
XVI. *Observations on the Genus of Begonia.* By Jonas Dryander, M. A.
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Read November 3, 1789.

THE Genus of Begonia was first established by Plumier, and published in 1700 by Tournefort, in the Appendix to his *Institutiones Rei Herbariæ*, three years before the *Nova Plantarum Americanarum Genera* of Plumier appeared. From Tournefort, Linnæus introduced it in the first edition of his *Genera Plantarum*, among the *Fragmenta*, or such genera as were not sufficiently described to be referred to their proper classes; and in the second edition it still remains in the Appendix: but in the fifth and sixth editions he refers it to *Polygamia Monœcia*, though without any alteration in the description of the genus from that in the first edition. In the thirteenth edition of the *Systema Vegetabilium* this genus first found its proper place in the Linnean System, which is, *Monœcia Polyandria*.

Ludwig, in the first edition of his *Definitiones Plantarum* (1737), introduces it very improperly in his fifth class, *Plantæ flore perfecto simplici regulari pentapetalo*. But in the second edition (1747) he gives it in the Appendix, among *Fragmenta varia*; and Boehmer also in the third edition (1760) refers it to *Plantæ dubiæ*.

Linnæus, in his *Ordines Naturales*, has ranged the *Begonia* in the fifth division of the twelfth order, *Holoraceæ*, with *Polygonum*, *Rumex*, and others. Erxleben, in his *Anfangsgründe der Naturgeschichte*, has classed it with nearly the same plants in his forty-second order, called *Vaginales*; and Rüling, in his *Ordines Naturales*, has it in his thirty-third order, *Polygona*, which differs from Erxleben's *Vaginales* only in some of the genera referred to it.

Adanson, in his *Familles des Plantes*, has joined it with a very different set of plants, in his thirty-second family, which he calls *Portulacæ*. But Jussieu, in his *Genera Plantarum secundum Ordines naturales disposita*, just published, has given it among *Plantæ incertæ sedis*; and justly says, "*Genus nulli verè affine.*"

When Plumier first determined the genus, he referred to it six species; but the few words by which he distinguished them, were not sufficient, in the present state of Botany, to discriminate species. Whence Linnæus, in his first edition of *Species Plantarum*, having then probably never seen a *Begonia*, joined all the species of Plumier, and one of Sloane, under the name of *Begonia obliqua*; and in the second edition he added two more synonyms, one from Rumphius, and one from Browne: so that in fact *Begonia obliqua* contained, under one trivial name, all the species at that time known; and it is no wonder that this vague name has been applied by different botanists to almost any species of *Begonia* which occurred to them. Chevalier Lamarck in the *Dictionnaire Encyclopédique*, and M. Jacquin in the first volume of his *Collectanea*, were the first who attempted to bring this confused genus into some order; but neither of them had seen more than one species, and were obliged to make out the rest merely from books.

A species of *Begonia*, which flowered in October last year (1788) in Mr. Lee's garden at Hammer-smith, made it necessary for me to study the genus of *Begonia*, for the purpose of determining that
plant:

plant: and having an opportunity of comparing dried specimens of several species, and the assistance of descriptions of some of them made on the spot by the late Doctors Solander and Kœnig, besides the knowledge to be got from printed books, I was tempted to lay before the Society the result of my researches. Though I have seen specimens of fifteen out of the twenty-one species I have determined, still many of them were not so perfect in all their parts, as to enable me to give a satisfactory account of them; and the impossibility of determining with certainty such fleshy plants from dry specimens, makes it still more necessary to offer this only as a sketch of the imperfect knowledge we have of this genus, in hopes of inciting such botanists, as may hereafter have an opportunity of examining the living plants, to fill up the chasms which still remain. It must also be left to a future consideration, when the different species shall be better known, if it would not be more convenient to divide this natural genus into several artificial ones; as it is almost impossible to give a general description of the genus, there being so great a variation in the parts of fructification.

Conscious of the impossibility of making good figures from imperfect dried specimens of succulent plants, but still wishing to give some assistance to those who have no opportunity of seeing the specimens I have used, I have given the outline of a leaf of most of the species, which were not figured before; and also a figure of the fruit, when I had a perfect one.

There still remain several Begonias of which I have some knowledge, but not sufficient to introduce them in this arrangement of the genus: those will be found in an appendix at the end, under the title of *Species obscuræ*.

It will be necessary to explain some terms made use of in my specific differences:

Folium *inæqualiter cordatum*, cujus alter lobus major. (Malè *obliquum* dictum, cum terminus hic directionem folii, non figuram, respiciat.)

Folium *femicordatum*, cujus alter lobus obliterated.

Capfulæ *alæ parallelæ*, dum alæ margo exterior lateri capfulæ parallelus est.

Rotundatæ, cum medio latiores.

Obtusangulæ, supernè latiores, angulo rotundato.

Acutangulæ, supernè latiores, angulo acuto.

