



**CALIFORNIA STATE SCIENCE FAIR
2006 PROJECT SUMMARY**

Name(s) Zoe E. Dubrow	Project Number J1607
Project Title Freaked Out Radishes!	
Abstract Objectives/Goals The purpose of this project is to investigate whether the shape of radishes is determined entirely by genetics or if it can be influenced by factors in the environment. Methods/Materials Cherry Belle Radishes will be planted in a plant starter kit. The plants will be moved into one of the two aeroponics containers when they are five centimeters tall. There will be no medium supporting the radishes' roots. When a radish fully grown it will be taken out of the aeroponics system. The radish's diameter, length, root length, number of leaves, length of leaves, and width of leaves will be measured. Control radishes will be grown in soil. Above ground radishes will be grown so that their hypocotyls and leaves are above the soil while their lower fibrous roots are in the soil. Results The average aspect ratio of an aeroponically grown radish was 1.7. The aspect ratio of a typical cherry belle radish is 1.0. Only three of the ten radishes grown in aeroponics were round. Conclusions/Discussion My data supports the hypothesis that an unsupported radish will be elongated. Therefore it was found that radish shape can be dramatically affected by environmental changes.	
Summary Statement The purpose of this project is to investigate whether the shape of radishes is determined entirely by genetics or if it can be influenced by factors in the environment.	
Help Received Father consulted with father on experimental design	