BIOACTIVITY ANALYSIS LIPID EXTRACT IN Zymomonas mobilis USE THE METHOD BSLT (Brine Shrimp Lethality Test)

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ABSTRACT

Hopanoid compound is a secondary metabolite the triterpen pentasiklik of the bacteria that functions as a set of them membrane permeability and membrane fluiditas on bacterial plasma membrane. Hopanoid compound was successfully identified from the bacterium Zymomonas mobilis produce ethanol in which the tolerance which is very unusual to about 13% ethanol. Function of Hopanoid as membrane cell stabilizer able to survive so that in extreme circumstances.

Hopanoid compound in in Zymomonas mobilis can be done using the method with Rohmer stages with extraxtion of total lipid of the cell using a dry kloroform/metanol (2:1 v/v). Then the separation hopanoid done with KLT column chromatography and then detected with hopanoid KG-MS.

Lipid extract content role as antitoxin preliminary test conducted using the method BSLT (Brine Shrimp Lethality Test). Lipid extract activities for the LC50 values of 91.2 ppm indicates that the compound that are active and have bioaktifitas high, which means the concentration that is already small toksik and off to Artemia salina.

Keywords: BSLT, hopanoid, Zymomonas mobilis