

I. HORTUS INDICUS MALABARICUS, continens Regni Malabarici apud Indos celeberrimi omnis generis Plantas Rariores &c. Amstelodami, Anno. 1678.

THis excellent *Work* giving account of the most rare and strange Trees and Shrubs of the most fruitful and flourishing Country of *Malabar* in the *East Indies*; by their descriptions, Vertues, and whatever else hath been observed remarkable, hath been especially promoted by the noble and ingenious *Governour* of the same *H. Henry Van Rheede*, who made his utmost endeavours to find and learn out not only from his own observations, but by the advice and assistance of the most learned men of the *Country*, what might prove exact and true concerning this Subject, not only to please the *Curious* with those *Monsters of Vegetables* expressed therein, but for the help to *Mankind* by their excellent Vertues. But through the various Employments of this *Noble Person*, himself not able (to his desire) to performe such a taske (tho accomplished and curious in drawing and designing as well as other parts) earnestly desiring to prosecute the same, he called to his assistance the most experienced and learned *Father Mathew* of the Order of *St. Joseph a Carmelite*, whose long inclinations to these Studies had raised him to a great perfection of knowledge, who upon the request of this noble Person opened his Treasure of Skill as well in his swift and most lively *designing*, as in other parts of this *work*; To which our present Author *Johanes Casarius* adjoining his accurate hand in supplying the defects of others. with his knowledge hath compiled and set forth
this

this admirable work with very apt descriptions and cauti-
 ed the most essential parts of each (*viz.*) the Flowers,
 Fruits, and their Cafes, to be also engraved in large Copper
Cuts generally as big as the Life, 57 in number, each whole
 Sheet opened containing but one *Plant* and its parts, most
 excellently done (they having had most Skilful Painters
 upon the place,) to which are added the *Latine, Malabarick,*
Arabick and *Braman's* names. And for that part concern-
 ing the Vertues the *Author* hath set forth in their own *Lang-*
guage, and with the *Translations* thereof, the *Testimonies*
 of the most learned men of the Country, as *Father Mather*
the Carmelite, Ranga Botto Vinaque, Pandito, & Apu Bandito, à
Braman, and *Itti Achudem* a Doctor of *Chegu* &c. whose fi-
 delity *Dr. Christian Herman,* and *D. Manuel Carnier* (men of
 credit and since returned home) by setting their hands to the
Translation of their *Testimonials* out of their original *Lang-*
guages have certified to the *World* the truth of these *Rela-*
tions.

And for the better completion of this *Laudable Worke,*
 that most curious and exact Person whose name should
 not be mentioned without an *Encomium* *Dr. A. Seyn* *Phy-*
sick and *Botanick Professor* lately at *Leyden* in his *Epistle*
 complaining of the defect in some other Authors of the
 connection and consent of others who have also formerly
 written on the same *Subject,* hath been pleased wonderfully
 to satisfy the *World* and shew his great learning in *illu-*
strating this *Worke* with his notes upon each *Plant* and his
 thoughts of the same, wherein he hath shewed what *Au-*
thors have formely written of it, and what is new, who
 gives a great *Character* of the *Worke* and that an *Egg*
 is not more like an *Egg* than the *Plant* to these *Figures,*
 which he desires you to look into this *Garden* and behold.

Wherein our *Author* first gives a large account of a sort
 of *Palm-Tree* which he calls *Tenga,* whose *Fruits* are much
 covered by *Elephants,* and the *Trees* Eradicated by them
 for the same. From the *Juice* or *Liquor* of which *Tree*
 they there make divers sorts of *Drinks,* one especially which

they call *Suri*, a Liquor of a grateful Sweetness mixed with Acidity strong and inebriating as *Wine*, which whilst new is Sweet in the Morning, Sowre by Night; one day somewhat acid, the next day sweet, but after due Fermentation past, proves an excellent moderate Drink, helpfull in Feavers, very pleasant and wholesome, which by distillation they improve to be spirituous as Brandy. Of this Tree and its several parts are Four several Plates.

Dr. P. Herman now Professor at *Leyden* sent from thence a leaf of another sort of *Palm* by them called *Carim-pana* 30 Feet long, and moderately extended 9 Feet broad.

