

The Effects of Rain and Spring Water on the Growth of Triops

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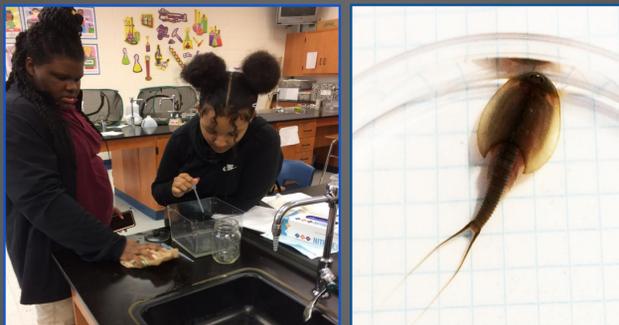
 State Climate Office of North Carolina

Introduction/Rationale

The purpose of this project is to compare how long triops survive and grow in spring and rain water. Also, we wanted to see how they react to the different types of water. We were interested in working with triops because they are very interesting and unique creatures.

Research Problem

Will triops live longer in spring water or rain water and how long will it take for them to become fully grown adults?



Hypothesis

We hypothesized that the triops would grow more efficiently in spring water and it would take about 2 weeks for it to fully grow into an adult.

Method and Materials

For this experiment we used the following materials/equipment :

- small tanks
- magnifying glasses
- triop eggs
- triop food
- spring water
- rain water
- petri dishes
- a caliper

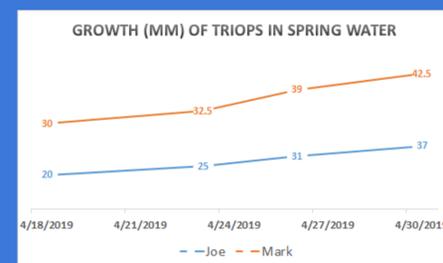


First, we had to set up the spring and rain water for each triop. Once the triop hatched, we checked on them and fed them daily. Regularly, we monitored the growth of the triops by measuring them with a caliper and graph paper. Each square on the graph paper was 5 mm long so we could use this to quickly measure the triops without disturbing them too much. We kept up with which triops were growing faster. They lived for about two weeks.

Results

Length (mm) of Triops in Spring Water

Date	Joe	Mark
4/18/2019	20	30
4/23/2019	25	32.5
4/26/2019	31	39
4/30/2019	37	42.5



The only triops that we could get to live and grow successfully were in spring water and this was difficult. They are tiny when they hatch out and seemed to die quickly. We are not sure how they would grow in rain water because all of the tiny triops that we put in rainwater died. They were hard to measure when they were tiny specks because you had to scoop them out of the container and that was stressful for them.

Discussion of Results

Growing triops was difficult. We could not get many to hatch and then when they hatched, they died quickly and did not make it to adult size. The triops that grew had about the same rate of growth although one was much smaller than the other one (see graph). If we were to work with triops again, we would have to find out what is the best way to efficiently get the eggs to hatch and grow into adults in order to get accurate data. If we had the chance to work and experiment with another animal, we would choose sea monkeys.

Conclusion

Our hypothesis was not correct because we were not able to see how long the triops lived in rain water and how much they grew in comparison to spring water.

References and Acknowledgements

References

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<https://www.wikihow.com/Care-for-Triops>

<https://thetriopsforum.com/how-long-can-an-un-used-egg-last-t932.html>

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