Antioxidant and anti-inflammatory properties of the root of *Ficus formosana*

Guan-Jhong Huang (黃冠中)[a], Yu-Ling Ho (何玉鈴) [b], Yuan-Shiun Chang (張永勳) [a,*]

[a] Department of Chinese Pharmaceutical Sciences and Chinese Medicine Resources, College of Pharmacy, China Medical University, Taichung 40402, Taiwan

[b]Department of Nursing, Hung Kuang University, Sha Lu, Taichung 433, Taiwan.

Oxidative stress and inflammation are related to several chronic diseases. *Ficus formosana* Maxim (FF) is a special folk medicinal plant in Taiwan. The aim of this study was to evaluate the antioxidant and anti-inflammatory, activities of the methanol extract and fractions from the root of FF. TEAC, DPPH scavenging activity, total phenolic content, flavonoid content, and inhibition on NO productions by LPS-induced RAW264.7 cell were employed. Among all fractions, chloroform fraction showed the highest TEAC, DPPH radical scavenging activities, polyphenol and flavonoid contents, respectively. Chloroform fraction also decreased the LPS-induced NO production and expressions of iNOS and COX-2 in RAW264.7 cells. The above experimental data indicated that the root of FF is a potent antioxidant and anti-inflammatory plant, and such efficacy may be mainly attributed to its polyphenolic compounds. (NSC100-2320-B-039-033-).