

5. CONCLUSIONS AND SUGGESTIONS

5.1. Conclusions

- Ethyl acetate and isoamyl acetate concentrations are positively correlated with total higher alcohol concentration.
- Fermentation temperature affects the concentration of esters and total higher alcohols positively.
- There's no significant relationship between yeast pitching rate, ethyl acetate, and total higher alcohols concentration.

5.2. Suggestions

- In future studies, it is recommended to conduct a sensory analysis to determine the effect of fermentation temperature and the pitching to the sensory quality of Heineken® beer.
- A quantitative analysis of other volatile compounds are needed to investigate the effect of fermentation temperature and the pitching rate of yeast to the concentration of off-flavor compounds

