

ABSTRACTS FOR POSTER PRESENTATION

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Ficus Deltoidea* Extract Protects Hacat Keratinocytes From UVB Irradiation-Induced Inflammation*Rosnani Hasham^{1,2}, Hyun Kyung Choi², Mohamad Roji Sarmidi¹, Chang Seo Park²**¹Institute of Bioproduct Development (IBD), Universiti Teknologi Malaysia (UTM), Johor Bahru, Malaysia.²Department of Chemical and Biochemical Engineering, Dongguk University, 3-26, Pil-dong, Chung-gu, Seoul, Korea 100-715.**Abstract**

Ficus deltoidea from the Moraceae family is a popular medicinal herb in Malaysia. It possesses strong antioxidant and anti-inflammatory properties. In the present study, the anti-inflammatory effects of *F. deltoidea* extract on UVB-irradiated HaCaT Keratinocytes were investigated. HaCaT Keratinocytes were UVB-irradiated (12.5 mJ/cm²) and were treated with 0.05, 0.08 or 0.1% of *F. deltoidea* extract. Cell viability following UVB irradiation was significantly higher in the groups treated with the *F. deltoidea* extract at doses of 0.05, 0.08 or 0.1% than in control group with UVB irradiation only. TNF- α , IL-1 α , IL-6, and cyclooxygenase (COX-2) play primary roles in the inflammation process upon UV irradiation and are known to be stimulated by UVB irradiation. Treatment with the *F. deltoidea* extract dramatically inhibited the UV-induced TNF- α , IL-1 α , IL-6, and COX-2 expression. These results suggest that the *F. deltoidea* extract may exert a protective effect against UVB-induced skin inflammation.

Keywords: *Ficus deltoidea*, anti-inflammation, TNF- α , IL-1 α and COX-2.