

ABSTRACT**Test of Antimicrobial Activity of *Curcuma heyneana* From Central Java And Madura Againsts Bacteria *Bacillus subtilis*, *Staphylococcus aureus*, *Escherichia coli* And Mold *Candida albicans*****Dende Marsi Rahanto**

The aim of this study is to determine the antibacterial and antifungal activity of *Curcuma heyneana* extract from two different areas (temu giring from Central Java and temu late from Madura) against *Staphylococcus aureus*, *Bacillus subtilis*, *Escherichia coli* and *Candida albicans*. Testing of bacterial activity using agar diffusion and agar dilution methods. Macroscopic observations show that the inner color of the rhizome of the temu giring is yellow and the temu late is brownish yellow. Microscopic observations of cross-sectional rhizome show that the anatomical arrangements of temu giring and temu late are not much different. The yield of essential oil of temu giring and temu late rhizomes is 0.4 % (v/b) and 2 % (v/b) respectively. The TLC test was performed for identification of terpenoid compounds, and showed that in extracts of temu giring and temu late contained terpenoid compounds, the color spot of temu late is more intensive than temu giring. Antibacterial and antifungal activity on diffusion test, showed that the extract of temu late at concentration of 250 µg/well obtained inhibition zone, *Staphylococcus aureus* 16,98 mm; *Bacillus subtilis* 15.2 mm; *Escherichia coli* 14.3 mm; and 8.76 mm *Candida albicans* fungus. Meanwhile, the extracts of temu giring does not have inhibition zone at the concentration of 250 µg/well. The dilution test showed that temu late extract had MIC in *Staphylococcus aureus* at 625 ppm, *Bacillus subtilis* at 1250 ppm, *Escherichia coli* at 1250 ppm. In conclusion temu giring has no antibacterial and antifungal activity and temu late has the antibacterial and anti-fungal activity at concentration of 250 µg/well.

Keyword : *Curcuma heyneana*, Antimicrobial activity, *Bacillus subtilis*, *Staphylococcus aureus*, *E. coli*, and *Candida albicans*.