Another sort called *Caunga* of which and its several parts are Four Figures.

A Fourth sort called *Ampana* is a very fruitful Tree bearing an innumerable Stock of round Fruits exceeding sharp of tast and biting to the Tongue.

A Fifth sort he calls *Schunda-pana*.

A Sixth called *Bala* with plain streight leaves undivided, whose Roots boyled prove very helpfull to those who are troubled with Vertiginous fits, sharpness of Urine, and whose bodies have been infected with *Quick-Silver*.

He tells us of the largest of *Canes* which he calls *Ily*, supposed to be that which C. Bauhine calls *Arundo Arboorea*, an example whereof D. Herman sent over from thence, saying that the *Portugals* have corruptly named it *Bambu* or *Bamboes*, which he entituled *Arundo Indica arboorea cortice spinoso*, and tells us that they call it *Nuayhas*, which is the *Ague Tree* from its effects upon those who wash themselves in those *Waters* wherein the *Leaves* have fallen; but they turne it also to good use by making a Decoction of the *Leaves*, which seemes one of their best dispersers of *coagulated blood*, either inwardly or outwardly taken, and from the pithie part in the middle of the old ones they make an excellent Medicine against the *Strangury* and sharpness of *Urine*. The *Leaves* hereof seem different from others of this Nature being not above an
hands

hands length and a fingers breadth, growing in bunches upon pedicles or foot Stalks out of the several Joynts , and he reports that about 60 years after the sowing hereof it bears its Flowers all in a Months time, and its Seeds, divesting its self of its Leaves , wholly dies away Root and Branch.

There is a *Cane* of this in the *Gallery* of the *Garden* at *Leyden* 26 or 28 Feet long, and in the *Musæum Asmolianum* at *Oxford* one not much less, being 8 or 9 Inches Diameter, both which have certainly lost a great part , one end not much exceeding the other in bigness.

They have a *Tree* or *Shrub* which they call *Appel* or *Nalla Appella*, which serves for many excellent uses. The *Oyl* extracted from the *Roots* is of a Gold yellow colour, of a most grateful smell, somewhat of sharp tast mixed with a little bitterness, easeth the pains of their *Heads* and almost any other parts of the *Body*, all *Aches* comeing from *Cold*, the *Gout*, *Spleen*, of the *Bowels*, very prevalent against *Agues*, *Feavers* &c.

Another which he calls *Carua*, which *D. Seyn* thought good to call *Laurus Zeilanica*, vel *Malabarica baccis calyculatis ex qua Cinamomum*, of which great things are related and the diversitie observable : from the *Roots* they extract *Camphore* and the *Oyle* thereof; from the *Bark* of the *Tree*, *Oyle* of *Cinamon*; from the *Leaves*, *Oyle* of *Cloves*; from the *Fruits*, *Oyle* like that of *Juniper* ; also a thick fat *Oylie* Substance like *Wax* serveing for makeing of *Unguents*, *Plasters*, *Candles* &c. This *Tree* serves, as also diverse others , both for external and internal uses.

Divers of their *Trees* flower twice a year, and some are productive all the year of very *Sweet* and *Odoriferous* and strangely shaped *Flowers* and *Fruits* , some whereof are, and some not, reduceable to our *European* method of *Trees* and *Plants*. But *Providence* seems admirably kind to those hot *Countrys* in provideing them with such rare *coolings* and *Cordials* profitable against *Feavours*, *Calentures*,

and such like distempers as may probably arise, rare Antipestiferials, Excellent Oyles, Liquors &c. for corroborating and exhilarating the Bodies and Spirits of men; whereof any desirous Reader may farther satisfy himself in the perusal of the Worke.

Horti Indici Malabarici pars secunda, &c. Amstelodami
1679.

The second part of this Laudable Worke hath been especially collected and promoted by that great *Senator Hen. van Rheede*, to whose counsel and assistance the before mentioned *John Cassearius* being called hath continued his expressions of skill in describing the rare and unknown *Plants* of that Country, some whereof have been formerly mentioned by some others, as *C. Bauhine, Prosp. Alpinus, Piso, Fontius* and the late *Jac. Breynius*, but not with that clearness and exactness as these long inhabitants upon the place have proved willing and able to do, as by their excellent *Sculptures*, clear Descriptions, and their excellent Vertues, may to the Reader more largely appear.

