

Comparative study of antioxidant components and activities in methanolic extracts from domestic bamboo leaves

김다송, 최문희, 신현재†

조선대학교

(shinhj@chosun.ac.kr†)

Bamboo is a valuable plant and has been used for many applications during several centuries. Among many parts of bamboo tree, bamboo leaves are known to have strong antioxidant, antimicrobial and anti-inflammatory activities. In this study, in vitro antioxidant activities of four domestic bamboo trees were analyzed as well as antioxidant components such as polyphenols by HPLC/MS method. Methanolic extracts were prepared from 4 species of Korean bamboo (*Phyllostachys bambusoides* Sieb. Et Zucc., *P. nigra* var. *henonis* Stapf, *P. pubescens* and *Sasa coreana*) resulting in average extraction yield was 18%. Using the extracts prepared before, several antioxidant activity assay including ABTS radical scavenging, DPPH radical scavenging and hydroxyl radical scavenging were examined. Ascorbic acid was used as a standard. Several polyphenols were identified based on the database of LC/MS used in this study. In addition to that, in vivo antioxidant assay using zebra fishes is under way. Acknowledgement: This work was supported by the Human Resource Training Program for Regional Innovation and Creativity through the Ministry of Education and National Research Foundation of Korea (2015H1C1A1035883)