EVALUATION OF LAND SUITABILITY FOR SUGARCANE CROPS (*Saccharum officinarum* L.) AND PINEAPPLE (*Ananas comosus* L. Merr) IN WONOREJO TRISULO VILLAGE, PLOSOKLATEN SUB-DISTRICT, KEDIRI DISTRICT

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ABSTRACT

Sugarcane and pineapple plants are widely cultivated in Wonorejo Trisulo Village, but their production is not optimal, productivity decreases in sugarcane plants and fluctuates in pineapple plants, so it is necessary to know about the limiting factors for the growth of sugarcane and pineapple plants from the side of the characteristics of the land. Based on these problems, it is necessary to conduct research studies on land suitability. The research objectives were to map the level of land suitability for sugar cane and pineapple in Wonorejo Trisulo Village, to find out the limiting factors for sugarcane and pineapple cultivation and to propose improvement efforts to increase land suitability classes in Wonorejo Trisulo Village. Research using survey method. Determination of sample points purposively based on land systems obtained from land use maps, because the type of soil and slope at the study site did not vary. The sample points in the research area are 8 points. Parameters observed included air temperature, rainfall, humidity, soil drainage, soil texture, coarse material, soil depth, cation exchange capacity, base saturation, pH H_2O,C-organik, N-total, P_2O_5, K_2O, slope gradient, surface rocks and rock outcrops. The results of the research analysis showed that the land suitability class for sugarcane in Wonorejo Trisulo Village obtained S3rc,nr,na class of 434.01 ha (34.66%) with limiting factors of root media (coarse soil texture), nutrient retention (very high base saturation). low), available nutrients (P_2O_5, K_2O very low) and Nrc covering an area of 679.99 ha (54.31%) with a limiting factor of the root medium (coarse soil texture). Pineapple land suitability class is S3nr,na covering an area of 434.01 ha (34.66%) with soil nutrient retention limiting factors (very low base saturation), available nutrients (P_2O_5, K_2O very low) and Nrc covering an area of 679.99 ha (54.31%) with a limiting factor of the root medium (coarse soil texture).

Keywords : *land characteristics, land suitability, limiting factors, matching method, soil texture*