ABSTRACT

Lettuce (*Lactuca sativa* L.) is one type of important vegetable that has high economic value, classified as a leaf vegetable, is an annual plant that belongs to the Asteraceae family and is an annual plant that has many forms, especially in terms of the shape of its leaves. One way to overcome this is by using organic fertilizers and ZPT (growth regulators) which can help overcome the problem of lettuce agricultural production. The purpose of this study is to provide information for those who need information about lettuce cultivation. Specific ally regarding the effect of coffee husk compost and plant growth regulators on lettuce growth. This study will be conducted in the experimental garden and laboratory of the Faculty of Agriculture, Malikussaleh University. This study will be conducted from May to June 2025. This study uses a Factorial Randomized Block Design with three replications. The first factor is coffee husk compost consisting of (K0) 0 g/polybag, (K1) 50 g/polybag (K2) 75 g/polybag, (K3) 100 g/polybag. The second factor is Hormax plant growth regulators consisting of (Z0) 0 ml/l, (V1) 5 ml/l, (V2) 10 ml/l. The results showed that the application of coffee husk compost significantly affected plant height, leaf number, stem diameter, plant fresh weight, and root weight. The application of hormax PGR significantly affected plant height, leaf number, leaf width, stem diameter, leaf chlorophyll, plant fresh weight, root length, and root weight. There was no interaction between the application of organic vermicompost and inorganic potassium fertilizer on cauliflower growth and yield.

Keywords: Lettuce, Coffee Husk Compost, Hormax PGR