CALIFORNIA STATE SCIENCE FAIR
2012 PROJECT SUMMARY

Name(s)
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Project Number
J2001

Project Title
Do Green Cleaning Products Get Rid of Bacteria Better Than Ammonia Base Cleaner?

Abstract

Objectives/Goals
I am doing this project because I know now days everyone wants to be cool by going green, but is it worth it if it's not eliminating bacteria?

Methods/Materials
I used 20 petri dishes, and I tested bacteria from a bathroom doorknob and a kitchen sponge. The green cleaners I tested were Green Works and Mean Green and the two ammonia base cleaners I tested were Lysol and 409. My control variable was water. I first swabbed the bathroom doorknob then I swabbed it on the petri dish. Next I whole punched filter paper and dipped it into the cleaner. Finally, I placed it on the petri dish. I did these steps for all of my variables and with both of my bacteria. On day 3 I measured the inhibition rate then again I measured the inhibition rate on day 5.

Results
I found that Green cleaners do not decrease bacteria population at a higher rate than standard ammonia base cleaners. I also found that Lysol eliminated bacteria the best followed by 409 then Mean Green and finally Green Works.

Conclusions/Discussion
I found that even though Green Works was the most expensive cleaner it only worked as well as my control variable, which was water. I know it's important to save the environment, but if green cleaners don't eliminate bacteria, then the earth can be contaminated with so many bacteria.

Summary Statement
Are green cleaning products decreasing bacteria population as well as standard household cleaners?

Help Received
Mr. Gong helped with me do my flowchart.