

ABSTRACT

Land evaluation is a process of assessing land resources for specific purposes using a proven approach or method. The development of corn plants requires data and information on land potential and assessment of land suitability classes based on physical and chemical criteria so that the land can be productive. The purpose of this study was to determine the land suitability class for corn crops in North Aceh District. This research was conducted in Muara Batu Sub-district, North Aceh District, based on the land map of unit (LMU) overlaying the results of the slope map, land use map and soil type map. The method used is a survey method consisting of 4 stages, namely (1) preparation stage; (2) preliminary survey; (3) main survey and (4) presentation of results. The results showed that drainage is good, soil depth >65, slope is flat to gentle, erosion hazard is mild, soil texture of sandy loam, sandy clay loam, loam, clayey loam, CEC is low to very high, pH is slightly acidic to slightly alkaline, Organic C is very low to moderate, Base of Saturation (BS) is very low to low, N-total is low to moderate, P₂O₅ is very low to moderate, and K₂O is moderate. The land suitability class for corn crops in Muara Batu Sub-district, North Aceh Regency is marginal suitable (S3) in all LMU with limiting factors in the form of texture, Base Saturation (BS), P₂O₅ and Organic C Improvement efforts with tillage, organic fertilization, P fertilization.

Keywords: Chemical properties, Land Map Unit, Limiting factors, Marginal suitability, Physical properties,