



**CALIFORNIA STATE SCIENCE FAIR  
2004 PROJECT SUMMARY**

<b>Name(s)</b> <b>Pamela Phonxaylinkham</b>	<b>Project Number</b> <b>J0922</b>
<b>Project Title</b> <b>Investigating the Growth of Radish Seeds in Various Ash and Soil Combinations</b>	
<b>Objectives/Goals</b> The purpose of my science fair project is to investigate the growth of radish seeds in various ash and soil combinations. I am trying to find out if slash and burn techniques have any affects on the soil when growing radish seeds in the soil that contains ash.	
<b>Abstract</b> <b>Methods/Materials</b> In my science project, I used soil, radish seeds, 25 potting bowls, water, measuring cups, matches, 5 different type of woods (orange, lemon, apricot, pistachio, and walnut), and a mallet. The woods were burnt into ash so it can mix with the soil. The mixture of soil is put into the potting bowls so that I can start my experiment.	
<b>Results</b> The results of my experiment showed that slash and burn techniques are beneficial and that they help the plants grow faster than just regular soil. The Orange wood ash came in the best in all three requirements in my project (health, # of growth, and length of plants). The lemon wood ash came in least best because it had less affect on the radish seeds. Apricot wood ash came in second best, the control came in 3rd, the pistachio wood ash came in 4th, and the walnut wood ash came in 5th. I also discovered that it depends on what type of wood ash that is added to the soil to make the plant grow faster or slower. Some wood ash makes the plant slower and some makes it grow faster, but slash and burn techniques is still pretty beneficial.	
<b>Conclusions/Discussion</b> After completing my investigation, I found out that my hypotheses was all wrong. My hypotheses was that the lemon wood would work better than the others, and help the radishes grow healthier. I think that because the citric acid would probably feed the radish seeds and help it grow. I also think that the walnut wood ash will not help the radish seeds grow.  The orange wood did the best out of all of them and the lemon did the worst.  I learned that slash and burn techniques are beneficial and that it can help the seed grow faster depending on what type of wood ash it is. In conclusion, people who farm or garden should consider into taking the slash and burn technique.	
<b>Summary Statement</b> My project is to see if slash and burn techniques have any affects on plants.	
<b>Help Received</b> Teacher revised science papers; Sister helped glue papers to board.	