

ANTIOXIDANT ACTIVITY OF GEL MASK OF KING BANANA FRUIT SKIN EXTRACT (*Musa Paradisiaca Sapientum*) USING DPPH METHOD

Mauidzah Hasanah
Department of Pharmacy

ABSTRACT

King banana fruit skin (*Musa Paradisiaca Sapientum*) has been known to contain chemical compounds such as flavonoid and phenolic compounds that can inhibit the formation of free radicals. Free radical compounds are very reactive to body cells, especially the skin by binding to electron molecules of cells. Damage to cell components of the skin, especially facial skin can cause the skin to become dry, wrinkled and dull, therefore it is necessary to add antioxidants to counteract free radicals. This study aims to determine whether the gel mask formulation containing extracts of king banana fruit skin has antioxidant activity. Determination of antioxidant activity of extracts and gel mask preparations was carried out using DPPH radical damping method. The results showed that the value of antioxidant activity (IC₅₀) before was 45,093 µg / mL. Whereas after the extract of the plantain fruit peel was put into the formulation of gel mask preparations IC₅₀ values obtained respectively were 0,3911 µg/mL, 0,4888 µg/mL and 0,2864 µg/mL. These results indicated that there was a significant value between the values IC₅₀ before and after formulated in formula III with a significance value of < 0.05.

Keywords: *DPPH, banana, gel, antioxidants, free radicals*