2016 NOBCChE National Science Fair Abstract

Category: **Physical Science**

Title: **Freshwater vs. Greywater, Will the Plants Survive?**

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I believe if I use greywater and freshwater to water the plants, then both groups of plants will grow at the same rate.

For the freshwater plants, I fertilized them with a solution that had been sitting out for a week to allow the chemicals to separate from the water. For the greywater plants, I fertilized them with a greywater solution, which was made by mixing 2/6th teaspoons of soap, 2/6th teaspoons of dirt, and ¼ cup of water to simulate water after you have washed your hands. The plants that I used were 6 Exotic Angel Plants and 6 Lima Bean Plants, three of each plant was used with the freshwater and greywater. In the end, the tallest Lima Bean plant which was fed freshwater grew taller than the tallest Lima Bean plant fed greywater.

The National Organization for the Professional Advancement of Black Chemists and Chemical Engineers (NOBCChE) National Science Fair is a poster competition in which students present an independent completed research project. Each contestant in the Science Fair must demonstrate their ability to conduct a research project by:

- Submitting an abstract of 150 words or less on an individual research project in one of the following **four categories: physical science, math & engineering, consumer science, or biological science.**
- Presenting the results of the research in a poster format, including answering questions from judges; and submitting a written report during the poster presentation.
- For more information, visit www.nobccheSTEMwkd.com.