Two novel identified compounds isolated from *Flueggea virosa* have anti-HCV activity

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Hepatitis C virus (HCV) infection is a major worldwide problem and can lead to chronic hepatitis, liver cirrhosis and hepatocellular carcinoma. Current therapy for HCV infection, composed of pegylated interferon-α plus ribavirin, has significant side effects. The direct-acting antiviral protease inhibitors improve sustained virologic response but resistant populations emerged under the selective pressure. Hence, there remains the urgent need to find additional therapeutic agents. *Flueggea virosa* Roxb. ex Willd. (Euphorbiaceae) has been widely used in Traditional Chinese Medicines. It contains securinine and norsecurinine alkaloids, which attracted much attention due to their wide spectrum of biological activities and structural novelty. However, little is known about the nonalkaloid constituents in this plant. Preliminary data showed that the nonalkaloid extract from the roots of *F. virosa* revealed anti-HCV activity with an IC_{50} 17.2 μg/mL under J6JFH based HCVcc infection. Following, four known terpenoids and eight novel compounds were characterized, and the anti-HCV activities were evaluated. Two of the novel compounds have anti-HCV activity with IC50 7.5 μM and 6.6 μM, respectively and both of them with CC50 more than 100 μM. The detail mechanisms of the two novel compounds to HCV are under investigations.