BEGONIA. *Tourn. Inst.* 660. tab. 442. *Lin. Gen. Pl.* ed. i. n. 901. ed. vi. n. 1156. *Ludw. Def. Gen.* 1737. p. 49. 1747. n. 1044. 1760. n. 1266. *Adans. Fam.* p. 244. *Lam. Encycl.* i. p. 393. *Gærtn. Sem.* p. 156, tab. 31. *Juss. Gen.* p. 436.

(Dixit Plumier in memoriam D. Begon, Regi Galliæ ab intimis consiliis et rei nauticæ præfecti in ora Santonum, cujus merita in rem herbariam me quidem latent.)

* *Masculi Flores.*

CAL. nullus.

COR. *Petala* quatuor (in *octopetala* 6—9): quorum duo opposita majora, plerumque subrotunda (in *ferruginea* omnia subæqualia oblonga).

STAM. *Filamenta* numerosa (15—100), receptaculo inferta, brevissima, interdum basi coalita. *Antheræ* oblongæ, erectæ.

* *Feminei Flores*, plerumque in eodem cum masculis pedunculo communi.

CAL. nullus.

COR. *Petala* plurimis quinque, aliis (4, 7, 18, 19, 21) sex, aliis (8, 16) fortè quatuor, plerumque inæqualia.

Pist.

PIST. *Germen* inferum, triquetrum, in plurimis alatum. *Styli* plerisque tres, bifidi. *Stigmata* sex.

PER. *Capfula* plerisque triquetra, alata, trilocularis, basi fecus alas dehiscens; aliis (5, 6) bilocularis; aliis (4, 18) fortè unilocularis.

Charaēter Essentialis.

MASC. *Calyx* nullus. *Corolla* polypetala. *Stamina* numerosa.

FEM. *Calyx* nullus. *Corolla* polypetala, supera. *Capfula* alata, polysperma.

Habitus Generis.

Tota planta carnosā.

Caulis plerisque herbaceus, sed species quædam acaules.

Folia petiolata, in caulescentibus alterna.

Stipulæ ad basin petiolorum binæ.

Pedunculi plerisque dichotomi, in caulescentibus axillares.

Locus Natalis.

Inter tropicos, in Asia et America. In Africæ continente nulla species hucusque inventa, sed in insulis adjacentibus tres.

Species.

I. *BEGONIA nitida*, fruticosa erecta, foliis glaberrimis inæqualiter cordatis obsolete dentatis, capsulæ ala maxima subrotunda.

Begonia nitida. *Hort. Kew.* iii. p. 352.

Begonia obliqua. *L'Herit. Stirp. Nov.* i. p. 95. tab. 46. (exclusis synonymis plurimis).

Begonia minor. *Jacqu. Collect.* i. p. 128. n. 3. descr. in p. 126*.

Begonia purpurea. *Swartz Prodr.* 86.

Habitat in Jamaica. *Gul. Wright.* 2

This elegant shrub, which is now a common ornament to our hot-houses, was introduced here in the year 1777.

* *Icon.* vol. ii.

Dr. Swartz informed me, by letter, that his *B. purpurea* is the common garden Begonia; but the synonym of Browne, which he quotes, cannot well belong to these species, as Browne's plant is scandent. I do not know if *Begonia roseo flore, folio aurito, minor et glabra*, of Plumier (*Begonia obliqua* β . *Linn. Sp. Pl.*), which Jacquin and Swartz refer to this species, belongs to it; as it is impossible from these few words to know what plant he meant, in a genus, where the species are very difficult to distinguish from one another. Among a great many collections of plants from different West India islands, which I have seen, I have never found *B. nitida* from any other island than Jamaica; and as Plumier had, as far as I know, not been in that island, I think it rather probable that he did not mean this species: besides, the epithet of Minor is ill applicable to so tall a shrub, and which has as large leaves as any in the genus, except *macrophylla* and *grandis*.

