PERUBAHAN RETENSI AIR PADA ZONE PERAKARAN TANAMAN JAGUNG AKIBAT APLIKASI BAHAN ORGANIK ECENG GONDOK (*EICHORNIA CRASSIPES*)[1)]

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Abstract: Management system implemented aimed to preventing land degradation and improve water availability in the rooting zone of Z*ea mays* plantation. Increased availability of high water as inplikasi ability of organic matter in binding water. The research method using field experiments with Completely Random Design with five levels, ie, P0 = without *Eichornia crassipess* organic matter or control, P1 = 3 ton.ha^{-1} *E. crassipess* organic matter, P2 = 6 ton.ha^{-1} *E. crassipess* organic matter, P3 = 9 ton.ha^{-1} *E. crassipess* organic matter, and P4 = 12 ton.ha^{-1} *E. crassipess* organic matter. The results obtained showed that the treatment of *E. crassipess* organic matter 12 ton ha^{-1} can increase water retention at pF pF 1.00 and 2.00 times respectively at 1.19 and 1.17 times larger compared with the untreated organic matter (P0).

Key words: E. crassipess, water retention, *Zea mays*