



**CALIFORNIA STATE SCIENCE FAIR  
2014 PROJECT SUMMARY**

<b>Name(s)</b> Olivia Myers; Grace Niccum	<b>Project Number</b>  34102
<b>Project Title</b> How Do Different Fertilizers Affect the Growth of Sweet Peas?	
<b>Abstract</b> <b>Objectives/Goals</b> The objective of our Science Fair project was to determine how different fertilizers affected the growth of sweet peas. We hypothesized that seaweed would most effectively strengthen and quicken the growth of our sweet pea plants. <b>Methods/Materials</b> We planted 50 sweet pea seeds in Miracle Grow Seed Starting Potting Mix. One row was fertilized with commercial fertilizer, one with molasses, one with seaweed, one with coffee grounds, and the last row was a control group with only the potting soil. We fertilized the seedlings every two weeks and watered them every other day. Every Friday, we measured and recorded the plants' heights. <b>Results</b> By the end of six weeks, on average, the control group and the seaweed group had the same amount of growth. The molasses and the coffee grounds group grew less and the commercial fertilizer group grew the least. <b>Conclusions/Discussion</b> We conclude that the seed starting potting soil worked most effectively on sprouting seeds when used by itself. According to our data it appears that the seaweed addition neither helped nor harmed the seedlings. Our results indicate that when the potting soil and the commercial fertilizer are used together the effect was detrimental because the plants were overfertilized. A question for further experimentation would be what effect the fertilizers would have if applied to seedlings in potting soil without seed starting fertilizer or if applied later in the growth cycle.	
<b>Summary Statement</b> How do different fertilizers affect the growth of sweet pea seedlings?	
<b>Help Received</b> Science teacher provided our board, Garden teacher let us use the garden to house our plants, mothers helped with purchases and applications	