

ABSTRACT

Kiki Supriatna. 2020. Enzact Response to Potato Production (Solanum Tuberosum L. Granola Varieties) in Different Cultivation Systems To Achieve Food Security. Supervised by Dr. Hj. Mia Nurkanti, M.Kes. and Fitri Aryanti, S.T., M.Pd.

Potatoes are an annual crop that is widely used as a source of carbohydrates. Potatoes are mostly cultivated on sloping land and on land that stimulates soil erosion which can lead to landslides. This is because the cultivation method is by loosening the soil so that the soil will easily come off. Therefore, it is necessary to carry out a cultivation system in polybags and planterbags. The aim of this study was to identify the response of enzyme content to potato plants and to differentiate between potato plants that used enzymes and which enzymes were better for growth. As well as studying different cultivation systems using planterbag planting media, polybags and where the growth and yields of potato crops are better. This research was conducted in a vegetable garden in Cihanjuang Rahayu Village, Parompong District, West Bandung Regency. The research data were analyzed by using Paired Sample T-Test and One Way Anova Test, while the research method used was in the form of experimental 3 treatments 5 repetitions. The parameters observed were plant height, number of leaves, number of tubers and tuber weight. The results of the research on potato cultivation using enzymes had better growth than not using enzymes. Potatoes grown in planterbags produced better growth such as plant height and number of leaves, compared to polybags which achieved the lowest value in all parameter tests. Meanwhile, the potatoes grown in the land achieved superior values in the number of tubers and tuber weight, even though the land medium was superior in tubers. In the planterbag media, it should also be one of the recommendations for potato cultivation because it produces tubers that are able to match the average media in the land. Cultivation of potato in the Planterbag is feasible because it can increase the growth and production of potato varieties Granola.

Keywords: enzyme, potato, polybag, planterbag, growth, production.