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## **ETHANOL EXTRACT FROM *Petiveria Alliacea* (SINGOLAWANG) INHIBITS THE GROWTH OF *Mycobacterium tuberculosis* IN VITRO**

## **ETHANOL EXTRACT FROM *Petiveria Alliacea* (SINGOLAWANG) INHIBITS THE GROWTH OF *Mycobacterium tuberculosis* IN VITRO**

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### **Abstract**

*Multidrug - Resistant Tuberculosis Problems TB (MDR - TB) is still recorded at the highest level. This fact refers to the latest report World Health Organization (WHO). Given the high morbidity and mortality due to tuberculosis antibiotic resistance terhadap M.tuberkulosi, it is necessary to research to find new drugs that are efficacious as anti M. tuberculosis. Petiveria is a plant in the family Alliaceae Phytolaccaceae and have long been, for generations used as traditional medicine for tuberculosis in daerah Bogor. The purpose of this study was to determine the inhibition of ethanol extract of leaves Petiveria alliacea and to determine the effective dose of ethanol extract of leaves Petiveria alliacea in inhibiting the growth of Mycobacterium tuberculosis in vitro HRV. Alliacea Peteveria leaves extracted by maceration method using 90 % ethanol. In the treatment group Lowenstein - Jennisen culture media mixed with ethanol extract of leaves Peteveria alliacea at doses of 15 mg/ml, 22.5 mg/ml, 27.5 mg/ml, 32.5 mg/ml, 50 mg/ml. negative control group is a group in which the culture medium without extracts whereas the positive control group is a group in which rifampin was added to the culture medium dose of 40 mg/ml. Colonies of bacteria are 10/ml planted, grown on LJ medium as 100 ul. Subsequently incubated for 8 weeks at a CO incubator with a temperature of 37 degrees C. The results showed that the LJ media were added Peteveria alliacea leaf extract at doses of 15 mg/ml, 22.5 mg/ml, 27.5 mg/ml, 32.5 mg/ml, 50 mg/ml there were no colony growth Mycobacterium tuberculosis. In the negative control the growth of bacteria, while the apparent positive controls were given antibiotics rifampin also did not reveal any bacteria growth. The conclusion was that the dose of 15 mg/ml of ethanol extract of leaves Peteveria preparations were able to inhibit the growth of bacteria alliacea HRV. (FMI 2013;49:51-54)*

Keyword : Peteveria, alliacea, Mycobacterium, tuberculosis, Lowenstein-Jennisen, media, inhibitory, effect,

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