diftinct, having trailing ftalks which take root at every joint, much in the manner of AJUGA *reptans* and VIOLA *odorata*, whence our trivial name. Leaves obovate, fpatulate, with ciliated petioles. Peduncles or flowering ftalks erect, both immediately from the roots, and from the axils of the leaves, bearing an umbel or cyme of nodding flowers of a bright violet colour, and furnifhed with 1—4 pair of linear-lanceolate leaves or bracteæ, hairy at the edges, fometimes oppofite and fometimes alternate. Four of the filaments are the length of the tube, and one fhorter by half, which gives the flower the appearance of being tetrandrous.

We are informed by Mr. JOHN FRASER, of Sloane-Square, Chelfea, that he firft difcovered this plant in Georgia, in the year 1786, together with PHLOX *pilofa*, *fetacea*, and *fubulata*, but that living plants were not brought to Europe till 1801, his fixth voyage to North-America, on botanical refearches, in company with his fon. This laft voyage was undertaken in confequence of an ukafe of their late imperial Majefties the Emperor and Empref of all the Ruffias, appointing him their Botanical Collector. We truft that fo much zeal will meet with a due reward.

It promifes to be a valuable addition to our gardens, particularly calculated for ornamenting rock-work, being, we are affured, perfectly hardy in our climate, although the fpecimen from which our drawing was made laft Summer was flowered in the ftove: if planted in a pot and placed on a pedeftal or flower ftand, with the branches fuffered to hang down the fides, it muft when in full flower make a very fhewy appearance.



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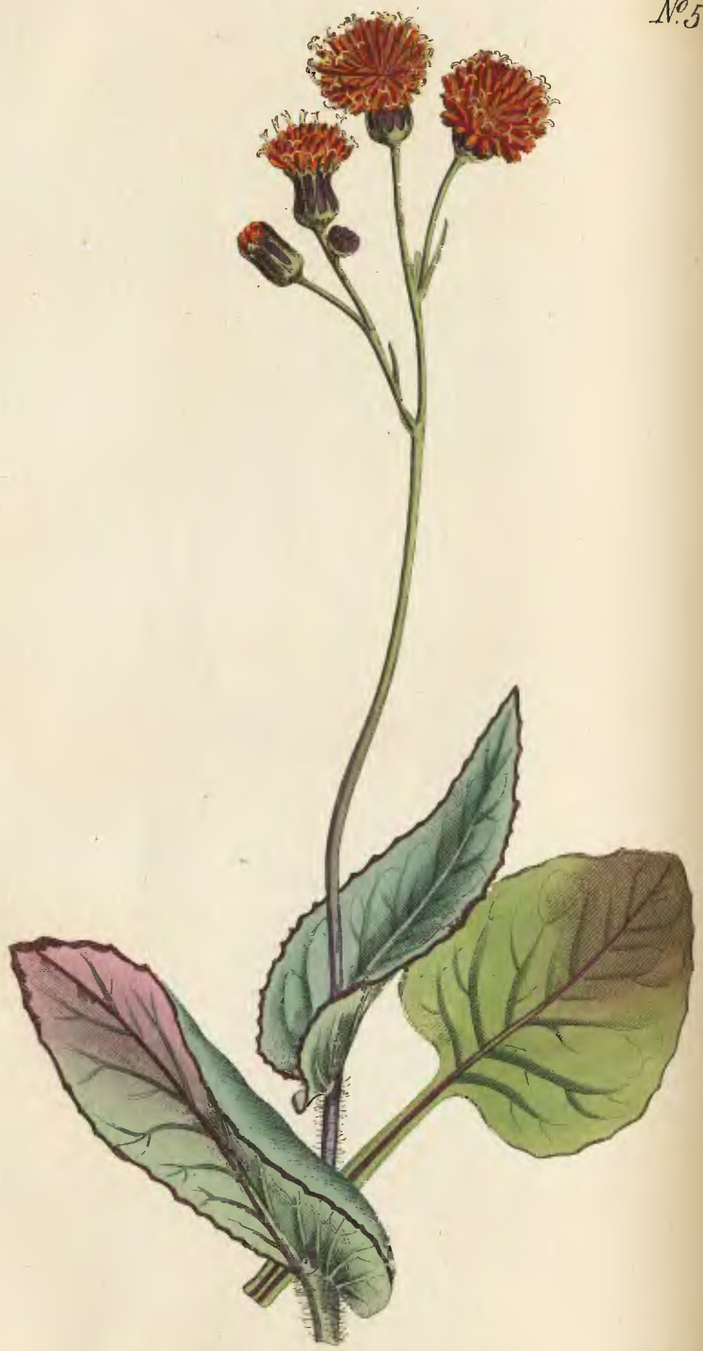

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CACALIA COCCINEA. SCARLET-FLOWERED CACALIA.

Class and Order.

SYNGENESIA POLYGAMIA ÆQUALIS.

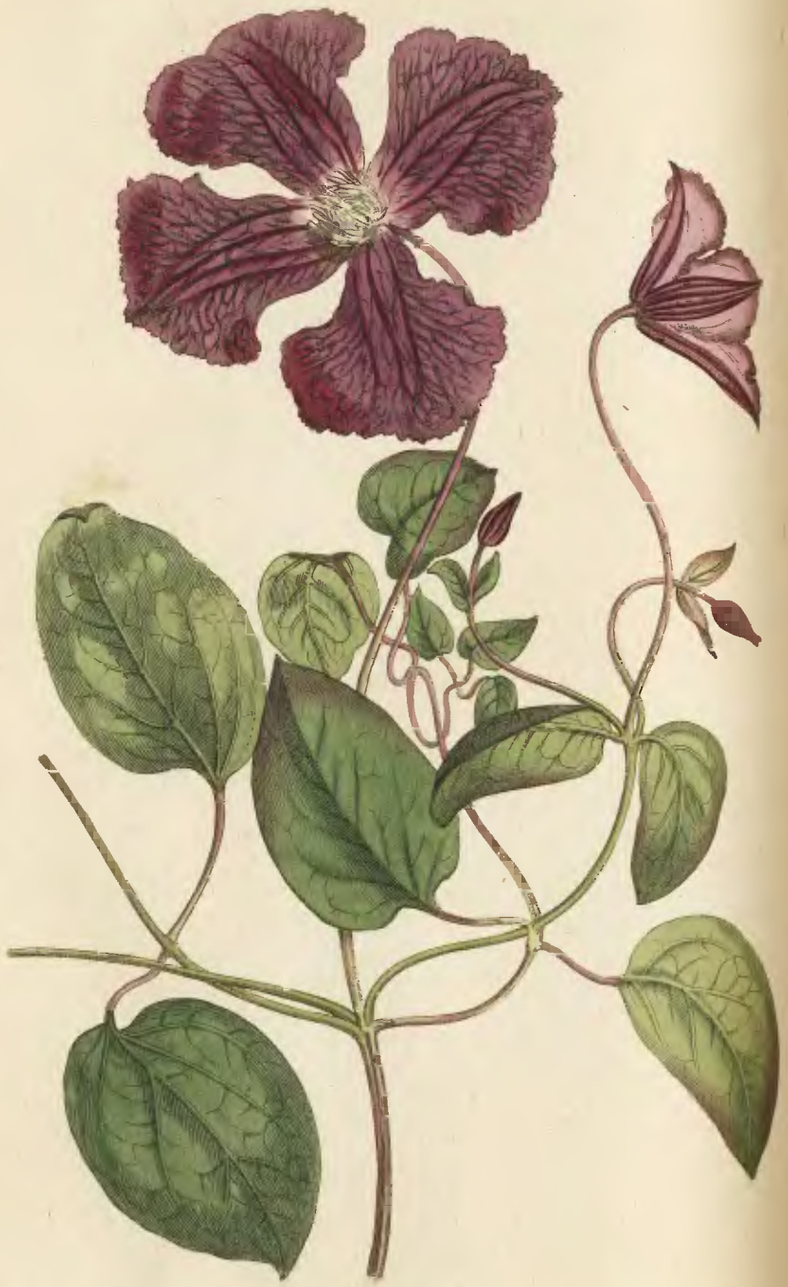
Generic Character.

Recept. nudum. *Pappus* pilosus. *Cal.* cylindricus oblongus basi tantum subcalyculatus.

Specific Character and Synonyms.

CACALIA *coccinea*; caule herbaceo, foliis radicalibus ovatis spatulatis, caulinis integris amplexicaulibus crenatis marginatis.

A tender annual, to be raised on a hot-bed in the Spring, and about the middle of June it may be planted into the open border, where it will ripen its seeds. Its fine scarlet flowers make a brilliant appearance, but its stalks, being weak and growing two or three feet high, should be properly supported to preserve its beauty from being marred by high winds or heavy rain. Our drawing was made at Mr. WOODFORD'S, at Vauxhall, who received the seeds from Mr. THOUIN, national gardener at Paris in the Spring of 1800, under the name of CACALIA *sonchifolia*; but as it neither answers to the description of that species, nor at all resembles the specimens preserved in the Banksian Herbarium, we consider it as a totally distinct species; and not finding that it has been hitherto described or figured, we have given it a name expressive of the colour of its flowers and a specific character, which we believe will sufficiently distinguish it from every other known species.



J. Edwards del. Pub. by T. Curtis St. Geo. Crescent June 1 1802 E. Sawyer

CLEMATIS VITICELLA. PURPLE VIRGIN'S-BOWER.

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Class and Order.

POLYANDRIA POLYGYNIA.

Generic Character.

Cal. 0. *Petala* 4—6. *Semina* caudata.

Specific Character and Synonyms.

CLEMATIS *Viticella;* foliis compositis decompositisque: foliolis ovatis sublobatis integerrimis. *Linn. Sp. Pl.* 765. *Hort. Cliff.* 225. *Mart. Mill. Dict. art.* 2.

CLEMATIS foliis compositis decompositisque: foliolis ovatis sublobatis integerrimis, petalis obovatis patentibus. *Willd. Sp. Pl.*

CLEMATITIS cærulea vel purpurea repens. *Bauh. Pin.* 300.

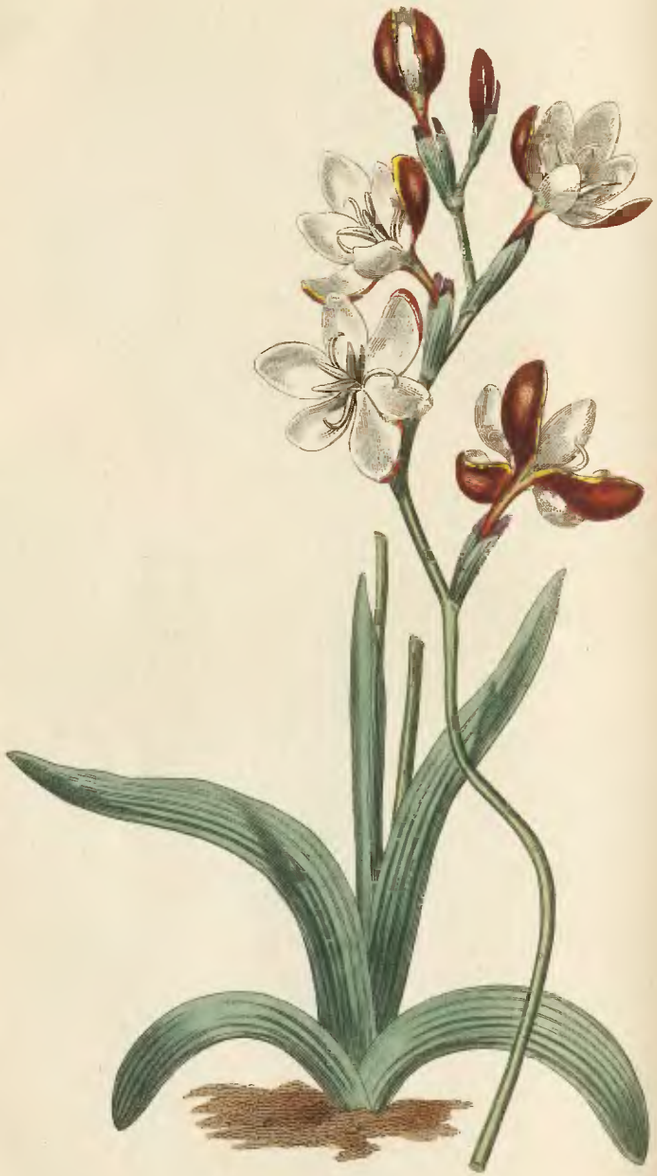
CLEMATITIS altera. *Clus. Hist.* 1. *p.* 122. *quoad figuram, descriptio nimis manca cuidam alteri pertinere videtur.*

CLEMATITIS peregrina cærulea sive rubra. *Ger. emac.* 887. *f.* 1. & 2. *Raii Hist. p.* 622.

The CLEMATIS *Viticella* is a native of Spain and Italy, and bears the cold of our winters very well; is a very ornamental climber, and its flowers sweet-scented. Though well known to our older Botanists, and cultivated as long ago as the year 1569, by Mr. HUGH MORGAN,* it is by no means common: the double variety is more so; but this in our opinion, though preferred by MILLER, is not so handsome as either of the single red or purple varieties, both of which grow in the greatest perfection at the nursery of Messrs. WHITLEY & Co. Old-Brompton, where our figure was taken last year.

It flowers in June and July. Is propagated either by seeds, which it sometimes produces in this country, or by laying the young shoots down early in the Spring or at the latter-end of July, the mode of doing which is fully detailed in MARTIN's MILLER's Dictionary; but Mr. WHITLEY prefers the former time, to that recommended by MILLER.

* Hort. Kew.



W. Edwards del. Pub. by T. Curtis, St. Geo. Crescent, June 1 1802. E. Sayers sculp.

Ixia Falcata. Sickle-Leaved Ixia.

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Clafs and Order.

Triandria Monogynia.

Generic Character.

Spatha 2-valvis. *Cor.* bafi tubulofa, tubus gracilis, limbus 6-partitus, regularis *(rariffime fubirregularis)* fubæqualis patens. *Fil.* limbo plureis breviora, recto-patentia, vel coarctato-erecta. *Stigm.* 3, patentia. *Sem.* numerofa globofa. *G.*

N°. 549, *in* Char. Ess. *lapfu calami poft* " limbus" *omifimus* " 6-partitus." *Ad calcem N°.* 556, *apud* Erratum, *pro* " excifis" *lege* " divifis."

Specific Character and Synonyms.

IXIA *falcata* ; fpatha herbacea ftriata, corolla erecta : laciniis ovalibus concavis, antheris horizontalibus, ftigmatibus ufque tubum divifis longis effufis proftratis curvatis. *G.*

IXIA *falcata. Linn. Suppl.* 92. *Thunb. Diff. n.* 23. *prod.* 10. *Murr. Syft. Veg.* 85. *Gmel. Syft. Nat.* 110. *Hort. Kew. addend. Jacq. ic. rar.* 2. *t.* 276. *Coll.* 4. 183. *Willd. Sp. Pl.* 1. *p.* 207.

IXIA cinnamomea. *Bot. Rep. tab.* 44. *ejufque Recenf. n.* 2.

Bulb about the fize of a large pea, campaniform, bafe flat, tunics brown, thefe in old plants are placed imbricately one over the other 10—15 deep, which gives the bulb the appearance of being greatly larger than it really is ; we have feen them thus piled nearly an inch high. Leaves 3—4, alternate, enfiform, from three inches to a foot long, nerved-ftriated, two lower ones nearly oppofite, reflex-falcate (fometimes almoft ftraight) cauline ones fiftulofely fheathing, compreffedly-ancipital, remote, longer, often edged with a membranous pellucid ferrately fcabrous margin. Stem from fix inches to a foot high, lax, fimple, or with axillary branches, generally three or four times longer than the leaves, upright. Flowers 5—20, erect, beginning to expand a little before funfet, when they diffufe a fine

fine aromatic odour like ſome of the varieties of honeyſuckle. Spathe ſomewhat ſhorter than tube, ſubconduplicate, keeled, and often edged in the manner of the cauline leaves. Tube about the length of the limb, which is quite patent, exterior ſegments largeſt and ſomewhat reflexed, of a fine ſhining brown on the outſide*, interior ones all white and ſomewhat more concave. Anthers ſagittately ſubulate incumbent, verſatile, pale, each of them ſomewhat reſembling in poſition the needle of a mariner's compaſs. Stigmas capillary, ſometimes pubeſcent.

Introduced into Kew garden by Mr. MASSON in 1787, flowers in April. We can perceive no difference between this and IXIA *cinnamomea*, except in the remarkable criſpature of the leaves and more numerous ſmaller flowers of the latter:—may theſe diſtinctions be loſt by culture? The former was found by THUNBERG on the hills about Cape-Town, the latter on thoſe of Loweſtaart. They are both called by the Dutch *Cannelbloem*, on account of their ſmell, as alſo *Avondbloem*, from their time of flowering, which at the Cape is ſaid to take place ſo preciſely at four in the afternoon, that the hour of the day may be known by it, except rain is at hand, which, by remaining cloſed, they predict as certainly as a barometer. Both, as well as IXIA *piloſa* and *radiata*, are in great requeſt there on account of their fragrance. Propagates with us by ſeed and offsets, but more ſlowly than moſt other ſpecies of this family. It is apt to luxuriate in the number of ſegments and in the parts of fructification. Our drawing was taken at the nurſery of Meſſrs. GRIMWOOD and WYKES, Kenſington, where it flowered this year in great perfection, the root throwing up two ſtems. It requires a very ſmall pot, to be put entirely in bog-earth, and when paſt flowering to be carefully preſerved from all moiſture. Is ſtill one of the rarer ſpecies. *G.*

* In JACQUIN's figure the colour is a bright carmine, and in the deſcription is ſaid to be purple.

GLADIOLUS QUADRANGULARIS. SQUARE-LEAVED CORN-FLAG.

Clafs and Order.

TRIANDRIA MONOGYNIA.

Generic Character.—Vid. No. 562.

OBS. *Antheræ dorfo accumbenter fufpenfæ, verfatiles, fubtus dehifcentes; Stigmata his imminent.* G.

Specific Character and Synonyms.

GLADIOLUS *quadrangularis;* foliis enfiformi-linearibus fulcato-quadrangulatis, corolla geniculato-recurva: fauce cylindrica tubo fubæquali, lácinia fuprema maxima porrecta: infima minima fubulata. G.

ANTHOLYZA *quadrangularis;* ftaminibus declinatis: alis revolutis: foliis lineari tetragonis. *Burm. fl. cap.*

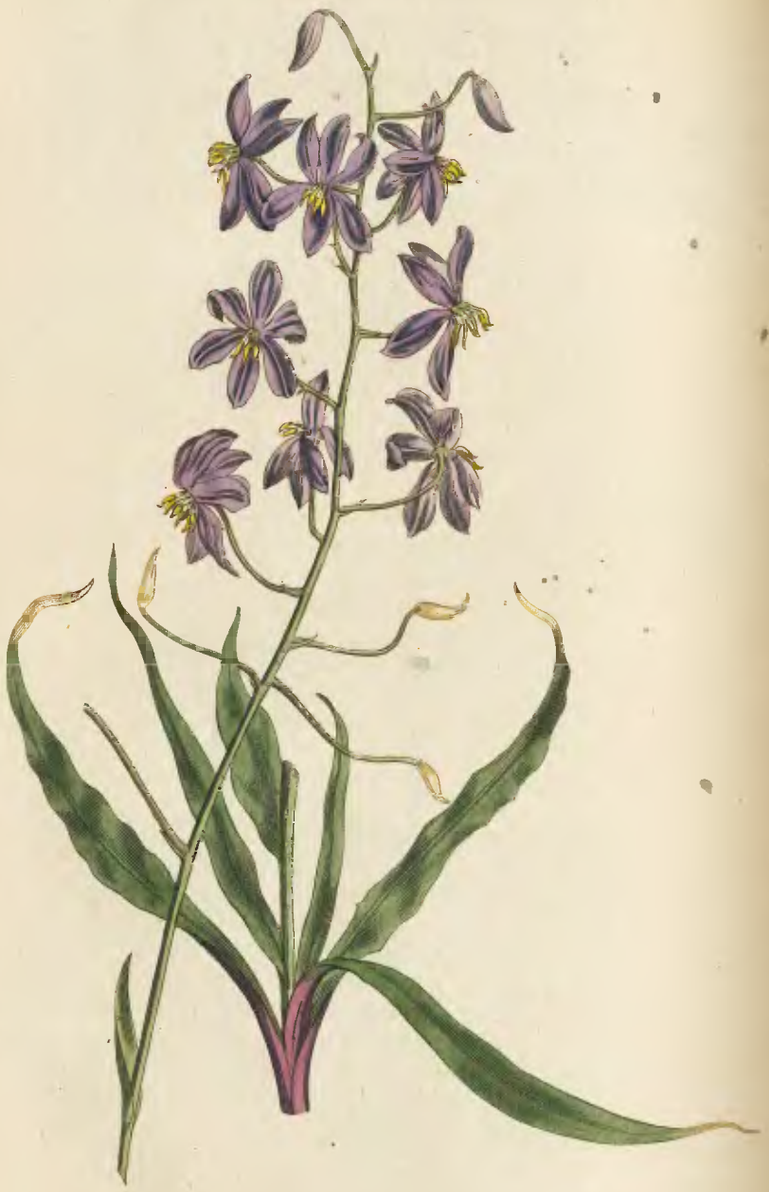
GLADIOLUS *abbreviatus. Bot. Rep. tab.* 166.

Leaves precifely thofe of GLADIOLUS *triftis*, n. 274. Stem 2—3 feet high, upright, rigid, round, tinged with reddifh yellow towards the Rachis. Flowers 2—3, ground yellow, covered with dotted fcarlet lines confluent towards the bafe of the faux. Spathes coloured like the flowers, but uniformly fo not ftreaked, outer valve the length of the faux. Corolla very irregular. Upper fegment ovate-oblong, very large, hyaline on the fides, two upper lateral ones rhomb-ovate, feveral times fmaller, but larger than lower lateral ones, which are ovate, acute, loweft very fmall, awl-fhaped; the three lowermoft have twin-ovate lucid green ftains in the middle.

This very rare and fingular plant, a native of the Cape, was introduced by Meffrs. LEE and KENNEDY, Nurferymen at Hammerfmith.

Hammerſmith. Flowers about the ſame time as GLADIOLUS *triſtis*, or rather earlier, about the beginning of April. Is perfectly ſcentleſs. The ſeed-veſſel preciſely that of GLADIOLUS *triſtis*. Eaſily propagated by offsets, but is ſtill rare.

BURMAN's deſcription is more vague and brief than we could have wiſhed, yet there can be little doubt of his deſigning our plant, when all the circumſtances are taken together, ſuch as the name, and its ſtation in his liſt, where it ſtands immediately after ANTHOLYZA *æthiopica* and *cunonia*, L. to both of which it has a very conſiderable reſemblance. According to him, it flowered in Holland in 1760, and grew two cubits high. *G.*



S. Edwards del. Pub. by W. Curtis St. Geo. Crescent June 1. 1801. F. Sansom sculp.

CYANELLA CAPENSIS. PURPLE-FLOWERED CYANELLA.

Class and Order.

HEXANDRIA MONOGYNIA.

Generic Character.

Cor. 6-petala: petalis 3 inferioribus propendentibus. *Stamen* infimum declinatum longius

Specific Character and Synonyms.

CYANELLA *capensis;* foliis undulatis, ramis patentissimis. *Syst. Vegetab.* 329. *Jacq. Hort.* 3. *p.* 21. *t.* 35. *Andrews's Bot. Rep. t.* 141. *Gært. fruct.* 68. *t.* 17.

