

Pengaruh penambahan fraksi etil asetat kluwek terhadap oksidasi asam linoleat yang dikatalisis oleh lipoksigenase

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Abstrak

Inhibition activity of ethyl acetate of kluwek fraction on the linoleic acid oxidation catalysed by lipoxygenase: study was carried out to observe the inhibition activity of ethyl acetate kluwek (fermented *Pangium edule* Reinw) fractions on the enzymatic oxidation of linoleic acid. The degree of oxidation of sample was determined according to the PV and TBA methods. The most active fraction then was treated as the inhibitor for enzymatic oxidation of linoleic acid catalyzed by lipoxygenase (E.C. 1.13.11.12). Data analysis showed that the antioxidant activity of kluwek fraction was: fraction B > fraction C > fraction A > control. Enzymatic assay of fraction B gave a kinetic inhibition as an uncompetitive inhibitor with $K_i = 1.1294\%$ v/v. Physicochemical analysis of its effect to the enzymatic oxidation rate was significantly different according to the PV and TBA values and compared to the control.