Biofuel Enzymes

Hill, Meghan

The purpose of this experiment was to find the best source of enzyme cellobiase to be used in biofuel production. The sources tested were supreme stuffer portabella mushrooms, porcini mushrooms, and baker's yeast. If given different sources of enzyme cellobiase, then the supreme stuffer mushroom will yield the most p-Nitrophenol because it has more mass than the other substances. In order to measure how much enzyme each source yielded, I measured the amount of p-Nitrophenol produced, an artificial product resulting from substrate breakdown. What I learned was that the porcini mushrooms yielded the most enzyme cellobiase because it had a faster reaction rate of substrate being broken down over time. Based on this data, porcini mushrooms would be the ideal choice for the source of the enzyme cellobiase.

Awards Won: