A Brief Guide on Native Sombrisian Life

"Sombrobes"

Courtesy of Dr. and Dr. DeNoah

Compiled by Dr. DeNoah

Up to date as of Sombrisian Year 70, Day 36

On Sirca as kids, the house provided us all with a general education. You may remember when they taught you about the planets of our star system. Typically, they teach us that Sombris is a dead planet which Omega has forsaken. A dry, toxic, and worthless planet.

House agents have given us permission to inform our employees that this isn't entirely true. If it were, we wouldn't had bothered to come to Sombris. 18 bodies of water have been identified on Sombris's surface, some being fairly large. Most of these lakes are fed by polar meltwater either from glaciers flowing into warming areas or meeting thermal hot springs.

In and around these lakes... is life, microscopic life. Large colorful mats comprised of hundreds of species of microbial life. These are the natives of this planet. While these organisms are occasionally referred to as if they were bacteria, the truth is they aren't related to bacteria at all. There are several major distinct phyla of these Sombrisian microbes, and for the purposes of this guide we'll refer to them all as "sombrobes" which is a portmanteau of Sombris and microbes. Sombrobes use a genetic material known as sombrisose nucleic acid (SNA) which can be converted into DNA using artificial enzymes provided courtesy of Dr.

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Chemosynthetic Sombrobes

We believe life started on Sombris between 2 and 3 billion years ago. Genetic analysis of sombrobe SNA shows that chemosynthetic sombrobes were the first organisms on this planet. Curiously, it seems chemosynthetic sombrobes evolved on land and then migrated into water when the ice caps on Sombris started to melt.

This a radiative event took place when this phylum moved to water. Modern chemosynthetic sombrobes as well as all other sombrobes are descendants of an ancestral chemosynthetic sombrobe species.

Initially inhabiting thermal vents where these organisms use the heat from within the planet to perform various reactions, chemosynthetic sombrobes also perform reactions in the water and soil on Sombris. All chemosynthetic sombrobes have an active and dormant form, going dormant when the conditions and reactants for their metabolism aren't met. They multiply in the active phase.

CHEMOSYNTHETIC SOMBROBE OF NOTE;

Torie Taylor's Sombrobe (TT. sombrobe)

Torie Taylor's Sombrobe (*TT. sombrobe*) was named and classified by Torie Taylor on Day 21 of Sombrisian Year 70. They live in cyan-colored colonies at the bottom of shallow pools around lake Justice, a polar lake which is rich in hydrogen gas compared to what is normal for Sombrisian waters. It is unknown why they are cyan or how they utilize hydrogen gas, but they seem to put off an electrical current which has been noted strong enough to cause discomfort but isn't lethal. *TT. sombrobe* is actually more efficient at generating electricity from hydrogen gas than any other method of doing so.

Dr. Taylor suggested she could place *TT. sombrobe* into a water column and gradually treat it with aqueous hydrogen gas in order to create a new power source. This power source would then be scrutinized and experimented with by future scientists.

Dr. **Complained** that in a world where nuclear energy exists, fooling around was explosive hydrogen gas was a stupid idea. However, Dr. DeNoah (that's me) notes that it could be useful as a native Sombrisian energy source if the planet proves to be poor in radioactive elements.

An expedition still needs to be sent to see why exactly there is a high amount of hydrogen gas dissolved in lake Justice in the first place, especially sense there isn't that much hydrogen gas in Sombris's atmosphere.

TT. sombrobe could also potentially be a source of cyan dye and ink far more vibrant than current available dyes and inks. However, the detrimental side effects of the pigment (melting of fur and paper) have not been overcome yet. Dr. Taylor says her fur will never grow back.

TT. sombrobe is a cyan microbe whose cell is narrow and between 1 and 2 microns long.

It has no cell wall

Photosynthetic Sombrobes

When chupadores first sent probes to Sombris, the majority photosynthetic sombrobes were in decline, but thanks to interventions courtesy of our terraforming initiative, this phylum has been making a comeback. As a result, planetary biomass and atmospheric oxygen have been on the increase.

Most photosynthetic sombrobes are green but blue and red subphyla have been discovered recently. Photosynthetic sombrobes exist only in water, either on the floor in shallow water or suspended near the surface of the water. The vast majority of photosynthetic sombrobes are colonial.

There is some evidence that some colonial photosynthetic sombrobes such as *J. mama* and *D. nuts*. Might be showing signs of forming multicellular plant like organisms in some lakes but more studies need to be done on them.

Apart from oxygenating the atmosphere, the other big significant role of photosynthetic sombrobes is as a reliable source for future residents of Sombris.

PHOTOSYNTHETIC SOMBROBE OF NOTE;

SOMBRIGROW (E. sombris)

E. sombris is a photosynthetic sombrobe which forms thick chewy dark green mats. These mats are called SOMBRIGROW and we are working on a trademark for them. They taste very smoky and bloody and go great with anything.

More importantly, SOMBRIGROW is extremely nutritious to chupadores and chupadore-like organisms both natural and artificial. All Sircan volunteers and subjects of other origins have been shown to be free of all deficiencies.

