## STUDY ON SOIL CHEMICAL PROPERTIES OF DIFFERENT AGRICULTURAL LAND USE AND SLOPES IN HARGOBINANGUN VILLAGE SLEMAN DISTRICT

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## ABSTRACT

Hargobinangun Village has a variety of agricultural land uses and different slope slopes, so it's possible that there will be differences in the chemical characteristics of the soil for each type of agricultural land use and slope slope. This research was carried out with the aim of determining the effect of land use at various slopes on the chemical properties of soil in Hargobinangun Village, Kapanewon Pakem, Sleman Regency. This research uses a survey method, determining sample points using the Purposive Random Sampling method and data analysis using descriptive analysis. The results of the chemical analysis obtained can be concluded that differences in agricultural land use on each slope can cause differences in soil chemical characteristics such as: Use of rice fields, rice fields with gentle slopes have the highest N-Total with a value of 0.38% (medium), and the highest K-Available at 0.49 me% (medium), rice fields with slightly steep slopes have the highest P-Available values with a value of 19.64 ppm (medium), and rice fields with a flat slope had the highest KPK value of 42.70 me% (very high); The use of dry land, dry land with a rather steep slope has the highest N-Total value of 0.50% (medium), the highest P-Available of 19.45 ppm (medium), the highest K-Available of 0.68 me% (high ), and the highest KPK was 53.60 me% (very high); Land use for snakefruit plantations, snakefruit gardens with gentle slopes have the highest N-Total value of 0.42% (medium) and the highest P-Available value of 7.86 ppm (very low), snakefruit gardens with flat slopes have K-Available values the highest was 0.62 me% (high) and the highest KPK value was 47.20 me% (very high).

**Keywords:** rice fields, dry land, snakefruit gardens, N-Total, P-Available, K-Available, KPK, pH