



Saving Coral Reefs



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Popular Science (popsci.com) has an article detailing a disease that wipes out Coral Reefs, and a novel treatment method.

The disease (SCTLD)

- [stony coral tissue loss disease](#),

is currently treated with
Amoxicillin, or recently with a paste of
Cocoa Butter and Sodium Hypochlorite (bleach)

The bleach treatment is only 1/10th as effective as the antibiotic, but it's cheaper, and does not lead to widespread antibiotic resistance.

Here's a couple of ideas for the researchers

1) The Cocoa Butter Bleach likely dissipates before the infection is eradicated.

So: try petroleum jelly. Petroleum is regularly mined from the ocean floor, so petroleum jelly is not going to hurt the environment. Silicone grease..?

2) Chlorine is a great germicide, but Iodine might be better. Iodine is present in seawater, so it should be GRAS

3) Splenda (Sucralose) contains 3 atoms of Chlorine per molecule. Try a paste of that.

4) Analine Dyes are used to kill diseases in freshwater aquariums, so an oily paste of Dye powder may work.

5) Borax is used to treat Decay in wood, so it may be effective against SCTLD.

6) LED lighting of certain frequencies, Blue to Ultraviolet, may exterminate the free-swimming form of the disease.

7) Regarding **Bacteriophages**:
Capture reef fishes, and feed them diseased Coral.

Take the excrement from the fish, and isolate bacteriophages specific to the Coral disease.

Sequence the bacteriophages, and make a treatment regimen.

Or, breed and release reef fish that survive a diet of diseased Coral...!

(Hmmm... Healthy Reefs elsewhere may have tiny worms or crustaceans whose waste includes the bacteriophages. The reef may be dying from a lack of worms...)

(Or... the local fish are over harvested,
and they do not spawn enough fry to
provide a complete macrobiome for the Coral. Fry eat microscopic food like protozoa...)

A few thoughts that might solve
a GLOBAL PROBLEM.

(Food ..!)

Chuck

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