

The Effect of Nutrients on Plant Germination

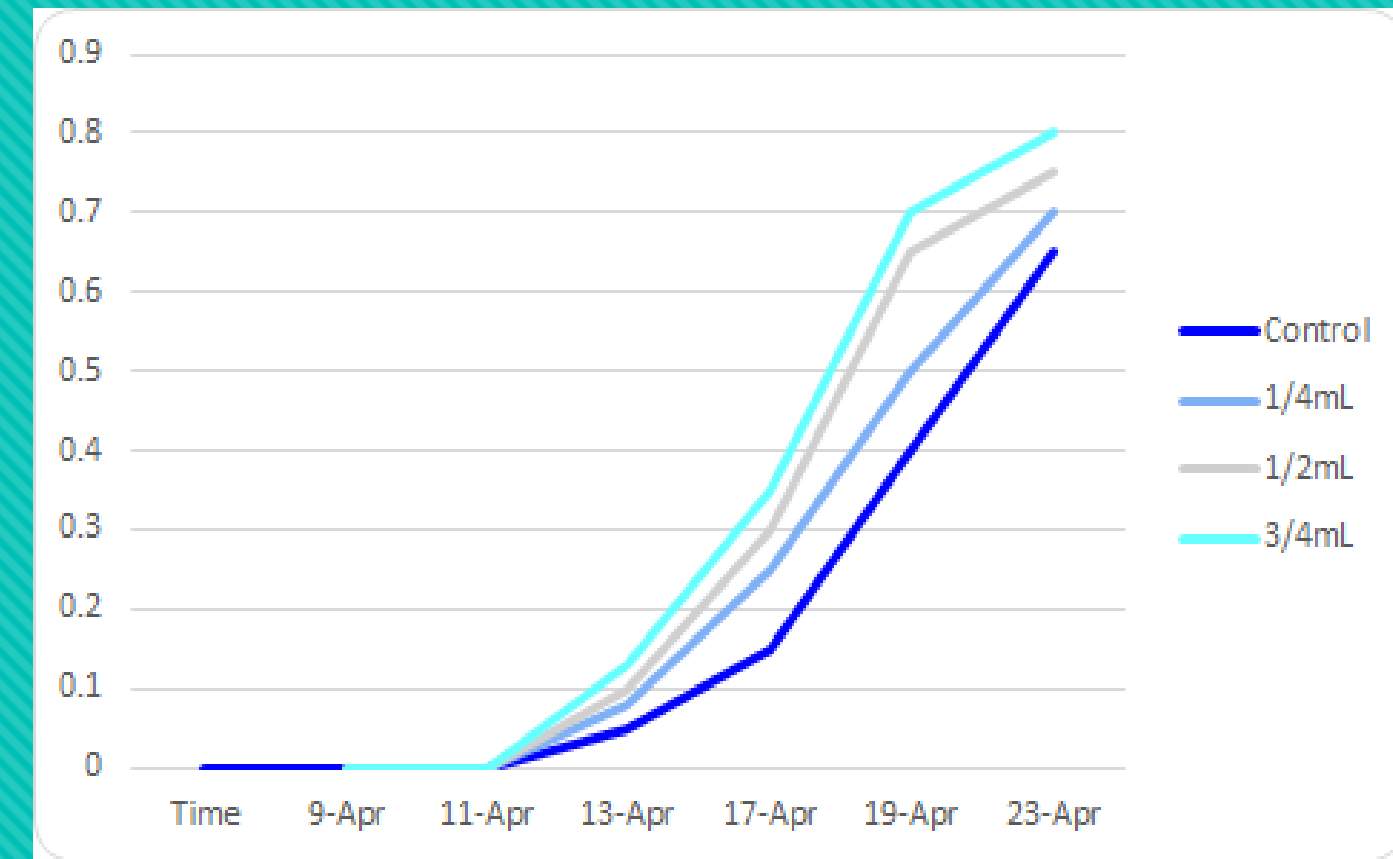
Thanks to Chelsea Pretz for the help with our project!

Prediction: By adding compost tea we boosted the percentage of germination and had our spores grow faster when more compost tea was added. Compost tea is the result of pouring boiling water through compost and sifting the compost so only the boiling water that has run through it remains.

Research question: How would adding different amounts of compost affect the germination and growth of the spores?

What We Would Change: Next time in this experiment, we would be more sanitary about our experiment. We would boil our tea every time so as to ensure no infection of the spores, and we would also make new batches of the tea every so often so the tea didn't lose its potency.

Experimental Set Up: First, we chose to determine the speed at which germination would occur based on different amounts of Compost Tea. We then over the course of two weeks measured the amount of germinated spores in each amount and added the amount of .25mL, .5mL, or .75mL to that dish every 2 days.



Abstract: We were testing to see if the added nutrients from a boiled version of compost would accelerate the process of germination in the spores. We did this by adding our "compost tea" to the Petri dishes and had different amounts to show if our hypothesis was indeed true. We then measured the percent of the approximate spores that had germinated.

Will nutrients from compost accelerate Germination?

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Claim: Added nutrients from the compost tea increased the rate of growth of the spores

Evidence: The ferns with more compost tea in the petri dish grew faster than those with less

Reasoning: Since the dish with 3/4ths of a mL had more compost it grew faster than the other three