

CALIFORNIA STATE SCIENCE FAIR 2004 PROJECT SUMMARY

Project Number Name(s) Karen L. Shein, Jr. **J1624 Project Title** How Does the Intensity of Incandescent Light Affect the Growth of the **Stems of Alfalfa Sprouts? Abstract Objectives/Goals** My objective was to determine the optimum intensity of incandescent light for growing alfalfa sprouts. Methods/Materials There were twelve pots filled with soil and alfalfa seeds in each. Each were filled with water and placed in a section of a box. The boxes were completely closed and therefore the plants only received the assigned light. Four different intensities of light were used: 25-watts, 40-watts, 75-watts, and 100-watts. Every other day 50 ml of water was poured into each pot. Everyday for twelve days all stems were measured. The sprouts under the 40-watt lights grew the tallest. Then the plants under the 25-watt lights. Third, the 75-watt lights. Lastly, the 100-watt lights. The sprouts under the 100-watt lights were too hot to grow, while the sprouts under the 25-watt lights contained too much water to grow. Conclusions/Discussion My conclusion is that a middle intensity of incandescent light grows alfalfa sprouts the tallest.

Summary Statement

Finding the best intensity of light for growing alfalfa sprouts.

Help Received

Father helped construct boxes.