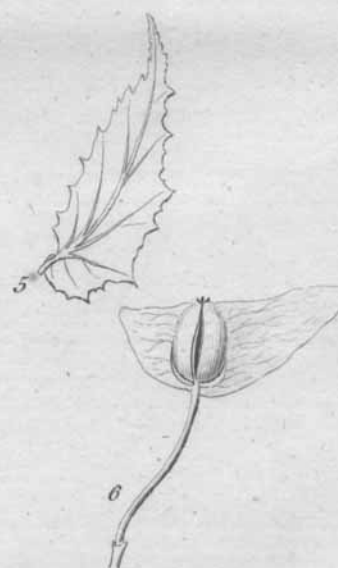
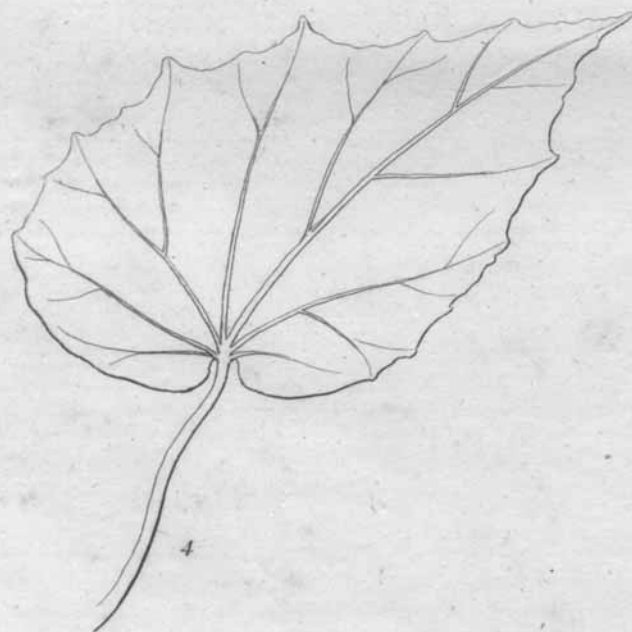
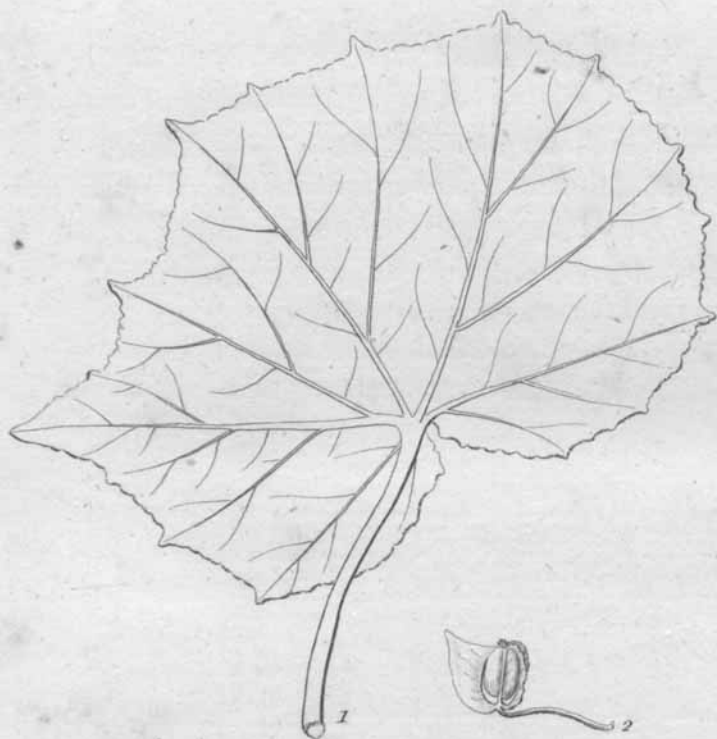
However unwilling to change names, I could not adopt any of the trivial names given to this plant: *obliqua* is too vague, as Linnaeus under the name of *Begonia obliqua* includes a great number of species; and it is even uncertain whether this be one of them; *minor*, as I have already remarked, applies ill to it; and *purpurea* still less, as no part of it is of a purple colour.

2. *BEGONIA isoptera*, caulescens, foliis glabris semicordatis obsolete dentatis, capsulæ alis subæqualibus parallelis*.

Habitat in Java.

Of this we may soon expect a figure and description in Dr. Smith's *Icones Plantarum*, from a specimen in the younger Linnaeus's Herbarium.

* *Smith Ic.* 43.



3. *BEGONIA reniformis*, caulescens, foliis reniformibus angulatis dentatis, capsulæ ala maxima acutangula; reliquis parallelis minimis. TAB. 14. Fig. 1, 2.

Habitat in Brasilia, prope Rio de Janeiro, in rupium fissuris umbrosis.
Jos. Banks.

Descriptio D. Doct. Solander.

“*Caules* carnosî, breves, crassitie digiti.

“*Folia* alterna, petiolata, latiora quam longiora, subreniformia, crenato-dentata, angulata: angulis 8—12, acutis, inæqualibus; basi cordata, altero latere minore.

“*Petioles* longitudine diametri longitudinalis foliorum.

“*Pedunculus* communis, spithamæus, terminatus *Cyma* bis dichotoma, dein tetrachotoma. *Pedicelli* dein umbellati.

“*Floris* masculi *Petala* quatuor, cruciata, patentia, alba: duo opposita majora, ovata, obtusa, integerrima, in medio extus convexa; reliqua dimidio minora, oblongo-lanceolata, acuta, parum carinata.

“*Filamenta* circiter triginta, filiformia, brevia, subæqualia, lutea. *Antheræ* lineari-oblongæ, filamentis longiores, longitudine petalorum minorum, erectæ, luteæ.

“*Pistillum* omnino nullum.

“*Floris* feminei *Petala* quinque, oblonga, subæqualia, patentia, parum concava, acutiuscula, alba.

“*Germen* inferum, ovatum, triangulare: angulis membranaceis: membrana anguli exterioris majore. *Styli* tres, bipartiti, villosiusculi. *Stigmata* simplicia.

“*Capsula* ovata, trigona, angulis membranaceis duobus interioribus æqualibus, minoribus; membrana anguli exterioris maxima, supernè in angulum acutum extensa; trilocularis: *loculis* cylindricis, basi dehiscentibus.

“*Semina* numerosissima, ovata, parva, receptaculo columnari crasso affixa.”