But alas the loss of that Curious and Learned *Notifier D. A. Seyn*, whose ingenious notes so illustrated the former Booke, being Snatched away by untimely Death in the Flower of his Age, had render'd the Work imperfect, had not an ingenious Successor *D. I. Commelinus* risen up in his place, who very well considering the necessitie of prosecuting a *Worke* so well begun, hath given good demonstration of his reading and learning by comparing and adjusting these *exotick Rarities* to what others have formerly said of them, and added his notes upon the same.

In this part are 56 large and excellent Figures drawn and cut to the Life, each one employing a whole sheet holding but one Plant or part of a Tree, which seem to be as big

big as the life and well designed as in the other also. When he hath occasion to express a Tree he maketh a part of a large trunk or body cut off, with a Limb or Branch springing out, bearing the Leaves, Flowers or Fruits, or what is observeable, which seems a much more expressive way than to contract and abbreviate a whole large Tree to so little a compass as other *Sculpturs* usually do.

Our Author gives account of a rare Plant which he calls *Kaida* whereof there are several sorts which are kinds of *Anana's*, which our Travellers know by the name of *Indian Pine-Apples*. Of the first he gives 8 Figures to express the several Growths and Parts of the same, growing a considerable heighth, dividing its self into divers branches, from the naked parts of which (which are transparent that a man looking up may see the Skie through them) it drops down new rooty matter which touching the *earth* takes fresh hold for its farther procedure, (as is observable in the *Sedum arborescens majus* when it grows well) the flowers are pleasantly sweet, and the *fruits* growing at every branches end are received among their delicacies, and desired by *Elephants*.

A second sort called *Kaida-taddi* beareth large fruits like clusters of the fruits of the true *Pine-tree* set together.

Thirdly *Perin-Kaida-taddi* whose fruit grows in large bunches but with lesser scales, not distinctly apart as the other.

Fourthly *Kaida-tsjera*, which seem (as well as the rest of his) somewhat odd names pretending to be *Latine*; the fruits of this sort become large long *Cones* with a stiff forked prickle upon each scale, and are pleasant fruits to eat.

He tells us of a beautiful *Shrub* about 8 or 10 feet high bearing clusters of flowers, which are of divers colours, as red, scarlet, white and shaded with degrees of these colours, as is the plant with us called the *Marvel of Peru*.

Also three sorts of *Hummatu* which are kinds of *Datura*, one with prickly fruit but round, two other with smooth fruits

fruits oval; the leaves serve for many external and some internal uses; the Seeds are of a Soporiferous quality, as the known *Datura*.

Here are two sorts of *Ericu* mentioned, which are *Apocynums*, whose seed vessels the Arabians call *Beid el Ofsar*, which others name *Beidelzar*, which is *Apocynum majus Syriacum rectum Cornuti*.

Avanacu ceu *Citavanacu* of our Author, is *Ricinus Americanus* of others, of which here are several sorts and shapes.

He sets forth among many others a curious *Shrub* called *Nandi-Ervatam major & minor* bearing large odoriferous flowers, for whose sweetness they are entertained into their gardens, one whereof was brought over and presented to the *Prince of Orange*, and did, if not doth grow in his *Garden at Honselardick* which our Annotatour calls *Syringa Malabariensis lactescens flore niveo pleno odoratissimo*.

Divers others are set forth worth observation whose descriptions are good and whose virtues seem to be peculiar, if not *specifick*.

Horti Indici Malabarici pars tertia &c. Amstelodami Anno 1682.

This third part the before mentioned Excellent *H. van Rheed* hath dedicated to the *Indian King* in whose *Domini- ons* himself lived several years, and there collected, and made his observation of what that Country afforded, who hopes by his promise of true relation that his account of so many new and most wonderful plants and trees may not be apprehended an ungrateful *work*, since the greatest part thereof are such as have not been mentioned by any *Europæan Author*, complaining of those who stuff the world with new *books* of formerly known *Subjects*.

