

Mustard Seed Germination in Water versus Cola

2. Purpose:

To see if mustard seeds will germinate in cola.

3. Hypothesis:

If we put mustard seeds in cola, then they will not germinate as well as in water.

4. Materials:

Petri dish

Mustard seeds

Water

Cola

Graduated cylinder

5. Procedures:

1. Put 10 seeds in each petri dish
2. Add 10 mL of water to one petri dish, 10 ml of cola to the other petri dish.
3. Cover the petri dishes.

6. Data:

See attached paper

7. Results:

See attached graph

8. Conclusion

Paragraph 1: What was the purpose? What was your hypothesis and was it right or wrong?

“The purpose of this lab was to see if mustards seeds would germinate in cola. I think that if we put mustards seeds in cola, then they will not germinate. Our hypothesis was correct.”

Paragraph 2: Summarize your procedures (one or two sentences). Identify the control group, the independent variable and the dependent variable. What did you learn from the lab? Support with evidence:

“...Our control group was the mustard seeds in water. The independent variable was mustard seeds in cola. The dependent variable was the germination of the mustard seeds. I learned that mustard seeds do not germinate in cola. I know this because zero mustard seeds germinated in the cola, while 8 seeds sprouted in the water.

Paragraph 3: Note at least two mistakes we made or hidden variables (hidden variables are things that happen out of our control) we had during the lab. How do those mistakes or hidden variables affect our data?

“I did not measure water correctly. It might have resulted in less mustard seeds germinating.”

“Bad mustard seeds, varying light levels, uncontrolled temperature, contamination in water or air” ... how did it affect mustard seed germination?