## Investigating the Fermentation and Distillation of Ethanol from an Invasive Species

Kuikahi, Irene (School: Success Academy DSU)

Valera, Jasmin (School: Success Academy DSU)

The question addressed was, are we human beings contributing to future disasters of our environment, such as global warming, air pollution, climate change and even invasive species? If so, then can we still prevent it?" From our perspective overall, yes we do believe we humans contribute to the world-threatening effects of many environmental problems we face today. Since the main source of contribution comes from human activities such as introducing animal and plant species to areas outside of their natural range, there are ways to adapt to a new way of life. A solution that we found to be upmost adaptable was creating ethanol, a biofuel source from an invasive specie. To perform this experiment we had to schedule four days to ferment the leaves from our invasive specie source named the Molucanna Falcataria, and then distilling the leaves for approximately 30 minutes. We then compared the results we received from fermenting and distilling the cane sugar. Results did support our hypothesis from both perspectives as the Molucanna Falcataria being a possible bio-fuel crop and as a natural source that created more ethanol than the cane sugar. We then took a step further by exploring the effects of creating ethanol from other possible invasive plants we could use, if we were to ignore today's environmental problems.