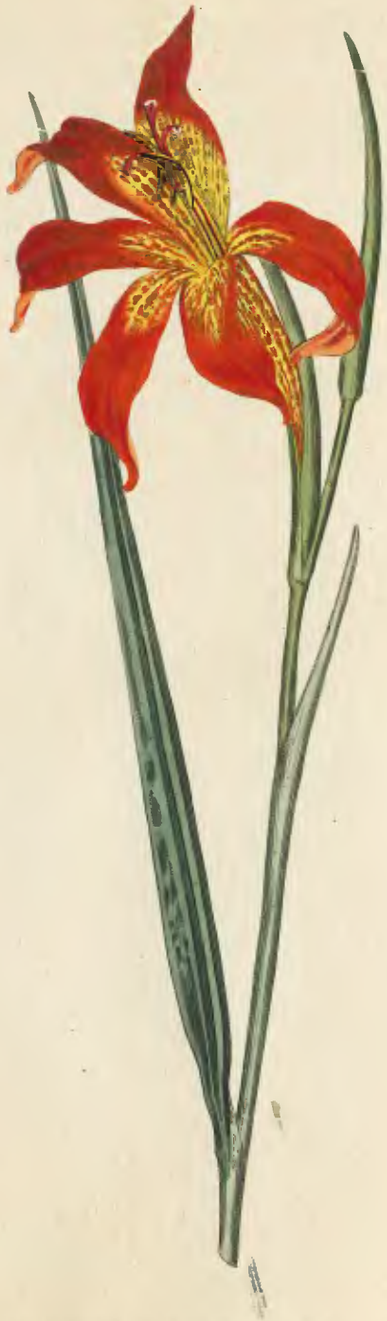
CYANELLA caule folioso paniculato, racemis divaricatis, foliis lanceolatis undulatis. *Willd. Sp. Pl. t.* 2. *p.* 131.

CYANELLA foliis lanceolatis undatis, ramis divaricatis. *Thunb. act. Holm.* 1794. *p.* 196. *Prod.* 65.

This is a native of the Cape of Good-Hope, growing spontaneously at the foot of the Table Mountain. The conical bulbs about the size of those of CROCUS *verna* are said to be edible when roasted. There is a great singularity in the growth of the stamens, which distinguishes the genus from every other: five of them have very short filaments and erect incurved anthers which open at the point, the sixth is declined and much longer both in the filament and anther, which last is tongue-shaped and grooved in the middle, upon this the style is incumbent; the lower one only, except in colour, has the common appearance of an anther, but all six are considered as such.

In external habit it is very similar to DIANELLA *cærulea*, No. 505, and in the flower to IXIA *scillaris*, No. 542.

Is said to have been cultivated by MILLER, in 1768, but in his description, he says, "the peduncle arises immediately from "the root supporting one flower;" from which we infer that his plant was not the CYANELLA *capensis*. Our figure was taken in April 1801, at the Garden of GEORGE HIBBERT, Esq. at Clapham. Requires the same treatment as other Cape bulbs.



Published by W. Curtis, S.t Geo. Chelsea, July 1802.

GLADIOLUS WATSONIUS (*var.* β.) DWARF WATSON'S CORN-FLAG.

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Class and Order.

TRIANDRIA MONOGYNIA.

Generic Character.

Spathæ valvula exterior lanceolata. *Cor.* basi tubulosa: limbus sexpartitus irregularis vel subirregularis. *Stam.* adscendentia. *Antheræ* parallelæ. *Stigm.* 3. sursum dilatata ex complicato explicata. *Caps.* trigona, oblonga, lenta. *Sem.* numerosa. G.

OBS. *Antheræ dorso accumbenter suspensæ, versatiles subtus dehiscentes; Stigmata his imminent.* G.

Specific Character and Synonyms.

GLADIOLUS *Watsonius* foliis ensiformi-linearibus utrinque tricostatis: lateribus sulcatis, fauce cylindrica, laciniis recurvis subæqualibus: suprema rectiore. G.

α. Corollis rubris.

GLADIOLUS *Watsonius. Bot. Mag.* 450. *To the Synonyms there quoted may be added,*

GLADIOLUS *recurvus. Houtt. Linn. Pfl. Syst.* 11. *p.* 59. *t.* 79. *f.* 1. nec vero Linnæi vel Thunbergii.

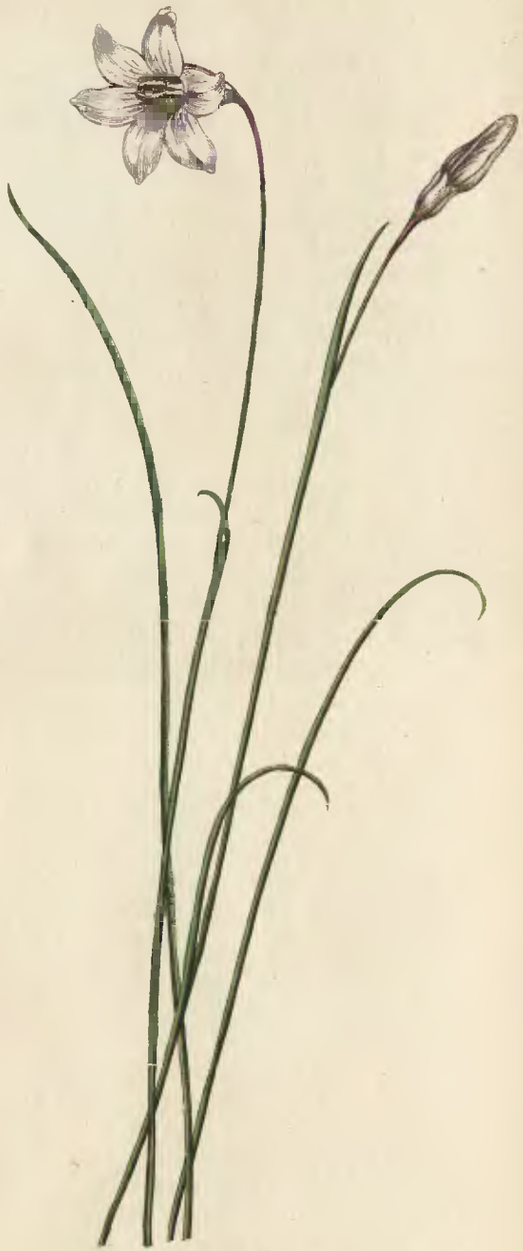
ANTHOLYZA *revoluta. Burm. Prod. fl. cap.*

GLADIOLUS *præcox. Bot. Rep.* 38. *ejus Recens.* 16. Gladiolus Watsonius.

β. Corollis majoribus luteo variegatis.

We are induced from the beauty and rarity of this plant (though a variety differing in little else than colour from that already published by Mr. CURTIS) to offer it to the public. It has been very lately imported from Holland by Mr. COLVILLE, of the King's-Road, Chelsea, and we believe has never before

before been ſeen in England. It is not above one-third the height of *var.* α, and is of a more beautiful colour. The leaves of both, from the prominence of their ribs, have the appearance of being thick and biſulcate on each ſide and the bottom of the furrows glaucous. Segments modifications of lanceolate bilabiately arranged, the loweſt dependent, all either patent or recurved; when patent the uppermoſt one points ſtraight forward, when recurved that is only patent, thus ever differing in direction, all nearly the length of the faux. Scentleſs. Flowers in February and March: (α) was found at the Cape by THUNBERG on the ſides of mountains, particularly on thoſe of Leuweſtaart, alſo near Conſtantia, and in ſome other diſtricts, flowering in our ſummer months. The firſt variety is become very common, and is one of the earlieſt blowers of its family. We ſuſpect our preſent variety to have been produced by ſeed in Holland, never having yet found it in any herbarium or ſeen it produced from any bulb immediately from the Cape. It is not improbable that the diminiſhed ſtature may be in ſome way connected with the variegation of the corolla, in the ſame manner as tulips whilſt they blow of a plain colour have a very long ſcape, which when, in the language of floriſts, the flower breaks, immediately loſes half or two-thirds of its length. We have obſerved the ſame diminution of ſize in ſeveral other inſtances in this natural order upon the flower becoming variegated. *G.*



Sydenham del. Pub. by T. Curtis 37 Gee Crescent July 1. 1802 F. Sansom sc.

Ixia Capillaris (*var.* γ.) Gracillima.
Slender Ixia.

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Class and Order.

Triandria Monogynia.

Generic Character.—Vid. No. 566.

Specific Character and Synonyms.

IXIA *capillaris* ſpatha ſcarioſa 5-ſtriata divaricata, tubo et fauce turbinato-continuis ſubſulcato-angulatis, laciniis lineari-oblongis, antheris conniventibus ſtigmata ſubæquantibus. *G.*

(α) *Gracillima*, foliis linearibus anguſtiſſimis non marginatis; ſpatha tubum ſuperante. *G.*

IXIA *gracilis. Saliſb. Prod. Hort.* 37. *n.* 22. ?

(β) *Capillaris;* foliis cartilagineo-marginatis, ramulis 1-3 floris racemoſo-digeſtis; ſpatha tubum ſuperante. *G.*

IXIA *capillaris. Linn. Suppl.* 92. *Thunb. Diſſ.* 12. *t.* 2. *f.* 2. *prod.* 9. *Murr. Syſt. Vegetab.* 84. *Gmel. Syſt. Nat.* 109. *Willd. Sp. Pl.* 1. 201.

IXIA *lancea. Jacq. Coll. Suppl.* 13. *Ic. rar.* 2. 281. Nec vero Thunbergii.

(γ) *Aulica;* robuſtior, ramis multifloris, ſpatha tubo ſubæquata. *G.*

IXIA *aulica. Hort. Kew.* 1. *p.* 57. *Gmel. Syſt. Nat.* 109. *Willd. Sp. Pl.* 1. 207.

(δ) *Incarnata;* præcedentis magnitudine, tubo et fauce ex cylindrico anguſte turbinatis ſpatha multo longioribus, limbo hypocrateriformi-patente. *G.*

IXIA *incarnata. Jacq. Coll. Suppl.* 13. *ic. rar.* 2. *t.* 282. *Willd. Sp. Pl.* 1. 201.

Outer valve of the ſpathe ſubtruncate, ſtreaked with three brown riblike veins ending in three ſhort teeth. Segments of the corolla ſtriped with three longitudinal darker coloured veins. Our variety has frequently a ſlender hair-like one-flowered branch, giving the ſtem an appearance of being forked. In a ſucceeding number β and δ will be given in one plate, γ we have never ſeen in bloom, but in the Bankſian Herbarium

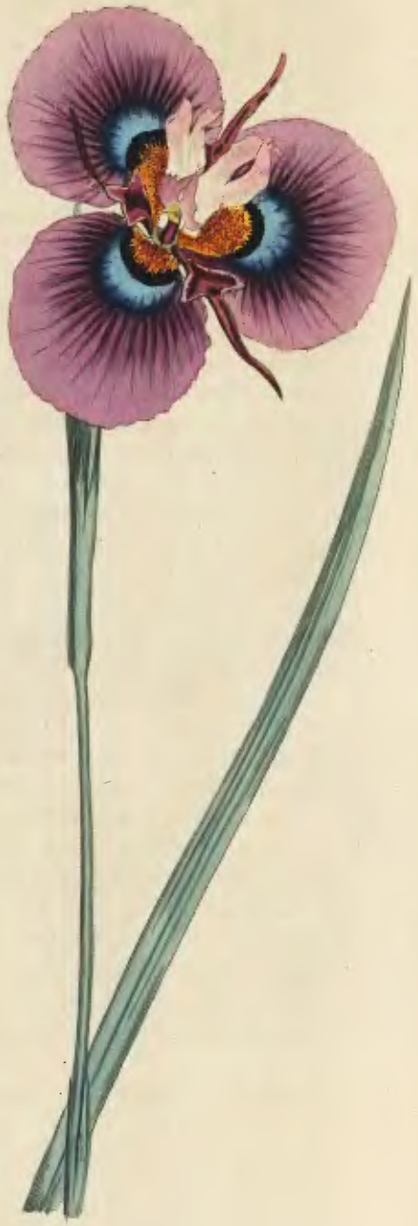
Herbarium find the ſpecimen from which the deſcription in *Hort. Kew.* was taken by one of its learned compilers, Dr. SOLANDER; perhaps this is only a leſs luxuriant variety of γ.

THUNBERG'S IXIA *lancea*, for which JACQUIN miſtook our variety β, is a very diſtinct ſpecies. All theſe varieties are ſcentleſs, and flower nearly at the ſame time, viz. in April. They are united by many others, that approach more or leſs to one or other of theſe.

This ſpecies is very diſtinct from its congeners, and although variable in ſome of its proportions, colour, and degree of expanſion, adheres faithfully to all its ſpecific diſtinctions. Thoſe who cannot be reconciled to the propriety of our reducing the above to mere varieties of the ſame ſpecies, and chooſe rather to conſider them as diſtinct, may retain the names allotted to them by the different authors.

Throughout this natural order, in which the different ſpecies and genera ſlide imperceptibly into one another, it is often impoſſible to mark the exact limits of each, and the means adopted by different authors will be found perpetually inadequate to the taſk. Thus the relative proportions of the tube to the ſpathe, and of the border to the tube, though ſometimes material, often afford no ground whatever for ſpecific diſtinction, even differing in different years in the ſame plant: ſometimes the further coheſion of the lower parts of the ſegments, or of the claws, ſtrangely alter the appearance of the flower though not the ſpecies: in this manner GLADIOLUS *hirſutus* obtains a long cylindric faux and rounded ſhort ſegments, their lower or narrower part being abſorbed in the faux, thus becoming GLADIOLUS *merianellus* of authors. So in our ſpecies the tube and faux of α, β, and γ, are gradually elongated till they become the length of the border in δ, partly by the coheſion of the baſes of the ſegments and partly by the elongation of the tube. In the ſame manner the cartilaginous margin, ſo frequent in the leaves of moſt of the natural order, can be of ſmall import for diſtinction, as its preſence or abſence often depend altogether upon the greater or leſs vigour of the plant.

Our preſent figure was taken at EDWARD WOODFORD'S, Eſq. Vauxhall.



Ed. Edwards del. Pub. by T. Curtis, St. Geo. Crescent. July 1. 1802 P. Sanson sculp.

Iris Villosa. Hairy Flag.

Class and Order.

Triandria Monogynia.

Generic Character.

Cor. 6-partita: laciniis alternis reflexis. *Stigm.* petaliformia. Vieusseuxia. *De la Roche*, Descr. 31.

Obs. Species capenses corolla hexapetaloidea unguibus subdiscretis non in tubum connatis basi tantum leviter connexis, filamentis crebrius (anne semper?) plus minus coalitis gaudent. *G.*

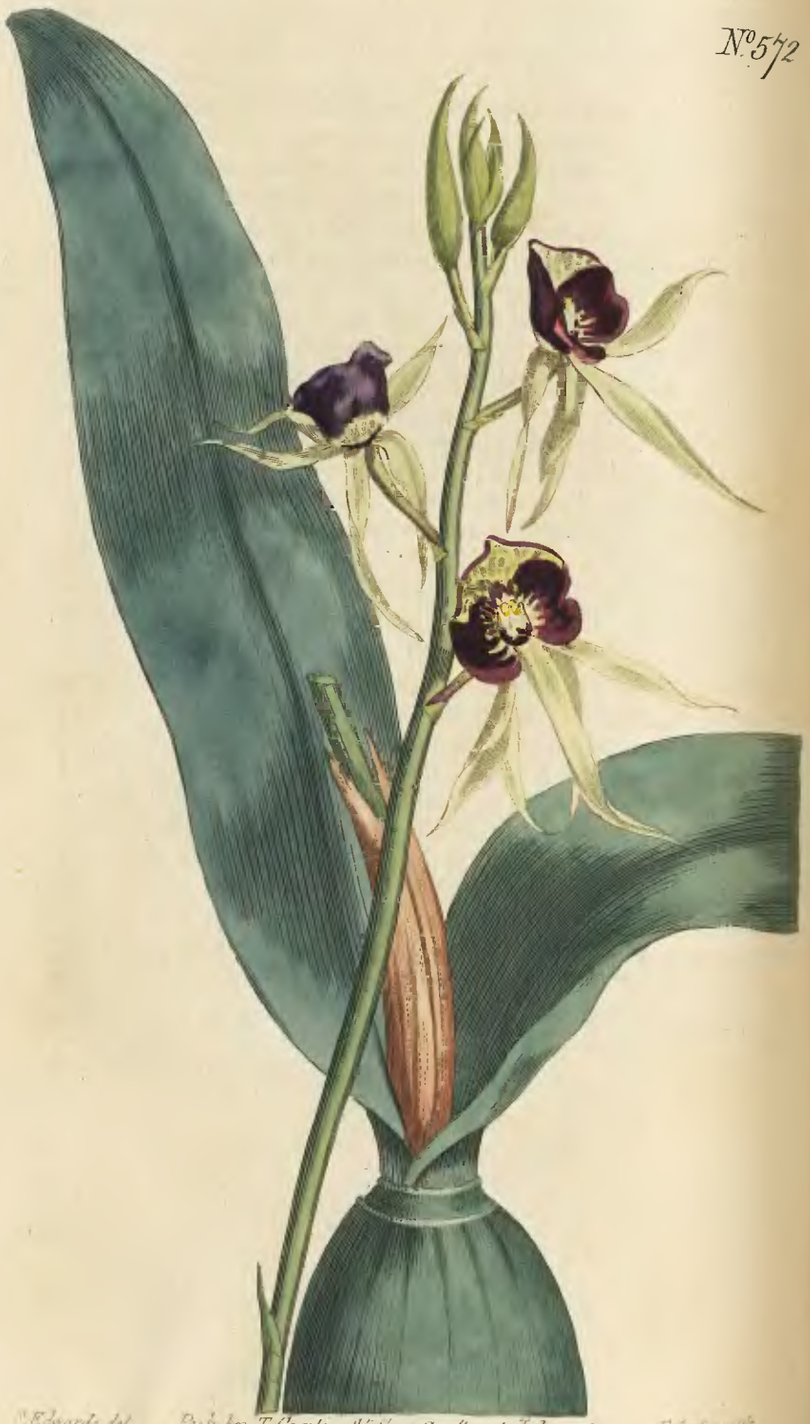
Specific Character and Synonyms.

IRIS *villosa*; (barbata) folio extus lineatim villoso, caule pubescente involucris glaberrimis, laminis alternis minimis tridentatis filamentis cylindrico-connatis. *G.*

IRIS *tricuspis*. Var. (α) *corolla purpurea*. *Thunb. Diss. de Iride* 15. ?

Our plant differs in no respect from Iris *tricuspis* (already published by Mr. Curtis, in this Work, No. 168, under the name of Iris *pavonia*) except in the pubescence of leaf and stem and in colour. In making it a distinct species on that account, we follow by analogy the example of former Botanists in this natural order. It cannot be distinguished from the real Iris *pavonia* but when in flower, and then it is sufficiently distinct. Its lower leaf, as well as those of Iris *pavonia*, *tricuspis*, *viscaria*, *bituminosa*, *papilionacea*, *tristis*, &c. &c. appear to be radical and flat or somewhat channelled, but when examined, will be found to be cauline and fistular, having split from near the base where they are entire and round, to near the end where they terminate, as fistular ones usually do, in a solid columnar mucronate point; the surfaces are of different hues and frequently of different habits, as in our plant, where the inner is quite smooth, the outer pubescent. Iris *tricuspis* (as are also most probably its kindred species above enumerated) is

is remarkably prone to luxuriance, forming abortive petals, or ſegments of petals within the claws of the larger ſegments of various forms, according to their greater or leſs perfection, and ſuch have been miſtaken by THUNBERG in IRIS *pavonia* for nectaries; he deſcribes them, "*nectaria tria intra petala majora, "ſingulum foliolum ovatum obtuſum petaliforme ad baſin;*" theſe are ſometimes preſent or not ſo in the ſame plant. To us it appears impoſſible to attribute to the union of the filaments, either in this genus or Ixia, the importance uſually given it by LINNÆUS, without creating confuſion and placing in diſtinct claſſes, orders, and genera, ſuch plants as are ſcarcely ſpecifically different; nor, on the other hand, are we able to lay down any rule of exception by which ſuch compliance with the laws of his ſyſtem can be avoided, eſpecially while GALAXIA, FERRARIA, and SISYRINCHIUM, remain ſo ſeparated on that ground only. This union of filaments varies exceedingly in both genera, ſometimes not extending beyond the baſe, ſometimes to the middle, ſometimes the whole length. The ſhape of the ſtigma is alſo very ſubject to variation, that of IRIS *pavonia* is very diſtinct from our ſpecies, nor do we think that FERRARIA *undulata* can be ſeparated from the Cape ſpecies of IRIS on that account only. DE LA ROCHE had already formed a new genus from IRIS *tricuſpis*, to which he gave the name of VIEUSSEUXIA, and if the Cape ſpecies (which form a very diſtinct and natural ſection, differing in habit, as well as in not having their claws united in a tube, but very ſlightly connected at their baſe only) ſhould be at any time detached and formed into a new genus, his name ſhould be retained, but his character muſt be generalized; for, as it now ſtands, it would ſcarcely admit any ſpecies but the one from which it is formed. Our drawing was taken at Meſſrs. GRIMWOOD and WYKE's, who received the bulb from the Cape, and with whom we believe it has now flowered for the firſt time in Europe. The ſynonym of THUNBERG we conſider to be doubtful, only becauſe he does not notice its pubeſcence. Its time of flowering is a little earlier than that of IRIS *tricuſpis*, viz. in April. *G.*



Epidendrum Cochleatum. Purple-Flowered Epidendrum.

Clafs and Order.

Gynandria Diandria.

Generic Character.

Nectarium turbinatum, obliquum, reflexum.

Specific Character and Synonyms.

EPIDENDRUM *cochleatum;* foliis oblongis geminis glabris ftriatis bulbo innatis, fcapo multifloro, nectario cordato. *Spec. Pl.* 1351. *Hort. Kew.* 3. 303. *Swartz. Obf.* 329. *Jacq. Ic. rar.* 3. *t.* 605. *Catefb. Car.* 2. *t.* 88. *And. Bot. Rep. Pl.* 13. *Mart. Mill. Dict. art.* 24.

HELLEBORINE cochleato flore. *Plum. Spec.* 9. *Ic.* 185. *f.* 2.

Of this very numerous genus, the Epidendrum *cochleatum* was the firft that was feen to flower in this country. It is now not very uncommon, confidering the difficulty attending the culture of plants naturally parafitical, a difficulty which appeared fo great to Miller himfelf, that he thought it unneceffary to enumerate the fpecies in his Dictionary, obferving, that "they "were not by any art then known to be cultivated in the "ground." Since his time many fpecies have been brought to flower in great perfection, five have been now figured in the Botanical Magazine, and we have drawings of fome others.

The Epidendrum is of the fame natural order as Orchis and Ophrys, and the flowers of the different fpecies have a fimilar fportive variety of form. Many of them are very beautiful, and all are curious for fome fingularity or other.

Our drawing was made from a fpecimen which flowered at Edward Woodford's, Efq. in December laft, whofe head gardener, Mr. Watson, appears to us to be more than ordinarily fuccefsful in the management of thefe plants, which ftamps

ſtamps a value upon every hint from him reſpecting their culture, *vide* No. 543.

The EPIDENDRUM *cucullatum* and *fragrans* have a very conſiderable reſemblance in the form of the flower; but beſides that, the former wants the fragrant ſmell of the latter, and the difference in colour, there are ſeveral remarkable diſtinctions. In *cochleatum*, the petals are nearly ſimilar, and all reflected; in *fragrans*, the petals are patent, and the two interior ones are much broader and ſomewhat ſhorter than the three exterior, and the lip of the nectary is more accuminate. Both are natives of Jamaica, and in this country muſt be conſtant inhabitants of the ſtove.

The error in No. 152 may be thus corrected.

