

**STUDY OF LAND USE AND SLOPE ON NITROGEN AND POTASSIUM
NUTRIENTS ON ANDISOL IN SELOPAMPANG SUB-DISTRICT
TEMANGGUNG DISTRICT**

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ABSTRACT

Various slopes and different land uses result in differences in Nitrogen and Potassium nutrient content in Andisol soil fertility. This study aims to determine the effect of land use and slope on the nutrient content of Nitrogen and Potassium in Andisol in Selopampang District, Temanggung Regency. This research used survey method by determining sample points based on overlaying or combining two maps, namely slope map and land cover map, to obtain land system unit map. Soil sampling was conducted using purposive sampling method with random sampling on each land unit in each slope (8-15%, 15-25% and 25-45%). Observations were made in the field and continued with laboratory analysis. Field observations included soil structure and aggregate stability, while laboratory analysis included: pH NaF, C-organic, N-total, N-available, K-total, K-available, KPK, BV, and BJ of the soil. Data were analyzed using correlation and linear regression calculations. The results of correlation and regression test analysis show that different land uses have an increasing effect on Nitrogen and Potassium elements. Different slopes have a lower effect on Nitrogen and Potassium elements. The combination of land use and slope has an increasing effect on Nitrogen and Potassium nutrients. At all sample points it is evident to determine the density of relationship between slope and land use on all parameters.

Keywords: andisols, potassium, slope, nitrogen, land use.