ABSTRAC

This research method aims to determine the effectiveness of Beauteria bassiana in controlling the development of armyworm populations on corn plants in vivo and in vitro. This research was carried out in a laboratory and greenhouse in the Mojokerto food crop protection and horticulture work area. The materials used in this research were corn seeds, young corn, soil, compost, 2nd instar armyworm pest water, Beauveria bassiana biological agent isolate, potato dextrose agar media, ECG media, distilled water, and alcohol. This research method was carried out in vitro. The results of this research are that the entomopathogenic fungus Beauveria bassiana is able to control the population of the pest S. frugiperda by acting as a stomach poison. Symptoms of death of S. frugiperda show changes in color and body shape caused by Beauveria bassiana. Further research will carry out calculations of spore viability if using long-lived isolates, testing is carried out in line with the observation parameters and observation objectives, additional data such as temperature, season, humidity also need to be shown.

Keywords: effectiveness, population of armyworm pests, corn plants