4. *BEGONIA erminea*, caulescens, foliis cordatis acuminatis ferratis, capsulæ ala maxima falcata; reliquis oblitteratis.

Begonia erminea. *L'Herit. Stirp. Nov.* i. p. 97. tab. 47.

Habitat in Madagascar: in insula Maroffe intra finum Antongil, supra lapides fecus rivulos. *Jo. Gul. Bruguiera*.

I know this species only from Mr. L'Heritier's description and figure.

5. *BEGONIA crenata*, caulescens, foliis inæqualiter cordatis subrotundis obtusis crenato-dentatis, capsulis bilocularibus. TAB.

14. Fig. 3.

Habitat in Indiæ Orientalis insula Salsette, et prope Fort Victoria, in muris et rupibus. *Ant. Pantaleon Hove*.

"*Flores pallidè rubri.*" *Hove*.

Floris *masculi* petala quatuor, quorum duo opposita angustiora, vix breviora. Floris *feminei* petala quinque, quorum tria angustiora. *Stylus* unicus. *Fructus* hujus et sequentis speciei immaturos tantum vidi, eosque malè ficcatos, ut de figura alarum incertus sim.

In Sir Joseph Banks's Herbarium, are specimens collected by Mr. Hove in the above-mentioned places.

6. *BEGONIA tenuifolia*, caulescens, foliis inæqualiter cordatis ovatis acutis angulatis obsoletè dentatis, capsulis bilocularibus. TAB.

14. Fig. 4.

Habitat in Pulo Pontangh, s. Prince's Island, prope Javam. *Jos. Banks*.

Descriptio D. Doct. Solander.

"Floris masculi Corolla tetrapetala, compressa, ex albido-incarnata, striis rubris ornata. *Petala* per paria opposita: duo exteriora ovato-subrotunda, obtusa, basi parum cordata, diametro tri- vel quadri-

quadrilineari; duo interiora dimidio minora, ovato-oblonga, obtusiuscula.

“*Filamenta* numerosissima (100), receptaculo in conulum elevato inferta, brevia. *Antherae* ovatae, erectae, luteae.

“*Pistillum* nullum.

“*Floris* feminei *Petala* quinque, colore ut in mare, figura exteriorum maris: intimum reliquis minus. —

“*Stamina* nulla.

“*Germen* incarnatum. *Styli* tres, glabri.”

7. *BEGONIA ferruginea*, caulescens, foliis inæqualiter cordatis dentatis, floris masculi petalis oblongis subæqualibus*.

Begonia ferruginea. *Linn. Suppl.* 419 (descr. Mutis). *Lamarck Encycl.* i. p. 395. n. 9. *Jacqu. Collect.* i. p. 128. n. i.

Habitat in Nova Grenada. *Jos. Celest. Mutis*.

In the Linnean Herbarium is a leaf and some male flowers of this species; from which, together with the drawing of it by Dr. Mutis, Dr. Smith will give a figure in his next Fasciculus.

It is easily distinguished from all other species which I know, by the long and narrow petals of the male flowers, all of the same breadth, and very little differing in length.

8. *BEGONIA grandis*, caulescens, foliis inæqualiter cordatis angulatis ferratis, capsulæ alis parum inæqualibus.

Begonia obliqua. *Thunb. Japon.* 231. descr. *Ic. Kæmpfer.* tab. 20. Sjukaido. *Kæmpf. Amæn.* 888.

Habitat in Japonia. *Engelb. Kæmpfer, Car. Petr. Thunberg*.

The male flowers alone are described by Dr. Thunberg, in his *Flora Japonica*; and by Kæmpfer, in his manuscripts preserved in

* *Smith Ic.* 44.

the British Museum (Sloan. MSS. 2915, p. 202); and the specimen in the Linnean Herbarium has only male flowers: so that the only knowledge I have of the female flowers is from Kæmpfer's figure, in which the wings of the germen in several instances have an acute angle, but in others are rounded; for which reason I have avoided mentioning the shape of the wings, in the *differentia specifica*.

Dr. Thunberg supposes this plant to be dioicous, but the figure of Kæmpfer has male and female flowers in the same panicle. This seeming contradiction may be reconciled by an observation I lately made. I wanted to examine the female flowers of *Begonia nitida*, and looked for them on plants in full flower, both at Kew and in the Marchioness of Rockingham's garden at Hillingdon; but could find nothing but male flowers, though it is very well known that the *B. nitida* is monoicous. This circumstance is not peculiar to *Begonias*, as I have seen a large cedar-tree for several years full of male catkins, without a single female one. Mr. L'Heritier also informed me that the female flowers are very rarely to be met with in *Ailanthus glandulosa*; and I have not yet been able to find any one in a large tree at Kew, which flowers very freely.

This species, and the following, *macrophylla*, have by far the largest leaves of any in the genus; but this has twice as large flowers as *macrophylla*.

9. *BEGONIA macrophylla*, caulescens, foliis inæqualiter cordatis crenato-dentatis: inferioribus angulatis, capsulæ alis obtusangulis: una maxima.

Begonia macrophylla. *Lamarck Encycl.* i. p. 394, n. 6. descr. ex manuscr. Plum.

