

ABSTRACT

Cayenne pepper plants are woody shrubs with a spicy taste that are widely cultivated. There are factors that affect plant growth and productivity such as nutrient inadequacy and a decrease in soil physical chemical and biological properties. This study aims to determine the effect of green fertilizer on the growth and production of cayenne pepper plants on coffee plantations, the effect of cayenne pepper plant varieties on growth and production on coffee plantations, the interaction between green fertilizer and cayenne pepper plant varieties on coffee plantations. This research was conducted from June 20 to December 30, 2023 in Arul Kumer Village, Silih Nara District, Central Aceh Regency, Aceh Province. The experimental design used was a two-factor randomized group design (RAK). The first factor is green fertilizer consisting of 3 factors, namely H0 (Control), H1 (orok-orok plant, 750 g/plant), H2 (gamal plant, 750 g/plant). The second factor is the use of cayenne pepper varieties consisting of 3 factors, namely V1 (bara variety), V2 (pelita variety) and V3 (sonar variety). Each treatment was repeated three times. The observed variables include plant height, number of leaves, stem diameter, number of flowers, number of fruits, productive branches and fruit weight. The results of this study indicate that the provision of green fertilizer (orok-orok plant 750 g/plant) is best for stem diameter increase at the age of 56 HST. The treatment of cayenne pepper varieties V2 pelita variety is best for plant height variables at the age of 14 HST and V3 treatment of bara variety is best for fruit weight at the third harvest. interaction of green fertilizer and cayenne pepper varieties, H2V2 treatment of stem diameter at the age of 14 HST and 56 HST. H2V3 treatment is best for fruit weight at the third harvest

Keyword: land productivity, green fertiliser soaking time.