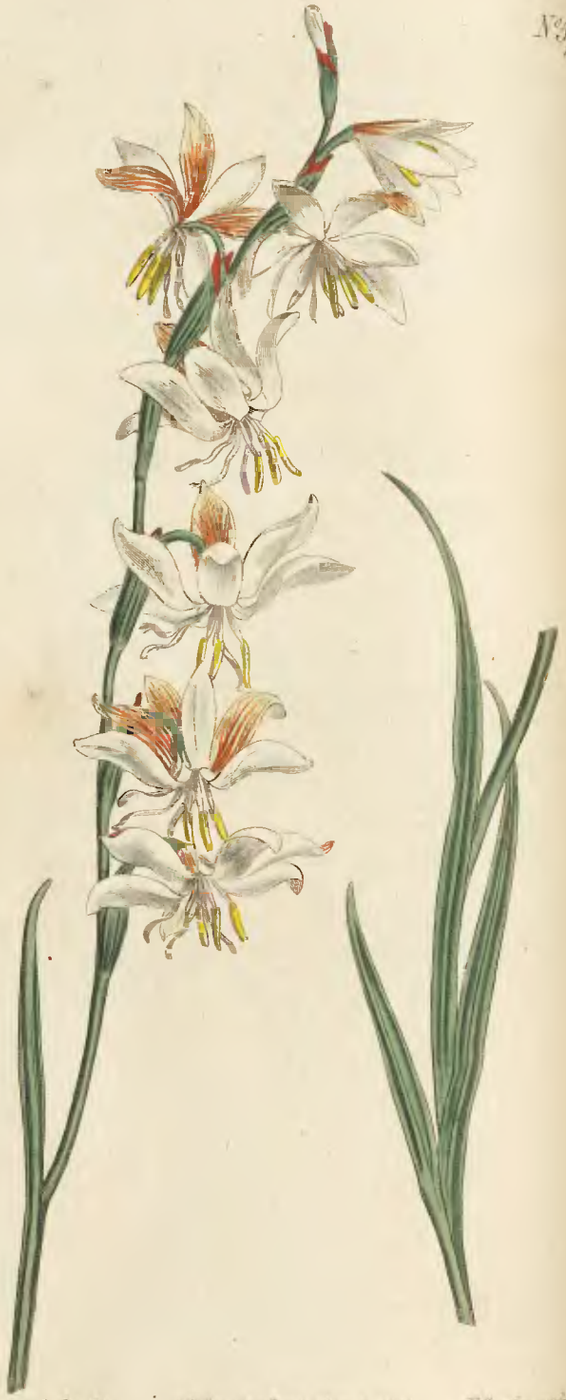
EPIDENDRUM FRAGRANS. SWEET-SCENTED EPIDENDRUM.

Specific Character and Synonyms.

EPIDENDRUM *fragrans*; folio lato-lanceolato enervi bulbo innato, ſcapo multifloro abbreviato, labio cordato. *Swartz. Prod.* 123. *Ait. Hort. Kew.* 3. 304. *Mart. Mill. Dict. art.* 63.

Native of Jamaica: introduced to Kew garden in 1786, by HINTON EAST, Eſq. now firſt figured.

The ſynonym quoted from SLOANE belongs neither to this plant nor to EPIDENDRUM *cochleatum*, but to EPIDENDRUM *ſanguineum*. *Swartz. Prod.*



Syd. Edwards del. Pub. by T. Curtis, St. Geo. Crescent Aug. 1. 1802. F. Sansom sculp.

Ixia Radiata. Nodding-Flowered Ixia.

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Class and Order.

Triandria Monogynia.

Generic Character.—Vid. No. 566.

Specific Character and Synonyms.

IXIA *radiata;* foliis fistulosis deorsum vaginanter teretibus exinde compresso-planis linearibus, spathis adpressis, corollis cernuis: limbo retroflexo, stigmatibus flexuoso-tortis dependentibus longis. *G.*

IXIA *radiata. Jacq. ic. rar.* 2. *t.* 280. *Coll. Suppl.* 15. *Willd. Sp. Pl. v.* 1. 202. *exclusa* Ixia setacea *in Syn.*

GLADIOLUS *recurvus. Thunb. Diss. p.* 9. *n.* 3. *depulsis synonymis. prod.* 8. *Herb. Linn. manu filii subscriptus, sed a* Gladiolo recurvo *patris prorsus alienus.*

IXIA *fistulosa. Bot. Rep. tab.* 59. *ejus Recens.* Ixia radiata.

(β) *Angusta* foliis angustioribus limbo subnutante uniformiter albo. *G.*

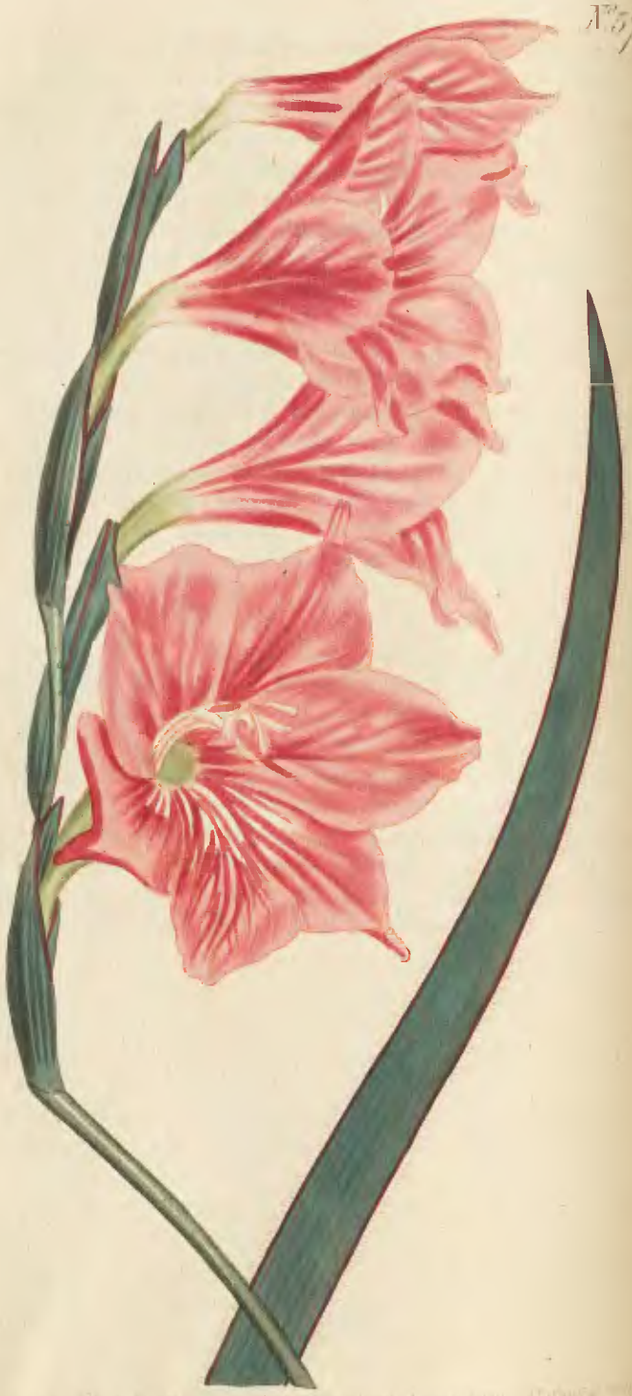
IXIA angusta. *Willd. Sp. Pl.* 1. 202. *Indicisque univers. in coll. Jacq. apud suppl.*

IXIA linearis. *Jacq. coll.* 4. *p.* 183. *ic. rar. t.* 279. *ubi Icon bulbum jam vetustum tunicis numerosis plurimo ordine superstructis obtectum sistit; a Hayne apud. Term. Bot. tab.* 5. *in radicationis exemplo mutuatum.* G.

(γ) *Caricina* foliis angustissimis scapo capillari. *G. Herb. Banks.*

What has been said of the bulb in the article of Ixia *falcata*, No. 568, will apply to this; observing, that when we speak of the size of a bulb it is meant without its tunics, otherwise all description of it as to size and form would be useless, as these often increase according to the age of the plant, and vary, according to this increase, in outward appearance; but the bulb being produced yearly within them is generally nearly of the same size, the old one perishing either in part or altogether. Leaves 3—4, gradually longer, fistular, round till they are pierced for the emission of the scape, from thence they are flattened,

flattened, linear, and obſoletely three-nerved, but ſtill hollow, inner one longeſt, nearly reaching to the flowers, and ſheathing the whole way. Stem round, kneed, flexuoſe. Flowers 8—20, though diſtich at their baſes ultimately inclining one way, expanding about ſunſet and cloſing again before midnight; whilſt open they diffuſe a very pleaſing caryophyllaceous fragrance; in the day-time, being cloſed, they are club-ſhaped, nodding, and the outer ſegments alone are perceived. Spathe ſhorter than tube, outer valve herbaceous, rigid, ſtriated, obliquely truncated, ſtem-embracing, entirely encloſing the inner valve. Tube upright, recurved, about the length of the ſegments, greeniſh. Segments lanceolate-oblong, acute, inner ones all white, outer ones ſtreakedly coloured with brown on their outſide. Filaments dependent, ſemicylindrical; anthers ſtraight, linear, orange-coloured, ſhorter than ſtigmas. Stigmas patent, linear, finely channelled, rather ſhorter than ſegments, white. Capſule triquetral, columnar, narrow. Seeds very ſmall. Flowers in April. THUNBERG obſerves its cloſe affinity to IXIA *falcata*, though it does not prevent his making it a GLADIOLUS. JACQUIN ſays the flowers are ſcentleſs, which is only true in the day-time. He gave it the ſpecific name of *radiata*, from the edge of the baſe of the tunic being dentately or what he calls *radiately*-lacerate. We have adopted his name becauſe we found it, but think it the moſt uncertain and inexpreſſive he could have given; beſides, that this characteriſtic is often obſolete, or nearly ſo. Introduction uncertain. Our figure was taken from a ſpecimen afforded us by Mr. COLVILLE, Nurſeryman, King's-Road, Chelſea, with whom it flowers in May, propagates ſlowly, and is ſtill a rare plant. Should be carefully guarded againſt moiſture when out of flower. *G.*



GLADIOLUS HIRSUTUS (*var.* β.) ROSE-COLOURED HAIRY CORN-FLAG.

Clafs and Order.

TRIANDRIA MONOGYNIA.

Generic Character.—Vid. No. 569.

Specific Character and Synonyms.

GLADIOLUS *hirfutus;* foliis fubcoriaceis pilofis nervofis, corolla geniculato-nutante: tubo recto, limbo campanulato, laciniis ovato-lanceolatis furfum patulis. *G.*

(α) *Brevifolius;* bulbo jam florigero foliis fpathaceis totis vaginantibus, eodem nondum florigero folio varietatum fequentium. *G.*

GLADIOLUS *brevifolius. Jacq. ic. rar.* 2. *t.* 249. *Coll.* 4. 156. *fragm. p. t. Willd. Sp. Pl.* 1. 213.

GLADIOLUS *triftis* (var. ι.) *aphyllus,* corollis albido-incarnatis quaternis fecundis fcapo pedali. *Thunb. Diff. No.* 8. ? *cujus varietates* κ *&* λ *huic fufpicor etiam pertinere fpeciei.* G.

GLADIOLUS *amænus & villofiufculus. Herb. Bankf.*

(β) *Rofeus;* foliis enfiformibus, corolla majufcula: laciniis lanceolato-ovalibus bafi unguiculato-attenuatis fauce longioribus. *G.*

GLADIOLUS *hirfutus. Jacq. ic. rar.* 2. *t.* 250. *Coll.* 4. *p.* 161. *Willd. Sp. Pl.* 1. 214.

GLADIOLUS *carneus. Herb. Bankf.*

GLADIOLUS *rofeus. Bot. Rep. tab.* 11. *ejus Recenf.* GLADIOLUS hirfutus.

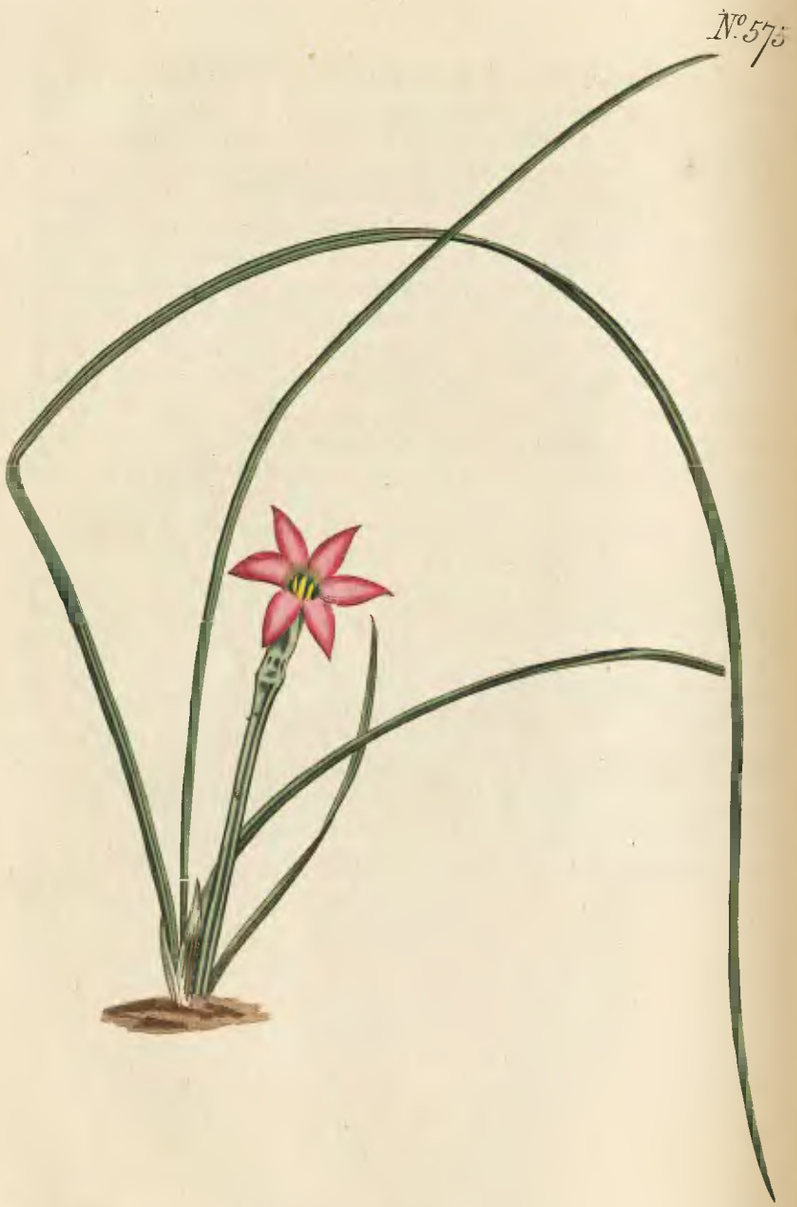
(γ) *Tenuiflorus;* corolla graciliori laciniarum bafibus in faucem cylindricam connatis: laciniis rotundato-ovatis. *G.*

GLADIOLUS *Merianellus. Thunb. Diff. n.* 11. *prod.* 7. *Willd. Sp. Pl.* 1. 214. *exclufo Milleri fynonymo.*

ANTHOLYZA *Merianella. Reich. Sp. Pl.* 103. *Syft. Veg.* 87. *Gmel. Syft. Nat.* 113. *exclufo Milleri fynonymo.* Nec vero ANTHOLYZA *Merianella,* Hort. Kew. vel. Curt. Bot. Mag. 441. Vid. retro WATSONIA *aletroides.* No. 533.

Stem

Stem ſmooth, from eight inches to near four feet high, never branched. Leaves far ſheathing, coarſely nerved, pubeſcent, and generally edged with a filiform cartilaginous border of a purple colour. Spathes ſmooth. Flowers 2—8. Faux obtuſely angular, which characteriſtic is very conſpicuous in the larger varieties; in (γ) the baſes of the ſegments are united and form a cylindrical faux, reſembling that of moſt WATSONIAS, which we preſume muſt have been the cauſe that LINNÆUS (who only ſaw it in a dried ſtate) deemed it a congener of WATSONIA (his ANTHOLYZA) *Meriana*. Limb nearly regular but ſomewhat unequal. Stamens ſhorter than limb. We bave ſeen many other intermediate varieties, but have, as uſual, only enumerated the moſt ſtriking, and ſuch as many will probably reckon diſtinct ſpecies. WATSONIA *humilis*, a ſtanding ſynonym to this, is a real Watſonia, and a very diſtinct plant with ſmooth leaves. The preſent variety flowers in May, and ſmells very like the flowers of Hawthorn or May. It ſcarcely ever blows two years together of the ſame ſize or colour, varying from a deep purpliſh roſe colour to a paie pink nearly white. Much of its beauty depends upon ſkilful cultivation. Mr. WILLIAMS, Nurſeryman, at Turnham-Green, has an exceeding large variety without the purple edge to the leaves. Is at all times very impatient of moiſture. Was moſt probably introduced among our Nurſerymen by the way of Holland; we have ſeen many ſpecimens of it among the late Cape arrivals. Our figure was taken at Meſſrs. GRIMWOOD and WYKE's, Kenſington, where it flowered in great perfection. *G.*



Sydl. Edwards del. Pub. by T. Curtis St. Geo. Crescent Aug. 1. 1802. F. Sansom sculp.

TRICHONEMA CRUCIATUM. CHANNEL-LEAVED TRICHONEMA.

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Class and Order.

TRIANDRIA MONOGYNIA.

Generic Character.

Spatha bivalvis: valvulis lanceolatis acuminatis integris. *Cor.* 6-partita æqualis tubo brevissimo. *Fil.* erecta, pilosa, brevia. *Stigm.* 3, bipartita. *Sem.* plurima, rotunda. *G.*

OBS. *Bulbus conicus basi oblique semitruncatus, radicem descendentem crassam carnosam demittens. Scapus teres sub florescentia sæpius subterraneus; jamprimum sub fructificatione e terra proveniens, sursum in ramos binos semiteretes, folio longiori stipulatos, bipartitus. Vid.* Bot. Rep. tab. 170. *quæ species adhucdum florifera scapum jam emisit. Ramus alter sæpe deficit. Genus* CROCO *maxime affine.* G.

Specific Character and Synonyms.

TRICHONEMA *cruciatum;* foliis subtetraquetris utrinque tricostatis: costa media elevata latiore, corollis erectis: laciniis acutis recurvo-patentibus, antheris stigmata æquantibus. *G.*

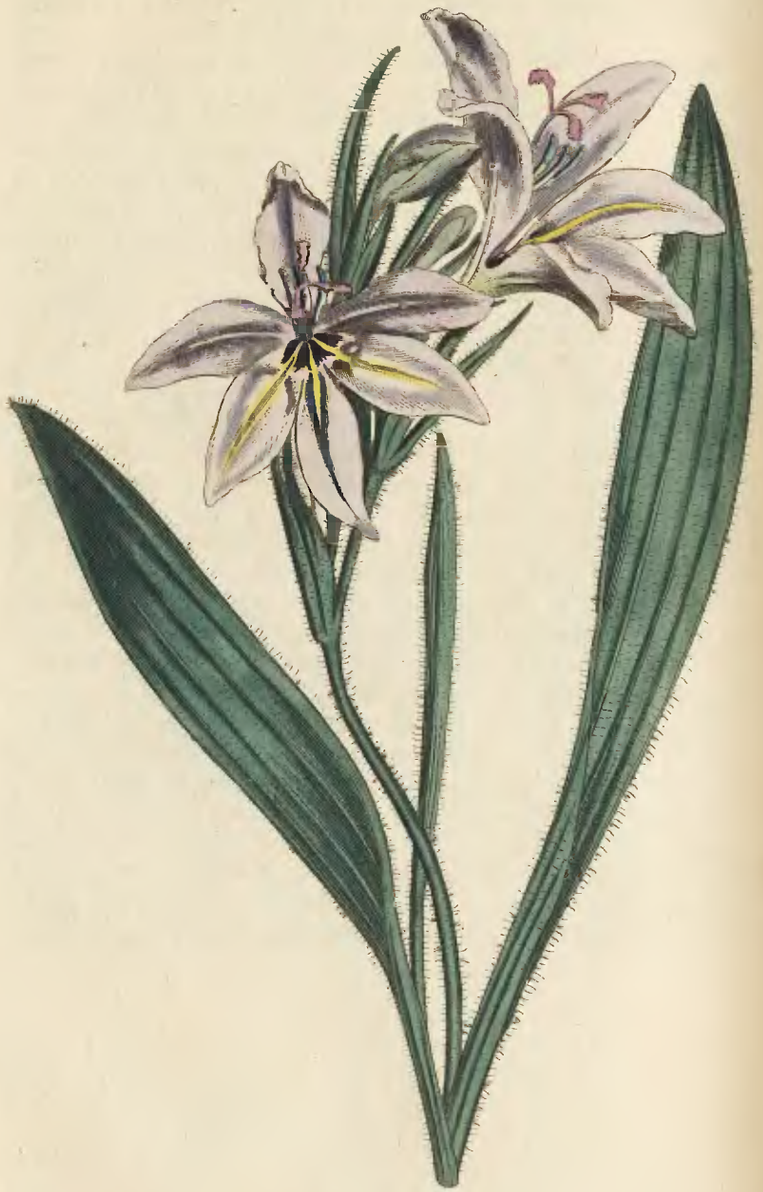
IXIA *cruciata. Jacq. ic. rar.* 2. *t.* 290. *Coll. Suppl. p.* 16. *Wild. Sp. Pl.* 1. 197.

IXIA *Bulbocodium,* var. 7. corollis roseis. *Thunb. Diss.* 3.

IXIA *rosea* β. *Herb. Banks.*

Dr. DRYANDER, by a manuscript note in the Hort. Kew. of the Banksian library, has most distinctly settled the difference between the IXIA *rosea* of the Cape (published already in this work, No. 265, by Mr. CURTIS, under the name of IXIA *Bulbocodium)* and the real IXIA *Bulbocodium,* an European species. To the first our plant approaches very closely, but we follow JACQUIN in making it a distinct species, as we believe it to be; besides some difference in the form of the leaves and stem, the spathe of this is more membranaceous, the

the ſtigmas nearly the length or ſhorter than the anthers, not longer, as in *roſea*. A tranſverſe ſection of the leaf of JACQUIN's ſpecimen, a much ſtronger plant than ours, affords the cruciate form from which he derives the ſpecific name. We are perſuaded that LINNÆUS adopted the name of *roſea* from one of the figures in MILLER's plates, where three ſpecimens are given, two coloured blue or purple and one pink or roſe, though the ſpecies is deſcribed as light purple in the letter-preſs and no mention made of the roſe-coloured variety. The above inaccurate plate with MILLER's deſcription, was moſt probably all that LINNÆUS had for a guide, hence his unſatisfactory deſcription and the confuſion it has ſince produced. JACQUIN is incorrect in deſcribing the corolla as hexapetalous, as it has a ſhort tube; he might with propriety have called it hexapetaloid. Our generic name is from θρίξ *pilus* and νημα *filum*, the filaments being hairy. Its ſpecies, already deſcribed or figured, are IXIA *Bulbocodium, Linn. Syſt.* 83. IXIA *roſea, Linn. Syſt. ed.* 13. 75. IXIA *cruciata, ſupra.* IXIA *chloroleuca, Jacq. Coll.* 4. 180. IXIA *Bulbocodium, Bot. Rep.* 170. IXIA *humilis, Thunb. Diſſ.* 4. *prod.* 9. ? IXIA *pudica, Herb. Bankſ.*— More are known to us, but we ſhall reſerve them for further examination from living ſpecimens. Dr. DRYANDER is perſuaded that there are ſeveral ſpecies even in Europe. The genus ſeems to be intermediate between CROCUS and IXIA, perhaps the link that joins them; when we have laid a larger portion of this tribe before the public, we ſhall then attempt to ſhew the mutual connection of the genera that compoſe it, with ſome further obſervations on them. This ſpecies flowers about May. Our drawing was taken from the rich collection at GEORGE HIBBERT's, Eſq. Clapham, who received it by his collector from the Cape; it flowered alſo this year at Mr. COLVILLE's, who had it from Holland, under the name of an Amaryllis. Found by THUNBERG in various parts round Cape-Town, flowering in our ſummer months. *G.*



Pub by T. Curtis, St Geo. Crescent Aug. 1. 1800

Babiana Plicata. Sweet-Scented Babiana.

Clafs and Order.

Triandria Monogynia.

Generic Character.

