



CALIFORNIA SCIENCE & ENGINEERING FAIR 2019 PROJECT SUMMARY

Name(s) Fabilu Tattersfield	Project Number J0922
Project Title Is There Water Contamination in Three Rivers, CA?	
<p style="text-align: center;">Abstract</p> <p>Objectives The purpose of this project was to see if my local water sources had an indication of water pollution.</p> <p>Methods Lettuce seeds, local water sources, table salt, round up, solutions, sandwich sized Ziploc bags, coffee filters, pipette, one liter graduated scientific flask, six inch ruler, three wool blankets, five day period, and controlled temperature.</p> <p>Results A lettuce seed bio assay was employed to show indication for water contamination, and five samples of water were taken from local sources of freshwater in Three Rivers C.A. Five seeds per concentrated solution were put on top of a coffee filter inside a Ziploc bag to test for an indication for water contamination. 315 lettuce seed radicles were measured in millimeters after five days of being covered with blankets, in a room with a temperature of seventy degrees. The length of the seeds varied depending on the concentrated solution they were put into.</p> <p>Conclusions Based on the radical growth of the lettuce seeds the hypothesis was accepted. Two out of the five local water sources indicated water contamination. Though contamination was indicated in the water, the identity and source(s) of the contamination remains unknown demanding further research.</p>	
Summary Statement I used a lettuce seed bio assay method in five different local water sources to test for indication of water contamination, it was proved that two out of the five local water sources were contaminated.	
Help Received I conducted my experiment with the guidance of Mr. Cannon, a science teacher at Woodlake High School, and I phone called Luz Amador, a biochemist and inventor of the enzymatic method of producing a lactose free calcium product, about glyphosate.	