

**OR-77****Antiviral Activity of Indonesian Plants from East Java Region Againsts Hepatitis C Virus**

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Hepatitis C virus (HCV) is a major cause of liver disease worldwide and a potential cause of substantial morbidity and mortality in the future. The most recent WHO estimate of the prevalence of HCV infection is 2%, representing 120 million people. Current standard of care is effective in only 50% of the patients, poorly tolerated, and associated with significant side effects and viral resistance. Therefore, a new drugs is needed for the development of complementary and alternative treatment strategies for HCV infection. A variety of medicinal plants have demonstrated antiviral efficacies and some of them possess broad spectrum antiviral activities. In this study, some of Indonesian medicinal plants were evaluated for their anti-HCV activities. Ethanol extracts of 21 samples derived from 19 species of plants that were explored from East Java Region were tested. Anti HCV activities were determined by cell culture method using Huh 7.5 cells and HCV J6/JFH1. The results showed that 6 of 21 samples have potential activity against HCV: *Eucalyptus globulus* stem (IC<sub>50</sub>: 15.1 µg/ml), *Toona sureni* leaves (IC<sub>50</sub>: 11 µg/ml), *Melicope vitiflora* leaves and stem (IC<sub>50</sub>: 9.6 and 15.7 ug/ml, respectively), *Melanolepis multiglandulosa* stem (IC<sub>50</sub>: 15.5 µg/ml) and *Ficus fistulosa* leaves (IC<sub>50</sub>: 23.0 µg/ml). These plant extracts may be good candidates for the development of anti-HCV drugs.

**Keywords:** Anti-HCV activity, HCV J6/JFH1, Indonesian medicinal plants.

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