CALIFORNIA STATE SCIENCE FAIR
2006 PROJECT SUMMARY

Name(s)
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Project Number
J0931

Project Title
Locals Only: Are Areas with Native Trees More Biologically Diverse than Areas with Non-native Trees?

Abstract

Objectives/Goals
The purpose of this experiment was to see if a difference in biological diversity on the macroscopic invertebrate level can be observed between an area with mostly native vegetation and an area with mostly non-native vegetation, and if so, which area would be more biologically diverse. My hypothesis was that a difference could be observed and that the native areas would be more biologically diverse.

Methods/Materials
Over a three week period I collected leaf litter from two native plant areas and two non-native plant areas. I put the leaf litter in a Berlese funnel (see Berlese funnel page and diagram), and identified the specimens that collected below the funnel.

Results
My results showed the non-native plant areas to be much less biologically diverse in terms of macroscopic invertebrates than the native areas.

Conclusions/Discussion
My conclusion supported my hypothesis and showed that a difference in biological diversity on the macro level can be observed and that areas with native vegetation have a greater diversity of invertebrates than do areas with non-native vegetation. The native areas had 120% more unique species than the non-native areas.

Summary Statement
It is a bio-diversity study on the invertebrate macro level between areas with native trees and areas with non-native trees.

Help Received
Dad helped in the designing of the berlese funnel.