

CALIFORNIA STATE SCIENCE FAIR 2002 PROJECT SUMMARY

Name(s)

Mathew P. Patten

Project Number

J0820

Project Title

Landfills to Life

Abstract

Objectives/Goals

Our Planet is plagued by more and more landfills by the day. My objective was to help reduce the amount of waste that goes into our landfills by experimenting with common landfill materials for alternative soils.

Methods/Materials

The method I used was to select four different types of common landfill materials. They consisted of Shredded paper:(paper plates, junk mail, Newspaper, cereal boxes, paper towel rolls). Shredded plastic:(egg crate, six pack holders, bread wrapper, Styrophom, plastic wrap, tinsel). Shredded metal:(tinfoil, aluminum cans, tin cans, nails, steel wool, staples,paperclips). Non-composted shredded organic material:(potato peels, eggshells, stale bread, old banana with peel, tea grounds, orange peel). I planted seeds in the materials and placed them in a warm sunny place and watered them daily.

Results

The results were that only the shredded paper soil supported plant life.

Conclusions/Discussion

My conclusion is paper makes a better soil than metal, plastic, or non-composted organic material because the paper holds moisture to allow the seeds to sprout, and allows the plants to establish a root system.

Summary Statement

Finding alternative soils from common landfill materials.

Help Received

Parents helped with typing and computer work.