

CALIFORNIA STATE SCIENCE FAIR 2015 PROJECT SUMMARY

Name(s)

Daniel A. Miret

Project Number

J1515

Project Title

Extras in Your Raw Vegetables

Objectives/Goals

Abstract

My Science project was about what vegetable is safer to eat raw the ones domestically produced here in the U.S.A or of the same type but imported from Mexico. I based my interest on Nathaniel Simms that imported products are as safe as homeland products because they go through tests to guarantee that they are safe to eat. I believe that imported raw products from Mexico contain more contaminants than those produced in homeland U.S.A.

Methods/Materials

Materials used to find and help understand my conclusion and results are in the following: Petri dish, swabs, bowl with cold water, incubator, microscope, gloves, transparent graph that measures squared centimeter per square. My procedure started in my school's science lab, first I prepared the vegetables: Beets, Cilantro, Asparagus, Green Onion, Green Squash, both imported or homeland by washing each in a separate bowls. Then I used a sterile swab to collect samples from the contaminated water, next I inoculated the agar with the contaminated water sample, after I repeated my procedure from steps 3-6, later observed growth on the petri dishes and after took the samples and did a wet mount and examined it even closer.

Results

The results indicated that Mexico#s vegetables were contaminated more than USA#s (shown on the graphs) the average bacteria grown on Mexico#s vegetables was a total of 14.97 yellow bacteria and 4.44 purple bacteria and together a total of 19.41. For USA#s was 6.57 yellow bacteria and 7.113 purple bacteria and together a total of 13.683.

Conclusions/Discussion

From the results of the colony counts and identification of microorganisms, those raw vegetables produced in Mexico has about 20% more bacteria than U.S.A.#s vegetables. Regardless of whether the products are produced in U.S.A. or imported from other countries, it is still safer to wash as much as possible to clean off any contaminated particles grown on your vegetables by using sprays sold at stores for example Fruit & Vegetable Wash or you could use boiling water or the old fashion, water.

Summary Statement

My project is about what vegetable is safer to eat raw the ones domestically produced here in the U.S.A or of the same type but imported from Mexico

Help Received

Dad And Mom helped in taking me to get my materials and always were there when needed special help; Mrs. Urbiztondo my teacher who helped me in my procedure