However, it has been noticed that some chupadores, especially those of Border-Worti descent, can become addicted to SOMBRIGROW. Overconsumption results in the accumulation of fat at a rate faster than the integumentary system can provide for which in rare cases can result in rupture and hemorrhaging of lipid rich tissue. However, future chupoids of Sombris will either be free of the urge to overeat or have genes that allow them to be unaffected by abuse of SOBRIGROW.

E. sombris cells are circular and each about 1 micron in diameter. They have cell walls

They form colonies using semi-rigid connectors derived from ancestral flagella.

Consumer Sombrobes

Consumer sombrobes are the most diverse phylum of sombrobes. These are single celled organisms that consume other single celled organisms, usually by attacking them with a structure attached to their cell wall or cell membrane. Examples of these kinds of structures are nets and spears.

Nearly consumer sombrobes are free living, as in none of them ever group together in colonies. They are found lacing the mats created by photosynthetic and chemosynthetic sombrobes. Most consumer sombrobes don't show any signs of being useful to chupadores in any way. They do however function as a balancing force in Sombris's ecosystems, as their metabolisms are complimentary of those of photosynthetic and chemosynthetic sombrobes.

The vast majority of consumer sombrobes are found in colonial mats of other sombrobe phyla located on the edges of bodies of water.

CONSUMER SOMBROBE OF NOTE; O. omega

Dr. Mudamudamuda make a shocking discovery in a shallow pool near the main outpost here on Sombris. He found a sombrobe which has importance not for commercial or scientific purposes but for symbolic purposes.

This sombrobes, now called *O. omega* is a sombrobe shaped like a horseshoe, shaped like the sigil of the house of Omega. Clearly this is an omen that Sombris is good. This sombrobe should provide a huge morale boost to us all on Sombris. In fact, when Dr. Mudamudamuda showed this to Dr. Taylor, she cried (I assure you tears of joy) and threw up (her vomit was in the shape of a smiley face). Dr.

claimed *O. omega* was actually crescent shaped, but Dr. DeNoah (me again) ignored that thought. (Hope he isn't mad).



Decomposer Sombrobes

This phylum is not a true phylum as taxonomically it is actually a subphylum within the phylum that contains consumer sombrobes. However, these sombrobes have enough unique features to separate themselves from consumer sombrobes.

Whereas almost all consumer sombrobes outside of the decomposers are free living, decomposer sombrobes may be free living or colonial. They are also more likely to be found in places other than the shallow water colonial mats however they are still most plentiful in the shallows.

When lots of cell death of other species occur decomposer sombrobe species form colonies to take advantage of formally living material. They don't need the structures found in consumer sombrobes in order to gather energy and nutrients.

Decomposer sombrobes are crucial for nutrient cycling on Sombris and many have symbiotic relationships with colonial photosynthetic and chemosynthetic sombrobes.

DECOMPOSER SOMBROBE OF NOTE; D. oderant

D. oderant is a decomposer sombrobe which Dr. Mudamudamuda accidentally spilled on himself. He hadn't showered that day and found that the sombrobe had eliminated the non-showered smell from his clothes.

Soon other scientists were trying it on themselves and loving the fresh smell it left behind as it consumed all odor causing chemicals associated with bad smelling chupa... However. Daniel Grif, the janitor, stepped in. He was this really large orange chupa who never showered and spent all his time stuffed in a tight denim suit. Naturally, we tested it on him when he interrupted us...

He screamed and gorily melted. We no longer use D. oderant as deodorant...



D. oderant is usually amorphous and is about 1 micron across. It's free living and doesn't form colonies.

THE ANOMOLOUS SOMRBOBE; SOMBROBE X

The elephant in the room, Sombrobe X. Sombrobe X is a sombrobe found all over the entire planet. It's in the air, in the soil, in the water, and in the ice caps. It's only in its active form in water and in the lab. Everywhere else it's in a dormant cyst state. It is unclear how sombrobe X derives energy or obtains nutrients as it has not been observed doing these things. It does have SNA so we know it's a sombrobe or at least related to sombrobes and we have observed that Sombrobe X is attracted to itself.

Dr. Dr. discovered two years ago or so that one specific gene in Sombrobe X both allows for conversion to DNA (which nothing on Sombris uses) and another gene that seems to force development along faster. Dr. DeNoah (me yet again) noted the genome of Sombrobe X looks edited, but that's impossible because sombrobes are the only things we've known to live on Sombris, and microbes can't form advanced civilizations. Of course, other alien visitors were considered but there are no fossils or traces of ships anywhere on the planet as of yet. More expeditions need to be made.

One last thing is that a lot of Sombrobe X together in dormant form looks a lot like a pile of ash....



CONCLUSION

In conclusion, Sombris is not a dead world. It is home to a myriad of interesting microbial organisms which will help efforts to transform the planet as we progress into the future. The possibilities of what these organisms could provide chupakind and its future descendants are endless. We hope this guide was helpful in highlighting these possibilities as well as giving a general sense of importance for these organisms while providing a foundation for understanding them.

WELCOME TO SOMBRIS!