

ABSTRACT

EFFECT OF THE COMBINATION OF BLACK SOLDIER FLY (BSF) LARVAE FRASS AND NPK 16:16:16 ON THE GROWTH AND YIELD OF CUCUMBER (*Cucumis sativus* L.)

By

**Fathimah
NPM 205001034**

Dosen Pembimbing :

**Yaya Sunarya
Adam Saepudin**

Efforts to increase cucumber productivity can be done by improving soil fertility with organic fertilizer. This research aims to determine the effect of the combination of Black Soldier Fly (BSF) larvae frass and NPK 16:16:16 on the growth and yield of cucumbers and to determine the dose of BSF larvae frass and NPK 16:16:16 which has the best influence on the growth and yield of cucumbers. This research used a Randomized Group Design (RGD) consisting of 6 treatments and 4 replications, namely A=NPK 16:16:16 300 kg/ha, B=BSF larvae frass 25 t/ha + NPK 16:16:16 0 kg/ha, C=BSF larvae frass 20 t/ha + NPK 16:16:16 75 kg/ha, D=BSF larvae frass 15 t/ha + NPK 16:16:16 150 kg/ha, E=BSF larvae frass 10 t/ha + NPK 16:16:16 225 kg/ha and F=BSF larvae frass 5 t/ha + NPK 16:16:16 300 kg/ha. Observations were carried out at the age of 7 DAP, 14 DAP and 21 DAP. The results of the analysis of variance show that the BSF larvae frass and NPK 16:16:16 treatments had an effect on plant height, number of leaves, stem diameter, flowering age, number of fruit and fruit yield per plot. The correct results for the BSF larvae frass dose and NPK 16:16:16 dose were obtained, namely BSF larvae frass 20 t/ha + NPK 16:16:16 75 kg/ha which was best for the growth and yield of cucumber (*Cucumis sativus* L.).

Key words: BSF larvae frass, NPK 16:16:16, Cucumber.