

2015 年臺灣國際科學展覽會 優勝作品專輯

作品編號 120018
參展科別 環境科學
作品名稱 Hay Aliens
得獎獎項 一等獎

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Abstract

The purpose of my project was to prove if the seeds of invasive plants are spread throughout the Peace region in hay harvested by local farmers.

Invasive plants are so dangerous because they adapt to their environment fast and some of them can cause harm to both animals and humans. Within a year they can completely wipe the ecosystem out of native plants. Many invasive plants are either poisonous or can affect the systems of the animals body's.

I collected 22 hay samples from local farms around the North Peace region. I conducted a survey to help collect information about the samples. A pretest was conducted to determine which of two homemade sifters (one with three layers of decreasing size wire mesh, and one with 6 layers of materials with larger size holes) was the best for sifting through hay. I was able to determine that the larger sifter was easier for sifting hay.

I sifted through all 22 samples with the larger sifter. I individually looked through each layer and removed what I believed to be seeds. Each seed was individually bagged, labeled, and photographed through a microscope. After each seed was photographed they were planted to help identify the seeds.

I contacted a seed specialist. I was able to send him the images of my seeds. He helped me to identify my findings. I removed a total of 5568 potential seeds in my 22 samples. Out of all the potential seeds found 628 seeds were invasive. All invasive plants identified either cause pain to animals or they easily over take the native plants.

【評語】 120018

作品探討甘草對於其中攜帶種子導致外來種侵入的影響，收集 22 個不同地區之甘草進行過篩分離出不同的種子並區分出可能的外來種，本實驗的架構完整且具科學性，並有邏輯的討論所得的實驗分析結果，是一個非常完整的作品。