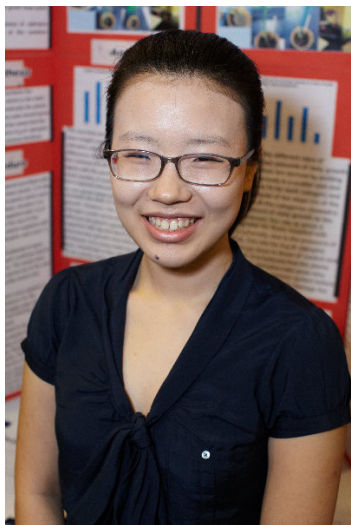


CWSF 2012 - Charlottetown, Prince Edward Island



Esther Jang

Jatropha Cucas Seed Cake as an Organic Fertilizer

Challenge: Environment

Category: Senior

Region: Bay Area

City: Oakville, ON

School: King's Christian Collegiate

Abstract: This experiment was designed to determine the effectiveness of Jatropha curcas seed cake as fertilizer compared to that of a common, inorganic fertilizer and also the most effective amount of the cake to grow a green bean plant. In conclusion, the common fertilizer was three times more effective than Jatropha cake; 9 g of the cake was the most effective amount among the tested amounts.

Biography

I am an international student with English as my second language. I would like to study biomedical engineering in university. Last year, I participated in a science fair for the first time, and to get an idea of how it's done, I looked at the projects done by the students from my school in the previous years. One of the projects that I looked into dealt with Jatropha curcus seed cake, and it brought my attention to the matter. I kept reading about the numerous applications of Jatrophy curcus plant and found out that the cake contains large amount of nutrients; therefore, it has a potential to be utilized as fertilizer. I wanted to do some more research on the matter myself. My project demonstrated that Jatropha cake causes death of green bean plants when used as fertilizer. In the future, I would like to determine what types of plants that the toxic chemicals in the cake have the most deleterious impact on. In addition, I would like to test the use of corn ash which has detoxifying effects in reducing the damage done by the cake to bean plant.

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