Begonia grandifolia. *Jacqu. Collect.* i. p. 128, n. 2 (excluso synonymo Brownei).

Begonia

Begonia purpurea et nivea maxima, folio aurito. *Plum. Ic.* 34, tab: 45, fig. 1.

Habitat in insulis Indiæ Occidentalis. *Car. Plumier, Job. Ryan, Henr. de Ponthieu, Alex. Anderson.*

This species is both in Sir Joseph Banks's and the younger Linnaeus's Herbarium. A specimen in the former Herbarium has, in the axilla of the lower leaf, a panicle consisting entirely of female flowers; and, from the axilla of the leaf above, a panicle of male flowers.

10. *BEGONIA acutifolia*, caulescens, foliis femicordatis angulatis dentatis, capsulae ala maxima obtusangula; reliquis acutangulis.

Begonia acutifolia. *Jacqu. Collect.* i. p. 128, n. 4 (excluso synonymo Plumieri).

Aceris fructu herba anomala, flore tetrapetalo albo. *Sloan. Jam.* tab. 127, fig. 1, 2.

Habitat in Jamaica. *Hans Sloane, Franc. Masson.*

Sir Hans Sloane's description, in his History, vol. i. p. 199, agrees so ill with his figure and his specimens in the British Museum (*Hortus Siccus*, vol. iii. fol. 121), which I have compared with the specimens in Sir Joseph Banks's Herbarium, that I am rather inclined to believe, that he, confounding several species, has described one and figured another. The leaves are longer and narrower than he describes them, and not at all rough; having so very few hairs, that they might be called smooth. The specimens I have seen have no appearance of being from a creeping plant; they are all in fruit, and have no flowers.

This species comes very near to the following, but differs in the smoothness already mentioned, and in having longer footstalks, the length of one third or one fourth of the leaf; which, on the contrary, are so short in *B. acuminata*, as not to equal the angle of the leaf, which extends beyond the insertion of the footstalk.

11. BE-

11. *BEGONIA acuminata*, caulescens, foliis hispidis femicordatis acuminatis inæqualiter dentatis, capsulæ ala maxima obtusangula; reliquis acutangulis. TAB. 14. Fig. 5, 6.

Habitat in Jamaicæ montibus cæruleis. *Jul. von Robr, Gul. Wright.*
Floris masculi Petala quatuor, quorum duo opposita minora. *Floris feminei* Petala quinque, quorum duo minora. Ad basin germinis *bractææ* duæ, argutè ferratæ, germine dimidio breviores.

Specimens are in the Herbarium of Sir Joseph Banks *.

12. *BEGONIA humilis*, caulescens erecta, foliis hispidis femicordatis duplicato-ferratis, capsulæ alis rotundatis parum inæqualibus.
Hort. Kew. iii. p. 353. TAB. 15.

Habitat in Indiæ Occidentalis insula Trinidad. *Alex. Anderson.*

Descriptio.

Tota planta carnosâ, pellucidâ. Caulis, petioli et pedunculi pallidè rubentes. *Caulis* teres, geniculis tumidis, primo anno spithamæus, altero anno bipedalis. *Folia* femicordata, acuminata, duplicato-ferrata: ferraturis ciliatis; supra saturatè viridia, hispida e strigis mollibus, erectis, basi tuberculatis; subtus pallidè viridia, glaberrima præter strigas rariores in venis, quales etiam in petiolis. *Stipulæ* semiovatæ, concavæ, ciliatæ, hyalinæ. *Pedunculi* axillares, sæpius dichotomi. *Bractæa* ad basin pedicellorum ovata, ciliata, minuta. *Floris masculi Petala alba*: duo cordato-orbiculata, magna; duo minima, quæ in quibusdâ floribus omnino defunt. *Filamenta* circiter 15, brevissima. *Anthæræ* oblongæ, luteæ. *Floris feminei Petala* quinque, alba, persistentia, obovato-oblonga: duo paulò angustiora. *Germen* trigonum, angulis acutis, alis rotundatis parum inæqualibus, pallidè carneis. *Styli* tres, brevissimi. *Stigmata* bipartita: lacinia divaricatæ, dein convergentes, et iterum divergentes, luteæ, tectæ glandulis minimis. *Capsula* figura germinis.

* This species has been introduced into the Royal Garden at Kew since the reading of this Paper.

When



Begonia humilis.

When this plant first flowered in Mr. Lec's garden at Hammer-smith, in October last year (1788), it was supposed to be annual, having produced flowers and fruits in a few months from its being sown. It was then very low, as appears from the annexed figure, representing a whole plant; and, supposing it to be then at its full height, I gave it the trivial name of *humilis*, in the Hortus Kewensis. But it has since stood over the winter, and grown much taller.

13. *BEGONIA hirsuta*, caulescens, foliis hispidis semicordatis duplicato-ferratis, capsulæ ala maxima obtusangula; reliquis parallelis minimis.

Begonia hirsuta. *Aubl. Guian.* 913, tab. 348. *Lamarck Encycl.* i. p. 393, n. 3. *Jacqu. Collect.* i. p. 129, n. 8 (excluso synonymo Plumieri).

