THE EFFECT OF CONCENTRATION BIOLOGICAL FERTILIZERS AND VARIOUS TYPES OF MULCH ON THE GROWTH AND RESULTS OF CAISIM (*Brassica juncea* L.)

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ABSTRACT

Caisim mustard plant is widely known in Indonesia. The development of mustard greens cultivation has good prospects for supporting efforts to increase farmer's income, improve community nutrition, and broadly develop agribusiness. One of the methods to develop caisim mustard cultivation is to test biological fertilizers and several types of mulches. This study aims to determine the effect of applying biological fertilizers and providing various kinds of mulches on the growth of caisim plants. The treatments were arranged in a Complete Randomized Block Design with 2 treatment factors, namely: factor I: application of biological fertilizers with 3 levels, namely 60 cc/lt of water, 80 cc/l of water, 100 cc/lt of water. Factor II: use of mulch with 3 levels, namely silver black plastic mulch, straw mulch (5 tons/ha), and sawdust mulch (5 tons/ha). To find out the significant difference between treatments, it was continued using Duncan's Multiple Range Test at the 5% level.. There was an interaction in the use of biological fertilizers with a concentration of 100 cc/lt of water and the use of silver black plastic mulch gave the best results for the growth and yield of caisim plants.

Keywords: Caisim, Biofertilizer, Mulch.