Using Aliivibrio fischeri to Detect Water Toxins

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Aliivibrio Fischeri is a very effective, economical, and quick method to detect toxins in water using bioluminescence. In this experiment, toxicity of water was tested using the bioluminescent nature Aliivibrio Fischeri. My H1 stated if Aliivibrio Fischeri is introduced to contaminated water, then the bioluminescence will be brighter than when compared with the control. My H2 stated if Aliivibrio Fischeri is introduced to contaminated water, then the bioluminescence will be dimmer than when compared with the control. My H0 stated if Aliivibrio Fischeri is introduced to contaminated water, then the toxins within the water will not affect the bioluminescence of the Aliivibrio Fischeri produced through quorum sensing. From the data collected, bioluminescence dimmed when toxins were present in the water.

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