

XIV. *The Establishment of a new Genus of Plants, called Salvadora, with its Description; by Laurence Garcin M. D. F.R. S. of Neufchatel in Switzerland; communicated in a Letter to Dr. Mortimer Secr. R. S.*

Translated from the French, by T. Stack M. D.

Read Feb. 23.
1748-9.

THIS Plant is woody. It grows sometimes into a Tree, sometimes into a Shrub, and sometimes into a Bush; spreading very tufted Branches on all Sides down to the Ground. Its native Countries are the Parts adjacent to the *Persic Gulph*, the North of *Arabia*, and the South of *Persia*. I cannot find that any Author has known, or made the least mention of it.

First I will give its Characters, and then its Description from accurate Observations, which I have made on the Spot.

Characters.

Calix. This is a monophyllous Cup, divided into four Lobes, which, as soon as they spread open, turn outward, and roll backward on themselves; then wither, grow whitish, and dry up.

Corolla. Its Flower is void of Petals.

Stamina. These are four in Number, answering to the four Lobes of the *Calix*, and being likewise of the same Length. They spring from the Basis of the *Pistillum*, and, as they shoot up, tend outward.

Their

Their Summits are round, with a Furrow turning in on one Side; which gives each of them the Form of a Purse.

Pistillum. It is round, its Style single and short, and the *Stigma* is blunt, and shaped like a Navel.

Pericarpium. Is a round Berry, of a middle Size, with one Cell or Lodgment in it.

Semen. It is single, spherical, inclosed in a callous firm Skin, beset with Spots, forming a sort of Husk like that of Hemp.

I know but one Species of this *Genus*, which I describe thus.

Description.

It is a Plant which varies considerably in Size; that of a larger sort of Shrub, is what it most frequently grows to. It produces a Number of Boughs without Order, and very tufted Branches, which most commonly hang down to the Ground. Its Bark is moderately thick, sometimes smooth, sometimes full of Cracks, of an Ash-colour, both in the Trunk and Branches, but green on the tender Shoots. Its Wood is every-where brittle, and nearly of a Straw-colour.

The Leaves are borne on young Sprigs, which shoot out along the Boughs. These Sprigs are strait, generally short, but sometimes pretty long, like little Wands. The Leaves are thick-set, and tufted on the former, but thin on the latter. They grow sometimes opposite to one another by Pairs, crossing alternately; and sometimes by three and three, disposed like Rays; but this more rarely. Their Length, which varies on the same Stalk, is generally from

from an Inch and half to two Inches and half, and their Width is from nine Lines to an Inch a little below the Middle in each, which is the widest Part. They are thick, pointed at their Extremity, and rounded at their Base, very even on their Edges, somewhat succulent, but firm: Their Colour is a pale Green, but somewhat yellowish, in those that are shooting out. The Pedicles which support them are very short, each being but half a Line in Length, and a quarter in Thickness. Every one of these Pedicles, which is round, furnishes a little Nerve, which runs thro' the middle of the Leaf; it is a little hollowed on the upper Side, and somewhat raised on the Back; and terminates at the End of its respective Leaf. This Nerve gives two or three Pair of almost imperceptible Threads, which spread and divide into other small irregular Threads, thro' the Body of the Leaf. In fine, these Leaves in Shape nearly resemble those of the Sea Purslain, and sometimes those of the Mistletoe of the Apple-tree. There are some generally on each Plant, which have one, two, or more black Spots, as in the *Persicaria*, but almost round, and smaller.

The Flowers, which are stameneous, that is, without Petals, are small, and disposed in Clusters on the Tops of the Shoots. These Bunches of Flowers intirely resemble those of the Vine-Blossoms. The Empalement is small, green on the under Side, having four Segments almost pointed, which roll outward, and then dry up. Its Diameter in this rolled State of its Lobes, is but of one Line. The *Stamina* are of a Straw-colour. The hollow Furrow in each

of their Summits is not easily discover'd without a Glass.

The Pistil or *Embryo* of the Fruit, which is little, and yet occupies the whole Inside of the *Calyx*, is of the same Colour with the Bottom of this, that is, green. Afterwards it swells in all Dimensions, and grows into a Berry, of the Shape and Size of a Gooseberry, of three or four Lines in Diameter. At first it is of a pale Green, then a bright Purple, and in its Maturity of a dark Red. Each Berry is supported on a strong thick Pedicle, attached to a small Bunch. Its Substance is a white transparent Flesh, full of Juice, much resembling Jelly, which surrounds a single round Grain, marbled with black or brown Spots, as in the Tortoise-shell, when ripe. This Grain is as large as a Grain of Hemp-seed, that is, about two Lines in Diameter, but sometimes less. It is properly a Kernel, or a Shell that has a Cavity, which incloses a sort of little round Almond, of a Straw-colour, yellowish on its outward Surface, and pale in its inward Substance, which is pretty firm.

