



**CALIFORNIA SCIENCE & ENGINEERING FAIR
2018 PROJECT SUMMARY**

Name(s) Josiah D. Rowland	Project Number 38327
Project Title How Different Foods Affect the Growth of Worms and the Soil They Live In	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals The objective of this study is to measure the length of the worms, reproduction, mass, and the nutrients in the soil.</p> <p>Methods/Materials Worms, soil, ruler, soil test kit, four food groups. Let several batches of the four food groups decompose for two months.</p> <p>Results At the end of the two months the fruit proved to be the most effective in the length, reproduction, and mass of the worms and nutrient quality of the soil.</p> <p>Conclusions/Discussion The worms that decomposed the fruit grew larger than the others fed a different diet, reproduced in greater numbers while also increasing in mass outweighing the other worms. The soil nutrients increased in all four test bucket, except for the Potential hydrogen in bucket two which contained newspaper. Worms having a larger mass had the most reproduction thus concluding worms in greater numbers and having a larger mass can consume more organic material than smaller numbers and worms with less mass.</p>	
Summary Statement I wanted to show what type of organic material worms prefer the most.	
Help Received I built and performed the experiments myself. I did not receive any help.	