

## CWSF 2019 - Fredericton, New Brunswick



### Manaskawin Phupinyokul, Naranya Rujanawech

#### The Biodegradable Nursery Bags From Agricultural Waste

**Challenge:** International

**Category:** Senior

**Region:** Thailand

**City:** nonthaburi, , Bangkok,

**School:**

**Abstract:** The development of biodegradable nursery bags from soybean meal, water hyacinth and natural rubber which will decompose by themselves when planting under the ground, decrease a number of plastic mass instead of using ordinary nursery bags, no any effects with the root systems and give high levels of nutrients to seedlings.

#### Biographies

Manaskawin - I'm Kavin. My activity is play batminton. I like watch sci-fi or Avenger movie, because of It inspires me. My hobby is plant a tree, I'm feel relax and encouraged when I saw it grow up. I've received gold medal and special awards from ican and thrid prize in competition of Hongkong about my project. The first time I started to think of this project when I saw problem garbage bag being left waiting to burn in my school. So I focus natural material for Organic product. I would like to investigate the amount of nutrients from the biodegradation of biological nursery bags. Project thinking should be a problem in life or something that is interesting a...

Naranya - My name is Naranya Rujanawech. You can call me 'Meiji' which is quite like Japanese name but actually I'm half Thai-Chinese. I come from Bangkok Thailand and now I'm 17 years old. I'm studying in Princess Chulabhorn Science High School Parhumthani which is boarding school that concerned about Science and Mathematics. For my hobbies, when I've free time I always play piano and tennis (Frankly, I used to wanna be tennis player). In the future, I'd like to study in the faculty of medicine or get international scholarships in overseas. By the way, let's talk about my project. I've been to many countries and got some awards becaus...

#### Awards

#### Value

Gold Medal - International	
Sponsor: Youth Science Canada	
Total	\$0