

ABSTRACT

Puri Handayani, 2024. Effectiveness Test Of Biochar Three In One On The Growth Of Pakcoy Plants (Brassica rapa L.)

Based on data from the Central Statistics Agency, in 2022 mustard greens production in West Java will experience a decline. The cause of this decline is due to a lack of optimal fertilization, cultivation techniques that are not yet intensive, and low soil fertility. This research aims to determine the effectiveness of *biochar three in one* on the growth of pakcoy plants (*Brassica rapa L.*). This research method uses a quantitative method using a Completely Randomized Design (CRD) consisting of six treatments and four repetitions. The treatments consisted of control, 35 g/polybag, 40 g/polybag, 45 g/polybag, 50 g/polybag, and 55 g/polybag. The main data taken has been plant height, number of leaves and plant weight and then supporting data in the form of climatic factors which include light intensity, environmental temperature, air humidity and soil pH. The research results showed that giving a dose of *biochar three in one* had a significant effect on plant height, number of leaves and plant weight. The optimal dose of *biochar three in one* for the growth of pakcoy plants is a dose of 55 g/polybag which is effective at a plant height of 984.50, while the *biochar three in one* dose of 45 g/polybag is effective at a number of leaves of 61.50, and a plant weight of 38.50. Pakcoy plant growth is significantly influenced by climatic factors.

Keywords : *Biochar Three In One*, Effectiveness, Growth, Pakcoy plants