Bactericidal Effect Of Extract Of Red Ginger (Zingiber officinale Rosc) Against Salmonella pullorum by In Vitro

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ABSTRACT

The research is to find out bactericidal effect of extract of red ginger (Zingiber officinale Rosc) against Salmonella pullorum by in vitro.

The method that used in this research was dilution method with two steps: fixing Minimum Inhibition Concentration (MIC) and Minimum Bactericidal Concentration (MBC) value. The experiment that has used was Completed Randomized Design (CRD) with 10 treatment by using 100%, 50%, 25%, 12.5%, 6.25%, 3.12%, 1.56%, 0.78%, 0.39%, 0% the extraction of red ginger with 3 replies for each concentration. The bacterial isolate of Salmonella pullorum that had been used was Strain 11.

The variable that had been monitorized was minimum concentration of the extraction of red ginger that could be used for inhibit and kill Salmonella pullorum. And then the result of the experiment had been analyzed by using Fisher's Exact Test.

The result of this research showed that minimum concentration of extraction of red ginger that could inhibit the growing of Salmonella pullorum is 8%, and minimum concentration of extraction of red ginger that can killed Salmonella pullorum bacteria was 25%, because in 6% concentration, Salmonella pullorum could grow in of 1% amount, after has been analized with Probit Analysis and Fisher’s Exact Test.

Key word : Bactericidal Effect, Extract Of Red Ginger (Zingiber officinalle Rosc), Salmonella pullorum