

ABSTRACT

RAHADIAN ADI PRASETYO. Comparison of Land Suitability Evaluation System for Corn in Tlogomulyo Village, Tlogomulyo Subdistrict, Temanggung Regency. Under Guidance: SUBROTO. PS and PARTOYO.

Tlogomulyo village has a large agriculture area potential for corn development. It can be seen that there are so many corn planted in the field. Optimal use of land resources in accordance are the carrying capacity can be achieved if there is information on the capability and suitability of land in the region. With the development of science and technology, there are several land suitability evaluation systems for assessment of land quality or characteristic that is different to the same type of plant. The purposes of this research are to evaluate land suitability class for corn based on land suitability evaluation field system according to CSR/FAO, (1983); Sys et al, (1993), and Puslittanak (2003.), and to compare the result from the three systems. This research used survey and laboratory method. The field observation include altitude, effective depth, land drainage, rock outcrop, surface rockiness, coarse material, flood, production data, planting pattern, and corn cultivation technique. The parameter tested are cation exchange capacity (CEC), C-organic, N-total, P₂O₅ available, K₂O available, pH H₂O, base saturation, exchanged cation (K, Ca, Mg, Na), salinity, lime contents, soil texture. The result of this research showed that land suitability class of corn in Tlogomulyo's Village, Tlogomulyo's Subdistrict, Temanggung's Regency according to CSR/ FAO, (1983) are N1n, S3rfn and S3r; according to Sys et al (1993) are N1nr, S3warcnr, and S3warc; and according to Puslittanak (2003) are Nrc, S3warcnr, and S3waoarc. The results of the third evaluation of land suitability evaluation system applied not depict the actual condition. Land suitability evaluation system for corn plant according Puslittanak closer to actual conditions when compared to land suitability evaluation system according to the CSR/ FAO and Sys et al.

Key words: Comparison, Evaluation system, Land suitability, Corn.