

ABSTRACT

This internship project aims to evaluate the microbial quality of coffee milk during its production at Jago Coffee. The project employs the Total Plate Count (TPC) and Methylene Blue Reduction Test (MBRT) to assess bacterial load and microbiological activity. The TPC results obtained for the cooling and filling & sealing processes comply with the SNI (Standar Nasional Indonesia) standards, as their TPC values fall within the acceptable range of $5 \log \text{ cfu/ml}$. However, the mixing process, which is considered a Critical Control Point (CCP), fails to meet the SNI standards as its value exceeds the required limit. Consequently, the overall product does not meet the TPC requirement. In contrast, the MBRT results indicate satisfactory microbiological quality and compliance with the SNI guidelines. The reduction time observed during the mixing, cooling, filling, and sealing processes ranges from 7 to 10 hours, placing it under the category of heat-treated milk according to the SNI guidelines. No significant correlation is observed between TPC and MBRT. This study highlights the importance of heat treatment during the mixing process to ensure product safety and quality. Further research is recommended to explore the relationship between TPC and MBRT in the production of coffee milk.

Keywords: Jago coffee milk, Methylene Blue Reduction Test (MBRT), microbial quality, Standar Nasional Indonesia (SNI), Total Plate Count (TPC)