



**CALIFORNIA STATE SCIENCE FAIR  
2016 PROJECT SUMMARY**

<b>Name(s)</b> Ariana O. Ruiz	<b>Project Number</b> <b>J1027</b>
<b>Project Title</b> <b>Investigating the Effect of Different Organic Substances in Changing Soil pH in the Environment</b>	
<b>Objectives/Goals</b> The objective of this project is to investigate how pH levels of our Central Valley's orange orchard soil is affected when different organic substances have been added to it.	
<b>Abstract</b> <b>Methods/Materials</b> pH meter, orange orchard soil, one 16oz. Cup, fifty 5oz. Dixie cups, 4 different organic materials, one container capable of holding 15lbs., food scale, 3 pound containers	
<b>Results</b> I conducted multiple trials to ensure a precise average of the effect the organic materials had on the orange orchard soil. At the end of my experiment I realized that my organic materials have turned into organic matter. What I mean is at first my soil was affected by the new additives. As time went on, however, the levels began to increase back toward the neutral area. What this means is as my experiment length increased my organic materials became organic substances.	
<b>Conclusions/Discussion</b> When my project was complete I had concluded my hypothesis had been incorrect. However, at the beginning of my experiment it had been correct, but as time went on the results changed. I had thought that my project would have a result of the soil becoming more acidic. This did happen to the soil at the beginning of my project, but soon the levels began to become increasingly alkaline. This is because the organic materials began to decompose and soon became organic matter thus no longer affecting the pH levels of the soil.	
<b>Summary Statement</b> My project was about how different organic materials will affect our Central Valley's orange orchard soil's pH levels over a certain amount of time.	
<b>Help Received</b> None. I built and performed my experiments myself.	