APPLICATION OF VARIOUS ANIMAL MANURE FERTILIZERS AND VARIOUS BAMBOO ROOT PGPR CONCENTRATIONS ON THE GROWTH AND YIELD OF PAKCOY (*Brassica rapa* L.)

By: Hafidh Prasetyo Nugroho
Supervised by: Suwardi

ABSTRACT

Pakcoy is one of the horticultural plants that is widely consumed by the community. The problem experienced in pakcoy cultivation is the excessive use of chemical fertilizers. One way to reduce it is to use organic fertilizers. This study aims to determine the type of animal manure fertilizer and various concentrations of the best bamboo root PGPR on the growth and yield of pakcoy plants. The research method used is field research with a Factorial design arranged in a Complete Randomized Block Design with 2 factors and 1 control. The research data were analyzed using Sidik Ragam with a level of 5% and continued with DMRT at a level of 5%. The results showed that there was no interaction between the treatment of types of animal manure fertilizer and various concentrations of PGPR on all parameters. The treatment of chicken manure fertilizer gave the best results in plant height and number of leaves at 21 and 28 HST, fresh weight, economic weight, root length, weight tons / ha, and weight per harvest plot. Treatment of bamboo root PGPR concentration of 40 mL/L gave the best results on plant height and number of leaves at 28 HST, fresh weight, root length, weight per harvest plot, and weight tons/ha. There was no significant difference between the combination of treatments and the control.

Keywords: Pakcoy, Animal manure fertilizer, PGPR