

CALIFORNIA STATE SCIENCE FAIR 2011 PROJECT SUMMARY

Name(s)

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Project Number

J0501

Project Title

Is the Fish Sold in Grocery Stores as Red Snapper Correctly Labeled?

Abstract

Objectives/Goals

My objective was to find out if grocery shoppers are getting what they#ve paid for behind the fish counter. I wanted to find out if the fish in grocery stores labeled as Red Snapper was actually Red Snapper.

Methods/Materials

I used fillets of Red Snapper from four different grocery stores and use a chelex and proteinase K solution to digest the samples to be genetically sequenced.

Results

All of the samples turned out to be a different fish than Red Snapper. The 50% of samples that were usable were all from the genus Sebastes, which is rockfish, instead of Lutjanus, which is Red Snapper. None of the samples were Red Snapper.

Conclusions/Discussion

The fish sold to customers in grocery stores is not Red Snapper. All of the fillets were types of rockfish. The season in which the fillets were purchased may have had an effect on how many of the samples were correctly labeled and environmental problems such as the BP gulf oil spill, where Red Snapper is normally caught, could have drastically affected the market for Red Snapper.

Summary Statement

After running genetic tests on fillets of Red Snapper purchased at grocery stores, it was found that none of the fish sold as Red Snapper were correctly labeled, they were all other species of fish.

Help Received

I received help from Thomas F. Schultz PhD, and Mark Attebury.