Spatha trivalvuloidea, valvula intima bipartita. *Cor.* bafi tubulofa, limbus 6-partitus. *Stigm.* 3, recurvo-patentia e canaliculato explicata. *Capf.* rotunda, torulofa. *Sem.* pauca angulata. *G.*

Obs. *Bulbus elongato-conicus tunica fibrofa involutus, fæpius alte fubterraneus. Folia plicata, e petiolis erectis fubmembranaceis linearibus convolutis flabelloidee explicata, utrinque acuminato-contracta, fæpius pubefcentia, nervi compares nullo precipuo vel medio. Corolla tubi longitudine et laciniarum fitu mire ludit. Stamina nunc adfcendentia et parallela nunc erecta et trifariam fpectantia. Capfula fæpius (femperne ?) pubefcens. Ab* Ixia, Watsonia, Antholyza, *et* Gladiolo, *præterquam habitu, fpatha imprimis difcrepat.* G.

Specific Character and Synonyms.

BABIANA *plicata;* foliis oblongo-lanceolatis molliffimis laxe plicatis villofis, limbo bilabiato-patente: laciniis fubæqualibus tubo fubæquatis alternis fubundulatis, genitalibus adfcendentibus. *G.*

GLADIOLUS *plicatus. Thunb. Diff.* 24. *prod.* 10. *Hort. Kew.* 1. 63. *Burm. prod.* 2. ? Nec vero Linn. vel Jacq. Ic. rar. vel Coll.

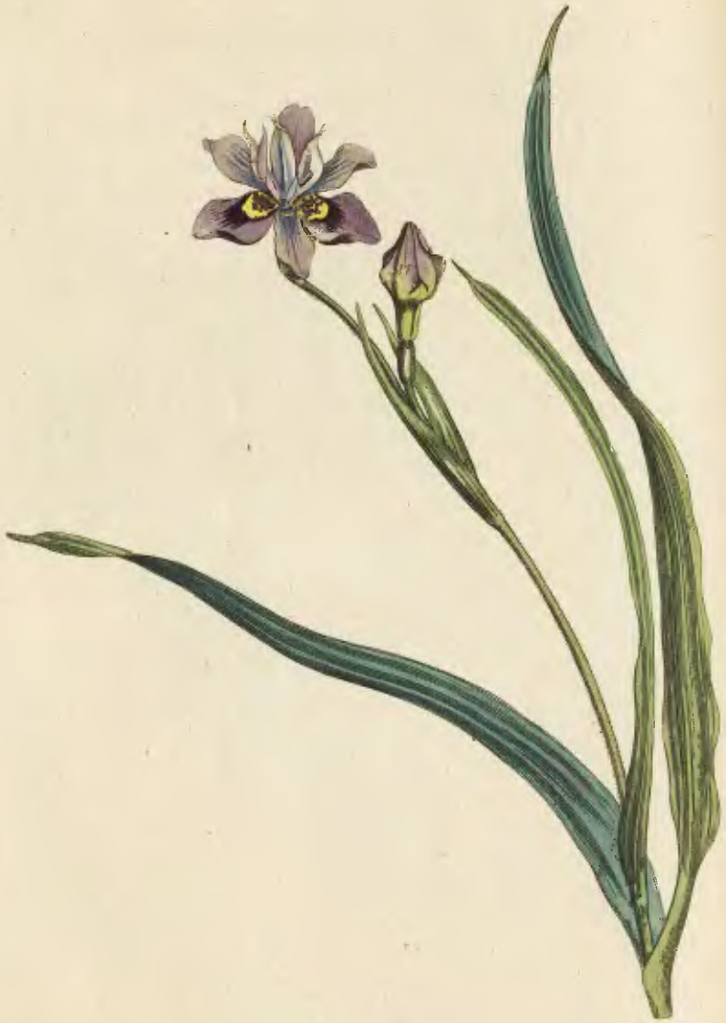
GLADIOLUS *fragrans. Jacq. Hort. Schoenb. p.* 7. *tab.* 14. Sifyrinchium latifolium floribus patentibus vix difformibus. *Breyn. prod.* 3. *p.* 22. *t.* 9. *f.* 2.

IRIS africana verficolor pumila plicatis et hirfutis foliis radice bulbofa. *Pluk. mant.* 424. *f.* 8. ?

GLADIOLUS *plicatus* (α) flore variegato fuaveolente. *Soland. MSS. Banks.*

The fpecies of this natural order having been ufually determined from herbariums only, many fynonyms have in confequence been heaped under the prefent head, which belong to what

what are now eſteemed diſtinct ſpecies; we have only reſerved ſuch as appear to us really to belong to this ſpecies, and ſhall apply the others as we publiſh the plants for which we conceive they were intended. MILLER's plant, figured in the 155th plate, uſually quoted as a ſynonym to this, is we believe the GLADIOLUS *ſtrictus* of *Hort. Kew.* The whole plant, except the corolla, is pubeſcent and very tender, from ſix inches to a foot high. Flowers emit a pleaſing caryophyllaceous fragrance. Cultivated, according to the Bankſian Herbarium, at Kew-Gardens in 1778. We venture to predict that this genus will turn out one of the moſt numerous of the whole natural order. For the derivation of the generic name, and an enumeration of ſuch ſpecies as are as yet deſcribed, revert to IXIA *conica*, No. 339 of this work. From this liſt GLADIOLUS *criſpus* ſhould be excluded. THUNBERG enumerates many varieties from dried ſpecimens, which will nearly all be found to be diſtinct ſpecies. Found by him at the Cape, on the loweſt hills beneath the weſt ſide of Leuwebild near the ſhore, near Cape-Town, in Swartland-Rode-Sand, and other ſpots, in great abundance. Flowers with us in May. Our drawing was taken at Meſſrs. WYKES and GRIMWOOD's, Kenſington. G.



Syd. Edwards del. Pub. by T. Curtis St. Geo. Crescent Aug. 1 1802. E. Sandon sculp.

Iris Tristis Dull-Coloured Flag.

Clafs and Order.

Triandria Monogynia.

Generic Character.

Cor. 6-partita: petalis alternis reflexis. *Stigmata* petaliformia.

Specific Character and Synonyms.

IRIS *triftis;* (imberbis) foliis angufto-lanceolatis nudis glaberrimis, caule ramulis et pedicellis villofis, petalorum laminis oblongis obtufis: alternis duplo anguftioribus, filamentis bafi connatis. *G.*

IRIS *triftis. Thunb. Diff.* 39. *prod.* 12. *Linn. Suppl.* 97. *Willd. Sp. Pl.* 1. 239.

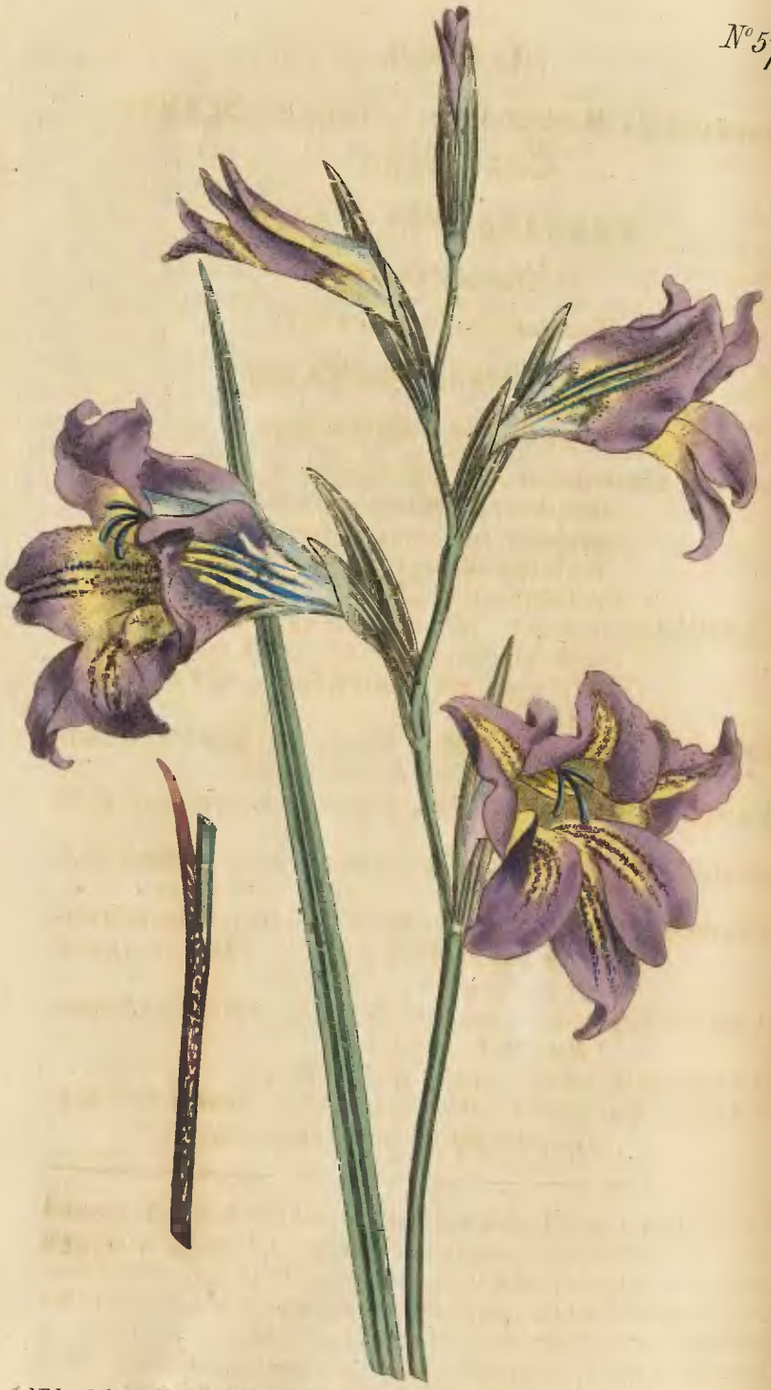
MORÆA *fordefcens. Jacq. ic. rar.* 2. *t.* 225. *Coll. Suppl.* 29.

MORÆA *tricolor. Bot. Rep. tab.* 83. *ejus Recenf.* Iris *triftis.*

Root a fmall round tunicated bulb. Leaves of the fame habit as thofe of Iris *villofa* of the foregoing number, but much broader and quite fmooth. Stem from fix inches to a foot high, ufually branched, terminated, as is alfo each branch, by a general bivalved involucre, from which iffue in fucceffion two, three, or four flowers, on feparate pedicles, with feparate one-valved, convolute, membranaceous fpathes. We have obferved, that in all the Cape fpecies of this family, when only one flower is produced from the general involucre, it is nearly twice the fize of thofe when the ufual number is produced. In all the Cape fpecies of Ferraria and Iris, as yet known to us, the flower, after the parts of fructification have completed their operations, forms itfelf into a kind of ball, the fegments rolling inwards previous to its final decay; whereas, in Moræa and Aristea, the genera neareft to this, the flowers commence their decay by twifting the fegments fpirally into a kind of column. Our fpecies was found at the Cape, by Thunberg, below the Duyvelfberg near the town. It feeds freely, and produces plenty of offsets. The drawing was taken

taken from a plant that flowered in May, at Meſſrs. GRIMWOOD and WYKES's, Kenſington, and was moſt probably introduced amongſt us by the way of Holland; Mr. HIBBERT's ſpecimen, figured in the Botaniſt's Repoſitory, came immediately from the Cape.

While "*laciniis alternis reflexis*" remains a part of the eſſential character of IRIS, nearly all the Cape ſpecies ought in ſtrictneſs to be excluded, and this we imagine has been the cauſe that ſome of them have been transferred to *Moræa*, with which they agree, in having "*petala tria interiora patentia, anguſtiora*," but differ, according to us, from true MORÆAS, in having petal-ſhaped ſtigmas and upright claws or baſes to their ſegments or petals. If therefore theſe are to be retained under IRIS, the eſſential character muſt be altered; but it appears to us more convenient that they ſhould be formed into another genus, diſtinguiſhed from IRIS in not having the claws or baſes of the ſegments united into a tube, but in having them nearly upright and parted. *G.*



Syd. Edwards del. Pub. by T. Curtis Sloane Street Aug. 1. 1802. F. Sansom sculp.

GLADIOLUS RECURVUS. VIOLET-SCENTED CORN-FLAG.

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Clafs and Order.

TRIANDRIA MONOGYNIA.

Generic Character.—Vid. No. 569.

Specific Character and Synonyms.

GLADIOLUS *recurvus;* foliis linearibus, planis: nervo utrinque prominente, corolla campanulato-ringente lateraliter compreffula: laciniis extimis lanceolatis recurvis: lateralibus infimis fubcuneatis. G.

GLADIOLUS *recurvus. Linn. Mant.* 28. *Reich.* 1. 101. *Syft. Vegetab. Murr.* 86. *Gmel. Syft. Nat.* 110. *Willd. Sp. Pl.* 1. 208. Nec vero THUNB. aut LINN. fil.

GLADIOLUS *carinatus. Hort. Kew.* 1. 64. *Gmel. Syft. Nat.* 7. 111. *Willd. Sp. Pl.* 1. 211.

GLADIOLUS *punctatus. Jacq. ic. rar.* 2. *t.* 247. *Coll.* 4. *p.* 160.

GLADIOLUS *triftis.* (var. γ.) *punctatus odorus. Thunb. Diff. de Glad.* 12.

GLADIOLUS foliis linearibus fulcatis, floribus uno verfu difpofitis tubo floris longiore. *Mill. ic.* 157. *t.* 235. *fig.* 2.

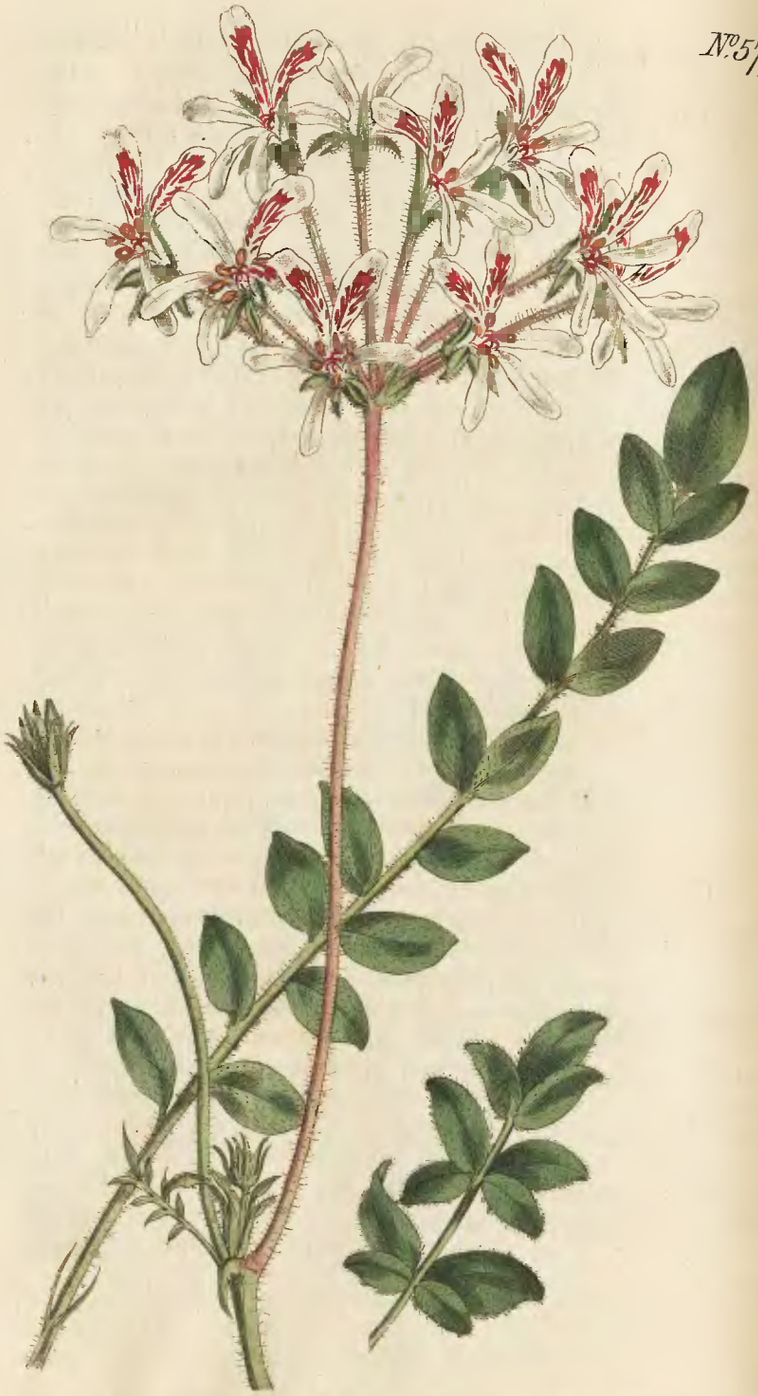
GLADIOLUS *alatus. Schneev. & Geuns. tab.* 12. *Uft. ann. Bot. St.* 6. *p.* 98.

GLADIOLUS *odorus. Salifb. prod. Hort.* 40.

GLADIOLUS *ringens. Bot. Rep. tab.* 27. *iterum tab.* 227. *ejus Recenf.* GLADIOLUS carinatus.

Root-fheath gloffy like porcelane, colour a white ground beautifully mottled with purplifh brown. Leaves 3, outer one nearly the height of the ftem, inner far fheathing, upper cauline and fpathaceous. Sometimes the leaves are fcarcely half the length of the ftem, as in JACQUIN's figure. Stem 1—3 feet high, flender, upright. Flowers 2—5, produced about April, fmelling very powerfully like violets or orris-root. Spathes

Spathes about half the length of the corolla, much longer than tube. Upper ſegment broadeſt, elliptic, recurved, lower ones ſubunguiculate. On the firſt and ſecond day of its expanſion, the upper parts of the ſegments, if cloſely obſerved, will be found to have a yellow ground, ſo thickly beſet with minute blue dots, as to give the appearance of a uniform blue, of which colour they really at laſt become. Stigmas longer than the anthers. It approaches very near to GLADIOLUS *gracilis* in corolla, but differs eſſentially in the leaf, as may be ſeen by their ſpecific characters; this laſt is alſo ſcentleſs, and wants the mottled root-ſheath. The plant in the Herbarium of the younger LINNÆUS, and deſcribed in the Diſſertation of THUNBERG, under the name of GLADIOLUS *recurvus*, is the IXIA *radiata* of this number; how it came to be made a ſynonym to ſo very diſtinct a ſubject as this we cannot account. We ſuſpect, however, that the real GLADIOLUS *recurvus*, as well as the GLADIOLUS *undulatus* of LINNÆUS, has never been known to any author that we have conſulted, if we may judge from the ſynonyms and the different names it has repeatedly received. Both ſpecies are intereſting, as being of the very few of this family deſcribed by LINNÆUS himſelf; and notwithſtanding the reaſons adduced in No. 538 for continuing it to JACQUIN's plant, we now regret that we did not preſerve his name of *undulatus* for the plant to which he had given it, which will appear in our next number. Raiſed by MILLER from Cape ſeeds; flowered in the Chelſea garden before the year 1760. Introduced into Kew garden by Mr. MASSON, in 1774, where it received the name of *carinatus*, from the appearance of the midrib of its leaves. MILLER's figure is, we believe, erroneous in repreſenting it as branched, which, we are almoſt certain, it never is; very probably two cloſe-growing plants afforded that appearance to the draughtſman. His deſcription is correct and full. THUNBERG mentions a variety with corollas of a pinkiſh or fleſh-coloured hue. It is the moſt fragrant of the genus; ſomewhat impatient of moiſture when out of flower; never fails to bloom when the bulb is of a proper age. There is no ſpecimen of this or *undulatus* in the Herbarium of the elder LINNÆUS. Our drawing was taken at the nurſery of Meſſrs. GRIMWOOD and WYKES's, Kenſington, with whom it generally flowers in April and May. *G.*



S. Edwards del. Pub. by T. Curtis St. Geo. Crescent Aug. 1. 1802 E. Sansom sculp.

PELARGONIUM PINNATUM. PINNATED CRANE'S-BILL.

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Class and Order.

MONADELPHIA HEPTANDRIA.

Generic Character.

Cal. 5-partitis: lacinia suprema desinente in tubulum capillarem, nectariferum, secus pedunculum decurrentem. *Cor.* 5-petala irregularis. *Filam.* 10 inæqualia, quorum 3 (raro 5) castrata. *Fruct.* 5-coccus, rostratus: *rostra* spiralia introrsum barbata.

Specific Character and Synonyms.

PELARGONIUM *pinnatum*; acaule, umbella subcomposita, foliis pinnatis: foliolis subrotundo-ovatis indivisis utrinque hirsutis. *L'Herit. No.* 14. *Ait. Hort. Kew.* 2. 417. *L'Herit. Geranial. t.* 8.

GERANIUM *pinnatum. Sp. Pl. ed.* 1. *p.* 677.

GERANIUM *prolificum* (γ.) pinnatum. *Sp. Pl. ed.* 2. *p.* 950.

GERANIUM astragalifolium. *Cavan. Diss.* 4. *p.* 257. *n.* 377. *t.* 104. *f.* 2. *a Commelini prælud. mutuata. Jacq. ic. v.* 2. *t.* 93.

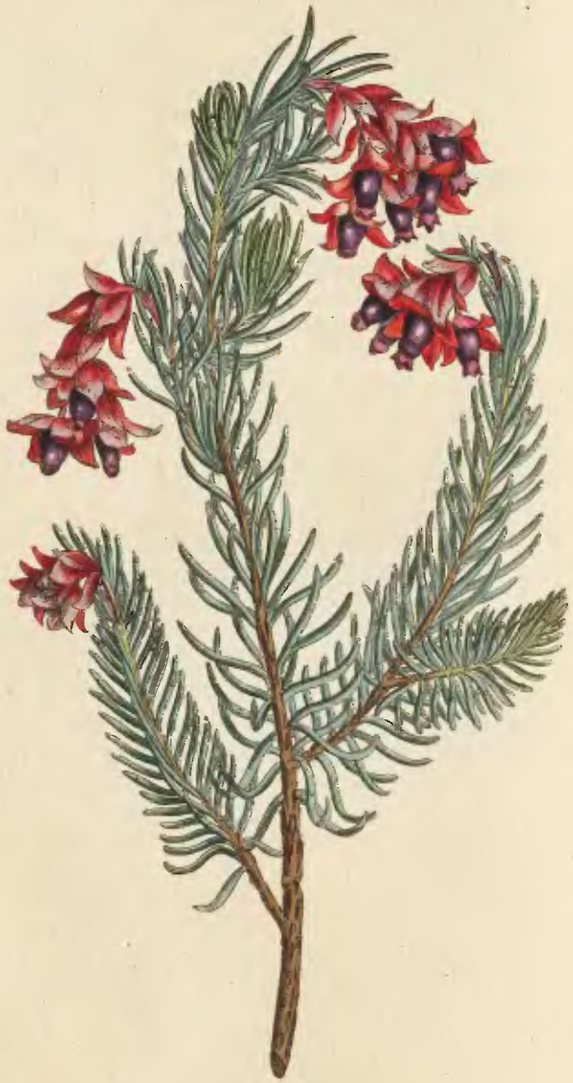
GERANIUM africanum astragalifolio. *Commel. præl.* 53. *t.* 3.

Root tuberous. Leaves radical, from six inches to a foot and half in length, pinnated, hairy, hairs of a silvery hue, covering the mid-rib and both sides of the leaf; leaflets varying extremely in form and manner of growth, numerous irregularly alternate, ovate, and obtuse, or ovate-lanceolate, mostly standing on footstalks, sometimes sessile, the terminating one usually largest; sometimes from the base of one of the leaflets springs a small leaf, and sometimes they grow as it were four together; indeed it is impossible to describe all their variations. Flowering stem 6—12 inches and taller, round, hairy, a little thickened just

juſt below the umbel, uſually throwing out two other flowering branches from the ſame part of the ſtem. Flowers 10—15 in an umbel. Involucrum conſiſting of as many leaves as there are flowers, one being ſituated at the baſe of each peduncle, about one-third of an inch long, ſubulate, hairy. Peduncles nearly an inch and half long. Calyx conſiſting of five lanceolate ſegments nearly equal, four of them uſually reflexed, hairy. Petals buff-coloured, narrow, ſomewhat undulated, dilating gradually from the baſe towards the apex; the two uppermoſt ſomewhat the longeſt and largeſt, and very prettily ſtreaked with crimſon. Five fertile ſtamens. Anthers inclining to orange. Stigmas crimſon.

