

# RATE OF GERMINATION OF CORN SPROUTS IN SPRING WATER COMPARED TO RAIN WATER

BY: BERTIE MIDDLE SCHOOL STUDENT



## INTRODUCTION/RATIONALE

BEAN SPROUTS ARE A COMMON SALAD FOOD BUT I NEVER HEARD OF CORN SPROUTS. THE PURPOSE OF THIS PROJECT IS TO UNDERSTAND IF CORN WOULD SPROUT BETTER IN RAIN WATER OR SPRING WATER. MAYBE WHEN WE GET OUR SOLUTION WE COULD TRY TO HELP THE CORN SPROUTS GROW BETTER.

## RESEARCH PROBLEM

- WHAT IS BETTER FOR CORN SEEDS TO SPROUT - RAIN WATER OR SPRING WATER?
- WHAT CAN WE DO TO ENSURE THE BETTER WATER SUPPLY IS USED TO GROW THE CORN SPROUTS?

## HYPOTHESIS

I THINK THE CORN SPROUTS WILL SPROUT AND GROW QUICKER IN THE RAIN WATER.

## MATERIALS AND METHODS

THIS EXPERIMENT REQUIRES...

- PAPER TOWELS
- SPRING WATER SPRAY BOTTLE
- RAIN WATER SPRAY BOTTLE
- WHATEVER SEEDS YOU WANT TO USE - FOR THIS EXPERIMENT, I TRIED CORN SEEDS THAT WAS NOT MODIFIED GENETICALLY
- A GROWING CHAMBER

## STEPS/PROCESS

FIRST, LAY THE PAPER TOWEL DOWN IN THE GROWING CHAMBER. SECONDLY, SPREAD THE SEEDS OUT ON THE PAPER TOWEL. THEN, LAY THE OTHER PAPER TOWEL DOWN ON TOP OF THE SEEDS GENTLY. FINALLY, SPRAY THE PAPER TOWEL WITH EITHER RAIN WATER OR SPRING WATER, 1-2 TIMES EACH DAY. RECORD THE DATA OF HOW MANY SEEDS SPROUTED OUT OF HOW MANY YOU STARTED WITH AND RECORD THE LENGTH IF POSSIBLE EVERY 3 DAYS.



## DISCUSSION OF RESULTS

SOME PLANTS CAN GROW IN WATER WITHOUT SOIL, AS LONG AS THERE IS AIR CIRCULATION. IF YOUR SEED IS UNDER THE WATER IT WILL DIE. IF THE SEED IS EXPOSED TO OXYGEN IT WILL PROCEED TO GROW. THE TYPE OF WATER THAT IS USED COULD GREATLY AFFECT THE RATE OF SPROUTING AND HOW HEALTHY THE SPROUTS ARE. THE SPRING WATER HAS ADDED CHEMICALS AND THE RAIN WATER IS PURIFIED THROUGH EVAPORATION.

I THINK I SHOULD HAVE STARTED JUST A LITTLE BIT EARLIER ON MY PROJECT TO GET MORE RESULTS THAN I DID AND I AM INTERESTED IN SEEING IF DIFFERENT TYPES OF WATER AFFECT HOW A CORN PLANT WILL GROW TO FULL SIZE.

## CONCLUSION

MY HYPOTHESIS WAS CORRECT BECAUSE I KNOW THAT RAIN WATER CONSISTED OF FEWER CHEMICALS THAN SPRING WATER AND THE CORN SEEDS SPROUTED BETTER AND GREW LARGER IN THE RAIN WATER.

## RESULTS

- DAY 1- RAIN WATER-3 CORN SPROUTS SPROUTED
- DAY 1- SPRING WATER-1 CORN SPROUT SPROUTED
- DAY 5-RAIN WATER- 1.5-2.0 IN- ALL SPROUTED
- DAY 5-SPRING WATER-1.2-1.5IN - ALL SPROUTED

FROM THE ABOVE MEASUREMENTS, IT APPEARS THAT THE CORN SEEDS SPROUTED QUICKER AND GREW LONGER IN RAIN WATER COMPARED TO THE SPRING WATER

## REFERENCES AND ACKNOWLEDGEMENTS

- <https://sproutpeople.org/growing-corn-sprouts/>
- <http://www.aganytime.com/Corn/Pages/Article.aspx?name=Corn-Kernel-Sprouting&fields=article&article=2325>

I WOULD LIKE TO THANK THE BURROUGHS WELLCOME STUDENT SCIENCE ENRICHMENT PROGRAM, THE NC STATE CLIMATE OFFICE, MRS. SNOW, MS. DANO AND MRS. KARL FOR THEIR HELP ON THIS PROJECT.



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