

THE EFFECT OF APPLYING MIXTURE SOLID FISH WASTE AND LIQUID ORGANIC FERTILIZER OF FISH WASTE ON LATOSOL FOSFORUS AND CORN PLANTS GROWTH (Zea mays)

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ABSTRACT

Latosol is soil with low fertility and low available P content. Solid fish waste and liquid organic fertilizer based on fish waste have a relatively high content of P element and have the potential to increase the availability of P in soil. The purpose of this study is to find out the effect of providing solid fish waste and liquid organic fertilizer of fish waste on Latosol's Fosforus availability and corn plants growth. The experiments were conducted using a One-Factorial Randomized Design (RAL) and consisted of 9 treatments: P₀=Fish Waste 0 tons/ha + LOF 0 ml/l, P₁= Fish Waste 0 tons/ha + LOF 6 ml/l, P₂= Fish Waste) tons/ha + 10 ml/l P₃= Fish Waste 5 tons/ha + LOF 0 ml/l, P₄= Fish Waste 5 tons/ha + LOF 6 ml/l, P₅= Fish Waste 5 tons/ha + LOF 11 ml/l, P₆= Fish Waste 10 tons/ha + LOF 0 ml/l P₇= Fish Waster 10 tons/ha + LOF 6 ml/l P₈= Fish Waste 10 tons/ha + LOF 11 ml/l. The research parameters are pH, P-available, Al-dd, Retention P, Ca. Plant Height, Plant Wet Weight, and Plant Dry Weight. The results of the study showed the effect of administering compost fertilizer and liquid organic fish waste had a real effect in increasing pH of H₂O, pH of KCl, available P, Ca availability, Plant Height, Wet Weight, Plant Dry Weight as well as lowering Al-dd and Ground Retention. The best dose of fertilizer is on P₅.

Keywords: fish waste, organc liquid fertilizer, p soil, latosol, corn