Poster

Study of the variability present in the production of craft beer at the "El Postiguet" brewery.

Martínez Zaragoza, Ignacio

Empresa Cervezas Postiguet , Dirección C/ del Marco, 26 03114 Alicante

Tutor académico: Ramos Barrales, Ramón

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ABSTRACT

In recent years, beer consumers have become increasingly demanding and this has opened up new market opportunities. These opportunities have been seized by a multitude of master brewers who began to increase the scale of production of their craft beers, in order to be able to market them. The booming beer market has also raised a lot of interest in improving the quality of beers. In the case of companies where resources are not equal to those of large producers, this interest in improving quality, which is their strong point, is even greater. To improve the quality of beer production, variability is avoided as much as possible, in order to offer a stable and characteristic product[1][2]. This is the case of "El Postiguet", a brewing company in the province of Alicante, which emerged with this boom in the craft beer market. This company brews beers of different styles and tries to ensure that each style has certain characteristics. To ensure that these characteristics are maintained in all brews of the same style, parameters such as pH and must density are measured throughout the process, so that the brews are as exact replicas as possible. Despite using the same ingredients and trying to keep the pH and density the same in each brew, there are always small variations. The objective of this study is to evaluate what these variations are and where they are found in the process, in order to find ways to minimize them. Therefore, pH and density data have been measured throughout the process and evaluated with principal component analysis to see which parameters contribute the most variance[3].Here the results showed that the factors measured do generate considerable variability in the final result hence we can conlcude thar the company should invest more in the control of these parameters. This can be done investing more in the control of these parameters, either with better measuring instruments to be able to better choose the quantities of malt or pH correctors added. Another approach to this solution could be trying to improve the process in a way that would allow to add the quantities of ingredients in a more accurate way.

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