

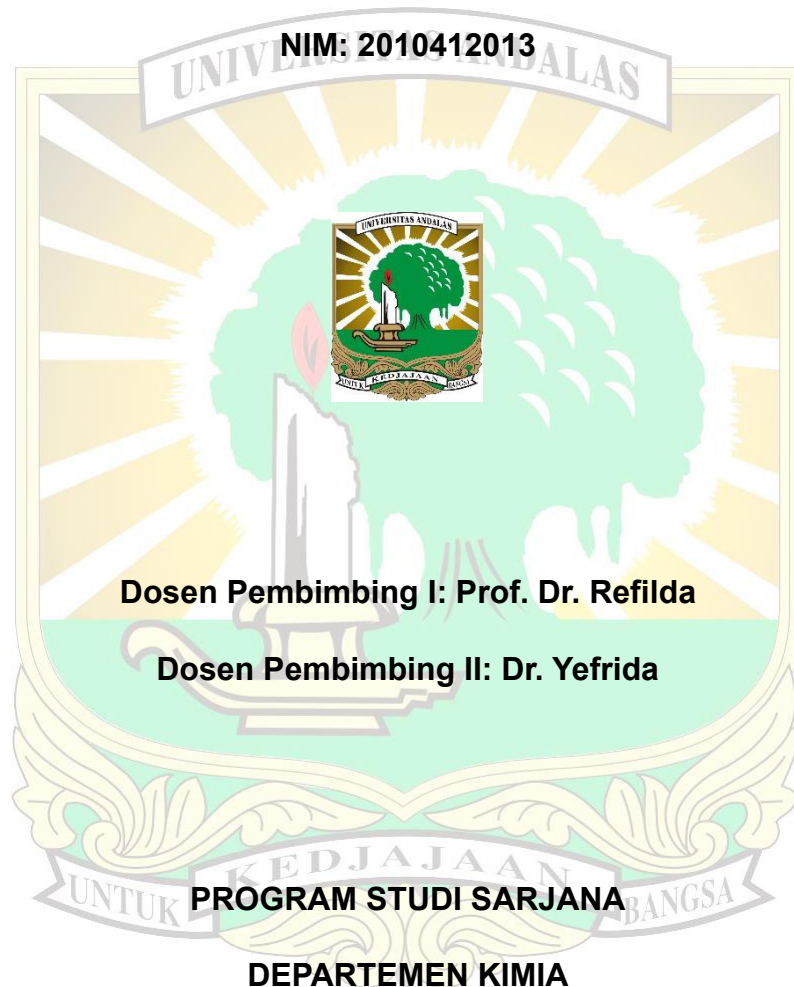
**PEMBUATAN EKSTRAK TANAMAN TERFERMENTASI DARI KULIT BUAH
PISANG KEPOK (*Musa paradisiaca*) YANG DIAPLIKASIKAN PADA PAKCOY
(*Brassica rapa* L.) HIDROPONIK**

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ABSTRACT

MAKING OF FERMENTED PLANT EXTRACT FROM FRUIT KEPOK BANANA PEEL (*Musa paradisiaca*) APPLIED TO HYDROPONIC PAKCOY (*Brassica rapa*L.)

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Fermented plant extract (ETT) is a type of liquid organic fertilizer made by mixing fruit and vegetable peels with Effective Microorganism-4 (EM4), brown sugar solution, and water. The purpose of this research is to make ETT from kepok banana peel, analyze the quality of nutrients in ETT made and apply ETT as a natural nutrient in hydroponic pakcoy to replace commercial fertilizers. The parameters analyzed were pH, EC, TDS using pH meter, TDS & EC meter and macro nutrients using Kjeldahl method for nitrogen analysis, atomic absorption spectrophotometer for potassium analysis and UV-Vis spectrophotometer for phosphorus and C-organic analysis. This study shows that the highest EC, TDS and N contents are found in ETT 3 at 8,528 μ S/cm, 4,267 ppm and 0.015% while pH, P, K, and C-Organic are highest in ETT 2 at 3.32; 0.158%; 0.91%, and 2.70% so that the ETT made has not met the quality according to the quality standards of liquid organic fertilizer. The nutrient solution made with the addition of lime has an effect on the growth of hydroponic pakcoy with the best results in ETT 2 concentration of 6% pH 6 seen from the height of the plant and the number of leaves with a value of 4.77 cm and 12 strands respectively which is significantly different from the negative control but still unable to match the results of pakcoy plants using AB-Mix commercial fertilizer as a positive control.

Keywords: FPE, kepok banana peel, pakcoy, hydroponics, EM4.