# $2^{\text {nd }}$ International Conference on <br> Analytical \& Bioanalytical Techniques 

16-17 December 2011 San francisco, USA

## TITLE

## Antioxidant activity of various parts of Cinnamomum cassia extracted with different extraction methods

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TThe aim of this study is to investigate the antioxidant activities of various parts (barks, buds, and leaves) of Cinnamomum cassia extracted with ethanol and supercritical fluid extraction (SFE). For the antioxidant activity comparison, the SFE and ethanol extracts in DPPH scavenging effects of IC50 were $0.562-10.090 \mathrm{mg} / \mathrm{mL}$ and $0.072-0.208$ $\mathrm{mg} / \mathrm{mL}$, and the trolox equivalent antioxidant capacity (TEAC) were 6.789-58.335 mmole trolox/g and 133.039-335.779 mmole trolox/g, respectively. In addition, the total flavonoid contents were $0.031-1.916 \mathrm{~g} / 100 \mathrm{~g}$ dry weight of materials (DW) and 2.030-3.348 g/ 100 g DW, and the total phenolic contents were $0.151-2.018 \mathrm{~g} / 100 \mathrm{~g}$ DW and $6.313-9.534 \mathrm{~g} /$ 100 g DW in the SFE and ethanol extracts, respectively. Based on the results, the ethanol extracts of Cinnamon barks have the potential valuable as an antioxidant substitute and this study also provide a better technique to extract the natural antioxidant substances from C. cassia.

## Biography

Li-Yeh Chuang has completed her Ph.D from North Dakota State University, USA. She is the professor of Department of Institute of Biotechnology and Chemical Engineering at I-Shou University, Taiwan. She has published more than 100 papers in reputed journals.

