Abstrak:

Aeromonas hydrophila is a motile Aeromonas bacteria that cause Septicemia (MAS) or the disease known as red spots (Plumb, 1994). These bacteria attack the various types of freshwater fish such as African catfish, carp and prawns. Treatment of MAS is still a lot of use antibiotics, whereas antibiotic a lot side effects. This study tries for find an alternative use antibacterial substances using natural chemicals derived from medicinal plants of leaves extracts red betel (P. rocatum) which is antibacterial is a volatile oil, flavonoids, alkaloids and tannins.

The purpose of this study was to determine the Minimum Inhibitory Concentration (MIC) and Minimum
Bactericidal Concentration (MBC) of leaves extracts red betel (P. crocatum) against of bacteria A. hydrophila. The research was conducted on July-August 2011, at the faculty of veterinary medicine, Airlangga University and Organic Chemistry Laboratory Faculty Of science and Technology Airlangga University. The method used in this study is an experimental method, using completely randomized design (RAL) with 11 treatments and
three replications. Variables observed in this study is the minimum inhibitory concentration (MIC) and Minimum Bactericidal Concentration (MBC) of leaves extracts red betel (P. crocatum). The observations were analyzed using analysis of variance (ANAVA). The results showed that extracts leaves red betel (P. crocatum) has efficacy against the bacteria A. hydrophila in vitro. Based on the results of MIC testing, leaves extracts of red betel (P. crocatum) inhibits growth of bacteria A. hydrophila at a concentration of 12.5% and based on test results of MBC, leaves extracs of red betel (P. crocatum) effectively kills the bacteria A. hydrophila at a concentration of 25%. It can be concluded that the concentration of antibacterial substances contained in red betel able to inhibit and kill bacteria A. hydrophila. This study recommends further to determine the effects of leaves extracts red betel (P. crocatum) A. hydrophila against bacteria in vitro, so that can know the effectiveness of leaves effects of leaves extracts.
red betel (P. crocatum) in suppressing populations of bacteria A. hydrophila.

Keyword:

Extracts Red Betel (Piper crocatum), Bacteria Aeromonas hydrophila

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