Habitat in Guianæ rupibus. *Fusée Aublet.*

The specimen in Sir Joseph Banks's Herbarium from Aublet is without fructification, so that my knowledge of the fruit is only from Aublet's figure. But it must be observed that the figures in his work are made at Paris from dry specimens, as appears from the original drawings in Sir Joseph Banks's library. In comparing them with the specimens in his own Herbarium, now in the possession of Sir Joseph Banks, I have several times had occasion to observe that they are not very faithful; and, in the instance of the two species of this genus figured there, the outline of the leaves is quite wrong: whence my specific differences, made from the specimens, will not be found to agree with his figures.

14. *BEGONIA Urtica*, caulescens radicans, foliis utrinque hispidis inæqualiter ovatis duplicato-ferratis, capsulis basi tricornibus.

Begonia

Begonia Urticæ. *Linn. Suppl.* 420. descr. *Lamarck Encycl.* i. p. 394, n. 8. *Jacqu. Collect.* i. p. 129, n. 7*.

Habitat in America. *Jos. Celest. Mutis.*

Dr. Smith will give a figure of this from a complete specimen in the Linnean Herbarium.

15. *BEGONIA scandens*, scandens radicans, foliis ovato-subrotundis obfoletè dentatis, capfulæ ala maxima obtufangula; reliquis parallelis minimis.

Begonia scandens. *Swartz. Prodr.* 86 (exclufo fynonymo Plumieri).

Begonia glabra. *Aubl. Guian.* 916, tab. 349. *Lamarck Encycl.* i. p. 394, n. 4. *Jacqu. Collect.* i. p. 129, n. 5.

Habitat in Guiana, *Fufée Aublet*: in Jamaica, *Gul. Wright, Rog. Shakefpear, Ol. Swartz.*

I have adopted Dr. Swartz's trivial name in preference to Aublet's, becaufe the leaves are not quite without hairs.

In Sir Jofeph Banks's Herbarium are fpecimens both from Guiana and Jamaica.

16. *BEGONIA tuberoſa*, repens, foliis inæqualiter cordatis angulatis dentatis, capfulæ alis parallelis.

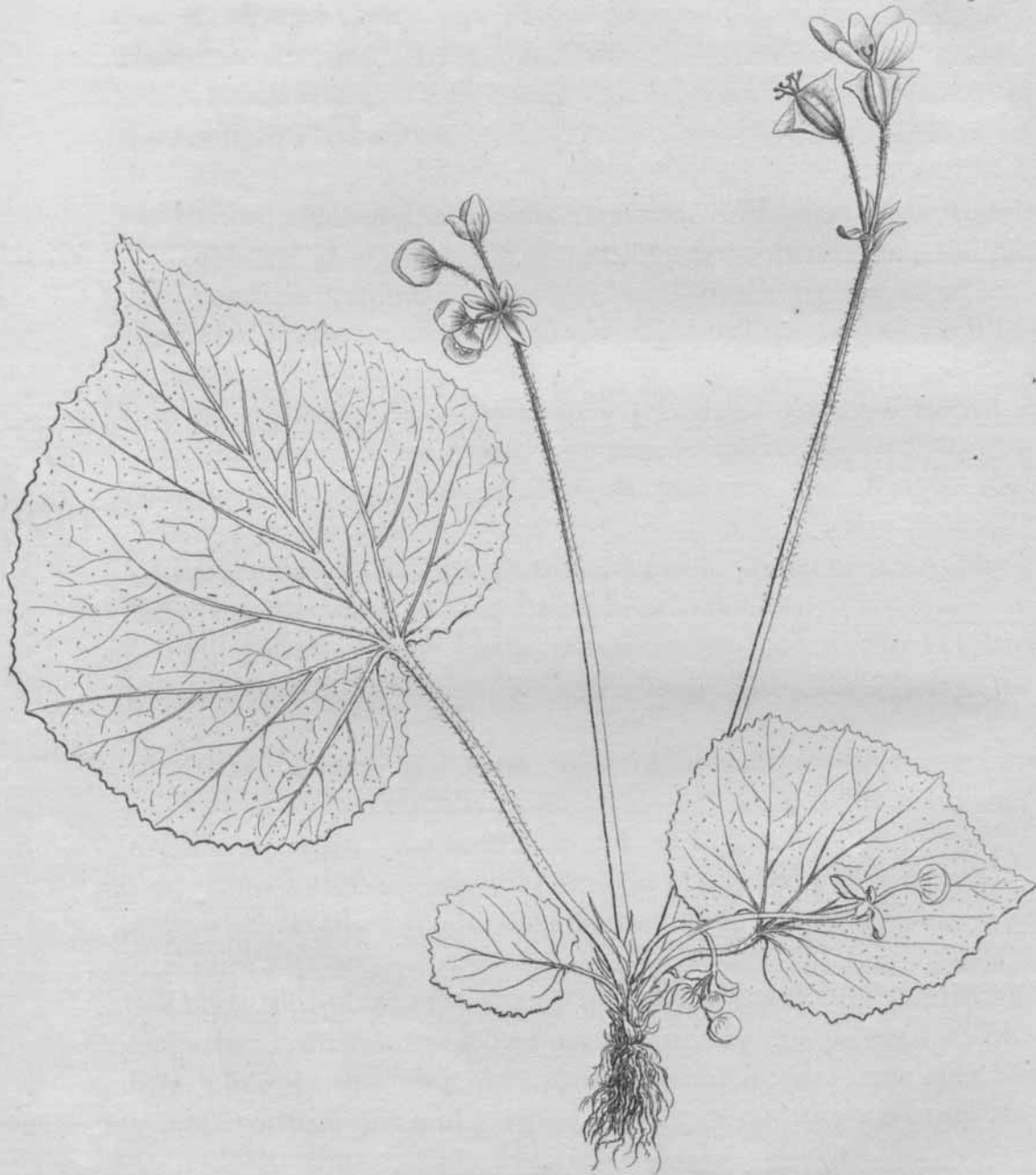
Begonia tuberoſa. *Lamarck Encycl.* i. p. 393, n. 1.

