

# CALIFORNIA STATE SCIENCE FAIR 2012 PROJECT SUMMARY

Name(s)

Corlin L. Palmer

**Project Number** 

S1117

## **Project Title**

# **Charcoal from Palm Waste**

# **Objectives/Goals**

## **Abstract**

My objective was to efficiently produce charcoal from discarded palm waste that can perform well compared to other types of charcoal.

#### Methods/Materials

I designed a steel-based apparatus to more efficiently make charcoal out of palm tree droppings, which is done by burning with a restricted oxygen supply, crushing it into powder, mixing it with other ingredients, and pressing it into briquettes.

### Results

The performance of the palm charcoal was very comparable to that of the commercial hardwood charcoal in every test, though undeniably a bit worse.

### **Conclusions/Discussion**

Though not quite as good as its commercial rival, using palm waste for charcoal production could greatly reduce deforestation in the third world, improving lives with its cheap and easy production.

# **Summary Statement**

By making charcoal out of the waste dropped by palm trees instead of hard woods, forests can be saved and lives can be improved.

## **Help Received**

Mother helped with arranging and gluing the board