Abstract
Malaria is a disease caused by a protozoan parasite called plasmodium carried by the female Anopheles mosquito. In result, Health Research Association in 2007, showed the prevalence of malaria in the province of North Maluku (7.23%) and Maluku (6.06%) and in the province of West Papua (26.14%) and Papua (18.41%). In this research used secondary data came from Health Research Association in 2007 LITBANGKES the province of North Maluku, Maluku, West Papua and Papua with total units of analysis 42 counties and 3 cities in each of province there are North Maluku province consists of 8 counties, Maluku consists of 7 counties and 1 city, West Papua consists of 8 counties and 1 city, Papua consists of 19 counties and 1 city. This research purpose to get a model the determination of malaria prevalence based on the influencing factors. Response variable is the percentage of malaria prevalence and predictor variables expressed as the factors that influence the prevalence of malaria. Modeling was conducted by OLS regression and robust regression. And then the conclusions on OLS regression variables that affect the percentage of households have no sewerage and the percentage of households accessing clean water and the robust variables that affect the percentage of households have no sewerage and the percentage of households accessing clean water which is the same conclusion of both methods.

Keywords: Prevalence of malaria, OLS Regression, Robust Regression