Pemodelan Fluktuasi Muka Air Tanah untuk Mendukung Pengelolaan Air pada Pertanian Lahan Rawa Pasang surut Tipe A/B

Abstrak

The objectives of this research are to develop a model of water table fluctuation on tidal lowland area of A/B type. The results of the research are expected to support of the agricultural development on tidal lowland area, especially on water management, because the water management play an important role in the agricultural on tidal lowland area. The water table on tidal lowland area fluctuates according to space and time. The water table controls at a certain depth can support the plant growth and the pyrite oxidation restraint. The model of water table fluctuation which is developed in this research based on the ellipse concept. The research was conducted on the reclamation area of tidal lowland at the fourth tertiary block in P8-12S Delta Telang I, Banyuasin district, South Sumatra province. The simulations of model show good result of estimating the depth of water table on tidal lowland area of A/B type. The Proportion of variation the depth of water table hich can be explained by model that is 89.6% up to 95.5% with standard error of the estimate is 0,021-0,035 meters. The parameter of the water level in the tertiary canals has high sensitivity to the model.