I have been following the mussel situation for quite some time now. Having spent lots of time reading advertisements and watching news casts about this plague, which has become such a problem in the world. After extensive research into Mussels and their habitat, I feel that the best way to deal with this problem would be an Aquatic Biopesticide. There are several different kinds of biopesticides that are not damaging to other wildlife, Zequanox being one of them. This biopesticide is made up of bacteria called Pseudomonas Fluorescens which happens to be one of the most common types of bacteria in the world.

**How It Works!**

Mussels are “Filter Feeders” meaning it uses its cilia to pull water into its shell through a siphon. Once the bacterium is ingested, it weakens the lining of the mussels’ digestive systems, causing the mussels digestive system to shut down. The mussel would then die from intoxication, rather than infection.

**About Pseudomonas Fluorescens**

These bacteria are found everywhere. They are found in antibiotics, in the water we drink, the food we eat, the soil that we grow food in. This bacterium is very helpful for plants, as it supports and strengthens their roots. It is, however, found to be the cause of disease, such as “Rot Fin” in fish. It is also found to affect those with weak immune systems, such as cancer patients.

**About Zequanox**

Zequanox Molluscicide is a low risk, natural biopesticide that is pulled from dead cells in a naturally occurring soil bacteria. The bacteria itself is known to target certain individuals and creatures, as we talked about previously. But seeing that the biopesticide is made up of dead cells, it would have little to no affect. It has been tested on several different occasions. Using extensive toxicology studies, scientists found that after using the product, there was a high mortality rate of zebra and quagga mussels, but there was no bacteria-induced mortality among any non-target organisms, including fish, ciliates, daphnia’s, and bivalves.

**Zequanox Can Be Used In**

* Hydropower facilities
* Coal-fired power facilities
* Drinking water and water treatment plants
* Golf course irrigation systems
* Industrial facilities
* Aquaculture
* Water transport systems
* Irrigation networks

**Why Choose Zequanox?**

* Noncorrosive to equipment or infrastructure
* Does not disrupt normal facility operations
* Not subject to regulatory restrictions on usage and carries minimal permit requirements
* Highly effective in a broad range of temperatures and conditions
* Does not require detoxification before water discharge
* No significant effect on water quality or non-target organisms
* Minimal PPE required for application

In conclusion, I feel that an aquatic biopesticide, and especially Zequanox, would be the safest, and most efficient option to rid our nation of the mussel problem, which has plagued the United States for many, many years.

**SOURCES**

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URL

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