



The Influence of Yeast Concentration in Fermentation of Beer

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Abstract: Different factors play their role in the fermentation of beer but very important ones are temperature, CO₂ pressure and yeast concentration. In this work it has been studied the influence of the yeast concentration in the main parameters of fermentation. It has been studied the beer fermentation in three cases, with three different concentrations of yeast: First case was used the 20.0 x 10⁶ cells/ml; Second case was used 22.0 x 10⁶ cells/ml; Third case was used 24.0 x 10⁶ cells/ml. All other conditions of production were the same and the same raw material was used, therefore, we used the same quality of barley malt, the same quality of water, the same type and quality of yeast, and the same hops. The work was done in the same equipment and under the same other chemical and thermodynamic conditions. According to the study we can conclude that the main differences were in the results of the apparent and real degree of attenuation. The small differences were noticed also in the yeast changing mass during fermentation but not so much. While the extracts decrease during fermentation was almost the same. It is important to say that organoleptic characteristics at the final product of beer were not noticed. The study was done under the production conditions of The Peja Brewery, Birra Peja. Analyses were made in the Chemical Laboratory of Birra Peja Brewery, according to the EBC – European Brewery Convention methods.

Keywords: yeast, fermentation, beer, cells, attenuation

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