

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.