Name(s)	Project Number
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Project Title

Do Different Types of Cacti Help Disperse Oil More Efficiently?

Abstract

Objectives/Goals
The objective of this study is to determine whether or not cacti are a better natural oil dispersant.

Methods/Materials
Four types of cacti, which are easily grown in the United States, were used in the study: prickly pear, Aloe Vera, barrel cactus, and prickly pear tuna. Extracts of each experimental cacti were collected and stored separately in four test tubes. Then, 2 ml of each extract were combined and placed in a fifth test tube. Eighteen (18) test tubes with six milliliter of water and one milliliter of olive oil (three test tubes for each of the five extracts, and three test tubes for the control (detergent solution) were set up for the experiment. Three trials for every solution was conducted for a more accurate outcome. One milliliter of each extract was added to its corresponding test tubes. The mixtures were allowed to react for three days. On the third day, test for fats was conducted using Sudan IV and paper test.

Results
The result showed that the combined extract worked efficiently in dispersing oil. The order of efficiency in dispersing oil was as follows: combined extract, prickly pear, golden barrel cactus, prickly pear tuna, and Aloe Vera.

Conclusions/Discussion
The results further showed that the solution that contained all three extracts dispersed the oil more efficiently than the detergent.

Summary Statement

In our project we tried to find a natural oil depressant that can work more efficiently than a detergent

Help Received