

**ABSTRACT**

**ANTIVIRAL ACTIVITY ETHANOL EXTRACT OF *Zingiber officinale* Rosc. RHIZOME AND *Curcuma heyneana* Val & Zijp. AGAINTS HEPATITIS C VIRUS**

Safaatul Laysa

Hepatitis C infection is a global world problem. The cronicly infection has infected around 71 million people that caused serious morbidity. Hepatitis C treatment is still limited, due to high treatment costs and some drugs have experienced resistance. Therefore, the new agent for anti hepatitis C is needed. This study examined antihepatitis C activity from ethanol extract of *Z. officinale* rhizome Sand *C. heyneana* by in vitro culture cells. Both of them possessed a potential antihepatitis C virus activities with the IC<sub>50</sub> values of 0.16±0.89 µg/mL and 0.19±1.23 µg/mL, respectively, without any toxicity effect, the CC<sub>50</sub> of *Z. officinale* was 61.73 µg/mL and *C. heyneana* was 147.04 µg/mL. The target mechanism of extract were found that ethanol extract of *Z. officinale* rhizome inhibit at the post-entry step of hepatitis C virus life cycle, while ethanol extract of *C. heyneana* rhizome inhibit at the entry and post-entry step. These results indicated that *Z. officinale* and *C. heyneana* may potential to be developed for antihepatitis C agents.

Keyword : *Zingiber officinale*, *Curcuma heyneana*, Hepatitis C