

## ABSTRAC

Horticultural plants such as shallots, corn, and red chilies are plants that have economic value, so they need to be developed to improve their quality and quantity. The purpose of this study is to map the qualitative and quantitative land suitability class levels for shallot plants in Lhoksukon district. This research was conducted in Lhoksukon District. Soil analysis was conducted at the Soil Science Laboratory, Faculty of Agriculture, Malikussaleh University and at the Soil and Plant Research Laboratory, Faculty of Agriculture, Syiah Kuala University. This research was conducted from January to March 2024. The method used in this research is a survey method with a parallel land evaluation approach. This approach consists of land suitability evaluation based on physical criteria and land suitability evaluation. The survey method used in this research is a survey method consisting of 4 stages, namely: preparation stage, preliminary survey, main survey, and data analysis and presentation of results. The results of the study showed that the land suitability class for shallots, corn and red chili plants in Lhoksukon District was in class S3 (marginally suitable) with limiting factors in the form of rainfall, texture, base saturation, pH H<sub>2</sub>O, P<sub>2</sub>O<sub>5</sub> and K<sub>2</sub>O. Therefore, it is necessary to make improvement efforts by adding organic materials as we know that organic materials can improve soil aggregates and the provision of CaCO<sub>3</sub> lime which can lower the soil pH at the limiting factor in order to increase land suitability to S1 (very suitable).

Keywords: corn, evaluation, land, red onion, red chili