PENGARUH PEMBERIAN DEKANTER SOLID DAN KOMPOSSAMPAH KOTA TERHADAP KEMANTAPAN AGREGAT ULTISOL DAN HASIL UMBI PORANG (Amorphophallus muelleriblume).

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ABSTRACT

Ultisol has quite a large potential in the development of agricultural cultivation, but in its management Ultisol experiences obstacles, namely its poor physical properties. The low content of organic matter in Ultisol soil causes the soil structure to break easily, so that aggregate stability becomes unstable. The stability of soil aggregates is very important in agricultural activities, stable soil aggregates will indicate good conditions for soil and plant growth. Given the importance of aggregate stability in the soil, one effort to improve aggregate stability is by providing organic matter in the form of solid decanter compost and municipal waste compost. This study used a Randomized Block Design (RAK) with a factorial pattern where the 1st factor was the solid decanter dose consisting of D0 without decanter, D1 10 tons / ha, D2 15 tons / ha and the 2nd factor was the dose of municipal waste compost consisting of K1 10 tons / ha, K2 15 tons / ha. This experiment consisted of 6 treatment combinations with 2 replications so that 12 experimental plots were obtained. The size of the experimental plot was 2.5 mx 2 m with a planting distance of 50 cm x 50 cm so that the number of plants in one plot was 9 plants. The results of the study showed that in the provision of solid decanters and municipal waste compost, no interaction was found in all observation variables. However, there was a single factor of solid decanters that had a significant effect on C-organic, weight volume, total pore space, aggregate stability, percentage of aggregate formed, and porang tuber yield, but the single factor of municipal waste compost showed no difference.

Keywords: Ultisol, aggregate stability, solid decanter compost, municipal waste compost, porang.