In his survey of the *Woods* and *Mountains* with no small pleasure, he could not but observe almost every *tree*

to be different, sometimes seeing some 80 feet high or more of a very considerable thickness seeming but one body, but bearing 10 or 12 different sorts of leaves, flowers, *fruits* &c. Which seemed amazing at first, but from better examination they proved to be so many several sorts growing up *Hederaceously* together, complicateing themselves into one body, others with their boughs falling to the ground or dropping *roots* from their *branches* growing up again employing a large space of ground, and sometimes so neatly growing that they seemed rather to be a stately *Palace* with its curious *Pillars* and *Arches*, than an uncultivated wood; which *Umbrella's* Providence hath wonderfully bestowed on these hot *Countries* which are very pleasant and fruitful as if each part were cultivated by skilful and industrious hands.

This rich *Country* he tells you is extended from the City of *Goa* to the *Comorine* Promontory 120 *German* miles, and about 30 broad, abounding in all necessaries both for *meat* and *medicine*. He seems mightily to commend the unexpressible cunning of their *government*, their *Theology* and *Politicks* so well mixed, one depending upon the other, that the same may in probability hold to the worlds end.

The two first parts of this *work* were especially compiled by the Reverend and skilful *D. J. Casparius* a Divine in the City of *Cochin* (where then lived *D. P. Herman* the present *Botanick* Professor at *Leyden*, a person of excellent experience and skill, and no small instrument in this *work* with his assistance there) which *D. Casparius* then dying before the finishing of the work *D. van Rheed* took to his assistance the well experienced *D. J. Munnicks* now Professor at *Utrecht* for the prosecution and completion of his designed work, to which *D. J. Commelinus* hath bestowed his curious *Notes*, but tells us that this *third* volume should have been more properly the second, consisting most of *trees* as the first doth; and the second should have been the last containing *Shrubs* and *Plants*, in which are 64 whole sheet *plates* of *Sculptures* rarely done. In

In this *Volume* our *Author* sets forth *trees* more unusual and seemingly strange than in either of the other. At first he presents you with a monstrous *Palm tree* which he calls *Codda panna*, five *Palma montana Malabarica*, and says that about the five or six and thirtieth year of its age it riseth to be about 60 or 70 feet high wth plicated leaves near round, 20 feet broad; wherewith they usually cover their *Houses*, and part of one leaf makes a *Book*, between whose folds they stamp their *Characters* entring the outward *Cuticle* and there remains the *impression*, which proves most durable or *Records* or the like, but bearing neither *flowers* nor *fruits* in that time; out of the top bud whereof riseth forth a new *Stem* which in 3 or 4 months time becomes 30 feet high; about which time the *leaves* fall off, & there appears a plaine; naked, upright, streight tree, from the sides of which new shoot, in about 3 months more spring forth divers naked streight parts from every side round, the lower whereof may be 20 feet long, Whereof there is a large pattern in *Mr. Ashmoles Museum* at *Oxford*. Afterwards these *branches* are adorned with abundance of small *white flowers* growing in bunches or bundles most pleasant to behold, which falling away are succeeded by great store of round fruits hanging on the small branches of an *Osseous* substance with plump *Kernells* in the middle, which being eaten cause *Vomiting*, and not of much use. This may probably be that mentioned by *C. Bauhine*, *Arbor folijs sex brachiorum longis, cujus folio extenso tres quatuorve viri in itinere operiuntur ut pluvias non metuant.*

To express this so notable a thing and all its parts, the *Author* hath employed 12 plates.

There is another which is referred to the *Palmes* very strange, called *Todda-panna*; to set forth its several parts, shapes and transmutations, our *Author* hath bestowed nine plates, the whole growing about 30 feet high, with a strange body about a foot and half or 2 feet diameter, with many joints and as it were *Horizontal* articulations.

Another he calls *Katou-Indel*, which is also referred to the

the *Palmes* with a *Plum like* Fruit, to shew the parts of which he gives 4 Plates.

Tsiaka-maram & *Pilau Malabarensibus* ; *Iaqueira Lusitana* ; is a large Timber Tree, bearing its fruits somewhat extraordinary hanging out of the body of the tree and large branches, not on the small branches as other trees do, each one a cubit long of an oval form all over prickly of which our *Author* particularizeth the parts on the three Plates.

