

ABSTRACT

ANTIOXIDANT ACTIVITY OF BLACK RICE (*Oryza sativa* L. indica) METHANOL EXTRACT ASSESSED BY DPPH METHOD

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Black rice is one of the varieties of rice in Indonesia known for its high content of anthocyanin. Anthocyanin is a flavonoid compound that plays a role as a natural pigment in black rice, giving it its characteristic deep purple color, and also acts as a natural antioxidant to neutralize free radicals. The objective of this study was to investigate the antioxidant activity of black rice. The antioxidant activity was tested using the DPPH method. Black rice was extracted using ultrasonic extraction with methanol as the solvent. The extracted methanol was then tested for its antioxidant activity quantitatively to obtain the IC₅₀ value of the extract using a UV-Vis spectrophotometer at a wavelength of 514 nm, with Vitamin C as the positive control. The spectrophotometric measurement results showed that the methanol extract of black rice had an IC₅₀ value of 114.1161 µg/mL, while Vitamin C had an IC₅₀ value of 55.215 µg/mL, indicating that the methanol extract of black rice had moderate antioxidant activity and Vitamin C had strong activity.

Key words: Antioxidant activity, Black Rice DPPH, Methanol Extract