



**CALIFORNIA STATE SCIENCE FAIR
2010 PROJECT SUMMARY**

Name(s) Emily Nevens	Project Number J2020
Project Title The Effects of Organic, Fish, and Chemical Fertilizers on the Growth of Tomato Plants	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals To determine which of the following plant fertilizers; organic, chemical or fish produces the maximum growth and fruit production in tomato plants.</p> <p>Methods/Materials To determine the objective, the experiment was conducted on 12 tomato plants of the same species and size. The tomato plants were divided to 4 groups of three and planted in the soil. Plants 1,2 & 3 (control plants) were fed only water every other day for 10 weeks. In addition to watering every other day, plants 4, 5, & 6 were given a dosage of Fish Fertilizer once per week for ten weeks while plants 7, 8, & 9 were nourished with Chemical Fertilizer, and plants 10, 11, & 12 were fed Organic Fertilizer.</p> <p>Results The growth of each plant was measured and recorded on a weekly basis. While the control plants achieved the greatest total growth of all the plant groups, the Fish and Chemical Fertilized tomato plants produced the most fruit averaging 8 tomatoes on each plant. Organic fertilizer produced the least fruit and growth rate.</p> <p>Conclusions/Discussion The location of the plants from a large white reflective wall was found to be an important factor influencing the plants growth. Although fertilizer plays an important role, other variables such as light intensity are as important as soil nutrients and irrigation. The Fish fertilizer proved to be more effective than its counterparts in optimum growth and fruit production.</p>	
Summary Statement To determine which of the three fertilizers (Organic, Fish, and Chemical) encourage maximum growth and fruit production in Tomato plants.	
Help Received	