APLIKASI EKSTRAK TANAMAN TERFERMENTASI MIMBA SEGAR DAN KERING SEBAGAI BIOKONTROL ALAMI UNTUK MENINGKATKAN KANDUNGAN ANTIOKSIDAN PADA SAWI

(*Brassica chinensis*)

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ABSTRACT

The quality of vegetables influence by physical and chemical factors, such as leave damages, content of vitamins, polyphenols, and pesticide residuals. The secondary metabolic of vegetables like vitamin C and polyphenols are potential antioxidant, scavenge free radicals. Synthetic of this metabolic influence by genetics, geographic, environment, nutrition (kinds of fertilizer), and cultivating factors. The main of this study were (1) to compare the levels of vitamin C, total phenolics, and antioxidant activity of chinesse mustard (*Brassica chinensis*) cultivated use two FPE (fermented plant extract) and two controls; (2) to compare effectivity of FPE fresh and dry neem leaves as natural biocontrols and increase antioxidant levels of chinesse mustard. Yodimethric method used to measure levels of vitamin C. Total phenolics measured by folin-ciocalteau methods. Measurement of antioxidant activity based of inhibition of linoleic acid oxidation. Chinesse mustard cultivated of FPE dry neem leaves (MK) contained higgest levels of vitamin C (69,91 mg/100g), total phenolics (603,77 mg/100g), antioxidant activity (74,85%), and lowest of cleaves damage (85,055%). The lowest levels of vitamin C (63,0 mg/100g), total phenolics (490, 87 mg/100g), and antioxidant activity (62,66%) in chinesse mustard of Pasar Pagi Arengka.

Keywords : chinesse mustard, FPE, vitamin C, total Phenolics, antioxidant activity.