

CALIFORNIA SCIENCE & ENGINEERING FAIR 2018 PROJECT SUMMARY

Name(s)

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Project Number

J2208

Project Title

The Effect of Varying Intensities of Soil Salt Stress on Genovese Basil Plants

Abstract

Objectives/Goals

The purpose of this project was to discover how the Genovese Basil plant reacts to different amounts of salt in the plants soil.

Methods/Materials

Table salt, 4 packets of Genovese Basil seeds, ruler. The plants were tested by mixing salt into the plants soil in multiples of five. To ensure the results were comparable, group one recieved zero grams of salt while group six, the last group, received twenty five grams of salt. To collect the data the height of the plant in inches as well as the plants vigorousness on a scale from zero to five was recorded.

Results

After each week the plants were measured and their height as well as vigorousness was recorded. After four weeks of measuring each plant, the average height for each group was calculated. The final results concluded that group one through four grew at least, if not less than, one inch while group five and six showed no signs of growth.

Conclusions/Discussion

Genovese Basil plants are fairly salt tolerant and can withstand soil salt levels ranging between 5 to 15 grams of salt, but will not grow within conditions that are more saline than previously stated. Therefore, this type of plant can be grown in saline conditions that are within its limits.

Summary Statement

I found that Genovese Basil plants are fairly resistant to soil salt stress but only to a certain extent.

Help Received

I recieved no help while conducting this experiment, everything was done by myself.