



**CALIFORNIA STATE SCIENCE FAIR
2005 PROJECT SUMMARY**

Name(s) Audrey L. Witt	Project Number J1338
Project Title The Effect of Lalvin Champagne Yeast on Carbonation and Taste of Home-Brewed Root Beer	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals Because the yeast greatly affects the taste of home-brewed root beer, I wanted to determine what was the smallest amount of Lalvin Champagne Yeast that would produce an acceptable amount of carbonation and a pleasing taste. I chose to use Lalvin Champagne Yeast after taste testing two ale yeasts and the Lalvin Champagne Yeast.</p> <p>Methods/Materials To test the effect of the Lalvin Champagne yeast on the carbonation and taste of home-brewed root beer, I made four different batches of root beer: 0 tsp. yeast, 1/32 tsp. yeast, 1/16 tsp. yeast, and 1/8 tsp. yeast. All of the proportions of the ingredients remained constant, as well as the methodology: temperature of water, type of water, sanitizing procedure, type of bottles, and amount of time they fermented.</p> <p>Results I found that as I increased the amount of Lalvin Champagne Yeast the carbonation increased, but so did the distinctive taste of the yeast. 1/32 tsp. yeast batch was, by far, the best tasting and it had an acceptable amount of carbonation. On the other hand, the 0 tsp. yeast batch had no carbonation and a horribly foul smell!</p> <p>Conclusions/Discussion Yes, I was able to produce a good tasting home-brewed root beer with an acceptable amount of carbonation with only 1/32 tsp. of Lalvin Champagne Yeast. It was amazing that such a tiny amount of yeast would produce a pleasing amount of carbonation in a 1.89265 liter(1/2 gallon) batch of root beer!!!</p>	
Summary Statement I made home-brewed root beer with varying amounts of Lalvin Champagne Yeast to determine what was the smallest amount of yeast that would produce an acceptable amount of carbonation and a pleasing taste.	
Help Received Leener#s Brew Works for giving me the plastic bottles and answering my questions; my mom for taking pictures and helping me with the things that took more than my two hands.	