MORPHOLOGY AND SOIL CLASSIFICATION OF THE NGLANGGERAN AND SAMBIPITU FORMATIONS IN THE MUNTUK VILLAGE, SUBDISTRICT DLINGO, BANTUL REGENCY

By: Uswatun Muharromah

Supervised by: Mohammad Nurcholis

ABSTRACT

Rock formation is the arrangement of rocks which is one of the most important factors in soil formation which will affect the characteristics of the soil to be produced. There are the Nglanggeran Formation and the Sambipitu Formation which are the main materials for soil formation in Muntuk Village, Kapanewon Dlingo, Bantul Regency. The purpose of this study is to examine the effect of the Nglanggeran Formation and the Sambipitu Formation on morphological characteristics and classify the soil in the Muntuk Village. The research method used is the survey method, and laboratory analysis. The determination of the research location and soil profile was carried out based on geological information, slope, land cover, and contour. The parameters physical analyzed were texture, Bulk Density (BD). The parameters chemical analyzed were pH, C-Organik, K, Ca, Mg, Na, KPK and KB. Results in the Nglanggeran Formation with volcanic breccia main materials and the Sambipitu Formation with tuffaceous sandstone main materials have morphologies with diagnostic horizons: mollic epipedon and argillic endopedon; umbric epipedon and argillic endopedon. The Nglanggeran Formation and the Sambipitu Formation have soil classification according to the USDA Abruptic Argiudolls and Ultic Hapludalfs. The Nglanggeran Formation has the Rodik Mediteran National Soil Classification, the Sambipitu Formation Nitosol has the Nitosol rodik. The Nglanggeran Formation has WRB Umbrisols Rhodic classification, and the Sambipitu Formation Umbrisols Chromic. The differences in the classification are due to the differences in the source rocks in each formation.

Keywords: Nglanggeran Formation, Sambipitu Formation, Morphology and Classification.