## **ABSTRACT**

Palm oil plants grow in tropical climates, many palm oil plants in Sumatra and Kalimantan. Land is one of the resources in an area in the form of plains which includes all the characteristics that play a role in the formation of land and its environment. In Indonesia, many areas of oil palm plantations are spread over marginal lands and productive lands, both on mineral soils and on peatlands. K-Means is a method used to group existing data into several clusters/groups, so that data with the same results are grouped into the same cluster and data with different results are grouped into other groups. By using K-Means, PT. Bakrie Sumatera Plantation Range can determine land use using palm oil production data. The results of this study on the cluster calculations performed on both lands showed that on peatland there were 69 high cluster members and on mineral land there were 60 high cluster members. This proves that mineral land has a better ability to produce high production. From the results of these calculations, PT. Bakrie Sumatra Platation can use the findings as a reference in developing production on peatlands.

Keywords: Mineral Land, Palm Oil, K-Means, Peatland