ABSTRACT

STUDY ANTI-HCV ACTIVITY AGAINST JHF1a VIRUS FROM LAURACEAE FAMILY PLANTS COLLECTED IN BALIKPAPAN BOTANICAL GARDEN, EAST BORNEO

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_Eusideroxylon zwageri_, _Alseodaphne elmeri_, and _Neolitsea cassiaefolia_ are plants from Lauraceae family. Previous research reported that several compounds showed hepatitis C activity such as terpenoids, flavonoids, and alkaloids. These plants then gradually extracted using hexane, dichloromethane, and methanol solvent and screened for antihepatitis C virus activity using JFH1a infected in Huh7i7 cell culture system and cytotoxicity assay using Huh7i7 cell. The results showed that dichloromethane extract of _N. cassiaefolia_ leaves has the highest inhibition percentage 92.90% ± 3.86%. Cytotoxic assay result showed the percentage of cell viability from the dichloromethane extract of _Neolitsea cassiaefolia_ leaves 64.655 ± 7.315% compare to control. Further separation of dichloromethane extract of _Neolitsea cassiaefolia_ leaves using Thin Layer Chromatography showed purple spot that indicate terpenoid substances. In conclusion dichloromethane extract of _Neolitsea cassiaefolia_ leaves contained terpenoid and has the highest activity against HCV.

Keywords : _Eusideroxylon zwageri, Alseodaphne elmeri, Neolitsea cassiaefolia_, Lauraceae, anti-hepatitis C virus