

Abstract

Our idea to compare distilled water and Flint water stemmed from the Flint water crisis. Many factors come into play such as the minerals in the water as well as the contaminants that may be in the water. The Wisconsin fast plant was perfect as it began growing only days after planting and completes its life cycle in 28 days. We were sure to make the hydration of the plants of both water samples equal. This was accomplished by using a pipette to apply water and a hydrated platform. The plants began sprouting in a mere week. There was no way to determine what water source would be the better water source for plant growth. They both grew, almost uniformly. As the project came to an end, there was still no determining what water source would be more efficient without the end calculations.



Background & Significance

What is Water Pollution?

- Contamination of water
- Water containing salts, sugars, or any other harmful substances



Distilled water Vs Polluted River Water

- Drinking water
- Runs through a filtration process
- Purified
- Some minerals and impurities are removed

Things To Consider

- Less natural minerals in distilled water
- The (Flint) river contains heavy metals, chemicals, and other harmful substances
- The river is naturally made
- The process of distilled water

Materials & Methods

Materials

- Styrofoam Plant pots
- Soil
- Distilled Water
- Polluted Water
- Greenhouse
- Wisconsin Mustard Plant
- Pipets
- Diamond wicks
- Bins



Experimental Plan

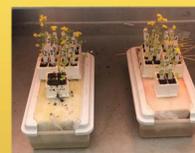
1. Gather seeds and plant seeds in soil in each individual pot.
2. Water half of the plants with Distilled water and the other half with polluted water.
3. Record results and draw conclusions.



Process



Day 1



End of 3 weeks



Distilled Water



Polluted Water

Results & Conclusion

- Distilled Water made the plants grow taller than the polluted watered plants
- The polluted watered plants started to grow sooner because of the natural minerals within the water. However, the growth was stunted due to the heavy metals and other substances within the water.
- The distilled watered plants grew slowly because of the certain minerals and impurities it lacks due to filtration when it becomes purified.

Plants	Distilled	Polluted
Tallest (cm)	15.2cm	13.6cm
Average (cm)	6.5cm	7.8cm

- The distilled watered plants ultimately achieve a taller plant, reaching 15.2 cm
- The polluted watered plants have the highest average plant height from day to day, averaging 7.8 cm

References

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- <https://blog.1000bulbs.com/home/how-water-quality-affects-your-plants>
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