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Analysis of Antioxidant effects of Embelia scandens and Cornus hongkongensis

Jee-Min Oh, Sang-Soo Lee and June-Hyun Kim*

The University of Suwon, Department of Biotechnology

The aim of the study was to determine the antioxidant activities of the plants with origin of Vietnam. The Embelia scandens (Lour.) Mez which is a species of plant in the family Myrsinaceae and Cornus hongkongensis Hemsl., which is a species of plant in the family Cornaceae were tested for antioxidant activities. Samples were prepared using 95% ethanol using DPPH assay for assessing the antioxidant activity. Ascorbic acid was used for positive control for DPPH assay. DPPH assay experiment showed that extracts of the Embelia scandens (Lour.) Mez and Cornus hongkongensis Hemsl. might have anti-oxidant activity 4.77 times and 5.65 times higher, respectively, compared to control. To determine the cell toxicity, MTT (3-(4,5-dimethylthiazol-2-yl)-2,5- diphenyltetrazolium bromide) assay was used. MTT assay experiment showed that Embelia scandens (Lour.) Mez might have 13.1% more toxicity whereas Cornus hongkongensis Hemsl. might have 47.3% less toxicity compared to control. Taken together, these experiments showed that Cornus hongkongensis Hemsl. extracts might have significantly higher antioxidant activities and relatively lower toxicity, compared to control.

*(Corresponding author) E-mail: jk819900@gmail.com, Tel: +82-31-220-2519