The Effect of Applying Manure and *Humid Super Phospate* Astiva on the Growth of Oil Palm Seeds *Main Nursery* Marehat variety. Supervaisor Ir. M. Bintoro, MP.

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ABSTRACT

The area of oil palm plantations has increased every year. The purpose of the study was to determine the effect of applying manure and HSP (Humic Super Phospate) and the effect of the interaction between the application of the two fertilizers on the growth of main nursery oil palm seedlings. This study used a Group Randomized Design (RAK) with two factors and three repeats. The first factor is K (Manure Fertilizer) 150 grams / polybag and the second factor is H (HSP Fertilizer) 25 grams HSP / polybag, 35 grams HSP / polybag, 45 grams HSP / polybag. The parameters of observations made include plant height, leaf count growth, leaf length, leaf width, leaf area, stem diameter, wet weight of the plant, dry weight of the plant. .significant influence on plant height increase parameters of 120 HST with an average of 6.60 cm in cow manure treatment (K1), leaf length increase of 120 HST with an average of 5.99 cm in cow manure treatment (K1), wet weight with an average of 41.67 gr in cow manure treatment (K1). The application of humic super phospate (HSP) had a very noticeable effect on the parameters of plant height increase of 120 HST with an average of 5.44 cm in HSP treatment of 45 grams (H3), plant height increase of 150 HST with an average of 10.77 cm in HSP treatment of 45 grams (H3), leaf length increase of 90 HST with an average of 3.889 cm in HSP treatment of 25 grams (H1), leaf length increase of 120 HST with an average of 6.33 in HSP treatment of 25 grams (H1), leaf length increase of 150 HST with an average of 7.97 cm in HSP treatment of 25 grams (H1), stem diameter increase of 120 HST with an average of 10.49 cm in HSP treatment of 25 grams (H1), The difference was significantly in the parameters of plant height increase of 90 HST with an average of 3.07 in HSP treatment of 45 grams (H3), stem diameter increase of 150 HST with an average of 10.13 cm in HSP 25 (H1) treatment, wet weight with an average of 42.19 gr in HSP treatment 45 grams (H3), dry weight with an average of 10.84 gr in HSP 45 (H3) treatment. The interaction between manure application and HSP astiva only affects the increase in height of seedlings aged 120 HST, and 150 HST where the best effect is shown on cow manure along with HSP (K1H3) which is 6.60 cm at the age of 120 HST and 10.77 cm at the age of 150 HST. While the other parameters, the interaction of the two treatments did not have a noticeable effect.

Keywords: Palm oil, manure, HSP