ISOLATION AND CHARACTERIZATION OF BACTERIA PRODUCING BIOFILM FROM FOOD VENDORS BY USING CONGO RED BROTH METHOD AND TUBE METHOD

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ABSTRACT

ISOLATION AND CHARACTERIZATION OF BACTERIA PRODUCING BIOFILM FROM FOOD VENDORS BY USING CONGO RED BROTH METHOD AND TUBE METHOD

The attachment of microorganism onto moist surfaces environment will form biofilm. Biofilm may give negative impact to human health such as causing gastrointestinal disease if improper handling and choosing food from street food vendors. Therefore, this study was conducted to isolate and characterize biofilm producing bacteria from food sold from food vendors in UiTM Kuala Pilah and to compare which method either Congo Red Broth or Tube Method were effective in determining biofilm formation. Exposed food samples such as cheese tart, fried chicken and cooked dishes containing vegetables were taken from food vendors. Through selective media screening and biochemical testing, there were a few pathogenic bacteria characterized. Tube Method was superior techniques to determine biofilm compared to Congo Red Broth method as the results showed strong and moderate of biofilm formation while Congo Red Broth method only showed low biofilm formation. It can be recommended that Tube Method is reliable to detect formation of biofilm.