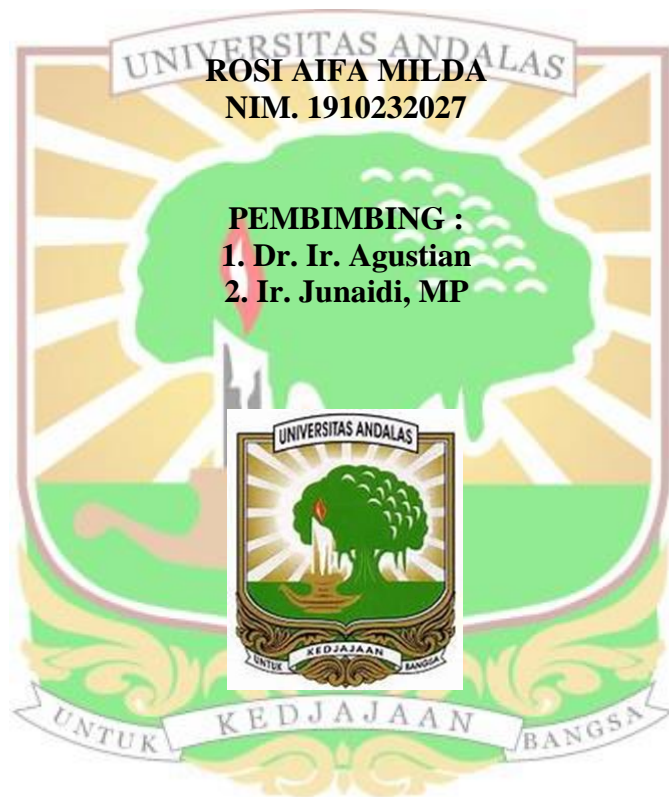


**INDEKS KUALITAS TANAH PADA POLA TANAM DAN
KELERENGAN YANG BERBEDA DI KEBUN MANGGIS
(*Garcinia mangostana* L.) KAMPUNG TEMATIK
KELURAHAN LIMAU MANIS**

SKRIPSI

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SOIL QUALITY INDEX UNDER DIFFERENT SLOPE AND CROPPING PATTERN MANGOSTEEN PLANTATION IN THEMATIC VILLAGE, LIMAU MANIS

ABSTRACT

*Soil quality is defined as the ability of the soil to maintain its function, either in terms of physical, chemical or biological properties. Decline in soil quality has a serious impact, because it is related to sustainable land use. The purpose of this study was to assess the index of soil quality under different cropping patterns and slopes at a mangosteen (*Garcinia mangostana* L.) garden in Thematic Village, Limau Manis District. The research employed survey method, the soil samples were taken by using purposive sampling based on land units (Incept 8-15 % slope mangosteen monoculture, incept 15-40 % slope mangosteen monoculture, Incept 8-15 % mangosteen mix garden, Incept 15-40 % mangosteen mix garden). Parameters analyzed were soil water content, texture, pH, organic-C, N-total, P-available, K-exchangeable, C-biomass and respiration of microorganisms. The results showed that the highest soil quality index (on 0-20 cm soil depth) was found under mixed garden having 15-40% slope with very good criteria. The lowest soil quality index was found in mixed garden having 8-15% slope on 20-40 cm soil depth with good criteria. Mixed garden land had a better soil quality index value than mangosteen monoculture land. Land having 15-40% slope had a better soil quality index than that having 8-15% slope. From the results of the analysis, it was also obtained low organic-C and nutrient values at the research location. To maintain the soil quality index in the long term, it was recommended to add organic matter and fertilize to the land, and apply the terracing method for steep slopes. In addition, it was also recommended the soil quality index be evaluated using other methods, so that the research results became more valid.*

Keywords: Soil Quality Index, Mangosteen, Thematic Village, Cropping Patter

