

Antibacterial Activity of *Curcuma Xanthorrhizae Rhizoma* Infusion against *Escherichia coli* and *Shigella dysenteriae*

Natsir Djide and Sartini
Pharmaceutical Microbiology Laboratory
Faculty of Pharmacy Hasanuddin University

ABSTRACT

Temulawak (*Curcuma xanthorrhiza* Roxb) is known as one of the Indonesian indigenous herbals. The rhizome is known as traditional medicine such as bloody diarrhea or dysentery. The aim of this study was to determine the *in-vitro* antibacterial activity of the rhizome infusion against *Escherichia coli* and *Shigella dysenteriae*. The rhizome was made infusion by concentration 5, 10, 20 %. Antibacterial activity was tested using agar diffusion method with cylinder reservoir (outside diameter 8 mm). The result showed that the infusion of *Curcuma xanthorrhizae rhizoma* with concentration 5, 10, and 20 % had antibacterial activity against *E. coli* and *S. dysenteriae*. The infusion 20% showed the highest activity with diameter of zone inhibition against the growth of *E. coli* was 18.41 mm and *S. dysenteriae* was 16.88 mm. The study confirms the possibility of curcuma xanthorrhizae infusion as antibacterial against *E. coli* and *S. Dysenteriae*.

Keywords : *Curcuma xanthorrhiza* Roxb, antibacterial, *Escherichia coli* , *Shigella dysenteriae*