



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

Name(s) William Ian Lyle B. Sahagun	Project Number J1711
Project Title The Fungus among Us: Can Guava Leaves Kill It?	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals This project is about finding out if the extract of guava leaves can kill yeast, the fungus, which at times, becomes pathogenic. The extract of guava leaves is supposed to contain bioactive compounds that are antifungal. Since yeast is a fungus, the guava leaf extract should be able to kill it.</p> <p>Methods/Materials Guava leaves, active dry yeast, sugar, water. Guava leaves were boiled in water to make a decoction. The yeast was proofed by using sugar and water for the control, then sugar and the guava leaf decoction. The foam volume produced by each setup was then measured.</p> <p>Results The number of times the yeast in the guava leaf decoction produced less foam than the control was 11 out of 20 times in total, which is not a significant difference.</p> <p>Conclusions/Discussion A definite conclusion cannot be drawn based on the results of this experiment. Upon further research, I found out that other variables affecting the experiment were not controlled, like room temperature and humidity. However, if guava leaves are proven to be an effective antifungal, then there can be an alternative medicine for treating yeast-related diseases, especially now since pathogenic organisms are getting resistant to traditional medicines.</p>	
Summary Statement I tried to find out if the extract of guava leaves can kill yeast, but the results were inconsistent because of variables affecting the experiment that I did not control.	
Help Received None. I performed the entire experiment myself.	