

**ISOLASI DAN KARAKTERISASI BAKTERI ASAM LAKTAT  
DARI VIRGIN COCONUT OIL (VCO) SERTA  
PENGUJIANNYA SEBAGAI ANTIBAKTERI TERHADAP  
BAKTERI PATOGEN *Escherichia coli* DAN *Staphylococcus  
aureus***

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## Abstract

In this study, we aim to isolate and know the characteristic of lactic acid bacteria and do antibacterial test to *Escherichia coli*, *Staphylococcus aureus*. Three samples were used from Virgin Coconut Oil (VCO) products which were available in Padang. Then, the formed colony was purified till 12 isolates. The macroscopic characteristic can be shown by observation process. The lactic acid bacteria characteristic also can be performed by dye gram, catalase and fermentation type test. The observation performed that bacteria were circle in shape, slippery in side, white milk in colour. The total colonies in IP<sub>2</sub> sample was higher than other samples amount  $6,8 \times 10^9$  CFU/mL. The dye Gram test shows all isolates were belong to positive gram, catalase test delivers negative catalase and the type of fermentation was homofermentative. The radius of resisting zone for twelve isolates but IP<sub>1,6</sub> was not significantly different in resisting the growth of *E.coli* bacteria. Whereas, the radius of resisting zone for twelve isolates was significantly different in resisting the growth of *Staphylococcus aureus* bacteria. With IP<sub>2,1</sub> as the widest of the resisting zone radius and IP<sub>3,2</sub> as tightest of the resisting zone radius

**Key word:** lactic acid bacteria, virgin coconut oil, anti bacterial, *Escherichia coli*, *Staphylococcus aureus*