ABSTRACT

THE IDENTIFICATION OF ACTIVE SUBSTANCE FROM Sterculia quadrifida R.Br (FALOAK) STEM BARK as ANTIHEPATITIS C VIRUS

Sterculia quadrifida R.br is an endemic plant from East Nusa Tenggara which commonly known as "Faloak". Faloak was traditionally used to heal liver disease and very famous alternative medicine in East Nusa Tenggara, Indonesia. In this study, we identified the active compound from S. quadrifida R.br and determined the anti HCV activities using JFH1a virus. The purification of S. quadrifida R.br was conducted by chromatography method while the in vitro anti HCV assay was performed using hepatocyte cell (Huh7it) and HCV genotype 2a. The result showed that FA2.2.1 was the most active isolate with IC50 value of 8.1 ± 0.10 µg/ml and CC50 values >2000 µg/ml (Selectivity index = 246,9). The identification of FA2.2.1 by TLC showed black color spot and IR analyze showed interpretation of the bonds on the phenolic, carbonyl, aromatic groups and has m / z [M-H] - 551.22 with impurities 0.98 which predict to have similarities with Kaempferol 3,4'-dixyloside. This isolated compound, FA2.2.1, was potential to inhibit Hepatitis C virus and it should be great candidate that as anti HCV agent.

Keywords: Sterculia quadrifida R.br, stem bark, anti-HCV, JFH1a, cytotoxicity.