

COMPARISON OF YEAST AND MOLD COUNT (YMC) VALUES IN STERILE
AND NON-STERILE KEPOK BANANA STARCH (*Musa paradisiaca* L.)

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ABSTRACT

Background: *Kepok banana starch (Musa paradisiaca L.) produced by the Sidodadi MSME is a high-resistant starch product processed using simple methods and has the potential for wider development. However, due to its simple production process, it is at risk of microbial contamination from environmental factors, which may affect the quality and safety of the product, particularly in terms of mold and yeast contamination. In this study, UV light was used as a sterilization method to reduce mold and yeast contamination in kepok banana starch. One of the parameters used to assess microbiological quality and safety is the Yeast and Mold Count (YMC) test. Objective:* This study aims to compare the YMC values in UV-sterilized and non-sterilized kepok banana starch and to determine whether the microbial contamination levels comply with BPOM regulations. **Methods:** This study employed the Petrifilm method, a rapid testing method using ready-to-use media. **Results:** The results showed that the YMC value in UV-sterilized kepok banana starch was 3.0×10^4 CFU/g, while the YMC value in non-sterilized kepok banana starch was 1.8×10^4 CFU/g. **Conclusion:** The findings indicate that sterile kepok banana starch exhibited a higher YMC value than non-sterile starch. However, the YMC values in both samples exceeded the microbial contamination limits set by BPOM Regulation No. 13 of 2019 on the Maximum Microbial Contamination Limits in Processed Food Products, which stipulates a maximum YMC value of 1×10^4 CFU/g for the flour and starch category.

Keywords: *Kepok banana starch, UV sterilization, Petrifilm, Yeast and Mold Count (YMC)*