Empetrum acetofum. *Rumph. Amb.* v. p. 457, tab. 169, fig. 2.

Habitat in faxofis infularum Amboinæ, Moluccæ, et Celebes. *Ge. Ever. Rumphius.*

I know this plant only from Rumphius's figure and defcription. Chevalier Lamarck has joined it with the *Begonia capenſis* of Linnaeus's Supplement; but the capſules of that ſpecies have only two winged corners, one wing being very large: and there is every rea-

* *Begonia urticæfolia.* *Smith Ic.* 45.



Begonia tenera.

Mackenzie fecit

son to suppose, from the figure and description of Rumphius, that *B. tuberosa* has all the wings of the same size, like the *B. isoptera*.

17. *BEGONIA rotundifolia*, repens, foliis reniformi-subrotundis crenatis.

Begonia rotundifolia. *Lamarck Encycl.* i. p. 394, n. 7.

Begonia obliqua δ . *Sp. Pl.* 1498.

Begonia roseo flore, folio orbiculari. *Tourn. Inst.* p. 660. *Plum. Cat. Pl. Amer.* p. 20, ic. 33, tab. 45.

Habitat in India occidentali. *Car. Plumier*.

I have not seen any specimen of this.

18. *BEGONIA nana*, acaulis, foliis lanceolatis, scapo subbifloro.

Begonia nana. *L'Herit. Stirp. Nov.* i. p. 99, tab. 48.

Habitat in Madagascar: in insula Marosse intra finum Antongil, in lapidibus et truncis arborum. *Jb. Gul. Bruguiere*.

I have taken up this species only from Mr. L'Heritier's description and figure.

19. *BEGONIA tenera*, acaulis, foliis inæqualiter cordatis, floribus umbellatis. TAB. 16.

Falkea tenera. *Kæn. Manuscr. (in Bibl. Banks.)* vol. xvii. pag. 227.

Habitat in Zeylona. *Joh. Gerb. Kænig*.

Descriptio D. D. Kænig.

“*Folia* omnia radicalia, orbiculato-cordata, acuta, inæqualiter dentata, membranacea, tenera, supra fibrillis basi glandulosis, albis, pellucidis conspersa; subtus fibrillis rarioribus præsertim ad venas adspersa. *Petioles* teretes, erectiusculi, glabri, adspersi fibrillis rarioribus, rubri, foliis longiores, sæpe pedales, crassitie penna anserina angustiores. *Scapi* erecti, teretes, læves, fibrillis adspersi, car-

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nosi,

nosi, petiolis tenuiores et breviores. *Stipulæ* radicales, ovatæ, acuminatæ, concavæ, dorso carinatæ, carnosæ, albicantes, marcescentes, femunciales. *Flores* umbellati, masculis numerosis, feminis paucis. *Umbellæ* interdum compositæ. *Bractææ* ad basin pedicellorum lanceolatæ, parvæ, caducæ. *Pedicelli* teretes, læves, fibrillis adspersi, parum colorati, flore longiores. *Floris masculi Petala* quatuor, nivea: *duo exteriora* cordato-orbiculata, extus fibrillis conspersa, intus glabra, nervis obsoletis notata, ante florescentiam invicem adpressa, plana, sub anthesi patentia; *Petala duo interiora*, cum exterioribus alternantia, ovata, acuta, utrinque glabra, exterioribus duas tertias minora. *Filamenta* basi connata, numerosa (50), capillacea, glabra, albicanti-viridia. *Antheræ* erectæ, clavatæ, filamentis longiores, petalis interioribus breviores, luteæ. *Floris feminei Petala* sex, quorum tria exteriora, tria interiora, a masculis non nisi numero diversa. *Germen* clavatum, triquetrum, ad angulos alatum, fibrillis adspersum. *Styli* tres, erectiusculi, clavati, glabri, lutescentes, petalis minoribus parum breviores. *Stigmata* reniformiter curvata, apicibus crassioribus, pilis aureo-luteis tenuissimis præsertim ad apices obducta. *Capsula* turbinata, triquetra, alata, trilocularis. *Receptaculum* feminum membranaceo-trilatum. *Semina* utrinque ad alas adnata, numerosa, globosa, minima."

