



2014 Monterey County Science and Engineering Fair

Special Award for Exceptional Project

in

Recycled Water, Pollution Prevention and/or Seawater Intrusion

Junior Division Winner:

Ms. Harley Thompson
8th Grade Student
San Carlos School, Monterey
Division: Pharmacology/Toxicology
Project Title: Mercury: Not Just in Fish

Other awards received:

Second Place
Northern California Institute of Food
Technologists
Water Awareness Committee of
Monterey County

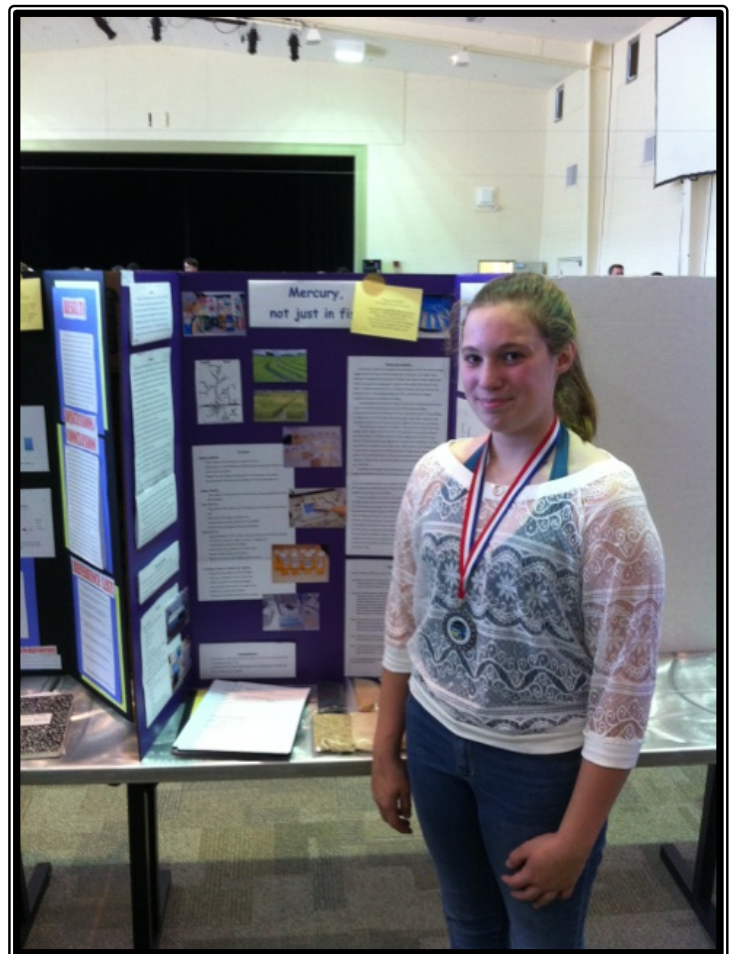


Figure 1: Ms. Harley Thompson with project board.

Mercury, not just in fish

Harley Thompson

Abstract

In this study, I looked at mercury levels in rice. Mercury is a toxic chemical that has been shown to be health hazard. People around the world eat rice everyday in their normal diet. The heavy metal, mercury, is absorbed by the rice plant. Rice samples were taken and analyzed on the Direct Mercury Analyzer (DMA80) and the Tekran 2700. I found that mercury levels can vary in rice, however my samples were low in mercury. In this study total mercury levels ranged from 1.5-5.9 ng/g and methylmercury levels ranged from 0.35-3.1 ng/g dry weight. Concentrations were at or below method detection limits of the methods used and these values should be considered preliminary.