We have followed the Hortus Kewenſis in conſidering the *pinnatum* of LINNÆUS and *aſtragalifolium* of JACQUIN as the ſame ſpecies. There are, however, remarkable varieties, and future obſervations may perhaps ſeparate ſome of them into diſtinct ſpecies.

Our figure was taken from a plant, which flowered in December 1798, in the Marquis of BLANDFORD's collection, at White-Knights, near Reading, and was raiſed there from Cape ſeeds, ſent by Lord MACARTNEY. Introduced to the Kew garden, by Mr. MASSON, ten years before. It is of the tenderer kind, and, like other tuberous rooted ſpecies, is impatient of water, and not eaſily propagated, except by ſeeds, which it rarely or never produces with us. In ſtrong plants the bulb will however branch out at top into two, three, or more diſtinct heads; by dividing theſe with caution, ſo that each part ſhall have ſome fibres to it, and not giving them too much water when planted, Mr. DOWDALL, at that time Gardener to the Marquis, told Mr. CURTIS, that this rare ſpecies might be increaſed.



S. Edwards del. Pub. by I. Curtis St. Geo. Crescent Aug.t 1802 F. Sansom sculp.

ERICA GLAUCA. GLAUCOUS HEATH.

Class and Order.

OCTANDRIA MONOGYNIA.

Generic Character.

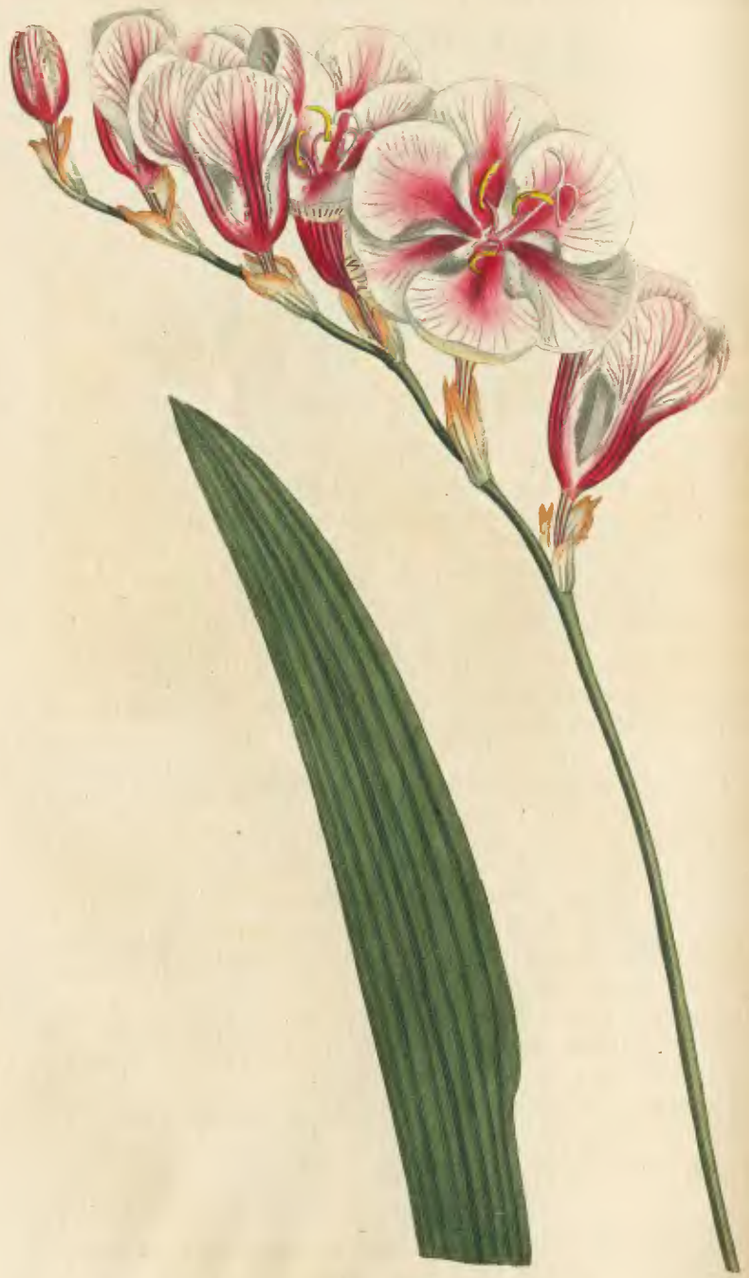
Cal. 4-phyllus. *Cor.* 4-fida. *Filam.* receptaculo inserta. *Antheræ* bifidæ. *Caps.* 4-locularis.

Specific Character and Synonyms.

ERICA *glauca*; antheris cristatis, foliis ternis acerosis glaucis, pedunculis terminalibus aggregatis bracteatis nutantibus, calycibus simplicibus patentibus corollas ovatas acutas subæquantibus.

ERICA *glauca*. *And. Eric. n.* 47. *Salisb. in Act. Soc. Linn. v.* 6. *p.* 352.

This makes a very handsome shrub, growing to the height of three feet or more; but as it will not flower till it has acquired a considerable size, and is of slow growth and propagated from seeds only, few persons have had an opportunity of seeing it in flower; on this account, perhaps, the bracteæ, calyces, and corolla have been erroneously described as being all of a livid-purple colour, which corresponds indeed with Mr. ANDREWS's figure above quoted, but does not accord with nature, the corolla only being of a purple colour and the other parts of a brick-dust red. The parts of fructification are entirely enclosed in the corolla, the anthers are what LINNÆUS calls cristated, that is, each lobe has an appendix at its base, compared to the comb of a cock, being flat and serrated at the edges. Appears to us to approach nearest to ERICA *baccans*, No. 358 of this work; but is easily distinguished from every other species by the remarkable large coloured bracteæ and spreading calyx. Our drawing was taken from the finest specimen we have ever seen, in the collection of GEORGE HIBBERT, Esq. which has unfortunately since perished,



TRITONIA SQUALIDA. SWEET-SCENTED TRITONIA.

****

Class and Order.

TRIANDRIA MONOGYNIA.

Generic Character.

Spatha bivalvis scariosa. *Corollæ* faux turbinata: limbus sexpartitus: laciniæ unguiculatæ. *Stam.* inclinata (*nunquam erecta*) filamenta curva. *Stigm.* 3, recurvo-patentia. *Caps.* ovato-rotunda. *Sem.* numerosa, globosa. *G.*

OBS. Bulbus involutus tunica reticulata, maculis sæpius majusculis. Folia glaberrima, iridioidea. Spatha integra vel apice denticulata et fuscescens. Flores majusculi plures. Corollæ limbus regularis vel bilabiatus et subirregularis vel etiam resupinato-bilabiatus: laciniæ sæpius æquales vel unica fere duplo major vel tres inferiores sed rarius minores, modo unica modo tres alternæ ad basin gibbæ, modo cunctæ conformes. Stamina in bilabiatis adscendentia, in regularibus assurgentia, vel etiam adscendentia et assurgentia in diversis floribus ejusdem plantæ. Filam. semper curva. A *Sparaxide* discrepat spatha haud partito-lacera, axillis foliorum non bulbiferis; a *Gladiolo* seminibus non alatis. *G.*

Specific Character and Synonyms.

TRITONIA *squalida*; foliis laxioribus extimis obtusiusculis, limbo æquali: lacinia unica basi urceolato-gibba: unguibus margine hyalinis: laminis rotundatis, stigmatibus stamina superantibus. *G.*

IXIA *squalida*. var. (α) *Hort. Kew.* 461. *Gmel. Syst. Nat.* 2. 109. *Willd. Sp. Pl.* 1. 206.

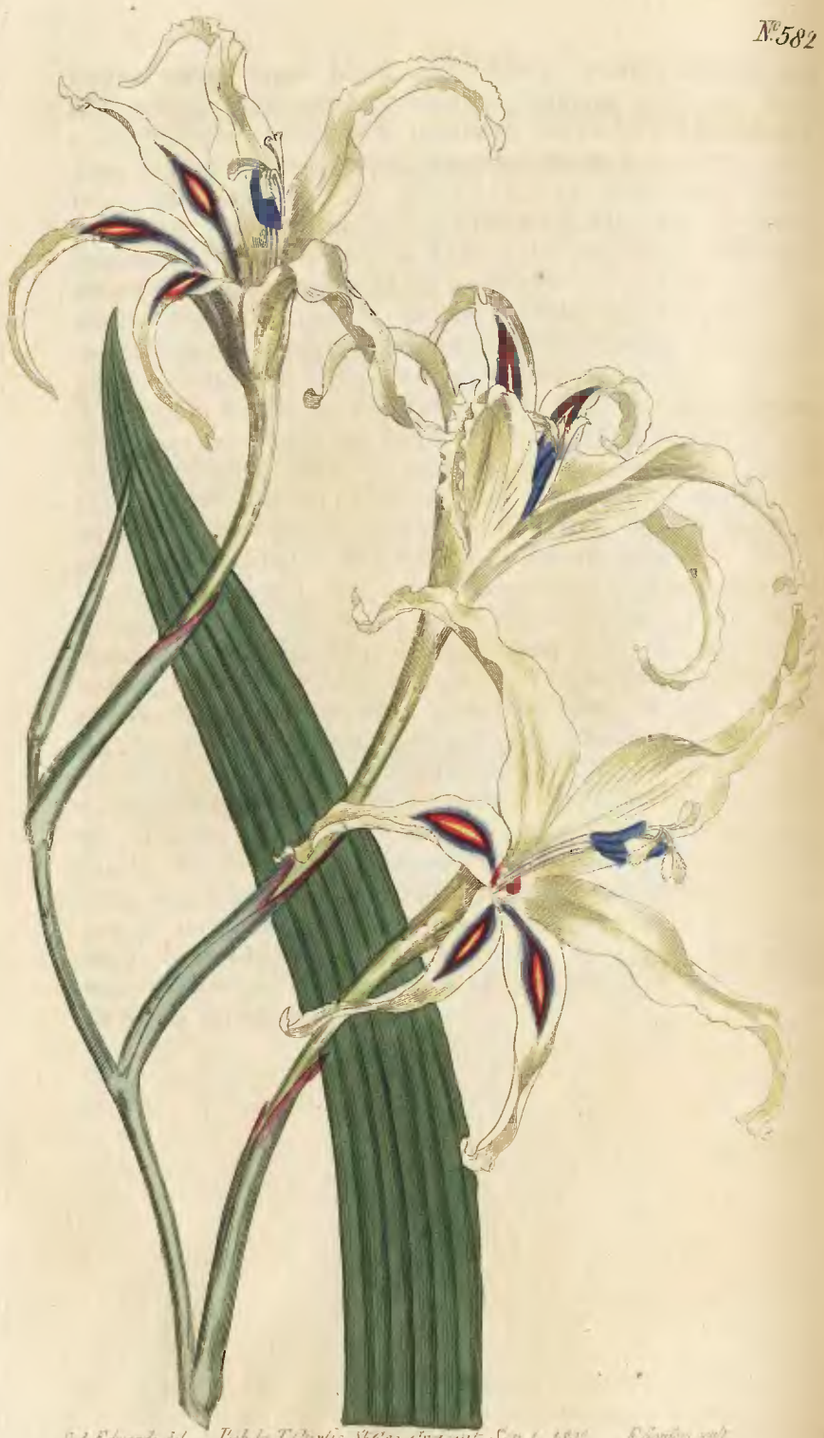
IXIA *lancea*. *Thunb. Diss. n.* 21.? *Prod.* 10.? *Syst. Vegetab. Murr.* 85.? *Syst. Nat. Gmel.* 110.? *Willd. Sp. Pl.* 1. 206.? Nec Jacquini.

IXIÆ *crocatæ* var. *Burm. Prod. Fl. cap.* 1. *Houtt. Linn. Pfl. Syst.* 11. 35.

IXIA *similis*. *Salisb. Prod. Hort.* 38. *n.* 28.

The present species, although too closely allied to TRITONIA (Ixia) *crocata*, No. 184, differs in having outer leaves

leaves rather more blunt and falcate, corolla ſmaller and leſs patent, veins more prominent, laminas narrower, more rounded, often retuſe and incurved, claws leſs hyaline; beſides in ſmelling very ſweet, whereas *crocata* is perfectly ſcentleſs. In the Hort. Kew. the TRITONIA (Gladiolus) *lineata*, Bot. Mag. No. 487, is made a variety of this; but upon what foundation we know not, as beſides the numerous differences above ground the habits of the bulbs are very diſtinct; in TRITONIA *lineata*, though it becomes effete, the bulb does not entirely periſh till the ſecond year after flowering, while in our plant it completely diſappears before the ſeed is ripe. DE LA ROCHE, in his *Deſcr. nov. plant n.* 13. *p.* 24. in a note on TRITONIA *crocata*, his IXIA *iridifolia*, declares himſelf at a loſs whether to allot it to IXIA or GLADIOLUS, notices the declined poſition of the parts of fructification and the curvature of the ſtamens, which he deſcribes by the word *ſigmoidea* (ſigmalike). We have founded the genus on the following deſcribed ſpecies, viz. IXIA *crocata*, *Linn. Bot. Mag. No.* 184. IXIA *feneſtrata*, *Jacq.* IXIA *miniata*, *Jacq.* IXIA *ſqualida*, *Hort. Kew.* IXIA *deuſta*, *Hort. Kew.* GLADIOLUS *lineatus*, *Saliſb.* (*Bot. Mag. No.* 487. IXIA *ſqualida* β. *Hort. Kew.*) GLADIOLUS *ſecuriger*, *Hort. Kew. Bot. Mag. No.* 383. GLADIOLUS *flavus*, *Hort. Kew.* GLADIOLUS *refractus*? *Jacq.* Name derived from *Triton*, in the ſignification of a vane or weathercock, in alluſion to the variable direction in the ſtamens of the different ſpecies. We have not adopted THUNBERG's trivial name of *lancea*, for although, taking circumſtances together, we have little doubt but this is his plant, yet the deſcription is far too vague to apply with certainty to any ſpecies. Flowers in May. Introduced by Mr. MASSON, in 1774. Our figure was drawn at the nurſery of Meſſrs. GRIMWOOD and WYKES, Kenſington. *G.*



GLADIOLUS CUSPIDATUS. TALL CORN FLAG.

Clafs and Order.

TRIANDRIA MONOGYNIA.

Generic Character.—Vid. No. 569.

Specific Character and Synonyms.

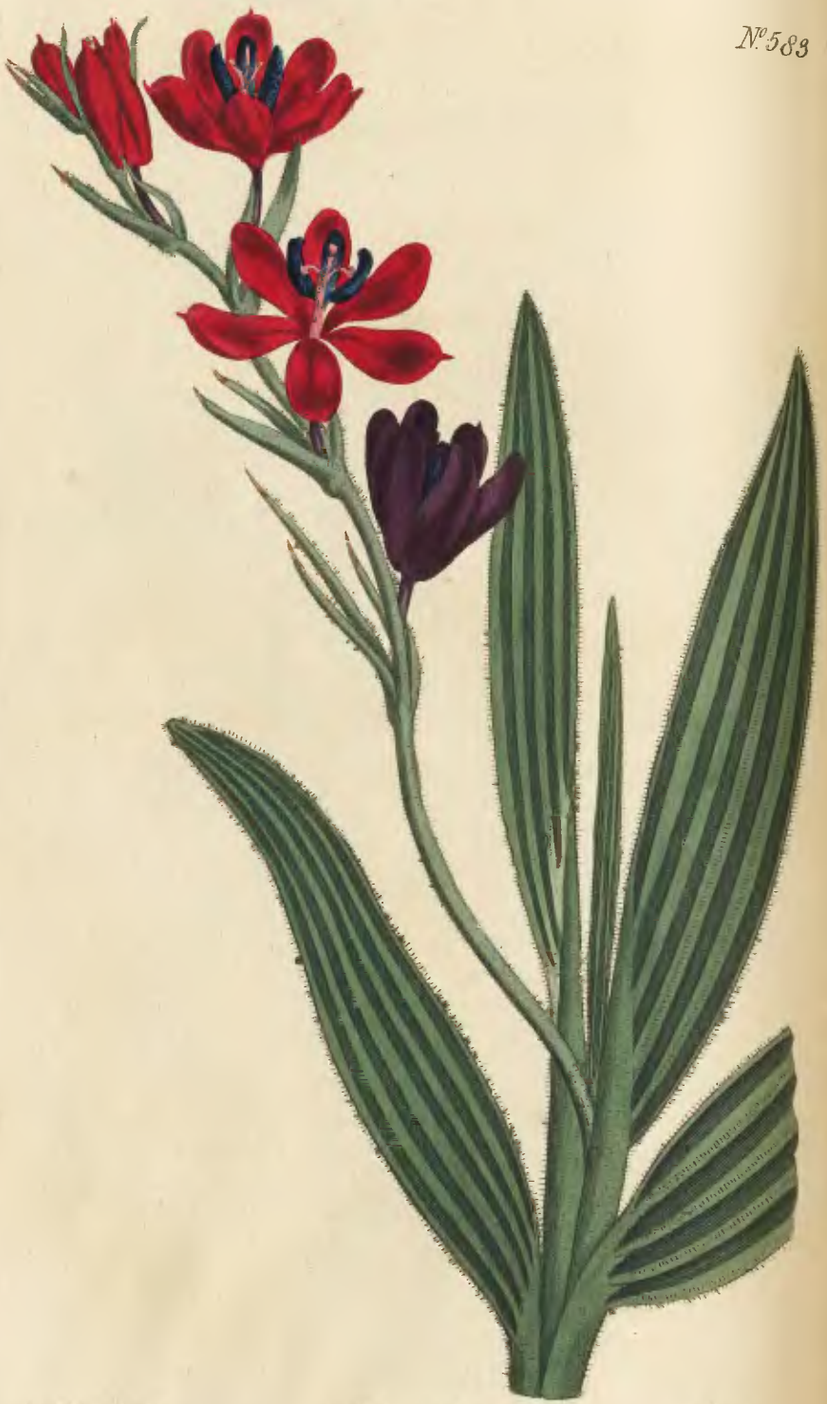
GLADIOLUS *cufpidatus;* corolla femiringenter-infundibuliformi; tubo filiformi fpatha limbove duplo longiore, laciniis longe attenuatis recurvis undulatis; infimis duplo anguftioribus. *G.*

GLADIOLUS *cufpidatus. Jacq. ic. rar.* 2. *t.* 257. *Coll. Suppl.* 17. *Willd. Sp. Pl.* 1. 210. *Bot. Rep. tab.* 219.

GLADIOLUS *undulatus. Linn. Mant.* 27. *Syft. Veg. Murr.* 86. *Reich.* 1. 101. *Houtt. Linn. Pft. Syft.* 11. 59. *Gmel. Syft. Nat.* 110. exclufo fynonymo.

GLADIOLUS *triftis.* var. (o) *haftatus,* corollis albo incarnatis macula haftata. *Thunb. Diff. de Glad.* 13.?

Leaves enfiform, generally fhorter than the ftem, and narrow in proportion to their height. Stem 2—3 feet high, erect, round. Tube filiform, ftraight, nearly twice the length of the fpathe, above which it is gradually enlarged into a faux; fegments lanceolate, far-attenuate, much fhorter than tube, and generally waved, upper ones broadeft, uppermoft nearly ftraight, recurved at the end. Flowers vary much in colour and in the form of the mark on the lower fegments, which is fometimes obfolete as well as the undulation. Our reafons for not having reftored LINNÆUS's fpecific name of *undulatus* to this fpecies may be feen No. 538 of this work, though we now wifh we had retained the trivial name of *auguftus,* given by THUNBERG for that, and LINNÆUS's for this.—— The latter, in his *Mantiffa,* fixes upon this fpecies as the link that unites Gladiolus and Ixia, which he would hardly have done had he feen the numerous fpecies that have been fince difcovered, many of which feem to approach much nearer to Ixia. This magnificent fpecies is a native of the Cape, flowers in May and June. Our drawing was taken from the collection of Meffrs. GRIMWOOD and WYKES, at Kenfington. Its time of introduction uncertain; but fince the publication of *Hort. Kew.* G.



Sydenham Edwards del. Pub. by T. Curtis, St. Geo. Crescent Sep. 1. 1800. F. Sansom sc.

BABIANA VILLOSA. CRIMSON BABIANA.

Class and Order.

TRIANDRIA MONOGYNIA.

Generic Character.—Vid. No. 576.

Specific Character and Synonyms.

BABIANA *villosa*; spatha tubo subæquata, corolla regulari: laciniis oblongis obtusis, stigmatibus linearibus antheras crassas majusculas subæquantibus. *G.*
IXIA *villosa*. *Hort. Kew.* 1. 58.
IXIA *punicea*. *Jacq. ic. rar.* 2. *t.* 287. *Coll. Suppl.* 12. *Willd. Sp. Pl.* 1. 198.
IXIA *flabelliformis*. *Salisb. Prod. Hort.* 37. *n.* 23.
GLADIOLI *plicati*. var. purpurea. *Thunb. Diss. n.* 24.

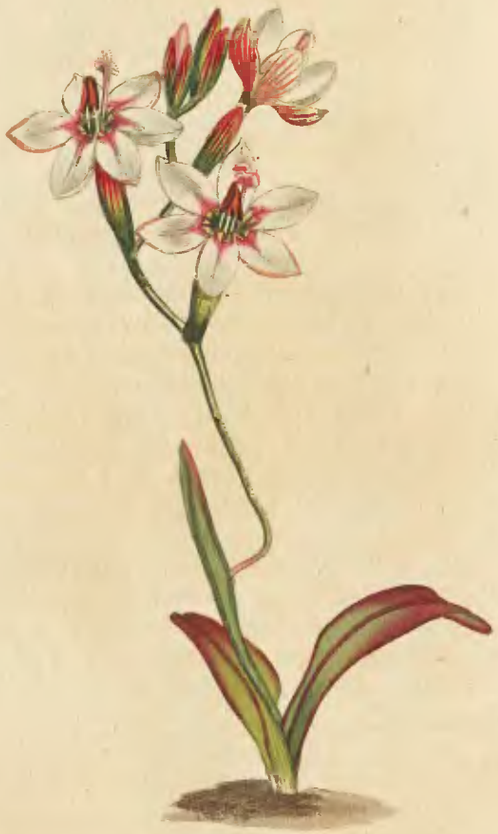
Stem declined. Flowers scentless. Outer segments of the corolla are traversed by a hairy subcarinate line on the outside, and terminated by a small mucro. Anthers deep violet or black, at first surrounding the stigmas, but ultimately inclining to a parallel front, though not ascendent.

Differs from BABIANA (IXIA) *rubro-cyanea*, No. 410 of this work, chiefly in not having the stigmas so broad and rounded, nor so markedly curled and fringed.—Are they really distinct species?

Our figure was taken at the nursery of Mr. COLVILLE, King's-Road.

Flowers in May. Introduced into Kew garden by Dr. PATRICK RUSSELL, in 1778.* *G.*

* Hort. Kew.



Ixia Excisa. Dwarf Ixia.

Clafs and Order.

Triandria Monogynia.

Generic Character.—Vid. No. 566.

Specific Character and Synonyms.

IXIA *excifa ;* rachi dichotomoideo-flexuofa, fpatha herbacea naviculari glaberrima; floribus remotiufculis erectiffimis: limbo rotato-patente; ftigmatibus revolutis fimbriato-pilofis antheras fupereminentibus. *G.*

IXIA *excifa. Thunb. Diff. n.* 24. *tab.* 1. *fig.* 4. *Prod.* 10. *Linn. Suppl.* 92 quoad varietatem fecundam, prior enim Gladiolum (nobis Lapeyroufiam) *junceum* fpectat. *Syft. Veg. Murr.* 85. *Gmel. Syft. Nat.* 110. *Willd. Sp. Pl.* 1. 207.

