

## MODELING FOR PREDICTING SOIL CHARACTERIZATION USING ELECTRICAL RESISTIVITY

This research aims to study the relationship between variables to model for predicting soil characteristics using electrical resistivity of the soil. The samples of soil were collected from farm of Kasetsart University Chalermphrakiat Sakonnakhon Province Campus. This modeling was considered the pH, organic matter, moisture, bulk density and texture. Then analyzed the relationship between variables using statistical methods were the correlation coefficient Spearman Rank and simple regression found that the electrical resistance of the soil was associated with the pH, organic matter, moisture and bulk density, but not associated with the texture were statistically significant at the 0.05 level. When analyzed for the best estimate model by applying a regression. The Cubic model was best estimate model for organic matter and moisture, the Exponential model was best for pH and the Quadratic model was best for bulk density. In this research, it was found that the electrical resistivity was associated many characteristics of soil and consequently it was impractical to create a model for predicting soil characteristics.

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