

CALIFORNIA STATE SCIENCE FAIR 2005 PROJECT SUMMARY

Name(s)

Kristine M. Ware

Project Number

J1440

Project Title

Anti-Ants: Organic Ant Repellents

Abstract

Objectives/Goals

My objective was to find organic ant repellents. I hypothesized that cedar chips, small dried lavender twigs and torn marigold petals would repel ants.

Methods/Materials

In my experiment, I used five miniature Uncle Milton ant farms with provided sand and connector tubes. I used three tubes (about 81) of Pogo-nomyrmex harvester ants from the same colony also provided by Uncle Milton#s Industry. I used CedarFresh premium grade cedar chips, dried lavender from the same plant in my backyard and marigold petals from the same plant. I connected all five ant farms using connector tubes and placed cedar chips in one farm, dried lavender in another and marigold petals in a third ant farm. The two remaining ant farms were my control farms. I recorded the number of ants in each ant farm several times a day.

Results

My results were that cedar chips came in first, averaging one active ant in the cedar chip farm. Marigolds came in second, averaging four active ants and lavender came in third, averaging seven active ants. Cedar chips repelled 99% of the ants where as marigold petals repelled 95% and dried lavender repelled 91% of all the ants.

Conclusions/Discussion

The results from my experiment supported my hypothesis. This information extends our knowledge of ants and how to control them without harming them. Organic ant repellents are useful when it comes to human food and pets. Cedar chips can effectively repel ants in food preparation and storage areas, outdoors where pets roam and pet feeding regions.

Summary Statement

I proved that cedar chips, dried lavender and freshly torn marigold petals repelled ants.

Help Received

My mother helped me paste all my information on my display board.