

V. *A short Account of the different Kinds of Ipecacuanha*, by Dr. Douglass, *Med. Regin. Extr.*
 & R. S. S.

I beg Leave to take up a small Part of this honourable Society's Time, in laying before them some Specimens of that celebrated vomiting Root, whether truly, or falsely called *Ipecacuanha*, which I keep in my Collection of the *Materia Medica* ; together with a few Observations concerning their outward Appearance, by the Help of which the several Kinds thereof may be distinguished from one another ; and an Account of what I have hitherto been able to learn concerning the true Places of their Growth.

The first general Division of these Roots must be, as has been already hinted, into true and false ; and each of these may be again subdivided into several Species, the distinctive Note of which is principally taken from their Colour.

Of the true *Ipecacuanha* I have four Kinds, Black, Brown, Grey, and White ; but I cannot pretend to determine whether they belong to different Plants, or are only Varieties of the same Plant owing to the Soil in which they grow, as is affirmed by our worthy and learned President Sir *Hans Sloane* Baronet. And as these Roots are never imported to us entire, it is impossible to give any certain Description of them in that State.

However, by comparing the several dried Pieces as we have them, we may very probably conjecture that

that a short radical Trunk descends from a *Caulis*, and is afterwards divided into several large Branches, and these again into smaller ones, in different Series, with minute Filaments or Fibrillæ going out from them.

Each Piece is made up of two general Parts, an Outer or Cortical, and an Inner or Fibrous, which like a white Nerve, or smooth compact Fasciculus of woody Filaments, runs through the Center or Axis of the Roots, and perhaps encloses within it a small Medulla or Pith, which however is hardly discernable by the naked Eye.

The Cortical Part is corrugated by two Sorts of Wrinkles, one superficial, consisting either in circular Rings or little Knots which do not go quite round; the other penetrating into its Substance, being deep Incisures or Fissures reaching all the Way to the Nerve.

What Lengths these Roots are of when taken out of the Ground, cannot be determined: I have met with some Pieces above nine Inches, many above six, but the greatest Number are still shorter.

We find them bent, wreathed, and contorted into all Manner of Figures; and indeed few Pieces are altogether straight for any considerable Length.

What has been hitherto said, agrees to all the true *Ipecacuanba-roots*; but several other Things are still to be taken Notice of, in which they differ.

The Black Sort is the smallest of the four, very hard, and the Fissures wide and numerous. The outward Colour of the Cortex is not equally black in all the Pieces of this Kind, and its inner Substance, as well as the Nerve, is mostly white, tho' not always in the same Degrees.

The Brown Sort is larger than the Black, the Fissures at larger Distances, the inner Substance of the Cortex darker, and the external Colour has several Degrees of Redness in the several Pieces.

The Third or Grey Sort is sometimes found of a darker, sometimes of a lighter Colour, and the Inner Substance of the Cortex is Brown streaked with White. It is much larger than the black Sort, many Pieces being above a quarter of an Inch in Diameter, but the Nerve is smaller in Proportion to the cortical Part. I have met with few Pieces of this Species above five Inches in Length; but, as I already observed, nothing can be concluded from thence as to the Length of the whole Roots.

The Fissures are here still fewer than in the brown Sort, and in some Pieces scarce any are to be met with. The superficial Corrugations are various in different Roots, some being almost wholly smooth, and in others the Wrinkles rather longitudinal than circular.

The white Kind, as far as I can judge by the small Sample which I have of it, is of very different Sizes, some Pieces of it being larger than any of the grey Sort, and the rest much less. The whitish Colour of the Cortex is mixed with a yellowish Cast, and the nervous Part is very large in Proportion to the rest. Very few Fissures are to be observed therein, and hardly any reach so deep as the Nerve. The other Corrugations are likewise very shallow, and most of them longitudinal; but it seems to be more knotty than the other Kinds, and these Knots I take to be owing chiefly to the *Fibrillæ* which go out from the larger Branches of the Roots. The

The *Loci Natales*, or true Places of Growth of these different Species of *Ipecacuanba* have not as yet been fully settled.

The Black Sort is hitherto known to come only from *Brasile*, whence we get it by the Way of *Lisbon*, and some of our Druggists for that Reason distinguish it by the Name of the *Brasile* Root.

About the Brown Sort, I am informed by Dr. *James Housfon*, who resided for several Years in *New-spain*, that it grows plentifully at some Distance from the City of *Cartagena* in the Kingdom of *New Granada*; from whence it is frequently sent in Sa-rooms or Skins, containing 100 Weight, to *Jamaica*, and so to *England*; where it is certain we have had it of late Years in great Abundance.

