



# CAPE VERDE and its SUCCULENTS

Norbert Duthion (Cape Verde)

It is now more than 10 years since my wife and myself have lives Santo Antão, the greenest island of the Cape Verde archipelago. This volcanic island of 779 km<sup>2</sup> does not have any “rainy season”, for there is no monsoon here. Indeed, what we can say is, if it has to rain, the rainfall will be situated between August and the end of November. In 2014, we had only 3 hours of rain (approximately 50 mm).



Volcanic ashes (pozzolan) near Tarrafall

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There is little temperature variation here, both diurnal and seasonal and day length differ very little throughout the year. Here, nature has no such benchmarks, the entire plant life cycle is based on the last rains.

This dry tropical climate has a significant impact on plants, among other things.

Cape Verde is the Southernmost part of the archipelago of Macaronesia in which flora and fauna are poorly represented. Santo Antão is the northernmost island within Cape Verde.

In Santo Antão we are fortunate to have here and there, underground streams that keep some moisture, both in the air and in the soil. On our island, yet it is rare, there are permanent streams that flow twittering, as in Paul Valley, and even quite unexpected, also permanent waterfalls, some having a significant height.

I am interested in the flora and I was surprised to find few succulent plants. The most common plants are xerophytes ... And for a good reason!

## Here are the ENDEMIC succulents:

### AGAVACEAE :

- *Dracaena draco* L. 1767, but perhaps as for *Dracaena draco* from the Moroccan High Atlas (*Dracaena draco* ssp. *ajgal* Benabid & Cuzin), is it a subspecies (its local name is *Dragoeiro*). Today, since the discovery of *Dracaena draco* ssp. *ajgal*, its Canarian endemism is probably questioned.



*Dracaena draco* in flowers towards Cova.

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**ASCLEPIADACEAE (Apocynaceae APG III) :**

- *Periploca laevigata* ssp. *chevalieri* (**Lantisco** is the local name) this beautiful plant is not a so common, although it may be seen from time to time. Its flowering delights me ... But is that REALLY a SUCCULENT?



*Periploca laevigata* ssp. *chevalieri*

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- *Sarcostemma daltonii* Decne 1849 (**Gestiba** is the local name). It occurs throughout the mountain where sometimes, this plant covers very large surfaces. In the great wall of my patio, there are some who have decided to grow there! Bewildering, because there is not even a gram of soil!



*Sarcostemma daltonii* & inflorescence, Ribeira de B. de C.

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**CRASSULACEAE :**

- *Aeonium gorgoneum* J. A. Schmidt 1852, up to 1 m high (Pico da Cruz). (**Saião** is the local name)



*Aeonium gorgoneum* on a stonewall, road towards Cova

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- *Umbilicus schmidtii* Bolle 1859 is well represented in the descent of Cova to Paul (Balsãmo is the local vernacular name). Like its predecessor, this plant thrives in stones (walls or even on large rock surfaces forming vertical cliffs. Unlike *Aeonium*, *Umbilicus* prefers a slight moisture.



*Umbilicus schmidtii*

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**EUPHORBIACEAE :**

- *Euphorbia tuckeyana* Steud ex. Webb (**Tortolho** is the local name), is found everywhere between 200 and 1600 m. in altitude.



*Euphorbia tuckeyana*, Pico da Cruz

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**A variety could exist:**

- *Euphorbia tuckeyana* Steud **var. mezereum** with much larger leaves (14 to 16 mm) with rounded top roughly showing a slight depression, and with larger fruits.

Is this an unusual variety? I cannot answer that question. In any case I have ever seen it, or maybe I missed it? I will try to find it someday ... This may take some time. If I can, I will photograph it closely enough that we can see clearly what differentiates the type species from this variety.

**Among the other succulents** which I will call “SPONTANEOUS” and which grow out of the gardens, these include :

**AGAVACEAE**

- *Agave sisalana* and *Furcraea gigantea* seem to be of the most numerous genera. The *Furcraea* are found in more or less important populations. The large flower heads of each other are very spectacular. Immediately after flowering thousands of propagules appear.



*Agave sisalana* on mountainside, Pico da Cruz

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*Furcraea gigantea* covering mountainside, Road towards Cova.

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## APOCYNACEAE

- *Plumeria acutifolia*. It is found in very small numbers, e.g. near Boca de Coruja.

## ASCLEPIADACEAE

- *Periploca laevigata*. Despite the heat, this beautiful climbing asclepiad appears from time to time.

## BOMBACACEAE

- *Adansonia digitata*. These african baobabs are found in Santo Antão but are very few.



*Adansonia digitata* & flower near Taraffal.

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- *Ceiba pentandra* is rare. It is unmistakable with its huge trunk and sometimes buttressed by spectacular wings at the base. Its fruit provides kapok. One of the beautiful finest specimen is located on Santiago Island.



## CACTACEAE

- ***Opuntia***. They are represented by ***Opuntia ficus indica***, which is rather common, the form with yellow flower is dominant, but sometimes, if we are lucky enough, we can find the form with red-orange flowers. Also, the red flowers of ***Austrocylindropuntia subulata*** appear on plants that can reach a respectable size, the largest clump I found was about 2-3 m. in height and diameter.

