

The Effects of Saltwater on Moss

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Introduction

The reason I was interested in this project is because mosses are very small important plants that live in wet areas. After working with the daphnia this year and last year, I learned that salt is a creator of stress. I wondered if it would stress out or kill the moss. I used a greater amount (%) of salt on the mosses than we used with the daphnia experiment.

Research Problem

What is the effect on different salt levels on moss?

Hypothesis

I thought the mosses sprayed with ten percent salt water would die in the first two days. I thought the 2 percent was going to die in a week as also the 5 percent.



BURROUGHS
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FUND 

Materials and Methods

Materials:
2%,5%,10% salt water made from Instant Ocean
Moss
Squirt bottles
Glass bowls for the moss
Camera
Saran wrap



Methods

1. Plant the moss in potting soil in a bowl.
2. Take picture before spraying with salt water mixtures
3. Sprayed them 2 times each every other day
4. Cover after spraying with saran wrap
5. Take pictures regularly

Results

Comparison of Mosses when sprayed with Different Salt Water Percents

| Date | 2% Salt | 5% Salt | 10% Salt |
|---------|---|---|---|
| 4/30/19 |  |  |  |
| 5/15/19 |  |  |  |

After 2 weeks of spraying, there was not much difference in the color or health of the mosses.

Discussion of Results

There was a small amount of discoloration on one of the mosses that was sprayed with the ten percent salt water. There was no change in the 2 percent or the 5 percent sprayed mosses. I would try to increase the salt percent and also spray more often and with more than 2 sprays to see if there was more stress on the mosses, and I would like to try different mosses. Seawater coming into our marshlands is a problem but mosses may be able to survive very low percentages of seawater.

Conclusion

My hypothesis was not correct because the mosses sprayed at all percents of salt water survived.

References and Acknowledgements

References:

- <https://msu.edu/user/davenpo5/Moss.htm>
- http://www.biology4kids.com/files/plants_moss.html

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