ABSTRACT

THE EFFECT OF COMBINATION OF UREA FERTILIZER AND BANANA PEEL LIQUID FERTILIZER ON GROWTH AND YIELD OF PAGODA MUSTARD PLANTS (*Brassica narinosa* L.)

By

Lilis Apriliani Student Number 185001123

Guided by : Ida Hodiyah Darul Zumani

Mustard pagoda is a vegetable plant belonging to the family Brassicaceae. Mustard pagoda has a high nutritional content that is beneficial to health. People's need for mustard pagodas is currently increasing, but it is known that the production of mustard pagoda is still limited. Banana peel is a residual material that has a potential nutrient content to be used as organic fertilizer. The use of banana peel liquid fertilizer can be an alternative to increase the availability of nutrients for plant growth. This experiment aims to obtain the best combination of urea fertilizer and banana peel liquid fertilizer against the growth and yield of mustard pagoda plants. This experiment was carried out at the Experimental Garden of the Faculty of Agriculture, Siliwangi University, from July to September 2022. The experiment was conducted using a Randomized Block Design (RBD) with 5 treatments and repeated 5 times. The treatments tested were A (urea fertilizer 100 kg/ha = 0.25 g/polybag), B (urea fertilizer 0.3 g/polybag + banana peel liquid fertilizer 125 ml/L), C (urea fertilizer 0.6 g/polybag + banana peel liquid fertilizer 100 ml/L), D (urea fertilizer 0.9 g/polybag + banana peel liquid fertilizer 75 ml/L), and E (Urea fertilizer 1.2 g/polybag + banana peel liquid fertilizer 50 ml/L). The combination of urea fertilizer and banana peel liquid fertilizer has a significant effect on the number of leaves at 4 WAP, crop diameter, and weight of mustard greens per plant, but has no effect on the net weight of mustard greens per plant and the number of leaves at 3 WAP. The combination of urea fertilizer 0.9 g/polybag + banana peel liquid fertilizer 75 ml/L has the best influence on the growth and yield of mustard pagoda plants.

Keywords: Mustard Pagoda, Banana peel, Urea fertilizer, Liquid fertilizer