- ***Hylocereus undatus***. This lithophyte covers huge rocks near Eito, over Paul. These plants are to be seen at night when thousands of flowers open.

- ***Pereskia saccharosa*** with pretty pink flowers resembling the wild roses is also found from



***Pereskia saccharosa***.

© N. Duthion

time to time.

- ***Pereskia aculeata*** should also be found, but I never saw it.

## COMMELINACEAE

- ***Commelina erecta*** is common near Boca de Coruja and was represented as wild in my future garden.



*Commelina erecta*, Quintal



*Kalanchoe tubiflora* (infl.)

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*Kalanchoe serrata* (infl.).

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## CRASSULACEAE

- *Kalanchoe tubiflora* with abundant flowering is current, as well as:

- *Kalanchoe pinnata* with beautiful bell-shaped flowers which becomes spectacular when the ground is a little wet. Plants are quite numerous near Paul and form large clumps.

- *Kalanchoe fedtschenkoi* and *K. serrata* may appear and probably others too...



*Kalanchoe pinnata* (infl.).



*Euphorbia pulcherrima*, Cova road. © N. Duthion



*Jatropha multifida* (fr. & infl.).

© N. Duthion

All these Kalanchoes have certainly escaped from gardens...

## EUPHORBIACEAE



***Pedilanthus tithymaloides***

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This family is well represented in the form of very drought resistant weeds, ornamental shrubs, a vegetable root (*Manihot esculenta* or cassava) and a fruit (*Phyllanthus acidus*).

- ***Euphorbia lactea***. They are often beautiful and form large clumps near houses.
- ***Euphorbia neriifolia***. Like the previous one, this species is found mainly near homes.
- ***Euphorbia pulcherrima***. I know only one adult specimen in Santo Antão. It is a plant of at least 3 to 4 m high. Just around the corner of a house, on the left side of the road up to Cova between Corda and Spongeiros. I wanted to take a picture of this beautiful plant but I was very disappointed to find that it had been cut. Nevertheless, it gives signs of new growth at the base. In this case, next year it should bloom again...

Some young *Euphorbia pulcherrima* were reported near Taraffal, so a little exploration in this area is needed.

- ***Euphorbia tirucalli***. Close to my home, in the mountains, I just found out a few plants of this staghorn Euphorbiaceae...
- ***Jatropha curcas***. There are many and well known for their oil fruit with insecticide

properties and their potential use as biofuel. Common everywhere.

- ***Jatropha gossypifolia***. This shrub is common in the area of Coculi. It looks a little like *Jatropha curcas* though it is smaller, its leaves and flowers are different, they are a beautiful red with yellow background and make lovely inflorescences.

- ***Jatropha multifida***. This Euphorbiaceae shrub is common in gardens, it is sometimes seen in nature where it often exceeds 2-50 m high.

- ***Jatropha podagrica*** is very rare, but with a little chance we can find it at low and medium altitudes.

- ***Pedilanthus tithymaloides*** is found here and there.

## LILIACEAE

In this family, first and foremost comes:

- ***Aloe vera***. It grows everywhere, impossible to miss it. You will see it in great numbers in the mountains, on the roadside, like near Coculi, towards Cruzinha, or along the road to Porto Novo.



***Aloe vera***, sparrows feasting on the nectar without pollinating.

© N. Duthion

- *Aloe spinosissima* is not rare. There is a very fine specimen at the entrance of Cova crater, on left side.

## MORINGACEAE

This monospecific family, highly sought in herbal medicine is found in Santo Antão in the form of a beautiful tree of 8 to 10 m high:

- *Moringa oleifera* is at Taraffal for example, but also elsewhere. I thought this plant could be classified in the succulents as it is a caudiciform.

## PHYTOLACCACEAE

- *Phytolacca dioica*. This large and beautiful tree with beautiful specimens which are found at the entrance of Cova crater and are covered with clusters of small fruits whose juice terribly stains. This juice was used to colour the wine.



*Moringa oleracea*, fruit at Taraffal © N. Duthion

In the mountains around the crater, we see many pokeweed plants, but strangely all young. It could be *Phytolacca mexicana*.

## DIDIERACEAE (ex PORTULACACEAE)

- *Portulaca oleracea*. This small annual or biennial appear on the ground in large numbers with the first rains. The goats feast on it. ... Apparently they are the only ones.

- *Portulacaria afra*. A shrub which is uncommon in Cape Verde, occurs only very rarely. I saw a plant near the village of Pedracin (Tinkling Stone) at Boca de Coruja, but is it still there?

It should be noted that Cape Verdeans enjoy succulent as we can see more and more growing in the gardens... and less in the wild (?).

I also met during my small survey and only evoke the presence of some Ipomoeas which are somewhat succulent.

In general, Cape Verde seems not to have been the subject of long and many botanical researches. I think plants should be found plants not yet described in the mountains, which are beautiful but not always easy to survey.

Perhaps these few lines will make you come to explore Santa Antão or another island just waiting for your visit. See you soon!

Text & photos: Norbert Duthion