IXIA *ovata,* foliis radicalibus binis ovatis connatis, fcapo in fummitate inflexo. *Planta fefquipalmaris, foliolo ad fcapi divifuram oblongo, qui a flore ad florem inflectitur et inftar dichotomiæ adparet ; flores in fummitate albi et violacei. Burm. Fl. cap. Prod.*

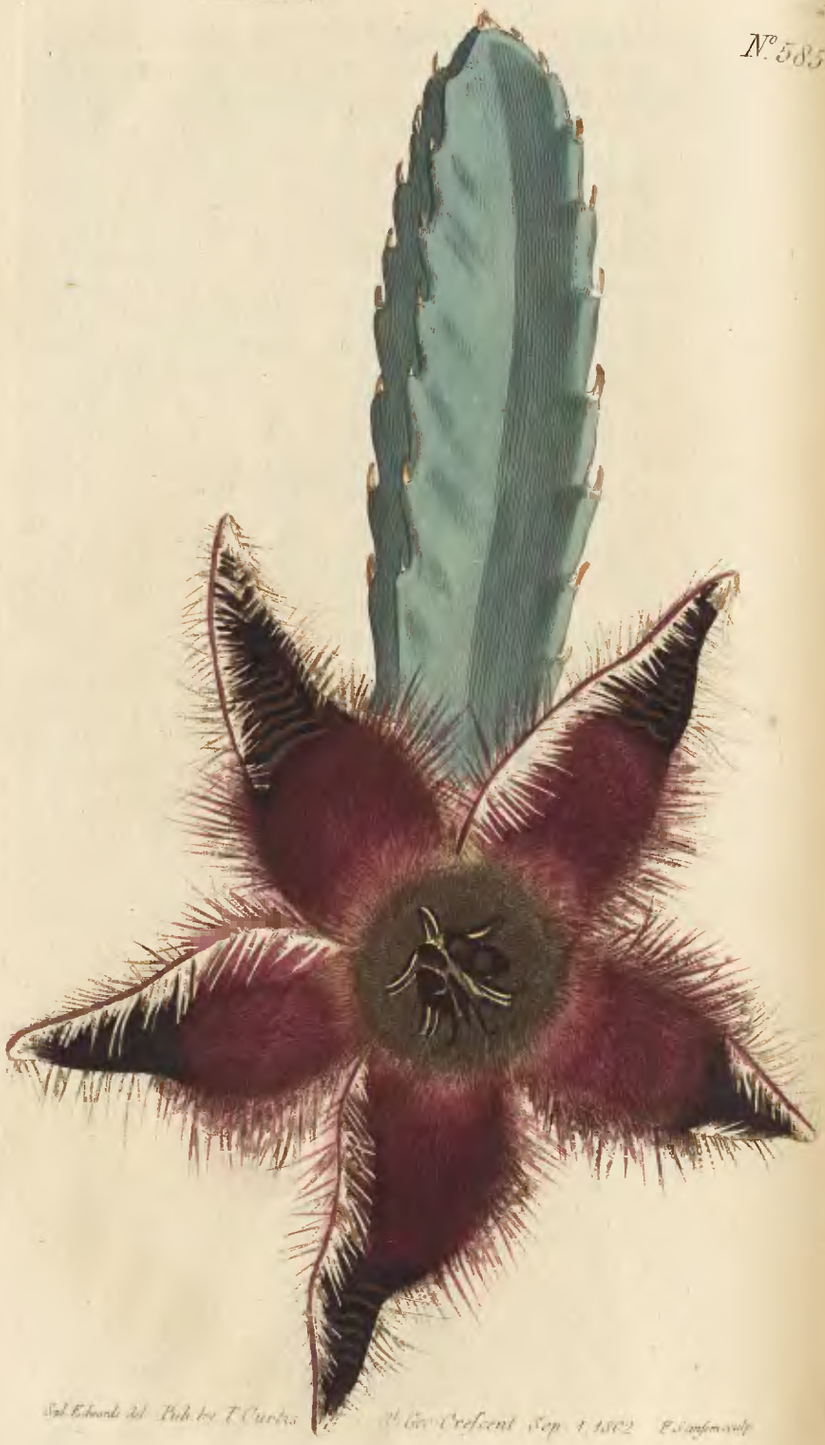
Bulb round, fmaller than a pea, tunic brown, hard, bafe obliquely femitruncate. Radical leaves two, three times fhorter than the ftem, narrow-ovate, fub-coriaceous, diftich, fubfalcate, very fmooth, rather fhining, with a flight excifion towards the bafe, and the middle nerve nearly obfolete. Stem ftiff, round, flexuofe, 2—4 inches long, generally with a cauline leaf. The fpike has the appearance of a dichotomous inflorefcence, owing to the rachis being ftrongly flexuofe and the flowers rifing ftraight from the angle of the bends or knees, feem as if each terminated a diftinct peduncle. Spathe fhorter than the tube, outer valve very fmooth, conduplicate, keeled, flightly bifid. Flowers 4—6, large in proportion to the bulb. Tube ftrict, thickifh, fleffy, obfoletely triquetral,

triquetral, longer than the ſegments, which are oblong, oval, ſlightly pointed, ſomewhat concave, nearly equal, white on the inſide, with a twin cinnamon-coloured ſtain at the baſe, on the outſide ſtreaked with the ſame coloured veins, the three outermoſt moſt ſo. Filaments erect, longer than the anthers, diſtinct or ſomewhat remote but not patent, forming a kind of open-work column; anthers ſagittate, upright, ſhort, brown. Style as long or longer than the ſtamens; ſtigmas revolute, hanging over the anthers, from complicate explanate, pubeſcently fringed, lucid. Expands about eight o'clock in the morning, and continues open as long as the ſun ſhines upon it. Quite ſcentleſs. The younger LINNÆUS ſeems to have confounded a variety of GLADIOLUS (our LAPEYROUSIA) *junceus* with it, as the latter variety only of the plant he deſcribes applies to our ſpecies.—Spathe and corolla bear a ſtrong *prima facie* reſemblance to IXIA *falcata*. Found by THUNBERG on the hills round Cape-Town; his figure is characteriſtic.

Our drawing was taken at the garden of GEORGE HIBBERT, Eſq. Clapham (by whom it was introduced) where alone, we believe, it is to be found in this country.

Our ſpecimen agrees in ſize with the many dried ſpontaneous ones we have ſeen, and does not appear to have been the leaſt altered by cultivation. Propagates by offsets with the uſual facility of its congeners, by which they will all ſoon become very common, eſpecially as they are of ſuch eaſy culture.

Flowers in April and May. *G.*



STAPELIA GRANDIFLORA. GREAT-FLOWERED STAPELIA.

Class and Order.

PENTANDRIA DIGYNIA.

Generic Character.

Contorta. *Nect.* duplici ſtellula tegente genitalia.

Specific Character and Synonyms.

STAPELIA *grandiflora*; ramis quadrangularibus clavatis: angulis dentatatis: dentibus remotis incurvatis, corolla magna plana quinquefida: laciniis lanceolatis acutis margine ciliatis. *Maſſon. Stap. p.* 13. *n.* 11. *t.* 11.

STAPELIA *grandiflora. Willd. Sp. Pl.* 1. 1278.

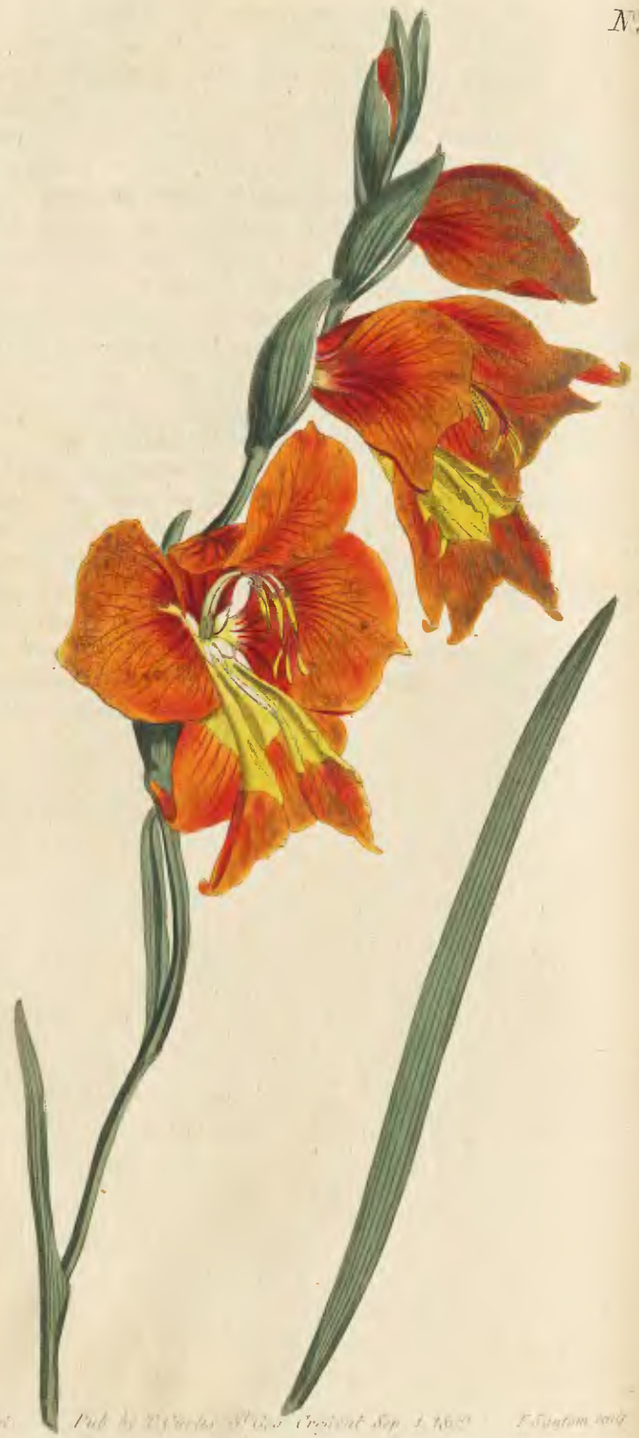
This STAPELIA has the largeſt flowers of any of the whole genus, the corolla meaſuring, when fully expanded, in the ſpecimen from which our drawing was taken, ſix inches in diameter, and is equally offenſive to the ſmell as any of its congeners. More nearly allied to STAPELIA *hirſuta* than to any other; but beſides a conſiderable difference in the branches, is diſtinguiſhed by ſegments more acute and covered with hairs to a greater extent; not only the centre of the flower, as in *hirſuta*, but more than half the ſegments, being thickly clothed with a felt of fine ſoft ſilky hairs of a reddiſh purple colour. The tips of the flower are of a very black purple colour and naked, except the fringe on the edge, which alſo ſurrounds the reſt of the flower,

flower, and confists of very long white silky hairs, growing from a narrow margin in one rank, but alternately reclining in different directions, chiefly distichwise; whereas in *hirsuta*, the ciliæ grow on a broader margin, constituting a thicker but much shorter fringe. The parts of fructification, which vary so much in the different species, though sufficiently different in form to mark a distinct species, are very similar to those of *hirsuta*, well figured and described by JACQUIN in his *Miscellanea Austriaca, tom.* 1. *p.* 28. *tab.* 3. We are however by no means convinced that the APOCINEÆ *Juss.* to which order Stapelia belongs, should be referred to the class decandria, but consider them rather as having five two-lobed anthers, with the lobes distinct; we would therefore retain them in the class pentandria for just the same reason that Prof. SWARTZ has considered the Orchideæ to be really monandrous, though arranged by LINNÆUS as diandrous.

Culture the same as for the rest of the genus, see No. 536. It does not flower so readily as many of the others, the buds being very apt to die off, even when far advanced.

Found by MASSON at the Cape of Good Hope, near Sondags Rivier.

Our drawing was taken in December, from a specimen communicated by Mr. LODDIGES, Nurseryman at Hackney, who has a large collection of Stapeliæ.



GLADIOLUS ALATUS. WING-FLOWERED CORNFLAG.

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Clafs and Order.

TRIANDRIA MONOGYNIA.

Generic Character.—Vid. No. 569.

Specific Character and Synonyms.

GLADIOLUS *alatus;* foliis rigidis denfe ftriatulis, fpathis fubventricofis decurrentibus, corollæ lacinia fuprema cuneato-lanceolata plana erecto-recurva: lateralibus latiffimis ovato-rhombeis: infima fpatulato-rhombea. *G.*

GLADIOLUS *alatus. Sp. Pl.* 53. *Amæn. Acad.* 6. *Afr.* 2. *(excluſo ſynonymo Pluken.) Thunb. Diff. n.* 15. *var.* 3. Nec GLADIOLUS *alatus* Hort. Kew. aut Jacq. ic. rar. vel coll.

GLADIOLUS flore fingulari miniato, inferioribus laciniis luteo-viridibus. *Breyn. Prod. p.* 25. *t.* 12. *f.* 2. *Seb. Thef.* 1. *t.* 7. *f.* 3.

GLADIOLUS. *Herb. Gronov. apud Herb. Bankf.*

GLADIOLUS *galeatus. Burm. Prod. cap.* 2. ?

GLADIOLUS *alatus. Bot. Rep. tab.* 8. *ejufque Recenf. No.* 14.

Bulb round, compreffed. Leaves 3—4, enfiform-linear, ftiff, fomewhat coriaceous, outermoft one bluntifh, nearly equal with the fcape, twice the length of the others, all without a chief or middle nerve, ftreaked with clofe parallel fine furrows. Stem 6—8 inches high, upright, flexuofe, femiancipital. Spathe much longer than tube, exterior valve ventricofely-concave, fomewhat keeled, ftem-embracing, decurrent, the margins of which projecting fomewhat beyond the ftem give it fomething the appearance of being winged. Flowers 5—10, divaricately ringent, patent. Tube fhort, turbinate,

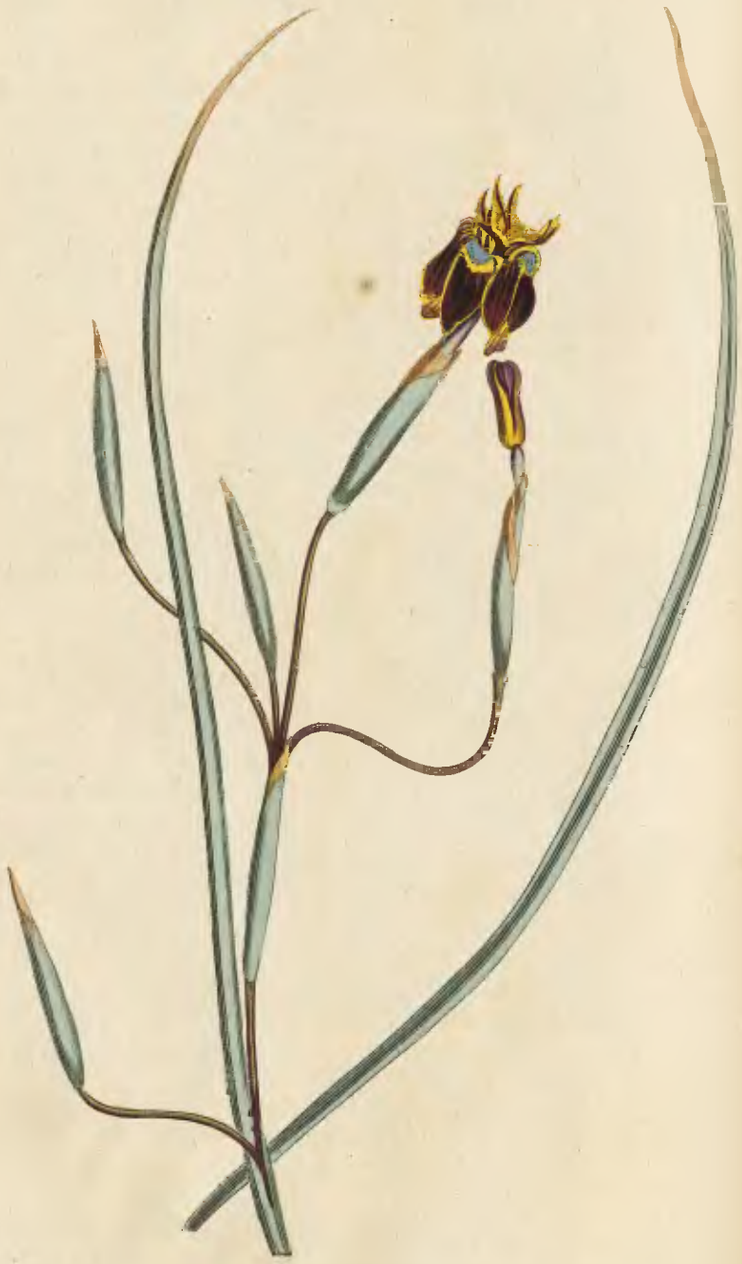
turbinate, ſegments equal in length, uppermoſt one twice narrower than its lateral ones, lower ones narrower, far-attenuate downwards or clawed. Parts of fructification nearly of one length, arched-adſcendent. Filaments flattened. Flowers ſmell like ſweet-briar. Being the GLADIOLUS *alatus* of *Sp. Pl.* and *Amæn. Acad.* we have retained the ſpecific name, though not the plant of *Hort. Kew.* or *Jacquin*, for which we intend the name of *viperatus*, that being the "*Siſyrinchium viperatum*" of PLUKENET, and mottled in the manner and ſomething the colour of a viper's head; of this we have never yet been able to obtain a live ſpecimen, but have ſeen a beautiful drawing of it by Mr. BAUER, in the Bankſian library, from a plant that flowered in the Kew garden ſome years ago; as likewiſe many dried ſpecimens*. THUNBERG has united under the GLADIOLUS *alatus* three very diſtinct ſpecies, viz. 1ſt. GLADIOLUS *galeatus*, *Jacq.* 2dly. GLADIOLUS *alatus*, *Hort. Kew.* and *Jacq. our viperatus.* 3dly, The preſent plant; which three ſpecies, together with GLADIOLUS *permeabilis*, *De La Roche*; GLADIOLUS *namaquenſis*, *Bot. Rep. t.* 122, and GLADIOLUS *viridis*, *Hort. Kew. add.* form a very ſingular and diſtinct ſection in this genus, agreeing in having the parts of fructification very much arched, the upper lateral ſegments of a more or leſs rhomboidal form, very patent, and broad; and, though they differ materially in other points, have a ſtriking reſemblance in the form of their corollas.

Our figure was taken at Mr. COLVILLE's Nurſery, in the King's-Road, Chelſea (with whom it bloſſoms in May) from a ſpecimen, the flowers of which were unuſually luxuriant.

Found by THUNBERG in many ſpots at the Cape of Good Hope, where it ſeems to be very common. It is among the moſt beautiful of the tribe; and, though not uncommon in different collections, is ſeldom ſeen in flower, the reaſon perhaps of its not appearing in *Hort. Kew.* for there is ſcarcely an arrival of Cape bulbs that does not contain ſome of the roots. Propagates very eaſily by ſeed and offsets. We have not yet learnt the mode of inſuring its flowering, but apprehend it requires rather more heat than many of the genus.

We preſume the ſpecific name was ſuggeſted by the extended wing-like appearance of the upper lateral ſegments of the corolla; ſcarcely from the ſomewhat winged appearance of the ſtem? *G.*

* Since this was written, we are happy to learn from a figure in the Botaniſt's Repoſitory for laſt month (ſee GLADIOLUS *orchidiflorus*, pl. 241) that the country is ſtill in poſſeſſion of this rare plant through the collection of GEORGE HIBBERT, Eſq. where it flowered in March laſt.



S. Edwards del. Pub. by W. Curtis St. Geo. Crescent Sept. 1. 1802.

Iris Viscaria. Bird-Limed Flag.

Clafs and Order.

Triandria Monogynia.

Generic Character.

Cor. 6-partita: petalis alternis reflexis. *Stigmata* petaliformia.

Specific Character and Synonyms.

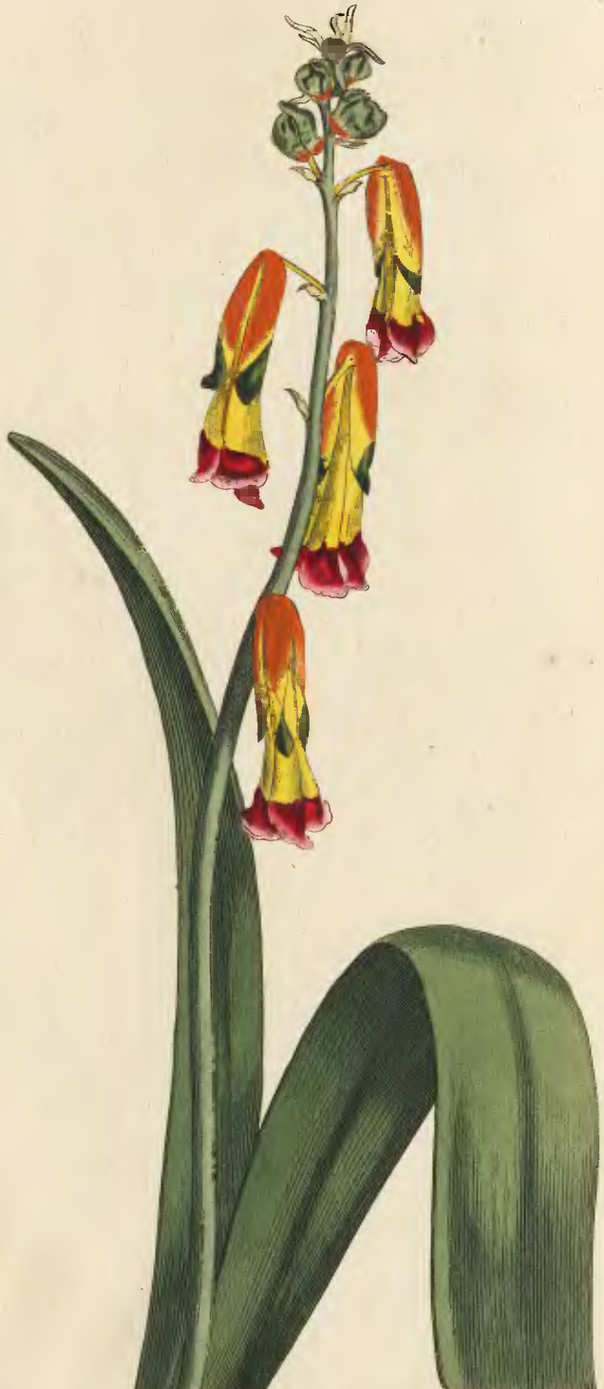
IRIS *vifcaria* (imberbis) foliis linearibus rectiufculis caule terete rigido vifcofo fubcandelabri formiter polyftachio, corollæ laciniis retroflexis ovato-oblongis acutulis, ftigmatibus ferratis. *G.*

IRIS *vifcaria*; imberbis, foliis linearibus planis, fcapo vifcofo. *Thunb. Diff.* 41. *Prod.* 12. *Willd. Sp. Pl. v.* 1. *p.* 239.

IRIS *vifcaria*; corollis imberbibus foliis linearibus planis, petalis patentibus caule vifcofo. *Linn. Suppl.* 98.

Root bulbous. Stem about a foot high, wiry, fmeared with a coat of yellowifh brown gluten of a very tenacious quality, enfnaring all fmaller infects that happen to touch it; culmaceous, each joint embraced by an involucre, from which iffue 3—4 fimple branches arranged in the manner of thofe of a chandelier, fimilar to the ftem and fmeared with the fame vifcid exudation, of which no other part of the plant poffeffes the fmalleft particle. Leaves longer than the ftem, ftriated on the outfide. Stigmas campanulately arranged, inner lips divaricately bifid. Clofely allied to Iris *bituminofa*, but eafily diftinguifhed from it by not having the root-leaf fpirally rolled; is alfo a much fmaller plant.

Found at the Cape, by Thunberg, in the fandy fpots of Saldanha-Bay, near Lofper's-Farm. Introduced amongft us by Edward Woodford, Efq. Vauxhall, where our figure was taken in the month of June 1801. *G.*



Syd. Edwards del. Pub. by T. Curtis, St. Geo. Crescent Sep. 1 1802 F. Sansom sculp.

LACHENALIA QUADRICOLOR. FOUR-COLOURED LACHENALIA.

****

Class and Order.

HEXANDRIA MONOGYNIA.

Generic Character.

