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**Project Title**  
The Effect of Lalvin Champagne Yeast on Carbonation and Taste of Home-Brewed Root Beer

**Abstract**
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.

**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.

**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!

**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(½ gallon) batch of root beer!!!