

Antioxidant Effect of Fermented *Luffa aegyptiaca* and Effect on B16F10 Melanoma Cells

김준희, 감다혜, 김송이, 김진우[†]

선문대학교

(biochem.jk@gmail.com[†])

The purpose of this study was to investigate the increase in antioxidant effects of the *Luffa aegyptiaca* fermentation using *L. plantarum*, UV protection, and the effect on melanogenesis-stimulating melanoma cells. The antioxidant activity of the fermenting extract showed the content of 30.23 GAE mg/g DM and confirmed the effect to be about 1.4 times higher. The electron contribution function was also found to be about 1.5 times higher than the ethanol extract at 45.12% in fermenting extract. 52.7% ultraviolet absorption in UV-B. When tested for When the melanin content in B16F10 melanoma cells was tested in fermenting extracts compared to hydrothermal extracts, cell toxicity is also not expected to be significant, given that the anticancer effect is high and the rapid decline in survival rate due to concentration changes is not confirmed. These results indicate that *Luffa aegyptiaca* inhibits melanin synthesis and could be used as a functional sunscreen agent.