TOTAL PLATE AND TOTAL *Staphylococcus aureus* COUNT OF BEEF SOLD AT WET MARKETS IN MULYOREJO SUB-DISTRICT SURABAYA

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**ABSTRACT**

The aim of this study is to know whether the Total Plate Count and total *Staphylococcus aureus* count of beef sold in wet markets in Mulyorejo sub-district below the National Standard Indonesia (SNI 7388:2009) about maximum limit of microbial contamination in food or not. Total of twenty four samples of beef purchased from traditional markets of Tempurejo, Krempyeng Yamuri, Pacar Keling, and Menur in Mulyorejo sub-district Surabaya were examined by Total Plate Count using pour plate method. The sample was also cultured in Mannitol Salt Agar. The colony suspected to be *S. aureus* were taken for identification. The identification of *S. aureus* consists of isolation in Mannitol Salt Agar, Gram staining, catalase test, and coagulase test. Total plate count result showed that four samples were exceeding the National Standard of Indonesia SNI 7388:2009 or 1x10⁶ CFU/g and the rest were below the maximum Total Plate Count in SNI. The highest Total Plate Count result was 1,9x10⁶ CFU/g and the lowest was 7,8x10⁴ CFU/g. The result of identification showed that 100% samples examined were contaminated by *S. aureus* with the highest result was 1,6x10⁴ CFU/g and the lowest result was 4,3x10² CFU/g or exceeding the SNI 7388:2009.

**Key words:** Total plate count, *Staphylococcus aureus*, fresh beef