Managing Organic Sludge in Freshwater Aquariums

INTRODUCTION

Aquariums are "closed aquatic systems", meaning that there is no natural river or stream to carry away debris and other waste materials. Dead algae, solid fish waste, and uneaten fish food collect in the aquarium gravel. This results in an organic sludge build-up, slowly fermenting in the gravel bed. Sludge build-up is unsightly and also suffocates beneficial nitrifying bacteria that comprise the biological filter. Adding certain strains of natural bacteria to the aquarium helps remediate the sludge build-up resulting in a cleaner, healthier aquarium. STRESS ZYME contains a unique blend of bacterial strains selected to reduce sludge build-up in an aquarium.

METHODS

Aquariums containing a heavy sludge build-up were used to evaluate the effect of the natural sludge-digesting bacteria in STRESS ZYME compared to untreated control aquariums.

- The gravel and sludge were developed over a nine month period in freshwater aquariums.
- Aquariums were treated with STRESS ZYME or left as untreated controls.
- After 10 days the gravel was examined for sludge build-up

RESULTS

- The gravel treated with the STRESS ZYME bacteria showed significant sludge reduction compared to the untreated control gravel.
- The treated gravel was cleaner and brighter than the untreated gravel.

AIM

To test the effectiveness of STRESS ZYME for the control of sludge build-up in freshwater aquariums.

DISCUSSION

The build-up of organic sludge in aquarium gravel robs nitrifying bacteria of essential oxygen and promotes the proliferation of non-beneficial bacteria. Aquariums with less sludge will be healthier and have more efficient biological filtration. Management of organic sludge can be achieved through the addition of natural sludge-digesting bacteria like those found in STRESS ZYME.

Untreated aquarium gravel

Aquarium gravel treated with STRESS ZYME for 10 days

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