Cor. 6-partita: Petala 3-exteriora difformia. *Capf.* 3-alata: loculamenta polyſperma. *Sem.* globoſa receptaculo affixa.

Specific Character and Synonyms.

LACHENALIA *quadricolor;* foliis binis lineari lanceolatis canaliculatis furſum explanatis, floribus diſtantibus pedunculatis pendulis: petalis exterioribus dimidio brevioribus.

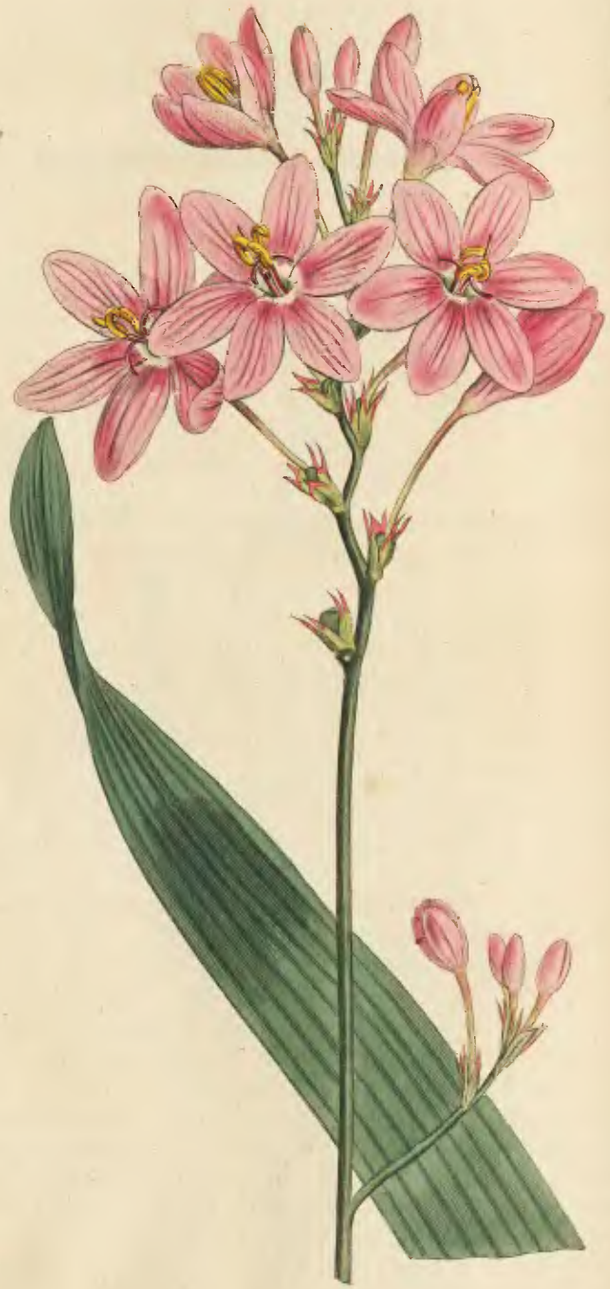
LACHENALIA *quadricolor. Jacq. Icon. rar.* 2. *t.* 388. *Andr. Bot. Rep. Pl.* 148.

LACHENALIA *pendula* β. *Willd. Sp. Pl. tom.* 1. *p.* 181.

We have no heſitation in pronouncing this to be a very diſtinct ſpecies from LACHENALIA *pendula*, of which WILLDENOW conſiders it only a variety. It appears indeed to us to have greater affinity with LACHENALIA *tricolor*, though ſufficiently different from that alſo. The flowers chiefly differ from thoſe of *pendula*, in having longer peduncles, the outer petals much ſhorter, and the inner more ſpreading at the mouth; they are alſo more diſtant, growing alternately on the ſcape, which is weaker. The leaves are much longer, narrower, and more channelled, one of them longer than the other, and, as JACQUIN remarks, erect at firſt, but reclined from above the middle; they come out from the bulb fiſtular and ſplit open as they advance, and thoſe of the young offsets not opening at all, have very much the appearance of a different plant growing in the ſame pot.

In brilliancy of colours it far excels all its congeners.

Our drawing was taken at Mr. WOODFORD's, Vauxhall, where it flowered the firſt time in February 1801, from bulbs imported from the Cape the preceding year.



Syd Edwards del. Pub. by T. Curtis, St. Geo: Crescent Oct. 1. 1802. E. Sansom sculp.

IXIA ARISTATA. SALVER-FLOWERED IXIA.

Clafs and Order.

TRIANDRIA MONOGYNIA.

Generic Character.—Vid. Num. 549.

Specific Character and Synonyms.

IXIA *ariftata;* fpica fubthyrfiformi, fpatha tubo 3—4plo breviori ariftato-dentata, laciniis rotato-complanatis oblongis longitudine tubi, ftaminibus erectis piftillo fubæqualibus. *G.*

IXIA *ariftata. Thunb. Diff. n.* 15. *prod.* 9. *Syft. Veg. Murr.* 85. *Gmel. Syft. Nat.* 109. Nec vero Hort. Kew. aut Willd. Sp. Pl.

IXIA *patens. Herb. Bankf.* quoad fpecimen fpontaneum capenfe.

Leaves four, enfiform, nerved, acuminate, with a filiform cartilaginous margin: midrib prominent, inner leaf fheathing the ftem nearly its whole length. Stem from a foot to two feet high, ftrict, round, fomewhat compreffed downwards, fimple, or with two or three fhort patent branches. Spike fomewhat fcattered, with from five to nine flowers. Nearly allied to IXIA *patens* and *flexuofa*, but a far more robuft plant; fegments quite flat, rotate, and blunter; fpathe more dentate, lefs membranous, and the parts of fructification more erect and collected. Scentlefs. Flowers in May. The fpecific name was undoubtedly fuggefted to THUNBERG by the fpathes, which however he defcribes as "*ariftato-dentatæ;*" and we guefs that the inappropriate application of the word "*ariftata*" was in fome meafure the caufe of the miftake in *Hort. Kew.* where SPARAXIS *grandiflora* (IXIA *grandiflora, Bot. Mag. No.* 541, and IXIA *bulbifera, var. purpurea, Thunb.*) is taken for

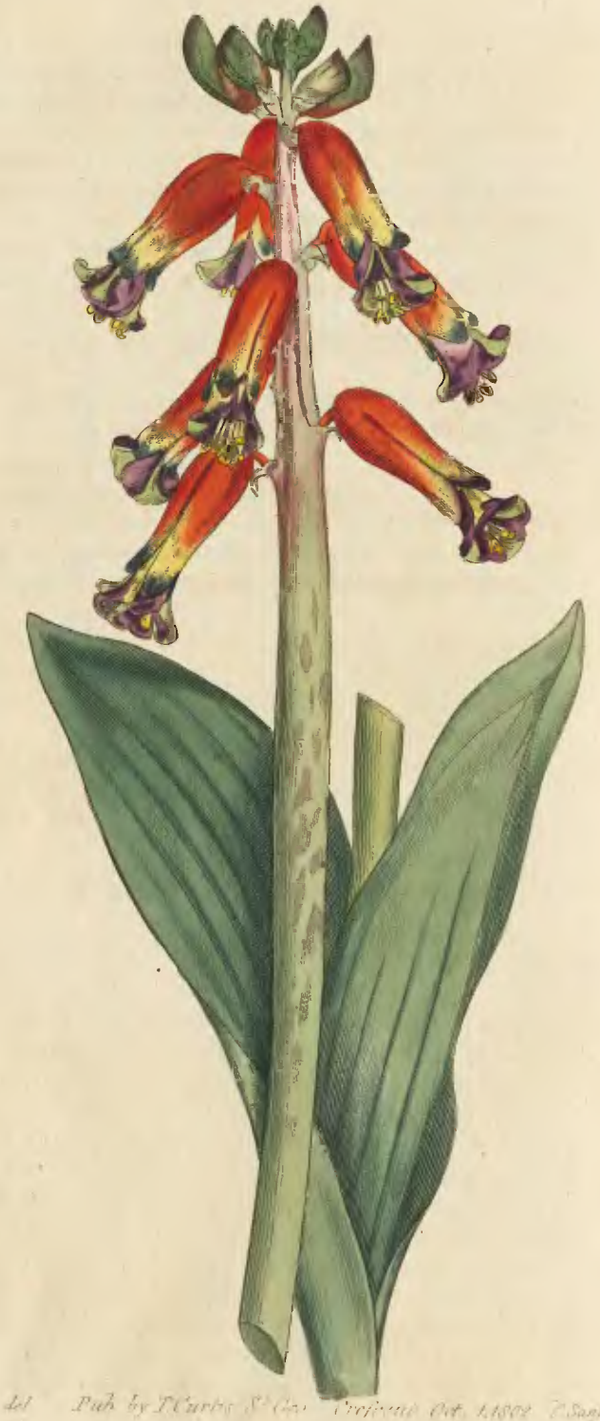
for the prefent ſpecies. When a weakly plant, it bears a ſtrong *prima facie* reſemblance to IXIA *capillaris, var.* γ. but differs in the ſpathe and tube.

In the Bankſian Herbarium we find a Cape ſpecimen of this plant, marked IXIA *patens,* placed as a ſynonym by the ſide of the one from Kew Gardens, from which the deſcription of that ſpecies was taken by Dr. SOLANDER. In fact, the ſeveral intermediate varieties we have ſeen, lead us to ſuſpect, that IXIA *patens, flexuoſa,* and *ariſtata,* can ſcarcely be retained as diſtinct ſpecies.

Our drawing was taken at the nurſery of Meſſrs. GRIMWOOD and WYKES, Kenſington.

Found by THUNBERG, at the Cape, growing in moiſt ſandy places. Is very impatient of drought, and ſhould be ſet in a pan of water when near flowering. Varies with white, pale pink, and purple-roſe-coloured flowers.

The IXIA *leucantha* of JACQUIN is a variety of IXIA *patens,* agreeing with that in proportion of the limb to the tube, but approaching this in ſize and robuſtneſs of growth. *G.*



LACHENALIA PENDULA. PENDULOUS LACHENALIA.

Clafs and Order.

HEXANDRIA MONOGYNIA.

Generic Character.

Cor. 6-partita. *Petala* 3 exteriora difformia. *Capf.* 3-alata: loculamenta polyfperma. *Sem.* globofa receptaculo affixa.

Specific Character and Synonyms.

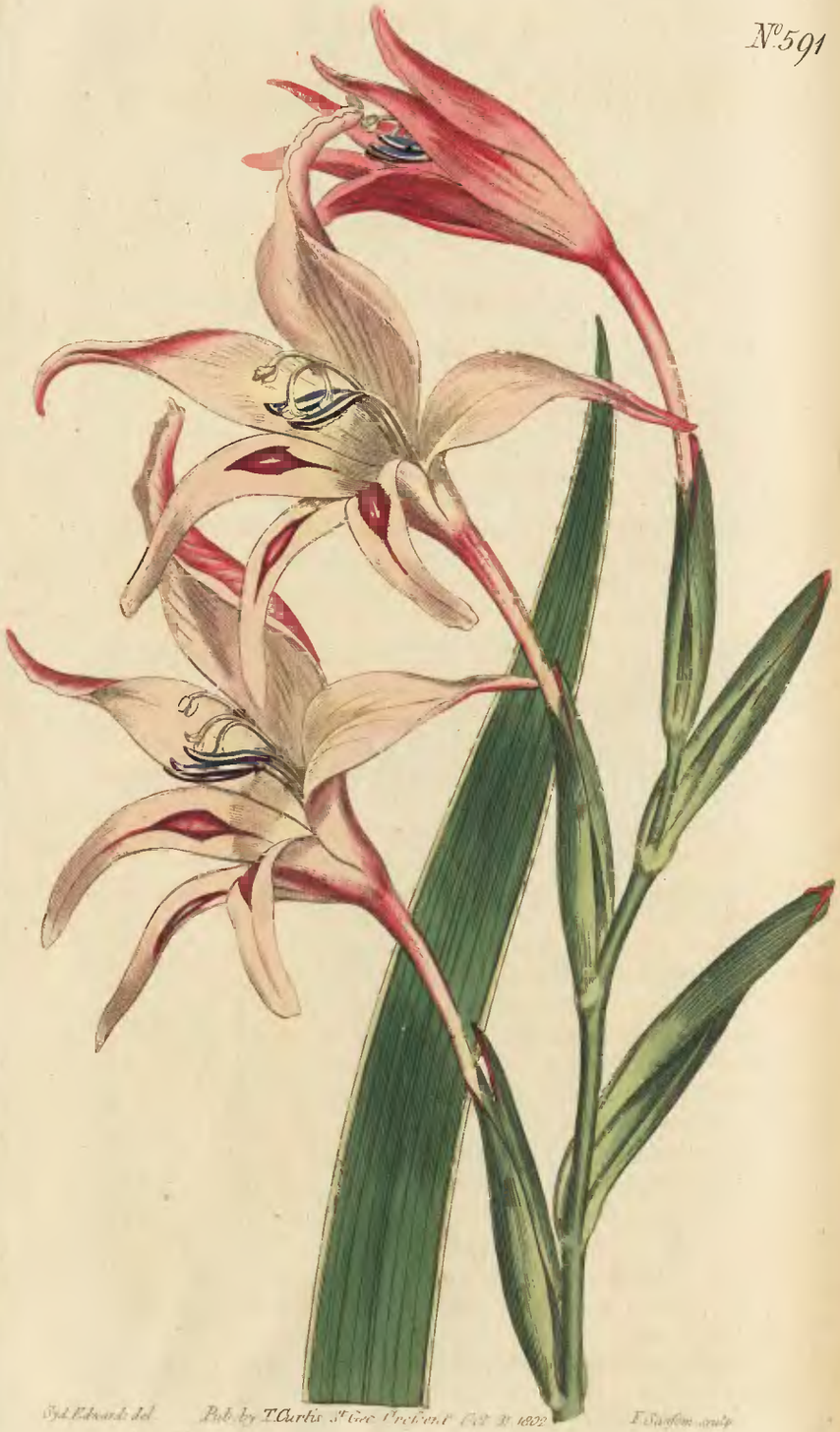
LACHENALIA *pendula;* foliis binis ovato-lanceolatis erectis, corollis cylindraceis cernuis breviter pedunculatis: petalis externis parum brevioribus, fpica compactiori.

LACHENALIA *pendula. Willd. Sp. Pl. t.* 2. *p.* 180. *Hort. Kew.* 1. *p.* 461. *Thunb. prod.* 64. *Jacq. ic. rar.* 2. *t.* 400. *Collect.* 3. *p.* 239. *Bot. Repof. pl.* 41. *Ejufque Recenf.* 62.

PHORMIUM *bulbiferum. Cyrilli Neap. fafc.* 1. *p.* 35. *t.* 12.

Though fomewhat lefs brilliant in the colour of its flowers than the *quadricolor,* No. 588, this fpecies, from its more compact growth, forms a no lefs defirable plant. Flowers in April and May. Propagates eafily by offsets from its bulbs. We are told in *Hort. Kew.* that it was introduced into the royal collection by Mr. MASSON, in 1774; but fince this time it has been frequently imported both from Holland and immediately from the Cape. Our figure was drawn from a fpecimen in the collection of EDWARD WOODFORD, Efq. at Vauxhall.

In JACQUIN's figure the colours are not exactly the fame as ours, and the whole plant is more flender. We were favoured, by Mr. WILLIAMS, of Turnham-Green, with a fpecimen more refembling this of JACQUIN's, which we fuppofe to be a mere variety of our plant.



GLADIOLUS CARNEUS. FLESH-COLOURED CORNFLAG.

Class and Order.

TRIANDRIA MONOGYNIA.

Generic Character.—Vid. Nos. 538 & 562.

Specific Character and Synonyms.

GLADIOLUS *carneus;* ſpica diſticha, tubo curvato ſpatha longiore, laciniis nutantibus compreſſo-ringentibus; lateralibus ſuperioribus divaricato-patentibus recurvis acuminatis: infima anguſtiſſima. *G.*

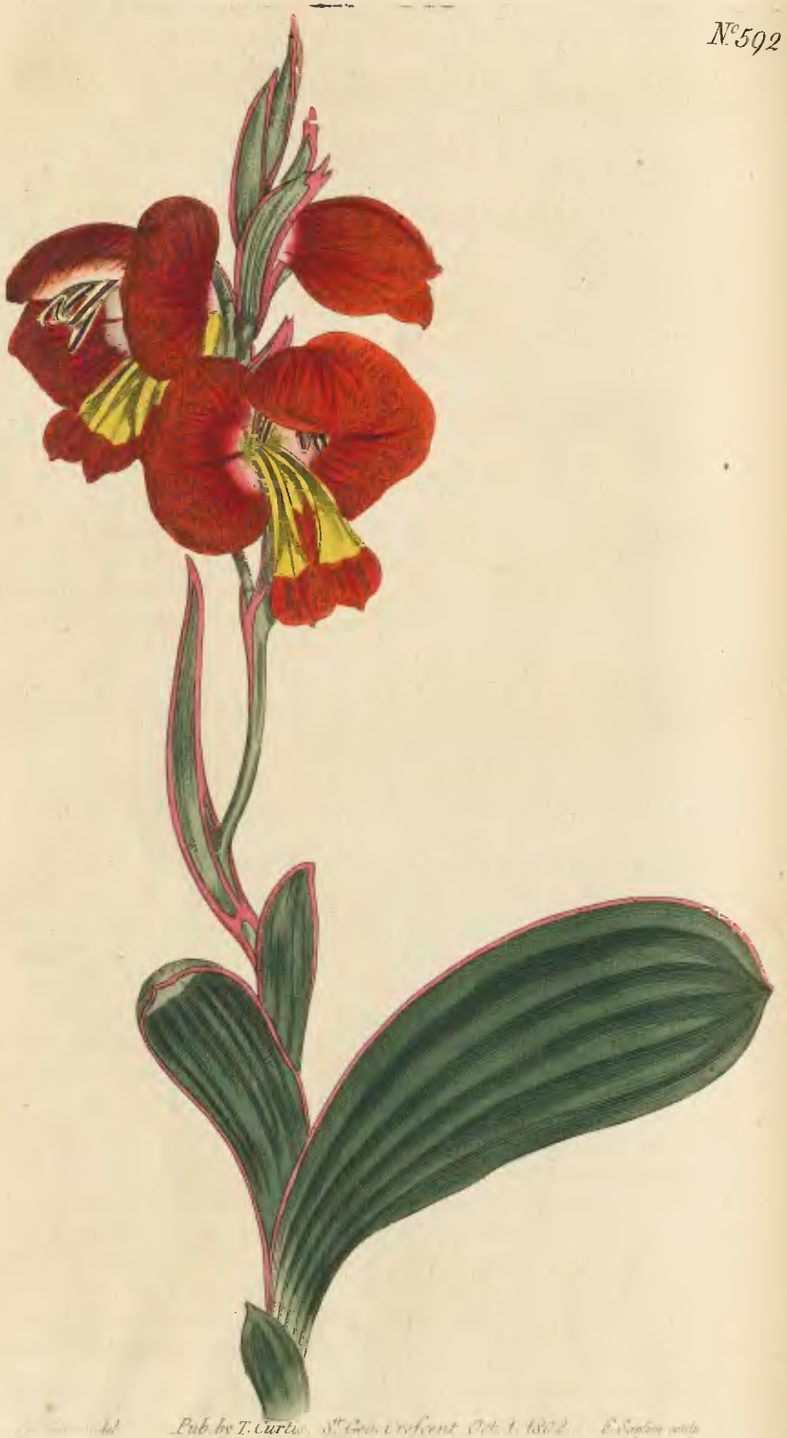
GLADIOLUS *carneus. Jacq. ic. rar. t.* 255. *Willd. Sp. Pl.* 1. 213. cæteris excluſis ſynonymis.

GLADIOLUS *cuſpidatus. Bot. Rep. tab.* 147.

Leaves enſiform, nerved, ſheathing at the baſe, ſhorter than the ſtem, edged with a ſlender white filiform cartilage. Stem 1—2 feet high. Flowers 3—5, narrow funnel-form below the ſegments. Upper ſegment broadeſt, lanceolate, concave, acuminate, convolute above, where it is alſo recurved and ſometimes ſlightly undulate; the three loweſt narrower, nearly linear, loweſt ſtraighter, narroweſt. Differs from GLADIOLUS *cuſpidatus* beſides in colour and in being leſs waved, in having its ſpathes more inflated and not ſo convolute, ſpike more decidedly diſtich, flowers not ſo upright, tube ſhorter, more curved, leſs filiform; ſegments proportionably longer, being nearly the length of the tube, leaves more conſpicuouſly margined.

Native of the Cape. Flowers in May and June, earlier than GLADIOLUS *cuſpidatus*. Scentleſs; blows freely, and is eaſily propagated either by ſeed or offsets. The ſpike being too large for our page, one rank of its flowers was neceſſarily omitted, leaving the ſpathes to ſhew the diſtich character of the inflorescence.

Our drawing was taken at Meſſrs. GRIMWOOD and WYKES's, Kenſington. *G.*



Pub. by T. Curtis, St. Geo. Crescent Oct. 1. 1802.

GLADIOLUS NAMAQUENSIS. THICK-LEAVED CORNFLAG.

Clafs and Order.

TRIANDRIA MONOGYNIA.

Generic Character.—Vid. N°s. 538 & 562.

Specific Character and Synonyms.

GLADIOLUS *namaquenfis*, foliis coriaceis oblongiufculis: margine craffa, lacinia fuprema fornicato-concava: lateralibus rhombeo-ovatis planis extenfo-patentibus: infimis conniventibus unguibus convolutis. *G.*

GLADIOLUS. *Herb. Bankf.*

GLADIOLUS *galeatus*. *Bot. Rep.* 122. *Ejufque Recenf.* 15. (exclufis fynonymis).

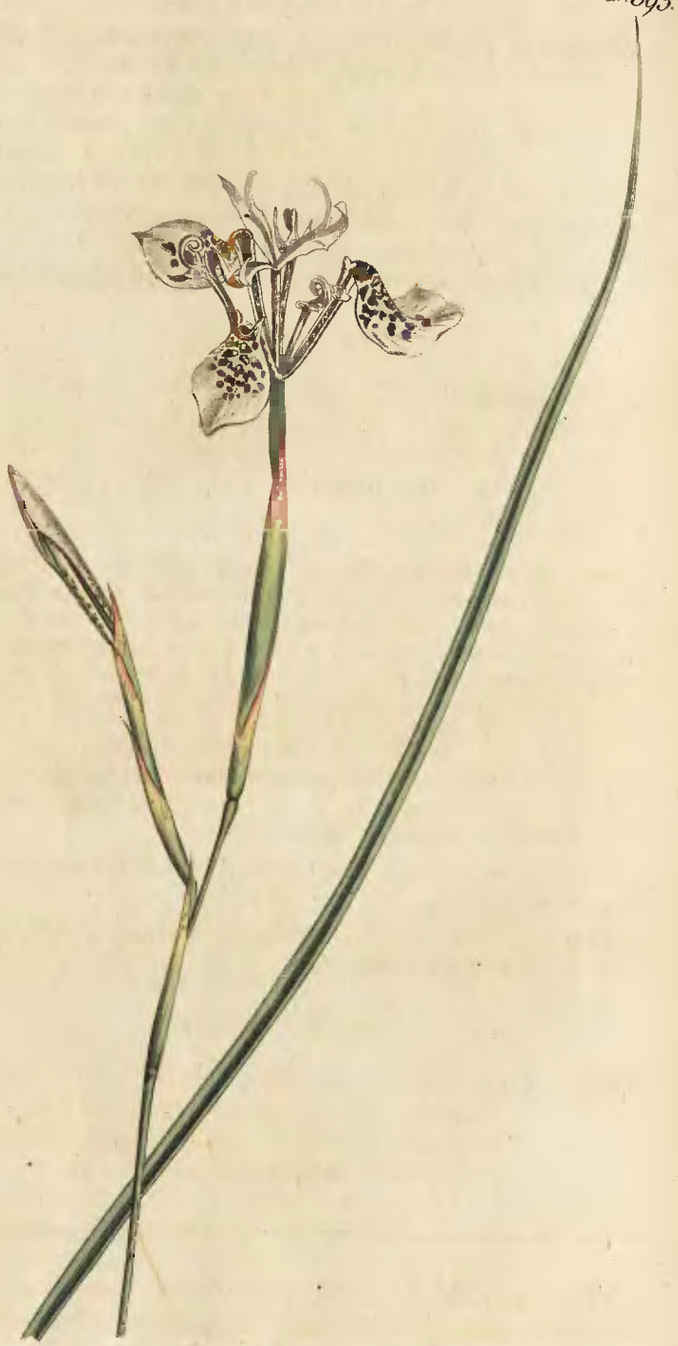
Bulb round, flightly compreffed, refembling that of GLADIOLUS *alatus*. Leaves four, coriaceous; inner ones gradually fhorter, narrower, farther fheathing; outer one oblong; fubacute, attenuated into a kind of broad petiole, ftreaked with 10—15 equidiftant, parallel, not prominent ribs, and furrounded by a thick, brownifh, cartilaginous border, in the manner of WATSONIA *marginata*. Stem from fix inches to a foot high, bluntly triquetral, flexuofe, longer than the leaves, with a fpathe-form decurrent leaf. Flowers 3—12, nodding, large, fhewy, fmelling like violets or orris root, expanding about May. Spathe much longer than the tube, outer valve fubventricofe, fubdecurrent. Corolla ringent: tube with the faux turbinate and very fhort; upper fegment oval-lanceolate; fide ones fhortly acute, flat, and fpreading; lower ones connivent, propendent, unguiculate, lateral ones narroweft, cuneate, fubacute, with convolute claws, loweft oval, broader than its lateral ones. Parts of fructification arched-adfcendent, fhorter than fegments.

