CALIFORNIA STATE SCIENCE FAIR
2005 PROJECT SUMMARY

Name(s)
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Project Number
J1622

Project Title
Soil Temperature and Seed Germination

Abstract

Objectives/Goals
The main purpose of this project was to show why corn is planted and at certain times of the year. If you plant at the wrong time then it takes longer for the crop to grow or it may not grow at all. To find the right soil temperature will help farmers know when to plant for the best yields.

Methods/Materials
In this experiment three pots of soil were used. Each pot was planted with ten corn seeds. Pot one had a bag over the top with a heat light and a heating pad, so the soil could reach 85 degrees F. Pot two was close to the heat lamp that reached 70 degrees F. Pot three was left alone and the soil was 60 degrees F. The data from this experiment was collected every day by observing each pot and counting the seeds that had germinated.

Results
The results showed that pot one grew very fast. Within six days it had seven seeds that had sprouted. The other two pots only had one seed sprouted. The data showed that the warmer the soil the faster seeds would sprout.

Conclusions/Discussion
This experiment provides information that is important for farmers to know; The proper time to plant corn. The hypothesis that stated the warmer the soil, the faster corn will germinate and grow is supported by the results. This is why corn is planted from May till July instead of December to March. Proper soil temperature will save money in fuel and labor.

Summary Statement
The purpose of this project was to determine if soil temperature affected seed germination; the data showed that the warmer the soil the faster seeds would sprout.

Help Received
Father helped type report