

ABSTRACT

Avocado (*Persea americana*) is a fruit that is well known and loved by the public. The prospects for avocado plants are quite promising, with market demand continuing to increase, stable prices, and quite high export demand. The Bawang Gajah Sub-watershed is a Sub-watershed located in the upstream part of Krueng Peusangan, this upstream area is a catchment area that must be maintained in a watershed. Judging from the critical land area in the Bawang Gajah Sub-watershed, it is quite severe, therefore reforestation (replanting) is necessary in several locations suitable for reforestation. This study used a survey method consisting of 4 stages, namely, the preparation stage, preliminary survey, main survey, and data analysis and presentation of results. Sampling was carried out based on the Land Map Unit (LMU) overlay results from slope maps, land use maps, and soil type maps. The results showed that the land suitability class for avocado plants in the Bawang Gajah Sub-watershed, Central Aceh Regency is included in the marginal class (S3) found in LMU 2 with a texture limiting factor (S3rc-1). LMU 3 has limiting factors of texture, P_2O_5 , K_2O , and slope gradient (S3rc-1; na-2; na-3; eh- 1). LMU 4 has limiting factors of texture, P_2O_5 , slope, and slope (S3rc-1; na-2; eh- 1). LMU 6 has limiting factors of texture, P_2O_5 , slope, and slope (S3rc-1; na-2; eh- 1). LMU 7 has limiting factors of texture, P_2O_5 , and slope gradient (S3rc-1; na-2; eh-1). LMU 14 has limiting factors of P_2O_5 and slope gradient (S3na-2; eh-1). Improvement efforts to address the limiting factor of texture are addressed by adding organic matter, slope gradient is addressed by constructing terraces, while the limiting factors of P_2O_5 and K_2O are addressed by adding P and K fertilizers.

Keywords: Texture, Limiting Factors, Map, Survey