

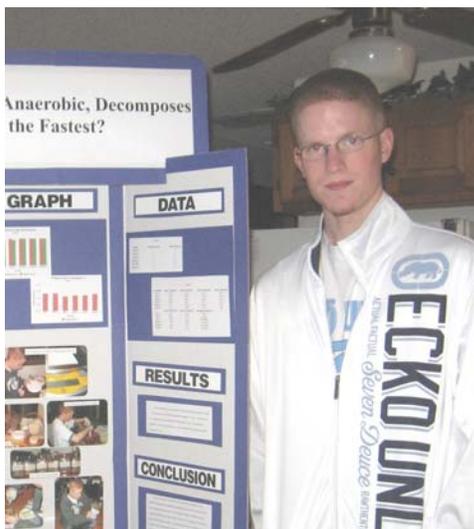


2009

MASSACHUSETTS CLEAN TECHNOLOGY AWARDS

A Program from The Foresight Project Inc

www.theforesightproject.org



Region III, Southwestern MA
CleanTech Honorable Mention:

William Black, Taunton High
School

*"Which Compost Decomposes
Sugar Can Fiber the Fastest?"*

ABOUT ME:

My name is William Black and I am a senior at Taunton High School. I have attended Taunton Public Schools my entire life and have proved quite successful. I am currently taking part in an internship at Champion Exposition Services working with CAD. I also work at a part time job 20 to 30 hours per week saving for college. My interests include cars, baseball, and movies. I am attending college next year at the University of Massachusetts Amherst, with the intended major of engineering.

I have been participating in science fairs since the seventh grade. Out of these six years I have gone to the regional science fair five times and the state science fair twice. All of my science projects have been about earth/environmental science or relating to real world problems. This is my last year participating in the high school level science fair so I am hoping to do very well in the state fair in May.

MY PROJECT:

One of the greatest issues concerning our sustainability here on earth is the excess amount of waste produced and placed in landfills. It is a fact that landfills are overflowing and we are running out of places to put our trash. One alternative that is very realistic for most people is to create their own compost. By developing compost for every household, less stress would be put on the landfills. So we need to find the most efficient way to decompose our waste at our very own homes.

In an effort to find the more efficient compost I used a piece of Sugar Cane Fiber (called Bagasse) in six separate composts. Three of the composts were aerobic and the remaining three were anaerobic composts. The reason for choosing Sugar Cane Fiber is that it has a very fast decomposition rate and will hopefully show results in the time allowed. I hypothesized that the aerobic (with oxygen) decomposition would be more efficient, and take place at a faster rate.

For my conclusion I found that my hypothesis was proven. The samples in the aerobic composts decomposed the sugar cane fiber the fastest. Even though the decomposition is not clearly visible, I was able to get an accurate reading from the gram scale. I strongly recommend the use of personal composts. With few ingredients and minor work we could all make a difference in waste management.