

## CALIFORNIA STATE SCIENCE FAIR 2017 PROJECT SUMMARY

Name(s) **Project Number Jose Shen Santos** S1120 **Project Title Physical Presences in Soil and Their Effects on Soil Erosion** Abstract **Objectives/Goals** The objective of this science experiment is to show how the contents in soil are in relation to water erosion inflicted upon the soil. **Methods/Materials** Soda Bottles, plants, dirt, barks and rocks, a cup measuring to 16 fluid ounces, coffee filter, small container, and a scale. Pour 16 fl oz into each of the soda bottles, measure the remaining dirt that would appear on top of the coffee filter. Compared the weight of the dirt with each test subject. Results The containers that lacked either an adequate surface protection for the soil or had no intricate root system within the soil were the most affected in water erosion. The container that had both was the least affected from soil erosion. **Conclusions/Discussion** Soil erosion is mainly dependent on two factors that are present within the soil that is not the soil itself. Erosion is affected by how much the top of the soil is covered and if there is an intricate system of roots within the soil to keep the soil compact. It is also alright to have one or the other, but if there is both factors present, then there will be little to no affect from soil erosion. **Summary Statement** I made an example of how the content in soil can either protect or encourage water erosion that can take place upon the soil.

## **Help Received**

My science teacher helped me with this project, but I did most of the work designing and executing this scientific environmental activity.