

EFFECT OF SOIL ORGANIC MATTER CONTENT ON THE DISTRIBUTION OF *Eurycoma longifolia* AT UMS HILL

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ABSTRACT

Purpose of this study is to find the influences of soil organic matter on the distribution of *Eurycoma longifolia* at UMS hill that have three different topography which are ridge, slope and valley. The variables used in this study were soil organic matter and soil moisture content. Soil samples from the depth 0-20 cm and 20-50 cm were taken at each study site. Analysis that have been used in these experiment were analysis of soil organic matter content, soil moisture content and soil texture. These analyses have been carried out to evaluate the effect of soil organic matter and moisture content on the distribution of *E. longifolia* at each topography. The average of soil moisture content from the depth 0-20 cm at the ridge, slope and valley were 4.52 %, 3.99% and 3.16 %. Meanwhile, the average of soil moisture content from the depth 20-50 cm were 4.57 %, 4.34 % and 3.12 %. The average percentages of soil organic matter from the depth 0-20 cm at ridge, slope and valley were 9.32 %, 8.60% and 4.52 %. For the depth 20-50 cm, the average of soil organic matter at ridge, slope and valley were 7.23 %, 6.93 % and 4.16 %. Soil moisture content at ridge were highest followed by slope and valley. *E. longifolia* were found most abundance at the ridge and not exist at all at the valley. Anova analysis show that, there is no significant different of mean between soil organic matter and moisture content.