

**STATUS OF NITROGEN, PHOSPHORUS, POTTASSIUM NUTRIENT
AND SOIL SALINITY ON AGRICULTURAL LAND IN TIRTOHARGO
VILLAGE, DISTRICT KRETEK, BANTUL REGENCY,
SPECIAL REGION OF YOGYAKARTA**

**By: Farrasia Ginaya Alkhansa
Guided By: Partoyo**

ABSTRACT

Agricultural land in Tirtohargo Village has problems related to land areas that are often submerged by sea tides and result in crop failure which is suspected to be due to problems with nutrient status and soil salinity. This study aims to determine the status and distribution of nutrients, soil salinity, and management suggestions on agricultural land in Village Tirtohargo, District Kretek, Bantul Regency, Special Region of Yogyakarta so that it can be cultivated optimally. This study uses survey methods and soil tests. Sampling points were carried out using the Free Grid Survey method, the observation density of 1 sample per 1 ha on a map scale of 1:10,000 with a grid size of 100 x 100 m. The observation parameters were Nitrogen (N), Phosphorus (P), Potassium (K), Electrical Conductivity (EC), Cation Exchange Capacity (CEC), pH, Sodium convertible (Na-dd), and Exchangeable Sodium Percentage (ESP). Spatial distribution analysis uses the Inverse Distance Weighting (IDW) interpolation technique. The results of the analysis showed that the status and distribution of nutrients in N-Total were classified as medium criteria with an area of 21,087 Ha (54.069%), P-Available criteria were 27,244 Ha (69.856%), K-Available criteria were 36,112 Ha (92.595%). The salinity level at the research site in salinity (DHL) is classified as a low criterion with an area of 23,856 Ha (61.169%), Na-dd and ESP are classified as very high criteria covering an area of 19,059 Ha (48.869) and 19,532 Ha (50.082%) so that coastal agricultural land in Tirtohargo Village can be classified as a type of sodik soil.

Keywords : Inverse Distance Weighting, Salt, Nutrient Status