He tells us also of a Tree of a vast bigness, which he calls *Atti-mecr-alou* , of 50 feet commonly in circumference, whereof there is one in the Province of *Cochin* by the Temple *Baykam*, which they say hath been there growing 2000 years.

Many other things might have been observed as things very unufal in these parts of the world, which we leave the curious *Reader* farther to satisfy himself of, from the work it self.

II. *Epistola ad D. Joelem Langelottum*
DE ALCALI ET ACIDI
INSUFFICIENTIA *pro prin-*
cipiorum corporum Naturalium munere
gerendo, conscripta à Johanne Bohn
Phil. ac Med. Doct. & in Acad. Lips.
Prof. P.

THE ingenious *Author* of this *Epistle*; in pursuit of his design, do's.

1. Complain of the obscure, and imperfect *Definitions*, which are given of the two great *Duellists* of *Nature*, *Alcali* and *Acidum*, by the favourers of this *Hypothesis*; if every thing, which ferments with an acid, be an *Alcali*, how comes it to pass, that *Spirit of Salt*, or *Spirit of Vitriol* causes a fermentation, and precipitation, when mingled with a solution of *Luna*, or *Venus*, made with *Aqua-fortis*, or *Spirit of Nitre*? and, if whatsoever coagulates with an *Alcali*, be an *acid*, whence is it, that *Liquor Nitri fixi*, or *ol. Tartari per del.*, turns Milk? and that *Spirit* * coagulates with *ol. Tart. per deliquium*.

2. He asserts, that those actions, which are imputed to *Alcali* and *Acidum*, do many times belong to such bodies, as partake of little, or nothing, of those *Principles*; for instance, he says, that the eroding quality of Oils *per Expressionem*, does not arise from the *acid* of those oils, there being not (as he says) so much *acid* in them, as can produce all those *Effects*, which are commonly laid to its charge.

3. He

3. He affirms that there is an absolute necessity of introducing (at least) one *active Principle* more; without which it is impossible to explain several *Phænomena* of *Nature*, particularly the inflammability of *Spirit of Wine*, which (he says) cannot proceed from any *acid*, that is in it, (as the friends to this *Hypothesis* would persuade us) for *Spirit of Wine* well *Tartariz'd*, burns away as readily, as that which is of an equal strength with it, and is not *Tartariz'd* at all.

The *Author* has hit on many things, which the *Honorable Mr. Boyle* thought fit to make use of in his [*Reflections upon the Hypothesis of Alkali, and Acidum*], which tract was Printed in the same year with this *Epistle*, and may very properly be consulted for a farther satisfaction in this subject.

III. Jacobi Barneri, D. SPIRITUS VINI SINE ACIDO &c. *Demonstratio curiosa.*

THE *Author* of this little *Treatise* (which is joyned with the *Epistle* before mentioned) does prove, that there is no *Acid* in *Spirit of Wine*.

1. By affirming, that *Spirit of Wine*, altho *cobobated* seven times from *Salt of Tartar*, (and by these means freed from its *acid*, if it had any at all) does still afford an *Offa alba*, when mingled with *spirit of Urine*.

2. By giving an *Analysis* of *spirit of Wine*, which discovers it to be an *Oil* dissolved in *Phlegm*, having nothing at all of an *acid* in it.

3. By

3. By shewing, that this *Offa alba* will not bear that *Test*, which a *Coagulum* arising from an *Alkali*, and an *Acid*, will undergo for, when brought to the *Fire*, it immediately dissolves.

Advertisement.

Since the Printing the first sheet of this Transaction, the Altar there Engraven and Explained, together with another ancient Roman one, both the Gift of the learned and judicious Interpreter Martin Lister Esquire, are safely arrived at Oxford, where they will speedily be set up, together with some others of the Worshipful Elias Ashmole Esquire, in the Court before the Musæum by Him lately furnished.

OXFORD,

Printed by LEONARD LICHFIELD, Printer to the University, and are to be sold by *Hen. Rogers* at the Sign of the Bible in *Westminster Hall*, and *Sam. Smith* at the *Princes-Arms* in *St. Pauls Church-yard*.

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