ABSTRACT

EFFECT OF PADDY HUSK ASH COEFFICIENT AGAINST SOIL BASED MODEL PERMEABILITY VALUE EMBANKMENT IN LABORATORY

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In the world of civil engineering soil serves as the basic foundation of a building and the persistence of a particular construction of waterworks such as irrigation canals, dams or levees are determined by the nature of the soil density and strength. Hence the need for the addition of other additives in order to increase the density of the nature of the soil structure. Some recent research in the field of civil engineering paddy husk ash efficient as soil stabilization and especially clay. Because the paddy husk ash can fill voids - empty cavities in the soil grains. So in this study testing the levee modeling aims to see the effect of paddy husk ash to the value of permeability that occurs in a soil sample model of the dike. Where in the levee modeling testing soil samples divided by 2 is the original soil samples and soil samples with a mixture of rice husk ash percentage used is 5%.

Soil samples tested in this study, namely clay comes from the Bhayangkara Housing, Beringin Jaya Village, District Kemiling, Bandar Lampung. Paddy husk ash used were obtained from the Dantar village Padang Cermin District Pesawaran Regency.

Results of analysis and calculations performed in the laboratory between native soil and ground paddy husk ash mixture obtained values of permeability (k) average and seepage debit , for native soil acquired for $1.4920 \times 10^{-4}$, for mixture of paddy husk ash 5% of $5.4291 \times 10^{-4}$, for seepage original soil debit samples obtained value - average at 0.1353, and the seepage samples debit of soil mix 5% paddy husk ash obtained value - average 0.2223.

Keywords: Permeability, Levee Model, Paddy Husk Ash, Clay Soil,