The Grey *Ipecacuanba* is with us preferred to all the rest, and by far the most generally used when it can be had. It is said by Authors to grow in *Peru*, from whence we get it by the Way of *Spain*, it being brought from *Peru* to *Porto-Bello*, and from thence into *Europe*, by the *Spanish Galleons*. Some Parcels thereof are likewise probably sent from *Porto-Bello* to *Jamaica*; for we are certain that it has sometimes been imported hither from that Island. By some Specimens that were brought me by Mr. *Lightbody*, an ingenious Surgeon, from *St. Thomé*, a *Portuguese* Island under the Equinoctial, whither they were sent directly from *Brasile*, it is evident that this Species is likewise a Native of that Country, and therefore must either have been included by *Piso* under one of the two Species mentioned by him, or else discovered since his Time. According to Father *La Bat*, in his late

Voyage to the Islands of *America*, this Species grows also plentifully in *Martinico*, where for many Years past it has been used by the Inhabitants.

The White Sort, called by the *Portuguese*, *Ipecacuanha Blanca*, is said by *Piso* to grow in *Brafle*, and if we may believe *Father La Bat*, it is likewise found in *Martinico*.

These are the four Kinds of true *Ipecacuanha* which have hitherto come to my Knowledge; but I have met with two other Roots to which that Name has been falsely ascribed, which from their outward Colour I shall call White and Reddish Brown.

The White Sort agrees pretty much both in Colour and Surface with the true White, but it is not near so knotty. It is likewise considerably larger in Size; straighter and softer to the Touch.

The Brown Sort is of a deeper Colour than the true Brown, and many Pieces thereof have some Mixture of Red (from whence it has been sometimes called Red *Ipecacuanha*) and the inner Substance of the Cortex enclines to a reddish Yellow. The Pieces thereof are much longer than any of the former Sorts, some of them measuring sixteen Inches, and they are of a Size between the Black and Grey. The Fissures are at greater Distances from one another than in the true Brown, and the Spaces between them much smoother. In a Word, though this Root when mixed with the true Brown, to which it bears the greatest Resemblance, may easily be confounded therewith; yet when they are attentively compared, their whole Appearance sufficiently distinguishes them.

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Both these false Kinds were brought me from *Maryland* in 1725, by one *M. Seymour* a Surgeon, who informed me that they grow there in great Plenty, being called *Ipecacuanba* by the Inhabitants, and used as a Vomit by those of inferior Rank. I have since that Time received a Sample of the Brown Sort, taken from a Parcel which lay in the Custom-house, above twelve Years ago, and called by the Name of wild *Ipecacuanba*.

The forementioned Illustrious *Sir Hans Sloane* did me the Honour to inform me that this false Brown Kind was the same that was formerly sent to him from *Virginia* for the true *Ipecacuanba*, and which he afterwards discovered to be the Root of a poisonous Apocynum described by him in his *Natural History of Jamaica*; in which Island it is very common, and likewise in *New-spain*, as appeared to him by the Specimens sent him by his Correspondent *Dr. Burnet*.

In his Introduction to the second Volume of that excellent History, he has obliged us with a very full and distinct Account of what he had learned from his Friends abroad, concerning the pernicious Effects of the several Parts of this Plant, and of the great Pains he was at to prevent its being brought into Use in this Country, which was then very much to be apprehended. *Helvetius's* Name will always be mentioned with Honour for the great Share he had in rendering the Use of the true *Ipecacuanba* common in *Europe*; and I cannot think that *Sir Hans Sloane* deserves a much less Degree of Praise for having detected this false Kind, which was insensibly creeping into Use,

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the Effects whereof might otherwise have proved as fatal as the other is found to be beneficial.

I have only to add, that this poisonous Kind of Apocynum is now cultivated by several curious Persons about *London*, and that I design with all convenient Speed to present this Society with a particular Description thereof, taken from a Plant which I had last Summer growing in my own Garden.

VI. *An Account of a Book entituled, Hesperii & Phosphori Nova Phœnomena, &c. Auctore Francisco Blanchino ; by John Hadley, Esq: R. S. V. Præs.*

THE Design of this Treatise, is to give an Account of some new Astronomical Discoveries relating to the Planet *Venus*, which the Author disposes under four Heads ; *viz.*

1. The Description of the dusky Spots observed in her Disk.
2. Her Rotation round an Axis, the Position of which is determined by the apparent Motion of those Spots, together with the Time of her Revolution.
3. The Parallelism of that Axis to it self in all Parts of the Planets Orbit.
4. Observations in order to determine the Horizontal Parallax of *Venus*, and consequently those of the Sun and other Planets.