Dr. Koenig quotes as synonym *Soneri-ila Rheed. Mal. ix. p. 127, tab. 65*; but the plant there figured has tripetalous hermaphrodite flowers, with three stamens and one style.

The annexed figure is from a dry specimen in Sir Joseph Banks's Herbarium.

20. *BEGONIA diptera*, acaulis, foliis inæqualiter cordatis, pedunculis dichotomis, capsulæ ala una maxima; altera angusta; tertia obsoleta.

Begonia capensis. *Linn. Suppl.* 420. *Jacqu. Collect.* i. p. 130, n. 9.

Begonia species *capensis*. *Linn. Mant.* 502. descr. Kœnig.

Habitat in insulæ Joannæ umbrosis, ad latera montium. *Joh. Gerb. Kœnig.*

The account of the capsules given in the above differentia specifica, is taken from the manuscript description sent by Dr. Kœnig to Linnæus, now in the possession of Dr. Smith.

21. *BEGONIA octopetala*, acaulis, foliis cordatis quinquelobis, pedunculis dichotomis.

Begonia octopetala. *L'Herit. Stirp. Nov.* i. p. 101.

Habitat in montibus Limæ. *Jos. Dombey.*

Of this I have neither seen specimen nor figure.

SPECIES OBSCURÆ.

1. *Begonia malabarica*, caulibus herbaceis, pedunculis axillaribus brevibus subtrifloris, fructibus baccatis. *Lamarck Encycl.* i. p. 393, n. 2.

Begonia malabarica, caule erecto, foliis obsoletè dentatis subtus hirsutis, pedunculis subtrifloris. *Jacqu. Collect.* i. p. 129, n. 6.

Tsjeria-narinampuli. *Rheed. Mal.* ix. p. 167, tab. 86.

No other species of *Begonia* being hitherto known, whose female flowers have only three petals, it requires the confirmation of modern botanists before one can trust to the authority of the Hortus Malabaricus for so singular a circumstance. I have seen several male flowers of *Begonia humilis* with only two petals, and why may not a similar monstrosity happen in female flowers?

2. *Acetosa Nigritarum* seu *Indorum* Lingat. *Kamel Stirp. Luzon.* (in *Raii Hist.* vol. iii.) p. 14, n. 24. Icon in *Mus. Britann. Manusc. Sloan.* 4080, fig. 109.

This comes very near to the *B. malabarica*, so far as one can judge from the rude figure of Father Kamel *.

3. In a volume of drawings in Sir Joseph Banks's library, made at Canton by a Chinese, who had been instructed by the late Mr. Blake in the art of making botanical drawings, is a figure of a *Begonia*, under the name of *Tsou Hoy Tong*, which is related to *grandis*, but differs in the leaves not being angulated, and the margin being equally ferrated. As only male flowers are represented in the drawing, it is impossible to determine it †.

4. *Begonia repens*, caulibus repentibus ad nodos radicosis, foliis uniauritis, pedunculis axillaribus longis multifloris. *Lamarck Encycl.* i. p. 394, n. 5.

Begonia obliqua γ. *Sp. Pl.* 1498.

Begonia roseo flore, folio aurito minor et hirsuta. *Tourn. Infl.* 660. *Plum. Cat. Pl. Amer.* 20, ic. 34, tab. 45, fig. 2.

Chevalier Lamarck describes this with white flowers, which, according to Plumier's name, should be pink. He adds as a variety *B. roseo flore*, folio aurito minor et glabra; and adds, ic. 45, f. 3: but that figure belongs to *B. roseo flore*, foliis acutioribus, auritis et latè crenatis.

5. *Begonia roseo flore*, folio aurito minor et glabra. *Tourn. Infl.* 660. *Plum. Cat. Pl. Amer.* 20.

Begonia obliqua β. *Sp. Pl.* 1498 (excluso synonymo iconum Plumieri).

I have before spoken of the uncertainty of this species, referred to *B. nitida* by Jacquin and Swartz.

* In this manner he signs his name to his letters to Petiver, preserved in the British Museum, Sloan. MSS. 4081. The plant named from him ought therefore to be called *Kamelia* instead of *Camellia*.

† Tsieou-hai-tang. *Mem. sur les Chinois par les Missionnaires de Pé-Kin*, iii. p. 443.
Autumnal Hai-tang. *Grosier Descr. of China*, i. p. 503.

6. *Begonia* roseo flore, foliis acutioribus, auritis et latè crenatis.
Tourn. Inst. 660. *Plum. Cat. Pl. Amer.* 20, ic. 34, tab. 45, fig. 3.
Begonia obliqua ϵ . *Sp. Pl.* 1498.
7. *Rumex* sylvestris scandens, foliis cordato-angulatis ab altera parte majoribus. *Browne Jam.* 203.
8. Totoncaxoxo coyollin. *Hern. Mexic.* 195.
9. *Begonia* obliqua. *Gærtn. Sem.* p. 156, tab. 31.