The

The Bankſian Herbarium contains a well-preſerved indigenous ſpecimen (nearly twice the ſize of the preſent) brought over by Mr. MASSON; here we learn that it is a native of that part of South Africa, called Namaqua-Land, a conſiderable diſtance from the Cape.

A free blower, and propagates with facility both by ſeed and offsets.

Introduced by Mr. NEVIN into the garden of Mr. Alderman HIBBERT, a Gentleman whoſe munificence and urbanity leave to no lover of ſcience a regret that ſo extenſive and invaluable a collection ſhould be the property of a private individual. *G.*



Jos. Edwards del. Pub. by J. Curtis St. Gs. Crch. ent. Oct. 1 1802 F. Sansom sculp.

MORÆA UNGUICULATA. LONG-CLAWED MORÆA.

****

Class and Order.

TRIANDRIA MONOGYNIA.

Generic Character.

Cor. hexapetaloidea, 6-partita, subæqualiter patens laciniis basi parum concretis. *Antheræ* stigmatibus petaliformibus vel subpetaliformibus bifidis accumbentes. *Caps.* oblonga obsolete trigona. *Sem.* numerosa. G. VIEUSSEUXIA *de la Roche, Descr.* 31.

OBS. *Radix bulbus farinaceus rotundus putamine fibroso paralleliter multi-rimoso inclusus. Folia pauca, sæpius unicum, fistulosa a caule supra longitudinaliter fissa, canaliculato-dehiscentia, cuspide terete stricta terminata. Caulis culmaceus teres polystachius ad nodos foliolo spathæformi involucratus, rami vel pedunculi axillares et terminales rarius unicus. Flores pedicellati bracteis inclusis discreti, successive prodeuntes involucro spathaceo fasciati. Corolla fugax involuto-marcescens (semperne?) laciniæ geniculatæ unguibus suberectis vel subrotatæ genubus et unguibus obsoletis, 3 interiores modo sed rarissime desunt. Filamenta vel basi tantum vel medio tenus vel omnino cuniculato-connata. Stigmata in nonnullis imminuta vix petaliformia at nunquam non fissa. Quandoque sterilescunt pedicelli.* G.

Ab IRIDI *(præterquam habitu) laciniis haud in tubum connatis apprime distinguenda.* G.

MORÆA *cærulea, spiralis (Bot. Mag.) melaleuca, et pusilla ad* ARISTEAM *revocandæ.* G.

Specific Character.

MORÆA *unguiculata*; imberbis, laminis interioribus parvis tridentato-partitis: exterioribus obovatis subacutis unguium angustarum longitudine, filamentis omnino coalitis ungues æquantibus. G.

When we observed in No. 577, that the corolla of MORÆA decayed by twisting itself spirally into a column, we then intended that

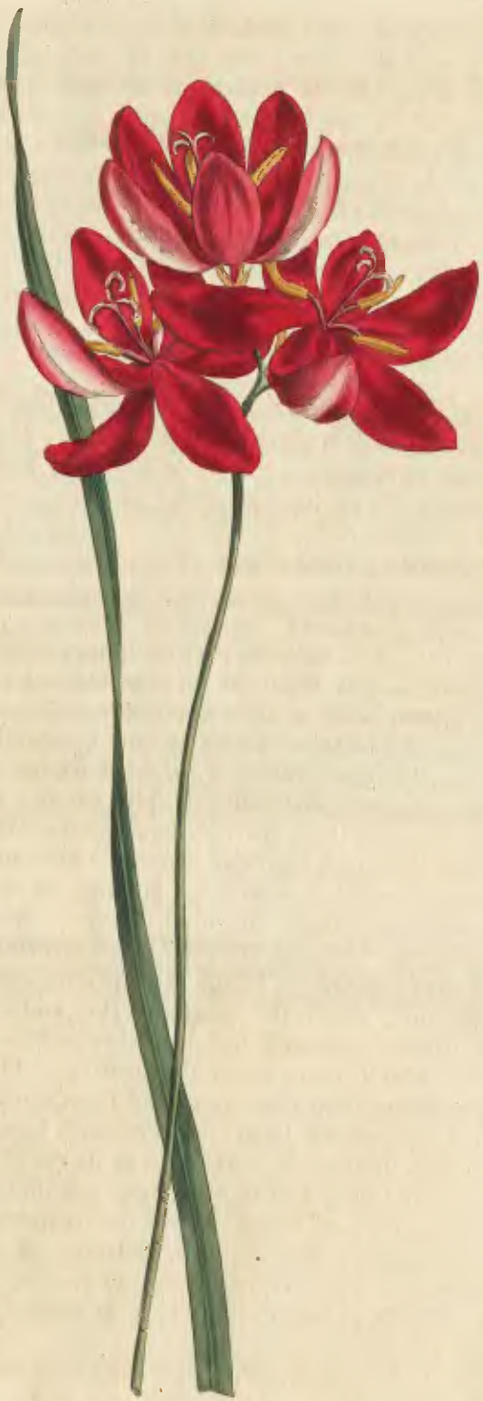
that name for another genus, and to have adopted that of VIEUSSEUXIA for this, ſo that the remark is now inappropriate to Moræa; a genus ſo named by MILLER from his friend ROBERT MORE, Eſq. whom he ſtates to be learned in various branches of natural hiſtory, and particularly in that of botany*; the ſpecies on which he founded it was MORÆA *vegeta*. Thoſe that have regulated us in the preſent eſſential character are IRIS *ciliata, minuta, tripetala, ſpathacea, ramoſa? anguſta, ſetacea, pavonia, criſpa, tricuſpis,* (Bot. Mag. No. 168.) *villoſa,* (Bot. Mag. No. 571.) *unguiculata, papilionacea, edulis, triſtis,* (Bot. Mag. No. 577.) *polyſtachia? viſcaria,* (Bot. Mag. No. 587.) *bituminoſa.* MORÆA *juncea, vegeta, (iriopetalæ* Willdenovii *varietates) collina* et *elegans* (Hort. Schœnb.)

Our preſent plant, ſo nearly allied to *tricuſpis* and *villoſa*, differs from both, in not being bearded and in having its claws much narrower and equal to the laminæ of the largeſt ſegments, and from the latter, moreover, in not having a pubeſcent leaf and ſtem.

Introduced from the Cape by Mr. Alderman HIBBERT, at whoſe garden our drawing was taken, and where alone, we believe, it is at preſent to be found. Flowers in May. Propagates in the manner of MORÆA *villoſa*.

This genus is certainly one of the moſt elegant diviſions of the whole natural order, but from the extreme delicacy of the corollas of its ſpecies ill calculated for the Herbarium, in which ſcarcely any thing but the leaf and ſtem can be recognized, hence good figures from living ſpecimens become the more deſirable. *G.*

* Profeſſor THUNBERG, in his Diſſertation on MORÆA, mentions the name as given by LINNÆUS in honour of JOHANNES MORÆUS, M. D. at Fahlun; but this muſt be a miſtake, LINNÆUS having avowedly adopted the genus on the ſole authority of MILLER's Dictionary.



N.º 594

Jos. Edwards del. Pub. by T. Curtis, 8 Gt. Gen. Crescent Jul. 31. 1812. E. Sanders sculp.

Ixia Crateroides. Crimson Ixia.

Clafs and Order.

Triandria Monogynia.

Generic Character.—Vid. No. 549.

Specific Character and Synonyms.

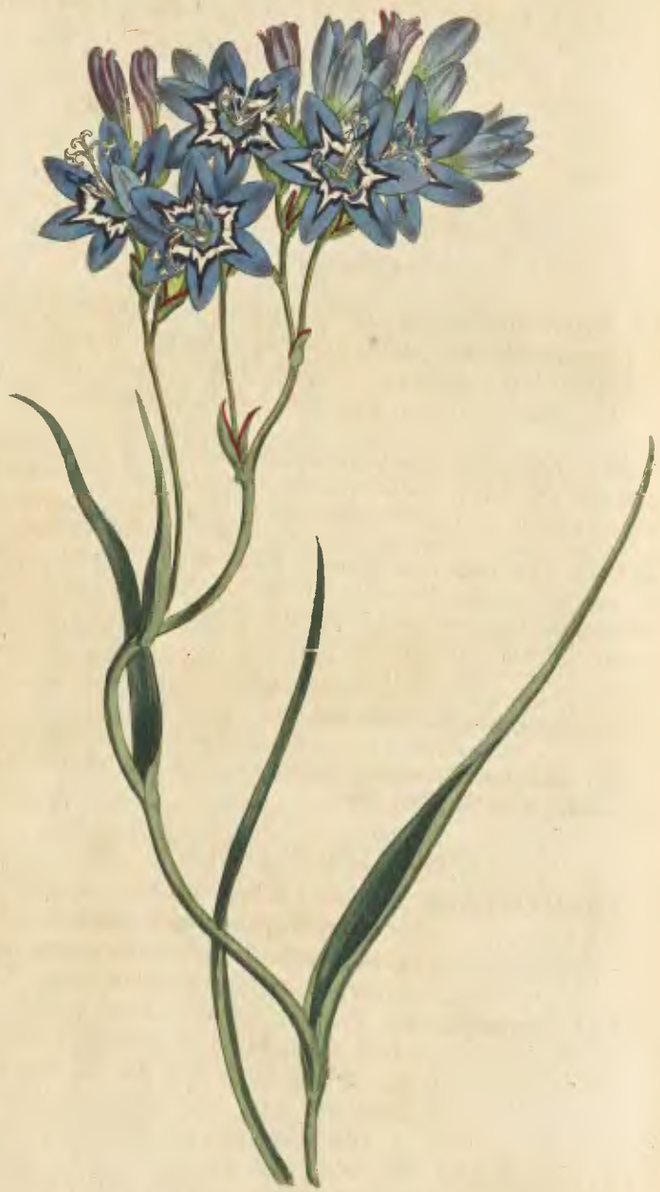
IXIA *crateroides;* pauciflora, foliis gramineis, tubo breviffimo fpatham fcariofam patentem vix æquante, limbo hemifphærico-campanulato: laciniis ovalibus firmulis, ftigmatibus antheras fuperantibus. *G.*

IXIA *fpeciofa. Bot. Rep. tab.* 186.

IXIA *campanulata. Herb. Bankf.*

Bulb irregular, of a more fucculent fpongy fubftance, and not fo farinaceous as ufual in the genus. Leaves 5—6, grafs-like, fmooth, with a flightly prominent midrib, fhorter than the ftem. Flowers 1—2, rarely three, upright, largifh, fcentlefs. Stem fimple, round, wiry, from fix inches to a foot high. Spathes fcariofe, denticulately fplit, patent; tube feveral times fhorter than the limb, fcarcely equal to the fpathe. Limb fubfphæroid-bell-fhaped, fegments feparate to the tube, oblong-oval, bluntifh, fomewhat concave, fhining, of a more fubftantial confiftence than in moft fpecies, deep crimfon on the infide, on the out purplifh red, traverfed longitudinally by a paler ftripe. Filaments upright, patent, much fhorter than limb, about the length of the anthers, purplifh. Stigmas recurved, feparated but little beyond the fummits of the anthers, which they generally overtop. Out of many hundred fpecimens, both indigenous and from our own gardens, this is the only one we have ever feen with fo many as three flowers, though the fpecies is as liable as its congeners to vary in fize of leaf and height of ftem. Does not bloffom fo freely as many others, perhaps requires tenderer treatment. Flowers in July. Propagates abudantly by offsets. A pot of them exactly refembles a pot of our common graffes. Found, according to Mr. Nevin, at the Cape, in fandy fpots near the twenty-four rivers.

Our figure was taken at Mr. Colville's nurfery, in the King's-Road, Chelfea. *G.*



Syd. Edwards del. Pub. by T. Curtis St. Geo. Crescent Oct. 1. 1802. F. Jenkins sculp.

LAPEYROUSIA CORYMBOSA. LEVEL-TOPPED LAPEYROUSIA.

Class and Order.

TRIANDRIA MONOGYNIA.

Generic Character.

Cor. hypocrateriformis: tubus gracillimus in faucem turbinatam recto-continuam sensim dilatatus: limbus 6-partitus laciniis regularibus vel parum irregularibus. *Stam.* erecta. *Stigm.* tria, gracilia, bifida, patentia. *Sem.* numerosa. G.

OBS. *Plantulæ spithameæ vix unquam pedales. Radix bulbus conico-campanulatus tegumento putamineo reticulato-rimoso basi dentato-multifido pro ætate uno vel plurimis imbricatim aggestis tectus. Caudis sæpius præ foliis spathisve decurrentibus alato-anceps vel triqueter, rigidus (exsiccato subligneo) ramosus modo ramulosus fruticulam emulans. Folia ensiformia, nervosa, ad marginem intimam basin versus conniventer fissilia, in* LAPEYROUSIA fissifolia *apice tenus subplana dehiscunt, hinc transverso-paginata cauli obversant. In nonnullis presertim spontaneis spatharum carinæ et foliorum margines strigosæ.* LAPEYROUSIA juncea *ab habitu præfato plurimum recedit, species forte nimis disparilis, novi generis primordium? Spica in* LAPEYROUSIA fasciculata *fasciculato-contracta spathæque univalves.* G.

Ab IXIA *et* GLADIOLO *stigmatibus bifidis, a* WATSONIA *floribus rectis, seminibusque non angulato-oblongis, a* MORÆA *tubo, a* WITSENIA *stigmatibus trinis discrepat.* G.

Specific Character and Synonyms.

LAPEYROUSIA *corymbosa* scapo ancipiti ramuloso, ramis corymboso-paniculatis sursum pauciflorigeris, limbo regulari tubo cum fauce breviore, staminibus patentissimis. G.

IXIA *corymbosa.* *Sp. Pl.* 51. *Amæn. Acad.* 4. 300. *Thunb. Diss. n.* 10. (excluso syn. de la Roche) *prod.* 9. *Murr. Syst. Veg.* 84. *Houtt Linn. Pfl. Syst.* 11. 27. *t.* 77. *f.* 1. *Jacq. ic. rar.* 2. *t.* 288. *Coll.* 4. 179 *Willd. Sp. Pl.* 1. 199.

IXIA *crispifolia* *Bot. Rep. tab.* 35

CARYOPHYLLUS *monomotapensis.* *Pluk. Alm.* 87. *t.* 275. *f.* 1.

A genus first proposed by the Abbé POURRET, in a tract contained in the third volume of the Transactions of the Academy

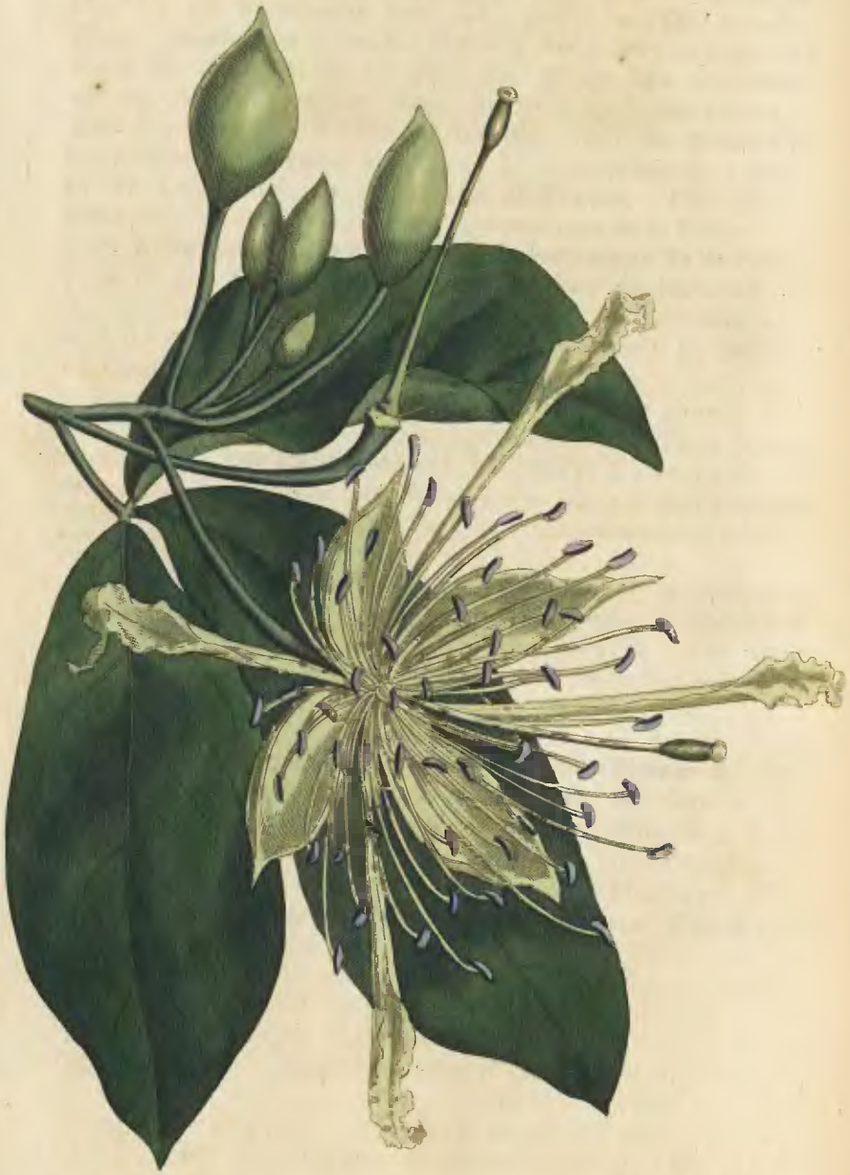
demy of Sciences and Inſcriptions of Thouloufe, to which he has ſince added further explanation, in the thirty-fifth volume of the Journal de Phyſique, p. 431. The ſpecies that ſerved him for his foundation was LAPEYROUSIA (GLADIOLUS, *Thunb.*) *anceps*, his *compreſſa*, the only one known to him, and which he ſtates to be an aboriginal of the Iſle of France, adding, that his ſpecimen was tranſmitted by COMMERSON to THOUIN, and by the latter to himſelf; thus the miſtake in the habitat lies between the three; for it is certainly a native of the Cape, and not of the Iſle of France. The generic name he gives in honour of PICOT, then Baron de la PEYROUSE, ſince Inſpector of the Mines of the French Republic and Aſſociate of the National Inſtitute, well known by his works on the Natural Hiſtory of the Pyrenees;—not to be confounded with the celebrated but ill-fated navigator, known by the title of Compte de la PEYROUSE.

The ſpecies on which we have conſtructed our generic character are as follow: GALAXIA *plicata*, *Jacq.* (IXIA *heterophylla*, *Willd.* our LAPEYROUSIA *faſciculata*) GLADIOLUS *falcatus*, *Linn. fil.* IXIA *corymboſa*, *Linn.* GLADIOLUS *anceps*, *Linn. fil.* GLADIOLUS *fiſſifolius*, *Jacq.* GLADIOLUS *ſilenoides*, *Jacq.* GLADIOLUS *junceus*, *Linn. fil.*

The preſent ſpecies varies greatly in number of branches, thickneſs and height of ſtem, breadth and even criſpature of leaves; alſo, with white and plain blue flowers. The white variety we have never ſeen, but know it to be in the collection of Mr. HIBBERT. Scentleſs.

Found by THUNBERG in ſandy ſpots and roads about Swartland, at the Cape of Good Hope. Neither he nor JACQUIN obſerved its bifid ſtigmas, which the former deſcribes as globular, an appearance they often aſſume in a dried ſtate.

Our drawing was taken at the garden of G. HIBBERT, Eſq. at Clapham. Is as yet an exceeding rare plant. Flowers in May. *G.*



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CRATÆVA FRAGRANS. SWEET-SCENTED CRATÆVA.

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Class and Order.

DODECANDRIA (*rectius* POLYANDRIA) MONOGYNIA.

Generic Character.

Cal. 4-fidus. *Cor.* 4-petala aut 0. *Bacca* 1-locularis polysperma.

Specific Character and Synonyms.

CRATÆVA *fragrans;* caule volubili, corollis regularibus: petalis longissimis undulatis, pedunculis capitato-racemosis terminalibus teretibus.
CRATÆVA *moschata. Herb. Banks.*
CRATÆVA *capparoides. Bot. Rep. pl.* 176.

Capparis and Cratæva are so nearly related, that it is not easy to find characters which will always distinguish them. Even in the artificial system, they ought not to have been separated into different classes, most of the species being polyandrous. Perhaps the only distinction in the parts of fructification is, that in Cratæva the stamens are attached to the column supporting the germ, whereas in Capparis they are attached to the edge of the receptacle. A slight difference, as the column itself is an elongation of the centre of the receptacle. In the habit of the plants there is this essential distinction, that in every species of Capparis the leaves are simple, in Cratæva ternate.

The CRATÆVA *fragrans* has several climbing stems, extending 10—20 feet, with a multitude of branches. Leaves alternate, petioled, trifoliate; leaflets ovate, entire, shining, shortly petioled. The flowers grow in bunches on long peduncles from the extremities of the branches, nodding whilst in bud. Calyx consists of four ovate-acuminate, concave, equal

equal leaves, deciduous. Petals four, very narrow, long-clawed, limb undulated and convolute towards the base, regularly patent. Stamens many, longer than calyx, shorter than petals, attached to the receptacular column near its base, incurved. Proper style o. Stigma annular. Germen supported upon a receptacular column, longer than the stamens, one-celled? containing many seeds. Fruit has never yet ripened with us. The flowers are of short duration, but come in succession for some weeks, very fragrant, approaching in smell to the fruit of the pine-apple (BROMELIA *ananas*).

First discovered in Africa, by our particular friend, Dr. ADAM AFZELIUS, Botanical Demonstrator to the University of Upsal, who never met with it but twice, once in the Island of Bananas, in April, when it was in full flower, and afterwards at Sierra-Leone, near Free-Town, towards the mountains, in January, when the seeds were ripe. In both places it grew near water on rising and rocky ground, covering the rocks for a considerable extent with its widely-spreading stems and twining branches. He gave the seeds to T. EVANS, Esq. Stepney, to whose liberality every possessor of this valuable acquisition to the stove is indebted. Is propagated easily by cuttings, but to thrive well requires more room for its roots than a pot.

It is at the desire of Dr. AFZELIUS that we have given it the specific name of *fragrans*, that of *capparoides*, equally applicable to other species of Cratæva, though hastily given by him to Mr. EVANS, as something to remember it by, being never intended for publication.

Our drawing was taken at the garden of EDWARD WOODFORD, Esq. at Midsummer 1801.

INDEX.

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

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* Belong to the Genus MORÆA, as now settled.

Printed by S. Couchman, Throgmorton-Street, London.