



**CALIFORNIA STATE SCIENCE FAIR
2013 PROJECT SUMMARY**

Name(s) Deshun D. Washington, Jr.	Project Number J1924
Project Title What Is Organic Gardening? The Effects of Natural Fertilizers and Pesticides on Plants	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals Through this experiment, it is my mission to determine whether or not I will be able to successfully create a suburban home garden without the use of harsh pesticides and fertilizers. I chose this problem in order to answer the question, what is organic gardening?</p> <p>Methods/Materials How I Grew My Own Organic Garden: 1. Prepare your soil-We had hard, clay-like and sandy soil with rocks, glass and debris that had not been gardened in over a decade. #Turn Soil -Start Composting #Add animal manure #We used leftover anchovies from fishing to increase the nitrogen levels in the soil to give the plants more nutrients. 2. Germinate seeds indoors or buy plant seedlings. 3. Transplant seedlings to ground. 4. Water plants regularly. 5. Fertilize plants naturally. 6. Wire plants to sticks or cages when they cant support themselves. 7. Prune dead leaves & add to compost. 8. Monitor for bugs/animals & use natural pesticides like canola oil & cayenne pepper. 9. Re-plant plants that need different locations. 10. Use the plant buddy system-some plants like shade of and support of other plants.</p> <p>Results Over the course of several months, I was able to collect data that demonstrated how I prevented garden pests without harsh pesticides and my plants grew well and produced vegetables/fruits with only organic fertilizers.</p> <p>Conclusions/Discussion Through this experiment, I discovered that a fruit, herb, and vegetable garden can be grown in the backyard of a Northern California suburban home without the use of pesticides or chemical fertilizers that damage the environment and reduce the nutrient value of the plants. With the use of proper soil preparation, composting, organic fertilizer and natural pest control, you can build a successful ecosystem. There were many unknown benefits and applications to my project. I discovered the potentiality for sustainable future for my family, lowered produce grocery bills, healthier diet, relaxation and exercise.</p>	
Summary Statement A thriving home garden can be created without the use of harsh pesticides and fertilizers.	
Help Received Mom helped transfer handwritten project to typed format; Mom and Dad helped maintain plant watering schedule. Local nursery gave planting advice.	