Qualities.

All the Parts of our Plant have an acid pungent Taste and Smell, vastly like our Garden-Cresses, but more biting. The Fruit is the most pungent Part of the Whole. The Smell of the Plant is perceptible at seven or eight Paces Distance, when a Person is to Leeward.

The Natives of the Country use it against the Bite of the Scorpion, by rubbing the wounded Part with its bruised Leaves. They also employ its warm Infusion to wash the Bodies of their Children, in order

to keep them healthy. And they feed Camels with it, who love it naturally.

Remarks.

This Shrub, which is sometimes large, sometimes small, is most commonly found along high Roads, and in dry low Places of its Climate. As its Branches, which are slender and brittle, spontaneously bend downward, and form a thick Tuft, this makes it generally resemble a great Bush, which takes up a good deal of Ground in most Places, where it grows naturally. It delights in the hottest and driest Places, such as those adjacent to the *Persic Gulph*, and perhaps more so than Palm-Trees: Wherefore I doubt of there being any growing in the Countries that lie to the East of the *Gulph*. And accordingly I have met with none, either in the Neighbourhood of *Surat*, or in the Kingdom of *Bengal*, where there are regular rainy Seasons every Year.

I should rather believe, it is more likely to be found in the Deserts of *Africa*, on this Side of our Tropic; those being proper Places for it, and where it rains seldomer than in any other Part of the Globe.

Its Leaves have frequently Excrescences of different Sizes and Shape, round, oval, and sometimes very large. They are the Work of those flying Insects, which commonly abound in these Parts.

The Inhabitants of the *Gulph* call this Shrub by the Name of *Tchuch*. Perhaps its Nature would not allow it to grow in Lands far distant from the Sea, no more than the *Sea-Plants*, to which this Sur-name is given for that Reason.

Its Parts are all brittle, and even the Leaves crack, if bent in the Middle.

In fine, I have chosen a Name, which I imagined I ought to give it, after the Example of Mr. *Linnaeus*; who has called several Plants by the Names of Botanists of Reputation. This laudable Proceeding is a Way to perpetuate the Memory of all those who have contributed to the Progress of Botany; and that much better than Medals do with regard to Princes or Emperors. A Proceeding, which, if duly pursued, will encourage those who come after us, to make useful Discoveries in this Science for the Good of Mankind, and in much greater Number than have been published on the Subject of Plants up to our Times. For it is easy to comprehend, that what remains to be discovered on this Subject for our Use, must infinitely surpass all that Man has hitherto found out.

The Name of *Salvadora*, which I have chosen for our Shrub, is that of the late Mr. *Salvador* of *Barcelona*, a very skilful Botanist, of whom *Monf. de Tournefort* makes mention in his Introduction, which serves for a Preface to his *Institutiones rei herbariæ*, where he styles him *the Phoenix of his Nation*; because he was really the richest Naturalist, and the most expert in botanical Matters that *Spain* ever produced. Before the last Siege of *Barcelona*, in the Years 1713 and 1714 they herborized together in *Catalonia*, and on the *Pyreneans*, while *M. de Tournefort* was on his Travels there. They were intimate Friends, and carried on a Correspondence some Years: And as I was personally acquainted with him for three or four Years, and have
likewise

likewise herborized with him before the said Siege, and have since been honoured with his Friendship and Correspondence, I thought it incumbent on me to do Honour to his Memory, by giving his Name to this Plant. And I have done it with the greater Justice, because it is certain, that, had he lived, he would have given a History of the Plants of *Spain*, which, by its Accuracy, would have afforded much Pleasure to the Botanists of *Europe*.

To conclude ; from the Characters of our *Salvadora* it is manifest, that its Place in *Tournefort's* System ought to be in the first Section* of the 18th Class. In the System of Mr. *Linnaeus* it ought to be placed after the *Rivina* in the fourth Class, which receives Plants with four *Stamina* (*Tetrandria* and *Monogynia*).

* Among Trees and Shrubs having *apetalous* Flowers with the Fruit joined to them ; to which Section belong the *Fraxinus* and the *Siligna*.

C. M.