

CALIFORNIA STATE SCIENCE FAIR 2010 PROJECT SUMMARY

Name(s)

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Project Number

J1736

Project Title

Which Organic Materials Accelerate Algae Growth

Abstract

Objectives/Goals

Determine which organic materials such as horse manure or willow leaves can accelerate the growth of oedogonium (green algae).

Methods/Materials

Place organic materials in water for 5 days. Take water from the organic materials and place it in algae cultures. Test spectral transmittance using spectrophotometer. Allow algae to grow for 7 days. Test spectral transmittance again. Record difference in transmittance from first test.

Results

Banana peels accelerated algae growth the most in organic materials group. Willow and sycamore leaves accelerated growth the most in the tree leaves group.

Conclusions/Discussion

Organic materials accelerated algae growth more than tree leaves. Eggshells and horse manure almost accelerated algae growth as much as the banana peels.

Organic materials would be the best option for production of biofuel rather than tree leaves.

Summary Statement

How different organic materials can accelerate algae, which can be used for biofuel.

Help Received

Used Mr. Whittington's spectrophotmer (teacher from sanger high school)